

Catalogue | 2014
Mylos, Élos, Chiara
Wiring accessories and Home Automation

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## ABB SACE Division: certified ethical and environmental quality


#### Abstract

ABB SACE, a division of ABB S.p.A., is at the forefront in dedicating significant resources to achieve the objectives of quality, safety for workers and environmental protection. This is demonstrated by the fact that all the company production sites have achieved ISO 9001 quality, OHSAS 18001 Health and Safety and ISO 14001 environmental certification.


In striving for the excellence that distinguishes it, the company has also implemented IRIS and SA8000 certifications in some manufacturing sites. These are standards of the highest importance in the area of quality and corporate social responsibility.
IRIS is a specific standard for the rail industry developed by UNIFE, the Association of European Railway Industries, which provides a shared and common system for assessment and certification of quality of companies that supply products requiring higher levels of quality (relating to rolling stock and signalling). It was developed from the ISO 9001 standard, adapting and supplementing it with the specific needs of operators in the railway sector, as had previously been done in other areas such as the aerospace and automotive sectors. SA8000 is the most widespread and internationally recognized standard that guarantees that a company is socially responsible and committed to respect for ethics throughout the production cycle and in working conditions.


## ABB: Energy efficiency for sustainable progress

$A B B$ is actively engaged in promoting environmental protection and sustainable development by providing products and solutions that contribute to improving energy efficiency and plant productivity, while reducing $\mathrm{CO}_{2}$ emissions.

## ABB SACE web site: facilitates work, develops business

- Catalogs to view, download and request publications on the huge range of ABB SACE products
- Technical documentation to check wiring diagrams, dimensional drawings, instruction sheets and installation manuals


## - Work tools for totally safe design

- Training to browse the catalog of training courses and register online
- News to keep up do date with the latest news from ABB SACE


## Calculation and budgeting tools Technical software

## DOC 2

DOC 2 is a program for designing and calculating single-line diagrams of low and medium voltage electrical installations, for selecting switching and protection devices, and for checking and coordinating protection devices.
With the drawing functionality provided by the integrated CAD, the new panel configurator module makes it possible to develop designs for ABB electrical panels and to produce a technical/commercial quotation with CAT.

## CAT 7

This is the tool that allows you to easily select and accessorize ABB SACE products in order to prepare quotes and offers quickly and without errors.
With CAT 7, choosing and accessorizing ABB SACE products is easier and faster, thanks to the new product selection screen and the new accessorizing module.

## Curves

Curves is the quickest program for checking the tripping characteristics of protection devices and the components of the installation.
Setting, checking, and documenting settings for releases and coordination is even easier than in the past.

OTC
The OTC module for thermal calculation allows you to check the thermal behavior of ABB switchgear and to size the fans and air conditioners to be installed in the switchgear.

http://www.abb.it/wiringaccessories ABB is the new website dedicated to products for residential and service sector installation, providing quick and easy access to all the documentation and information.
http://www.abb.it/lowvoltage is the site that keeps you informed about ABB low voltage electrical installations and industrial automation.

"DOC \& CAT" is the collection of technical software that helps you to produce designs and quotations easily, rapidly and completely. The entire software collection can be downloaded for free from the online Business portal. ABB Software Desktop is a platform created to allow the installation and operation of the above software.
With its automatic update notification service, ABB Software Desktop is able to detect which programs are installed on the PC, allowing them to be updated.

Mylos, Élos and Chiara: ABB wiring accessories Materials, designs, colours

Mylos, Élos and Chiara amaze with their materials, designs and colours. Three wiring accessories ranges to meet all expectations in an original and unique way.
The possible combinations are limitless, according to individual taste and imagination: the same type of frame as a unifying thread in all the areas of your home or office, or many different frames to enhance each individual environment.

Mylos
Frame with Metal finish


Élos Soft
Metal frame


## Chiara

Technopolymer frame


Mylos
Frame with Lucent finish


Élos Smart
Technopolymer frame


## Chiara

Metallic frame with satin finish


## Mylos

## The beauty of seeing, touching, living



Your house is your world. And your world reflects you. If you are looking for timeless design and quality materials, Mylos is the best way to express yourself. Even in the smallest details, functionality marries with appeal. And makes your house your home.

Perfection is in the details. Mylos are so well thought out as to make them fundamental: the LED-lit switches, incredibly thin frames and their velvet-like surface. Details which, together, create a special effect every time.

Ultra-thin Square and Round frames: fitting in with everything, everywhere.
When design is the perfect synthesis of style and functionality, it fits in harmoniously with any environment. Mylos wiring accessories' frames have been designed to satisfy exactly this requirement: clean, non-invasive lines which create perfect continuity in any place in any home.
Two shapes have been chosen for Mylos, "square" and "round", allowing you to choose on the basis of your needs. The square frame has firm, minimalist lines, ideal for any environment. The round frame is more characterful and less technical, fitting in well with more particular environments.


## Mylos

Materials, designs, colours

Mylos finishes best represent current trends in interior design.
Four different materials, two different designs, infinite combinations to choose from to synchronise your environment with your desires.


## Crystal finishes.

Glass has no equal in terms of luxury. It can be elegant and sober at the same time, with great purity of form and substance. The two finishes, satin white and satin black, have been chosen to fit in with the most elegant environments, lending them a style which is refined yet never excessive.


Metal finishes.
The most prestigious, elegant and resistant. Metal is the material which invokes sensations of refinement and prestige, emphasising purity thanks to nuances ranging from silver to gold, encompassing aluminium, titanium and chrome. With natural satin, brushed or glossy finishes.


## Velvet finishes.

Polymer technology generates an innovative finish.
The Velvet series creates a soft, velvet-like touch, offering an original multisensory experience.
"Pure White" stands out among the velvet finishes, integrating the frame, the trim and the switches in a single colour. An absolutely minimalist design which "disappears" into the wall.


Lucent finishes.
Made from special resins, the Lucent series' glossy tones stand out in any environment, reminding you of elements such as alabaster and ice, adding a technological touch which is perfect to complete particularly hi-tech environments.

## Home or building automation, the solution is always Mylos.



A simple and immediate system to best meet the needs of residential contexts, or a professional system able to communicate with any platform.

When you use Mylos in a project, connections between devices are always performed logically. This means that each component, even those which perform the simplest functions (such as switches for example), is able to receive and transmit signals over the bus.
The information runs through the system and is read only by the devices which it is addressed to.
It is for exactly this reason that each sensor or actuator device can be connected to the bus without a particular order: the function will be defined through programming.



Mylos: your house is now tailor made.
With Mylos, programming is performed via the time-programmable thermostat or touch panel, which can manage up to 64 devices. It will be the programming device to define functions and connections by means of a simple guided menu. The device functions are changed by modifying the configuration without physically working on the system, which thus becomes extremely simple to update or modify.

Mylos allows your home to be automated: for example, switching on lights at a predetermined time in the evening, heating up the towel rail for bath time, lowering shutters in the evening and raising them in the morning, or creating different lighting for different occasions.

Mylos KNX: the only limit is not having limits. Offices, apartment blocks, sports centres, shopping malls. There are many and various situations where design requirements are complicated and it has to be possible to make modifications and change the positioning of devices over time (open-space offices, cubicles or other partitioned spaces etc.). With ABB it is possible to program Mylos KNX flush-mounted devices together with DIN-rail KNX devices, in order to completely manage the building automation project, no matter how complex.
A system designed with KNX maintains the property value over time, as it never ages or becomes obsolete. Moreover, even if the destination of a part or an entire complex changes, it is not necessary to redo the system: it simply needs reprogramming.

## Mylos Home Automation <br> Easy Home automation



Systems with bus technology have become more popular in residential applications over the last few years, thanks to their ease of installation, flexibility and integration of multiple functions according to the users choices and needs. ABB has based the Mylos integrated system on this technology, able to control and command all electrical devices in the home, providing total comfort as well as energy savings and increased security.


A system conceived in this manner doesn't risk to become obsolete because it is always upgradeable and programmable. In this way is possible also to value the property. Mylos, ABB's last generation integrated system, offers all the knoweledge, the experience and the technical competence of a market leader with a design that is able to conquer the most demanding customer.

# With Mylos, home automation is within the reach of everyone. Because its purpose is to make life easier both for those who decide to create a system in their home and for the installers. 

Mylos Touch
Environments are activated with a simple touch.


A system that only has advantages.

- It reduces design, installation and wiring costs.
- It allows you to expand and modify the installation at every stage of its life cycle, ensuring a secure and profitable investment over time.
- It allows the integration of new functions at any time.
- It offers intelligent management of the home in order to reduce energy consumption (for example, management of lighting and heating depending on whether or not rooms are occupied).
- It simplifies programming of devices for the installer and the management of the house for the user.
- It maximizes the comfort and security of residents.

Whatever the requirement, with Mylos the answer is simple. A complete installation interfaced with a Domustech safety and security system provides:

Lighting management
曾
Heat regulation
解
Automation of roller shutters

Load management
4
Scenario management


Safety and Security integration

For programming the system, a time-programmed thermostat or, alternatively, Mylos Touch needs to be installed. However, once the devices are configured, they do not require a central unit in order to operate, and therefore the time-programmed thermostat can even be removed from the system once programming is completed.
Principles to follow:

- input channels must be associated to only one group;
- each actuator can be included in a maximum of 4 different groups;
- input devices can belong to any type of group;
- conventional dimmers and actuators can be part of the same group;
- roller shutter actuators are placed in groups only with other shutter actuators or input devices;
- up to 84 groups can be configured.


## Élos

## The perfect combination of aesthetics and functionality



Élos Soft line


## Élos Smart line

Élos is the wiring accessories' range ideal for implementing the terminal parts of the electrical installation in both residential and commercial applications.
The availability of two lines, Élos Soft and Élos Smart, means you can also choose: two solutions to suit all tastes, even the most refined and particular. Élos Soft and Élos Smart were created to set a turning point, to create a new sign with a sleek design and the use of exclusive and innovative materials.

The Élos series includes a full range of devices that can be used to optimize management of electrical loads and extend the functions available in the various areas of the home, office, shops etc.

The control devices and finishing frames are available in two specifically designed versions that allow the two lines Élos Soft and Élos Smart to be distinguished visually.


## Élos Soft

## Materials, designs, colours

Élos design wasn't left to chance .
Creativity and industrial design have produced two lines with precise connotations. The Élos Soft frames have the refined and sinuous profile of a wave that gives personality and importance to an environment. The buttons are crossed by a vertical mark, recognizable to touch, while the soft glow of blue LEDs allows you to see them even in the dark or in dim light.


The materials and finishes such as metal, technopolymer or glass, with glossy or satin finishes, have been carefully selected to complement different styles of furniture.
The frames are available in the colours of nature and its four elements, available in 24 variants for metal versions,


17 for the technopolymer versions and 6 for those made of glass, with finishes and materials carefully selected to match the various styles of furnishing and to maximize your customisation options.

## Élos Smart

## Materials, designs, colours

One solution, many combinations. Élos Smart multiplies your choice.

For the commercial contexts and more tailored residential solutions, Élos Smart offers wide possibilities for choice and implementation of specific functions with components in the range and with frames in 3, 4, 6, 8 and 12 module versions, all made from technopolymer with a satin finish.

The product range features, various types of electrical, television/satellite and telephone/EDP sockets; switches can be identified by key covers with special symbols (door opener, doorbell, lamp, table lamp, stair light, etc.) and by warning lights available in different colours.


## Chiara

## Simplicity becomes harmony



Chiara, as the name implies, means light and purity.
The elegance of the white switches and devices goes well with the evocative colours of the frames: white, sand, stone, volcano, metallic and pastel shades.

The design of Chiara expresses the best of Italian creativity combined with the excellence of ABB's technological and production processes. Chiara is designed to suit everyone's taste and enhances any environment, from the most refined
to the most essential, with a choice of components that allow you to implement a number of solutions in residential and commercial contexts.


## Chiara

## The ideal choice if you are looking for practicality

Chiara is the easiest and most immediate response to all your needs. The breadth of its product range and completeness of the solutions offer the greatest choice.

From the point of view of the installation, flexibility is a feature of Chiara.
The devices, with a width of 22 mm , are suitable for insertion in all the round flush-mounted boxes with a diameter of 60 mm and rectangular boxes on the market; the supports and frames are available in 2, 3, 4 and 7 module versions that can be mounted in rectangular boxes with 2, 3, 4 and 6 standard modules respectively.


The composition of the devices is particularly simple: the support is made from semi-transparent plastic material for easy mounting in the flush-mounted boxes. In addition, the assembly of the devices is frontal, except for the IP40 and IP55 wall-mounted enclosures and the IP55 flush-mounted escutcheon frames.


## Chiara

Materials, designs, colours

The glossy finish of the metal enhances the simplicity of the shape.
A harmonious combination generates reflections of rare purity and beauty.
You will be amazed by the intensity of the glossy finish or the shimmer of the satin finish: the 4 metal colours, Gold, Bronze, Chrome and Metal Black stand out with their simplicity and elegance.


## Mylos, Élos and Chiara: ABB wiring accessories Lighting and design

Whether you are guided by the purity and beauty of Chiara, the elegant design of Élos, or the velvet-like touch of Mylos, a gesture as simple as turning on the light will be transformed into a new sensory experience.


## Élos Soft

The controls are crossed by a vertical tactile indicator that emanates soft light generated by blue LEDs among the shadows.


## Chiara

The asymmetric lighting of the switches gives a distinctive and personal note to each light point, without affecting the purity and harmony of the lines.


## Mylos

When lit, the LED creates a fading effect that fits in harmoniously with the design of the frame; however, when it is off it is completely invisible. The luminous indicator, completely embedded in the key cover, does not diminish the velvet-like touch sensation.

# Mylos, Élos and Chiara: ABB wiring accessories Comfort and energy saving 

Comfort and savings are now increasingly linked: with the wide range of time-programmed thermostats and thermostats of the Mylos, Élos and Chiara wiring accessories you can maximize comfort while reducing waste.


Whatever you require, heating or air conditioning, with a single device you can program your system for a perfect temperature regulation, making each environment a welcoming space.
IR detector devices and dimmers allow intelligent management of the lighting, improving the quality of each environment and allowing you to create special atmospheres.

## Mylos, Élos and Chiara: ABB wiring accessories Protection and safety

ABB wiring accessories combine aesthetics with the safety of persons and environments: it is advisable to install specific protection devices against overloads, short circuits and overvoltage, from miniture circuit breakers to surge protections; in the case of leakage of natural gas and LPG it is important to prevent hazards and damage through appropriate detection and signalling devices, from detectors and signal repeaters to solenoid valves.


Emergency lighting can be implemented with convenient removable anti blackout lights or with professional emergency lamps, possibly with programmable stairwell light functions and adjustable light intensity.


Interlocked socket outlets are suitable for installation in the system terminations to protect the load supplied from the outlet against dangers of short circuits and overloads.


## Mylos

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## Mylos

## Components and functions



## Control devices

Maximum flexibility in the selection of switches, push switches, two-way switches, intermediate switches, relays and change-over switches.
The most common control devices are available in screwless versions, reducing installation times even further. All the conventional control devices, except for relays and change-over switches, can be lit. Switches are available with an incorporated LED to enable all types of functional indication.


## Key covers

The key covers in 1 module or $1 / 2$ module versions allow conventional switches to be customised as desired.


Socket outlets
The versions with 2P+E 10-16A plugs for 250 V lines are available in the Italian and German standards, with safety shutters and side/central earth. For telephone and data transmission applications various types of connectors compatible with the most widespread international wiring standards are available.


Protection devices
These devices intervene in the event of overloads, short circuits and other phenomena that involve a risk for the safety of persons and which compromise proper operation of connected appliances, performing their protection function directly downstream without impacting the power supply to other points in the electrical installation.


## Signalling devices

Warning lights to display the operating status of connected appliances, as well as bells and buzzers. The warning lights are supplied with an incorporated 230 V LED, which can be replaced for use under different voltages, if necessary.


## Comfort devices

To optimize the operation of electrical appliances and increase the liveability of environments, the range includes devices for programming, adjustment and timing such as time-programmed thermostats, electronic thermostats and dimmers. IR presence detectors and receivers for remote controls complete the product range to guarantee the maximum level of comfort.
Removable anti-blackout lights and emergency lights are available with ample operating autonomy.


## Components for installation

Blank covers for unused modules and mounting supports for $2,3,4,7$ and $4+4$ modules for the installation of devices and components in round and rectangular flush-mounted boxes. All types of modular solutions can be used thanks to the presence of the $1 / 2$ module blank cover.

## Frames

The range of Mylos frames allows a wide choice with 4 different finishes: the technological Lucent, the innovative Velvet, the elegant Metal and the refined Crystal.
All the frames (except for those made of glass) are available in both shapes, Round and Square, so they can be adapted to any setting. There is wide range of colours to make every environment exclusive.

All the products in the range that require the $I M Q$ mark have obtained it, in compliance with the specific Reference standards.

## Mylos - Order codes

## Conventional switches



2CSY1001XC


2CSY1007MC


2CSY1007MCU


2CSY1010XC


2CSY1011MC


Switches

| Description | $\begin{aligned} & \mathrm{N}^{\circ} \\ & \text { modules } \end{aligned}$ | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole switch, 16A-250V~ | 1 | 2CSY1001MC | 1/24 |
|  | 1 | 2CSY1001MS | 1/24 |
| Double-pole switch, 16A-250V~ | 1 | 2CSY1002MC | 1/24 |
|  | 1 | 2CSY1002MS | 1/24 |
| Single pole switch, 16A-250V~, two modules | 2 | 2CSY1001XC | 1/12 |
|  | 2 | 2CSY1001XS | 1/12 |
| Double-pole switch, 16A-250V~, with key control | 1 | 2CSY1007MC | 1/24 |
|  | 1 | 2CSY1007MS | 1/24 |
| Double-pole switch, 16A-250V~, with universal key control | 1 | 2CSY1007MCU | 1/1 |
|  | 1 | 2CSY1007MSU | 1/1 |

Information on the illumination of switches from page 2/37.
Technical details from page 2/41.

2CSY1001xs


2CSY1007MS


2CSY1007MSU


2CSY1010XS


2CSY1011MS

Two-way switches - Intermediate switch - Change-over switches

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole two-way switch, 16A-250V~ | 1 | 2CSY1003MC | 1/24 |
|  | 1 | 2CSY1003MS | 1/24 |
| Single-pole two-way switch, 16A-250V~, two modules | 2 | 2CSY1003XC | 1/12 |
|  | 2 | 2CSY1003XS | 1/12 |
| Intermediate switch, 16A-250V~ | 1 | 2CSY1010MC | 1/24 |
|  | 1 | 2CSY1010MS | 1/24 |
| Intermediate switch, 16A-250V~, two modules | 2 | 2CSY1010XC | 1/12 |
|  | 2 | 2CSY1010XS | 1/12 |
| Change-over switch, 10A - 250V ~ three-position, with central OFF | 1 | 2CSY1011MC | 1/24 |
|  | 1 | 2CSY1011MS | 1/24 |

Information on the illumination of switches from page 2/37.
Technical details from page $2 / 41$.


Information on the illumination of switches from page 2/37.
Technical details from page 2/41.

Push switches

| Description | $\mathrm{N}^{\circ}$ <br> modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switch, 16A-250V~, normally open | 1 | 2CSY1005MC | 1/24 |
|  | 1 | 2CSY1005MS | 1/24 |
| Single-pole push switch, 16A-250V~, normally closed | 1 | 2CSY1016MC | 1/24 |
|  | 1 | 2CSY1016MS | 1/24 |
| Double single-pole push switch, 16A-250V~, NO + NO | 1 | 2CSY1017MC | 1/24 |
|  | 1 | 2CSY1017MS | 1/24 |
| Double single-pole push switch, 16A - 250V , NO + N0, with interlock | 1 | 2CSY1018MC | 1/24 |
|  | 1 | 2CSY1018MS | 1/24 |
| Double single-pole push switch, 16A-250V~, NO+NO modular | 1 | 2CSY1017MY | 1/24 |
| Single-pole push switch with pull cord, 16A - 250V~, normally open. Supplied with 2.25 m cord | 1 | 2CSY1020MC | 1/24 |
|  | 1 | 2CSY1020MS | 1/24 |
| Single-pole push switch with pull cord, 16A - 250V~, normally closed. Supplied with 2.25 m cord | 1 | 2CSY1021MC | 1/24 |
|  | 1 | 2CSY1021MS | 1/24 |
| Single-pole push switch, 16A-250V~, 1 NO + 1 NC, with ON symbol | 1 | 2CSY1022MC | 1/24 |
|  | 1 | 2CSY1022MS | 1/24 |
| Single-pole push switch, 16A-250V~, 1 NO + 1 NC, with OFF symbol | 1 | 2CSY1023MC | 1/24 |
|  | 1 | 2CSY1023MS | 1/24 |

## Mylos - Order codes

## Conventional switches



2CSY1029MC


2CSY1030MC


2CSY1008MC


2CSY1008MCU


2CSY1012MC 2CSY1014MC


2CSY1030MS


2CSY1008MS


2CSY1008MSU

Push switches

| Description | $\begin{aligned} & \mathrm{N}^{\circ} \\ & \text { modules } \end{aligned}$ | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switch, 16A-250V~, normally open, with bell symbol | 1 | 2CSY1028MC | 1/24 |
|  | 1 | 2CSY1028MS | 1/24 |
| Single-pole push switch, 16A-250V , normally open, with key symbol | 1 | 2CSY1029MC | 1/24 |
|  | 1 | 2CSY1029MS | 1/24 |
| Single-pole push switch, 16A - 250V~, normally open, with stairlight symbol | 1 | 2CSY1030MC | 1/24 |
|  | 1 | 2CSY1030MS | 1/24 |
| Double-pole push switch, 16A-250V~, with key control | 1 | 2CSY1008MC | 1/24 |
|  | 1 | 2CSY1008MS | 1/24 |
| Double-pole push switch, 16A-250V~, with universal key control | 1 | 2CSY1008MCU | 1/24 |
|  | 1 | 2CSY1008MSU | 1/24 |

Information on the illumination of switches from page 2/37.
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| Relay |
| :--- |
| Description |
| Single-pole latching relay, with 230V~ coil, output contact 10A |
|  |
| Monostable relay, with 230V $\sim$ coil, output contact 10A |
|  |

[^0]
## Mylos - Order codes

## Screwless switches



2CSY1001ZC


2CSY1003SC 2CSY1010SC


2CSY1003ZC


2CSY1005SC


Switches

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole switch, 16A-250V~ (R | 1 | 2CSY1001SC | 1/24 |
|  | 1 | 2CSY1001SS | 1/24 |
| Double-pole switch, 16A-250V~ ©R | 1 | 2CSY1002SC | 1/24 |
|  | 1 | 2CSY1002SS | 1/24 |
| Single-pole switch, 16A-250V $\sim$, two modules $\mathbb{C R}$ | 2 | 2CSY1001ZC | 1/12 |
|  | 2 | 2CSY1001ZS | 1/12 |

Information on the illumination of switches from page $2 / 37$.
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2CSY1001ZS


2CSY1003ZS


2CSY1005SS

Two-way switches - Intermediate switch

| Description | $\mathrm{N}^{\circ}$ <br> modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole two-way switch, 16A-250V~ $\mathbb{C R}$ | 1 | 2CSY1003SC | 1/24 |
|  | 1 | 2CSY1003SS | 1/24 |
| Single-pole two-way switch, 16A-250V~, two modules (R | 2 | 2CSY1003ZC | 1/12 |
|  | 2 | 2CSY1003ZS | 1/12 |
| Intermediate switch, 16A-250V~ ©R | 1 | 2CSY1010SC | 1/24 |
|  | 1 | 2CSY1010SS | 1/24 |
| Intermediate switch, 16A-250V~, two modules $\mathbf{C R}$ | 2 | 2CSY1010ZC | 1/12 |
|  | 2 | 2CSY1010ZS | 1/12 |

Information on the illumination of switches from page 2/37.
Technical details from page 2/41.
Push switches

| Description | $\boldsymbol{N}^{\circ}$ |  | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Single-pole push switch, 16A, normally open $\boldsymbol{C R}$ | 1 | 2CSY1005SC | $1 / 24$ |
|  | 1 | 2 Code. |  |

Information on the illumination of switches from page 2/37.
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## Mylos - Order codes

## Switches with incorporated LED



2CSY1006MC 2CSY1006FC


2CSY1015FC


2CSY1024MC


2CSY1025MC


2CSY1026MC


2CSY1027MC


Switches with incorporated LED

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole switch, 16A-250V~ (incorporated LED) | 1 | 2CSY1004FC | 1/24 |
|  | 1 | 2CSY1004FS | 1/24 |
| Double-pole switch, 16A-250V ~ with incorporated LED | 1 | 2CSY1006MC | 1/24 |
| (functional indication always ON ) | 1 | 2CSY1006MS | 1/24 |
| Double-pole switch, 16A-250V~ with incorporated LED | 1 | 2CSY1006FC | 1/24 |
| (Ioad functional indication) | 1 | 2CSY1006FS | 1/24 |

2CSY1006Ms 2CSY1006FS
 2CSY1015FS
 2CSY1024MS
 2CSY1025MS

Push switches with incorporated LED

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switch, 16A - 250V~, normally open (incorporated LED) | 1 | 2CSY1015FC | 1/24 |
|  | 1 | 2CSY1015FS | 1/24 |
| Single-pole push switch, 16A-250V~, normally open, with red diffuser (incorporated LED) | 1 | 2CSY1024MC | 1/24 |
|  | 1 | 2CSY1024MS | 1/24 |
| Single-pole push switch, 16A - 250V~, normally open, with green diffuser (incorporated LED) | 1 | 2CSY1025MC | 1/24 |
|  | 1 | 2CSY1025MS | 1/24 |
| Single-pole push switch, 16A-250V~, normally open, with orange diffuser (incorporated LED) | 1 | 2CSY1026MC | 1/24 |
|  | 1 | 2CSY1026MS | 1/24 |
| Single-pole push switch, 16A-250V~, normally open, with white diffuser (incorporated LED) | 1 | 2CSY1027MC | 1/24 |
|  | 1 | 2CSY1027MS | 1/24 |
| Single-pole push switch with warning light, 16A - 250V~, normally open, modular (incorporated LED) | 1 | 2CSY1027MY | 1/24 |

Information on the illumination of switches from page 2/37. Technical details from page 2/41. 2CSY1026MS


2CSY1027MS

2CSY1027MY


## 2CSY1032MC



2CSY1032MS

Push switches with incorporated LED

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switch, 16A-250V~, normally open, with backlit label holder, | 2 | 2CSY1031MC | 1/12 |
| 2 modules (incorporated LED) | 2 | 2CSY1031MS | 1/12 |
| Single-pole push switch, 16A-250V~, normally open, with backlit label holder, | 3 | 2CSY1032MC | 1/8 |
| 3 modules (incorporated LED) | 3 | 2CSY1032MS | 1/8 |

Information on the illumination of switches from page 2/37.
Technical details from page 2/41.

## Mylos - Order codes

## Key covers

2CSY1502MC


2CSY1503MC


2CSY1504MC


2CSY1505MC


2CSY1506MC


2CSY1507MC


2CSY1508MC


1 module key covers

| Description | $\begin{aligned} & \mathrm{N}^{\circ} \\ & \text { modules } \end{aligned}$ | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Key cover 1 module, generic | 1 | 2CSY1501MC | 4/96 |
|  | 1 | 2CSY1501MS | 4/96 |
| Key cover 1 module, with nurse symbol | 1 | 2CSY1502MC | 4/96 |
|  | 1 | 2CSY1502MS | 4/96 |
| Key cover 1 module, with table lamp symbol | 1 | 2CSY1503MC | 4/96 |
|  | 1 | 2CSY1503MS | 4/96 |
| Key cover 1 module, with dimmer symbol | 1 | 2CSY1504MC | 4/96 |
|  | 1 | 2CSY1504MS | 4/96 |
| Key cover 1 module, with fan symbol | 1 | 2CSY1505MC | 4/96 |
|  | 1 | 2CSY1505MS | 4/96 |
| Key cover 1 module, with telephone symbol | 1 | 2CSY1506MC | 4/96 |
|  | 1 | 2CSY1506MS | 4/96 |
| Key cover 1 module, with door/gate open symbol | 1 | 2CSY1507MC | 4/96 |
|  | 1 | 2CSY1507MS | 4/96 |
| Key cover 1 module, with door/gate close symbol | 1 | 2CSY1508MC | 4/96 |
|  | 1 | 2CSY1508MS | 4/96 |

Technical details from page 2/47.

2CSY1504MS


2CSY1505MS


2CSY1506MS


2CSY1507MS


2CSY1508MS


| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Key cover 1/2 module, generic | 1/2 | 2CSY1511MC | 4/96 |
|  | 1/2 | 2CSY1511MS | 4/96 |
| Key cover $1 / 2$ module, with red diffuser | 1/2 | 2CSY1513MC | 4/96 |
|  | 1/2 | 2CSY1513MS | 4/96 |
| Key cover 1/2 module, with green diffuser | 1/2 | 2CSY1514MC | 4/96 |
|  | 1/2 | 2CSY1514MS | 4/96 |
| Key cover 1/2 module, with orange diffuser | 1/2 | 2CSY1515MC | 4/96 |
|  | 1/2 | 2CSY1515MS | 4/96 |
| Key cover 1/2 module, with clear diffuser | 1/2 | 2CSY1516MC | 4/96 |
|  | 1/2 | 2CSY1516MS | 4/96 |
| Key cover 1/2 module, with blue diffuser | 1/2 | 2CSY1517MC | 4/96 |
|  | 1/2 | 2CSY1517MS | 4/96 |
| Key cover 1/2 module, with door vertical arrow | 1/2 | 2CSY1518MC | 4/96 |
|  | 1/2 | 2CSY1518MS | 4/96 |
| Key cover 1/2 module, with door horizontal arrow | 1/2 | 2CSY1519MC | 4/96 |
|  | 1/2 | 2CSY1519MS | 4/96 |
| Key cover 1/2 module, with door/gate open symbol | 1/2 | 2CSY1520MC | 4/96 |
|  | 1/2 | 2CSY1520MS | 4/96 |
| Key cover 1/2 module, with door door/gate close symbol | 1/2 | 2CSY1521MC | 4/96 |
|  | 1/2 | 2CSY1521MS | 4/96 |

Technical details from page 2/47.

## Mylos - Order codes

## Socket outlets

Socket outlets, Italian standard with safety shutters

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2P+E socket outlet, 10A-250V~, P11 type | 1 | 2CSY1101MC | 1/24 |
|  | 1 | 2CSY1101MS | 1/24 |
| $2 \mathrm{P}+$ E socket outlet, 10/16A - 250V~, P17/11 type | 1 | 2CSY1103MC | 1/24 |
|  | 1 | 2CSY1103MS | 1/24 |
| 2P+E socket outlet, 16A - 250V~, P17/11 type, coloured for privileged circuits | 1 | 2CSY1104MR | 1/24 |
|  | 1 | 2CSY1105MV | 1/24 |
|  | 1 | 2CSY1106MA | 1/24 |

Technical details from page 2/48.


2CSY1104MR


2CSY1106MA


2CSY1108MC


2CSY1109MC


2CSY1114MR


2CSY1116MA


2CSY1111MV


2CSY1108MS


2CSY1109MS


2CSY1115MV


2CSY1110MR


2CSY1112MA

Socket outlets, Italian/German standard with safety shutters and side/central earth

| Description | $\mathrm{N}^{\circ}$ <br> modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2P+E socket outlet, 16A - 250V~, P30 type | 2 | 2CSY1108MC | 1/12 |
|  | 2 | 2CSY1108MS | 1/12 |
| 2P+E socket outlet, 16A - 250V~, P30/17 type | 2 | 2CSY1109MC | 1/12 |
|  | 2 | 2CSY1109MS | 1/12 |
| 2P+E socket outlets, 16A-250V , P30 type, coloured for privileged circuits | 2 | 2CSY1114MR | 1/12 |
|  | 2 | 2CSY1115MV | 1/12 |
|  | 2 | 2CSY1116MA | 1/12 |
| 2P+E socket outlets, 16A-250V~, P30/17 type, coloured for privileged circuits | 2 | 2CSY1110MR | 1/12 |
|  | 2 | 2CSY1111MV | 1/12 |
|  | 2 | 2CSY1112MA | 1/12 |

Technical details from page 2/48.


2CSE1610EL

Special socket outlets

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2P shaver socket outlet with insulating transformer, power supply $230 \mathrm{~V} \sim 50 / 60 \mathrm{~Hz}$ | 3 | 2CSY1113MC | 1/1 |
| Output voltage 125V ~ (American standard 2P socket) or 230V ~ (2P socket, P11 type) | 3 | 2CSY1113MS | 1/1 |
| Flush-mounted USB charger 500-650mA, with male type A connector, NEW | 1 | 2CSY1160MC | 1/24 |
| power supply 230V ~ 50/60Hz, output voltage 5V DC | 1 | 2CSY1160MS | 1/24 |

Technical details from page 2/49

## TV/SAT sockets

| Description | ${ }^{\circ}$ <br> modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Coaxial TV/SAT sockets, direct, male IEC connector, Ø 9.5 mm , DC | 1 | 2CSY1118MC | 1/24 |
|  | 1 | 2CSY1118MS | 1/24 |
| Coaxial TV/SAT sockets, feedthrough, male IEC connector, $\emptyset 9.5 \mathrm{~mm}$, attenuation 7 dB | 1 | 2CSY1132MC | 1/24 |
|  | 1 | 2CSY1132MS | 1/24 |
| Coaxial TV/SAT sockets, feedthrough, male IEC connector, $\emptyset 9.5 \mathrm{~mm}$, attenuation 10 dB | 1 | 2CSY1136MC | 1/24 |
|  | 1 | 2CSY1136MS | 1/24 |
| Coaxial TV/SAT sockets, feedthrough, male IEC connector, $\emptyset 9.5 \mathrm{~mm}$, attenuation 14 dB | 1 | 2CSY1137MC | 1/24 |
|  | 1 | 2CSY1137MS | 1/24 |
| Coaxial TV/SAT sockets, direct, female F connector, DC | 1 | 2CSY1140MC | 1/24 |
|  | 1 | 2CSY1140MS | 1/24 |
| Coaxial TV/SAT sockets, double demixed, feedthrough, male IEC connector, Ø 9.5 mm and female F connector | 1 | 2CSY1133MC | 1/24 |
|  | 1 | 2CSY1133MS | 1/24 |
| Coaxial TV/SAT sockets, double demixed, feedthrough, male IEC connector $\emptyset 9.5 \mathrm{~mm}$ and female F connector, attenuation 10 dB | 1 | 2CSY1130MC | 1/24 |
|  | 1 | 2CSY1130MS | 1/24 |
| Coaxial TV/SAT sockets: double demixed, feedthrough, male IEC connector $\emptyset 9.5 \mathrm{~mm}$ and female F connector, attenuation 14 dB | 1 | 2CSY1131MC | 1/24 |
|  | 1 | 2CSY1131MS | 1/24 |
| Terminal resistor 750 hm | - | 2CSE1610EL | 50/200 |

## Mylos - Order codes

## Socket outlets

Network and telephone sockets

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Telephone connector, RJ11 | 1 | 2CSY1121MC | 1/24 |
|  | 1 | 2CSY1121MS | 1/24 |
| Telephone connector, RJ12 | 1 | 2CSY1122MC | 1/24 |
|  | 1 | 2CSY1122MS | 1/24 |
| RJ45 connector, Cat.5e, UTP (unshielded) | 1 | 2CSY1124MC | 1/24 |
|  | 1 | 2CSY1124MS | 1/24 |
| RJ45, Cat.5e, FTP (shielded) | 1 | 2CSY1125MC | 1/24 |
|  | 1 | 2CSY1125MS | 1/24 |
| RJ45 connector, Cat.6, UTP (unshielded) | 1 | 2CSY1127MC | 1/24 |
|  | 1 | 2CSY1127MS | 1/24 |
| RJ45 connector, Cat.6, FTP (shielded) | 1 | 2CSY1128MC | 1/24 |
|  | 1 | 2CSY1128MS | 1/24 |
| Adapter for RJ45 connector, Keystone type | 1 | 2CSY1135MC | 1/24 |
|  | 1 | 2CSY1135MS | 1/24 |

Technical details from page 2/54.

## Mylos - Order codes

Protection devices


2CSY1302MY


2CSY1307MC


2CSY1308MC


2CSY1309MC
 2CSY1302MS

Fuse holders and overvoltage limiters

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Fuse holder, Ø5x20 / Ø6.3x32, 16A | 1 | 2CSY1301MC | 1/24 |
|  | 1 | 2CSY1301MS | 1/24 |
| Surge protection device limiter 75J, 250V~ | 1 | 2CSY1302MC | 1/24 |
|  | 1 | 2CSY1302MS | 1/24 |
| Spare protection for surge protection device | - | 2CSY1302MY | 1/24 |

Technical details from page 2/56.


 2CSY1305MS
 2CSY1306MS


2CSY1307MS


2CSY1308MS


2CSY1309MS

Miniature circuit-breakers - Residual current circuit-breakers

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Automatic MCB, 1P+N, C6, breaking capacity 1.5kA | 1 | 2CSY1304MC | 1/12 |
|  | 1 | 2CSY1304MS | 1/12 |
| Automatic MCB, 1P+N, C10, breaking capacity 3kA | 1 | 2CSY1305MC | 1/12 |
|  | 1 | 2CSY1305MS | 1/12 |
| Automatic MCB, 1P+N, C16, breaking capacity 3kA | 1 | 2CSY1306MC | 1/12 |
|  | 1 | 2CSY1306MS | 1/12 |
| Automatic RCD, 1P+N, C6-10 mA, breaking capacity 1.5 kA | 2 | 2CSY1307MC | 1/8 |
|  | 2 | 2CSY1307MS | 1/8 |
| Automatic RCD, 1P+N, C10-10 mA, breaking capacity 3kA | 2 | 2CSY1308MC | 1/8 |
|  | 2 | 2CSY1308MS | 1/8 |
| Automatic RCD, 1P+N, C16-10 mA, breaking capacity 3kA | 2 | 2CSY1309MC | 1/8 |
|  | 2 | 2CSY1309MS | 1/8 |

Technical details from page 2/58.

## Mylos - Order codes

## Signalling devices



2CSY1311MC


2CSY1312MC


2CSY1313MC


2CSY1317MC 2CSY1318MC 2CSY1321MC 2CSY1322MC


2CSY1311MS


2CSY1312MS


2CSY1313MS


2CSY1317MS 2CSY1318MS 2CSY1321MS 2CSY1322MS

Warning lights

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Orange warning light, (incorporated LED) | 1 | 2CSY1310MC | 1/24 |
|  | 1 | 2CSY1310MS | 1/24 |
| White warning light, (incorporated LED) | 1 | 2CSY1311MC | 1/24 |
|  | 1 | 2CSY1311MS | 1/24 |
| Red warning light, (incorporated LED) | 1 | 2CSY1312MC | 1/24 |
|  | 1 | 2CSY1312MS | 1/24 |
| Green warning light, (incorporated LED) | 1 | 2CSY1313MC | 1/24 |
|  | 1 | 2CSY1313MS | 1/24 |

Technical details from page 2/37.

Bells and buzzers

| Description | ${ }^{N}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Electro-mechanical bell, 12V, 5VA power, 80dB sound intensity | 1 | 2CSY1317MC | 1/24 |
|  | 1 | 2CSY1317MS | 1/24 |
| Electro-mechanical bell, $230 \mathrm{~V}, 8 \mathrm{VA}$ power, 80 dB sound intensity | 1 | 2CSY1318MC | 1/24 |
|  | 1 | 2CSY1318MS | 1/24 |
| Electro-mechanical buzzer 12V, 5VA power, 70dB sound intensity | 1 | 2CSY1321MC | 1/24 |
|  | 1 | 2CSY1321MS | 1/24 |
| Electro-mechanical buzzer 230V, 8VA power, 80 dB sound intensity | 1 | 2CSY1322MC | 1/24 |
|  | 1 | 2CSY1322MS | 1/24 |

## Mylos - Order codes Comfort devices



2CSY1201MC


2CSY1201MS


2CSY1202MC


2CSY1202MS


2CSY1201XC
2CSY1201Xs


2CSY1202XC
2CSY1202XS


2CSY1205MC 2CSY1207MC


2CSY1206MC


2CSY1205MS 2CSY1207MS


2CSY1206MS

Thermostats and time-programmable thermostats

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Electronic time-programmable thermostat, day/week programming, summer/winter function, with LCD display, 3 modules, powered by 1.5 V AA battery | 3 | 2CSY1201MC | 1/1 |
|  | 3 | 2CSY1201MS | 1/1 |
| Electronic thermostat, summer/winter function, with LCD display, | 3 | 2CSY1202MC | 1/1 |
| 3 temperature levels can be set, 3 modules, powered by 1.5V AA battery | 3 | 2CSY1202MS | 1/1 |
| Electronic time-programmable thermostat, day/week programming, summer/winter function, with LCD display, 2 modules, 230V~50/60Hz power supply | 2 | 2CSY1201XC | 1/1 |
|  | 2 | 2CSY1201XS | 1/1 |
| Electronic thermostat, summer/winter function, with LCD display, | 2 | 2CSY1202XC | 1/1 |
| 3 temperature levels can be set, 2 modules 230V 50/60Hz power supply | 2 | 2CSY1202XS | 1/1 |

Technical details from page 2/61

## Dimmers

| Description | $\begin{aligned} & \mathbf{N}^{\circ} \\ & \text { modules } \end{aligned}$ | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Electronic dimmer with rotary control for resistive loads 100-500W 230V~ 50/60Hz | 1 | 2CSY1205MC | 1/24 |
|  | 1 | 2CSY1205MS | 1/24 |
| Electronic dimmer with push-button control for resistive and inductive loads 60-500W (60-500VA) 230V~50/60Hz | 1 | 2CSY1206MC | 1/24 |
|  | 1 | 2CSY1206MS | 1/24 |
| Electronic dimmer with rotary control and two-way switch for resistive loads 100-500W 230V~50/60Hz | 1 | 2CSY1207MC | 1/24 |
|  | 1 | 2CSY1207MS | 1/24 |

[^1]
## Mylos - Order codes

## Safety devices



2CSY1210MC


2CSY1210MS


2CSY1211MC


2CSY1211MS


2CSY1214MC


2CSY1214MS


2CSY1303MC

Gas detectors

| Description |  | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: | :---: |
| Natural gas electronic detector with acoustic and luminous signal, relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15) - 250V~. | NEW | 3 | 2CSY1210MC | 1/1 |
| Power supply 230V~ - 50Hz. <br> Equipped with dedicated frame for installation on type 503 box |  | 3 | 2CSY1210MS | 1/1 |
| Natural gas probe replacement module |  | - | 2CSY1220MC | 1/1 |
|  |  | - | 2CSY1220MS | 1/1 |
| LPG gas electronic detector with acoustic and luminous signal, relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15) - 250V~. | NEW | 3 | 2CSY1211MC | 1/1 |
| Power supply 230V~ - 50Hz. <br> Equipped with dedicated frame for installation on type 503 box |  | 3 | 2CSY1211MS | 1/1 |
| LPG gas probe replacement module |  | - | 2CSY1223MC | 1/1 |
|  |  | - | 2CSY1223MS | 1/1 |

Technical details from page 2/70.

Emergency lighting

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Anti black-out removable light, 230V~. | 2 | 2CSY1214MC | 1/12 |
| Charge reserve 4.5 h and recharge time 10-20 h. To be combined with 230V~ sockets | 2 | 2CSY1214MS | 1/12 |
| LED lamp for emergency or stairwell lighting. | 3 | 2CSY1303MC | 1/1 |
| Charge reserve up to 3 h and recharge time 12h. Power supply 230V~ - 50Hz. <br> Equipped with dedicated frame for installation on type 503 box |  |  |  |

Technical details from page 2/72.


## Mylos - Order codes

Installation devices, accessories

Blank covers

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Blank cover, 1 module | 1 | 2CSY1601MC | 1/24 |
|  | 1 | 2CSY1601MS | 1/24 |
| Blank cover, 1/2 module | 1/2 | 2CSY1600MC | 2/48 |
|  | 1/2 | 2CSY1600MS | 2/48 |
| Blank cover, 1 module with hole for cable outlet, $\emptyset 11.50 \mathrm{~mm}$ | 1 | 2CSY1606MC | 1/24 |
|  | 1 | 2CSY1606MS | 1/24 |

2CSY1606MC
2CSY1606MS

## Supports

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Support, 2 modules with screws for flush mounted boxes with 60 mm | 2 | 2CSY1602MY | 1/10 |
| or $56 \times 56 \mathrm{~mm}$ screw distance |  |  |  |
| Support, 2 modules (with claws) for round box (screw distance 60 mm ) | 2 | 2CSY1612MY | 1/10 |
| Support, 3 modules for rectangular box (screw distance 83.5 mm ) | 3 | 2CSY1603MY | 1/10 |
| Support, 4 modules for rectangular box (screw distance 108 mm ) | 4 | 2CSY1604MY | 1/10 |
| Support, 7 modules for rectangular box (screw distance 100 mm ) | 7 | 2CSY1607MY | 1/1 |
| Support, 4+4 modules for rectangular box (screw distance 108 mm ) | 4+4 | 2CSY1608MY | 1/1 |

[^2]2CSY1603MY


2CSY1604MY


2CSY1607MY


2CSY1608MY

2CSY1632MY 2CSY1633MY 2CSY1609MY 2CSY1622MY 2CSY1624MY

| Description | $\mathrm{N}^{\circ}$ modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| LED, 250V , white, to be used with illuminated switches for night-time location | - | 2CSY1632MY | 1/24 |
| LED, 250V , white, to be used with two-way and intermediate switch for night-time location | - | 2CSY1633MY | 1/24 |
| LED, 9V, white, replacement for switches with incorporated LEDs | - | 2CSY1609MY | 1/24 |
| LED, 12V , white, replacement for switches with incorporated LEDs | - | 2CSY1622MY | 1/24 |
| LED, 24V~, white, replacement for switches with incorporated LEDs | - | 2CSY1624MY | 1/24 |

Information on the illumination of switches from page $2 / 37$.
Technical details from page 2/41.

DIN Rail adapter
$\left.\begin{array}{l|l|l|l}\hline \text { Description } & N^{\circ} & & \begin{array}{l}\text { Packing/ } \\ \text { No. items }\end{array} \\ \hline \text { Din rail adapter } & \text { NEW } & 2 & \text { 2CSY1618MY }\end{array}\right] 1 / 10$.

## Mylos - Order codes

## Quick selection table for frames

Frames with Crystal finish


Satin white (square)
page 2/25


Satin black (square) page 2/25

Frames with Metal finish


Light silver (square)
page 2/26


Brushed steel (square)
page 2/26


Satin aluminium (square) page 2/27


Glossy gold (square) page 2/27


Light silver (round) page 2/26


Brushed steel (round) page 2/26


Satin aluminium (round) page 2/27


Glossy gold (round) page 2/27


Dark titanium (square) page 2/26


Brushed nickel (square) page 2/26


Satin gold (square) page 2/27


Glossy chrome (square) page 2/27


Dark titanium (round) page 2/26


Brushed nickel (round) page 2/26


Satin gold (round) page 2/27


Glossy chrome (round) page 2/27

Frames with Velvet finish


White (square)
page $2 / 28$


Black (square)
page 2/28


Cold grey (square)
page 2/29


Anthracite (square)
page 2/29


White (round)
page $2 / 28$


Black (round)
page 2/28


Cold grey (round)
page 2/29


Anthracite (round) page 2/29


Pure white (square)
page 2/28


Ice (square)
page 2/28


Graphite (square)
page 2/29


Pure white (round)
page 2/28


Ice (round) page 2/28


Graphite (round) page 2/29

## Mylos - Order codes

Quick selection table for frames

Frames with Lucent finish


Alabaster white (square) page 2/30


Cold grey (square)
page $2 / 30$


Alabaster white (round) page $2 / 30$


Cold grey (round)
page 2/30


Brilliant black (square) page 2/30


Ice (square)
page 2/30


Brilliant black (round) page 2/30


Ice (round)
page 2/30

Mylos - Order codes
Frames with Crystal finish


Satin white colour


Satin black colour

| Colour | $\mathrm{N}^{\circ}$ modules | Order code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| Satin white (square) | 2 | 2CSY0201QSV | 1/12 |
|  | 3 | 2CSY0301QSV | 1/12 |
|  | 4 | 2CSY0401QSV | 1/6 |
| Satin black (square) | 2 | 2CSY0200QSV | 1/12 |
|  | 3 | 2CSY0300QSV | 1/12 |
|  | 4 | 2CSY0400QSV | 1/6 |

Technical details and customization from page 2/77.

## Mylos - Order codes

## Frames with Metal finish



Satin silver colour


Satin silver colour


Dark titanium colour


Dark titanium colour


Brushed steel colour


Brushed steel colour


Brushed nickel colour


Brushed nickel colour
Brushed nickel colour

| Colour | $\mathrm{N}^{\circ}$ modules | Order code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| Light silver (square) | 2 | 2CSY0211QLZ | 1/12 |
|  | 3 | 2CSY0301QLZ | 1/12 |
|  | 4 | 2CSY0411QLZ | 1/6 |
|  | 7 | 2CSY0711QLZ | 1/6 |
|  | $4+4$ | 2CSY0811QLZ | 1/3 |
| Light silver (round) | 2 | 2CSY0211RLZ | 1/12 |
|  | 3 | 2CSY0311RLZ | 1/12 |
|  | 4 | 2CSY0411RLZ | 1/6 |
|  | 7 | 2CSY0711RLZ | 1/6 |
|  | 4+4 | 2CSY0811RLZ | 1/3 |
| Dark titanium (square) | 2 | 2CSY0200QSZ | 1/12 |
|  | 3 | 2CSY0300QSZ | 1/12 |
|  | 4 | 2CSY0400QSZ | 1/6 |
|  | 7 | 2CSY0700QSZ | 1/6 |
|  | $4+4$ | 2CSY0800QSZ | 1/3 |
| Dark titanium (round) | 2 | 2CSY0200RSZ | 1/12 |
|  | 3 | 2CSY0300RSZ | 1/12 |
|  | 4 | 2CSY0400RSZ | 1/6 |
|  | 7 | 2CSY0700RSZ | 1/6 |
|  | 4+4 | 2CSY0800RSZ | 1/3 |
| Brushed steel (square) | 2 | 2CSY0202QSZ | 1/12 |
|  | 3 | 2CSY0302QSZ | 1/12 |
|  | 4 | 2CSY0402QSZ | 1/6 |
|  | 7 | 2CSY0702QSZ | 1/6 |
|  | $4+4$ | 2CSY0802QSZ | 1/3 |
| Brushed steel (round) | 2 | 2CSY0202RSZ | 1/12 |
|  | 3 | 2CSY0302RSZ | 1/12 |
|  | 4 | 2CSY0402RSZ | 1/6 |
|  | 7 | 2CSY0702RSZ | 1/6 |
|  | $4+4$ | 2CSY0802RSZ | 1/3 |
| Brushed nickel (square) | 2 | 2CSY0203QSZ | 1/12 |
|  | 3 | 2CSY0303QSZ | 1/12 |
|  | 4 | 2CSY0403QSZ | 1/6 |
|  | 7 | 2CSY0703QSZ | 1/6 |
|  | 4+4 | 2CSY0803QSZ | 1/3 |
| Brushed nickel (round) | 2 | 2CSY0203RSZ | 1/12 |
|  | 3 | 2CSY0303RSZ | 1/12 |
|  | 4 | 2CSY0403RSZ | 1/6 |
|  | 7 | 2CSY0703RSZ | 1/6 |
|  | 4+4 | 2CSY0803RSZ | 1/3 |

Technical details and customization from page 2/77.


Satin aluminium colour


Satin aluminium colour


Satin gold colour


Satin gold colour


Glossy gold colour


Glossy gold colour


Glossy chrome colour


Glossy chrome colour

| Colour | $\mathrm{N}^{\circ}$ modules | Order code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| Satin aluminium (square) | 2 | 2CSY0204QLZ | 1/12 |
|  | 3 | 2CSY0304QLZ | 1/12 |
|  | 4 | 2CSY0404QLZ | 1/6 |
|  | 7 | 2CSY0704QLZ | 1/6 |
|  | 4+4 | 2CSY0804QLZ | 1/3 |
| Satin aluminium (round) | 2 | 2CSY0204RLZ | 1/12 |
|  | 3 | 2CSY0304RLZ | 1/12 |
|  | 4 | 2CSY0404RLZ | 1/6 |
|  | 7 | 2CSY0704RLZ | 1/6 |
|  | $4+4$ | 2CSY0804RLZ | 1/3 |
| Satin gold (square) | 2 | 2CSY0205QLZ | 1/12 |
|  | 3 | 2CSY0305QLZ | 1/12 |
|  | 4 | 2CSY0405QLZ | 1/6 |
|  | 7 | 2CSY0705QLZ | 1/6 |
|  | 4+4 | 2CSY0805QLZ | 1/3 |
| Satin gold (round) | 2 | 2CSY0205RLZ | 1/12 |
|  | 3 | 2CSY0305RLZ | 1/12 |
|  | 4 | 2CSY0405RLZ | 1/6 |
|  | 7 | 2CSY0705RLZ | 1/6 |
|  | 4+4 | 2CSY0805RLZ | 1/3 |
| Glossy gold (square) | 2 | 2CSY0207QLZ | 1/12 |
|  | 3 | 2CSY0307QLZ | 1/12 |
|  | 4 | 2CSY0407QLZ | 1/6 |
|  | 7 | 2CSY0707QLZ | 1/6 |
|  | $4+4$ | 2CSY0807QLZ | 1/3 |
| Glossy gold (round) | 2 | 2CSY0207RLZ | 1/12 |
|  | 3 | 2CSY0307RLZ | 1/12 |
|  | 4 | 2CSY0407RLZ | 1/6 |
|  | 7 | 2CSY0707RLZ | 1/6 |
|  | 4+4 | 2CSY0807RLZ | 1/3 |
| Glossy chrome (square) | 2 | 2CSY0206QLZ | 1/12 |
|  | 3 | 2CSY0306QLZ | 1/12 |
|  | 4 | 2CSY0406QLZ | 1/6 |
|  | 7 | 2CSY0706QLZ | 1/6 |
|  | $4+4$ | 2CSY0806QLZ | 1/3 |
| Glossy chrome (round) | 2 | 2CSY0206RLZ | 1/12 |
|  | 3 | 2CSY0306RLZ | 1/12 |
|  | 4 | 2CSY0406RLZ | 1/6 |
|  | 7 | 2CSY0706RLZ | 1/6 |
|  | $4+4$ | 2CSY0806RLZ | 1/3 |

[^3]
## Mylos - Order codes

## Frames with Velvet finish



White colour


White colour


Pure white colour


Pure white colour


Black colour


Black colour


Ice colour

Ice colour


| Colour | $\mathbf{N}^{\circ}$ <br> modules | Order code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| White (square) | 2 | 2CSY0224QSP | 1/12 |
|  | 3 | 2CSY0324QSP | 1/12 |
|  | 4 | 2CSY0424QSP | 1/6 |
|  | 7 | 2CSY0724QSP | 1/6 |
|  | $4+4$ | 2CSY0824QSP | 1/3 |
| White (round) | 2 | 2CSY0224RSP | 1/12 |
|  | 3 | 2CSY0324RSP | 1/12 |
|  | 4 | 2CSY0424RSP | 1/6 |
|  | 7 | 2CSY0724RSP | 1/6 |
|  | 4+4 | 2CSY0824RSP | 1/3 |
| Pure white (square) | 2 | 2CSY0201QWP | 1/12 |
|  | 3 | 2CSY0301QWP | 1/12 |
|  | 4 | 2CSY0401QWP | 1/6 |
|  | 7 | 2CSY0701QWP | 1/6 |
|  | 4+4 | 2CSY0801QWP | 1/3 |
| Pure white (round) | 2 | 2CSY0201RWP | 1/12 |
|  | 3 | 2CSY0301RWP | 1/12 |
|  | 4 | 2CSY0401RWP | 1/6 |
|  | 7 | 2CSY0701RWP | 1/6 |
|  | $4+4$ | 2CSY0801RWP | 1/3 |
| Black (square) | 2 | 2CSY0223QSP | 1/12 |
|  | 3 | 2CSY0323QSP | 1/12 |
|  | 4 | 2CSY0423QSP | 1/6 |
|  | 7 | 2CSY0723QSP | 1/6 |
|  | $4+4$ | 2CSY0823QSP | 1/3 |
| Black (round) | 2 | 2CSY0223RSP | 1/12 |
|  | 3 | 2CSY0323RSP | 1/12 |
|  | 4 | 2CSY0423RSP | 1/6 |
|  | 7 | 2CSY0723RSP | 1/6 |
|  | $4+4$ | 2CSY0823RSP | 1/3 |
| Ice (square) | 2 | 2CSY0221QSP | 1/12 |
|  | 3 | 2CSY0321QSP | 1/12 |
|  | 4 | 2CSY0421QSP | 1/6 |
|  | 7 | 2CSY0721QSP | 1/6 |
|  | 4+4 | 2CSY0821QSP | 1/3 |
| Ice (round) | 2 | 2CSY0221RSP | 1/12 |
|  | 3 | 2CSY0321RSP | 1/12 |
|  | 4 | 2CSY0421RSP | 1/6 |
|  | 7 | 2CSY0721RSP | 1/6 |
|  | $4+4$ | 2CSY0821RSP | 1/3 |

Technical details and customization from page 2/77.


Cold grey colour


Cold grey colour


Graphite colour


Graphite colour


Anthracite colour


Anthracite colour

| Colour | $\mathrm{N}^{\circ}$ modules | Order code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| Cold grey (square) | 2 | 2CSY0222QSP | 1/12 |
|  | 3 | 2CSY0322QSP | 1/12 |
|  | 4 | 2CSY0422QSP | 1/6 |
|  | 7 | 2CSY0722QSP | 1/6 |
|  | $4+4$ | 2CSY0822QSP | 1/3 |
| Cold grey (round) | 2 | 2CSY0222RSP | 1/12 |
|  | 3 | 2CSY0322RSP | 1/12 |
|  | 4 | 2CSY0422RSP | 1/6 |
|  | 7 | 2CSY0722RSP | 1/6 |
|  | 4+4 | 2CSY0822RSP | 1/3 |
| Graphite (square) | 2 | 2CSY0225QSP | 1/12 |
|  | 3 | 2CSY0325QSP | 1/12 |
|  | 4 | 2CSY0425QSP | 1/6 |
|  | 7 | 2CSY0725QSP | 1/6 |
|  | $4+4$ | 2CSY0825QSP | 1/3 |
| Graphite (round) | 2 | 2CSY0225RSP | 1/12 |
|  | 3 | 2CSY0325RSP | 1/12 |
|  | 4 | 2CSYO425RSP | 1/6 |
|  | 7 | 2CSY0725RSP | 1/6 |
|  | 4+4 | 2CSY0825RSP | 1/3 |
| Anthracite (square) | 2 | 2CSY0226QSP | 1/12 |
|  | 3 | 2CSY0326QSP | 1/12 |
|  | 4 | 2CSY0426QSP | 1/6 |
|  | 7 | 2CSY0726QSP | 1/6 |
|  | 4+4 | 2CSY0826QSP | 1/3 |
| Anthracite (round) | 2 | 2CSY0226RSP | 1/12 |
|  | 3 | 2CSY0326RSP | 1/12 |
|  | 4 | 2CSY0426RSP | 1/6 |
|  | 7 | 2CSY0726RSP | 1/6 |
|  | $4+4$ | 2CSY0826RSP | 1/3 |

Technical details and customization from page 2/77.

## Mylos - Order codes

## Frames with Lucent finish



Alabaster white colour


Alabaster white colour


Brilliant black colour


Brilliant black colour


Cold grey colour


Cold grey colour


Ice colour

Ice colour


| Colour | $\mathbf{N}^{\circ}$ <br> modules | Order code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| Alabaster white (square) | 2 | 2CSY0201QLP | 1/12 |
|  | 3 | 2CSY0301QLP | 1/12 |
|  | 4 | 2CSY0401QLP | 1/6 |
|  | 7 | 2CSY0701QLP | 1/6 |
|  | $4+4$ | 2CSY0801QLP | 1/3 |
| Alabaster white (round) | 2 | 2CSY0201RLP | 1/12 |
|  | 3 | 2CSY0301RLP | 1/12 |
|  | 4 | 2CSY0401RLP | 1/6 |
|  | 7 | 2CSY0701RLP | 1/6 |
|  | 4+4 | 2CSY0801RLP | 1/3 |
| Brilliant black (square) | 2 | 2CSY0200QLP | 1/12 |
|  | 3 | 2CSY0300QLP | 1/12 |
|  | 4 | 2CSY0400QLP | 1/6 |
|  | 7 | 2CSY0700QLP | 1/6 |
|  | 4+4 | 2CSY0800QLP | 1/3 |
| Brilliant black (round) | 2 | 2CSY0200RLP | 1/12 |
|  | 3 | 2CSY0300RLP | 1/12 |
|  | 4 | 2CSY0400RLP | 1/6 |
|  | 7 | 2CSY0700RLP | 1/6 |
|  | $4+4$ | 2CSY0800RLP | 1/3 |
| Cold grey (square) | 2 | 2CSY0202QLP | 1/12 |
|  | 3 | 2CSY0302QLP | 1/12 |
|  | 4 | 2CSY0402QLP | 1/6 |
|  | 7 | 2CSY0702QLP | 1/6 |
|  | $4+4$ | 2CSY0802QLP | 1/3 |
| Cold grey (round) | 2 | 2CSY0202RLP | 1/12 |
|  | 3 | 2CSY0302RLP | 1/12 |
|  | 4 | 2CSY0402RLP | 1/6 |
|  | 7 | 2CSY0702RLP | 1/6 |
|  | $4+4$ | 2CSY0802RLP | 1/3 |
| Ice (square) | 2 | 2CSY0203QLP | 1/12 |
|  | 3 | 2CSY0303QLP | 1/12 |
|  | 4 | 2CSY0403QLP | 1/6 |
|  | 7 | 2CSY0703QLP | 1/6 |
|  | 4+4 | 2CSY0803QLP | 1/3 |
| Ice (round) | 2 | 2CSY0203RLP | 1/12 |
|  | 3 | 2CSY0303RLP | 1/12 |
|  | 4 | 2CSY0403RLP | 1/6 |
|  | 7 | 2CSY0703RLP | 1/6 |
|  | $4+4$ | 2CSY0803RLP | 1/3 |

Technical details and customization from page 2/77.


## Mylos - Technical details <br> General information

Main technical data and reference standards for the devices in the range

| Component | Reference standards | Basic electrical data* |  |  | Prolonged operation No. changes of position | Resistance to abnormal heat and fire |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Test voltage withstand (V) | Insulation resistance <br> (MW) | Breaking capacity or utilization category |  | Thermal pressure with ball $\left.{ }^{\circ} \mathrm{C}\right)$ | Glow wire tests <br> ( $\left.{ }^{\circ} \mathrm{C}\right)$ |
| Operating mechanisms | $\begin{aligned} & \text { CEI 23-9 } \\ & (\text { EN 60669-1) } \end{aligned}$ | 2000 at 50 Hz <br> for 1 minute | >5 | 1.25 In <br> (200 changes <br> of position) | $40000$ <br> at In 250V~ $\cos \varphi=0,6)$ | 125 | 850 |
| Socket outlets | CEI 23-5/CEI 23-50/CEI 23-16 (EN 60884-1) | 2000 at 50 Hz <br> for 1 minute | $>5$ | 1.25 In <br> (100 changes <br> of position) | $10000$ <br> at In 250V~ $\cos \varphi=0,8)$ | 125 | 850 |
| Latching relay | CEI 23-9/CEI 23-62 <br> (EN 60669-1/EN 60669-2-2) | $2000 \text { a } 50 \mathrm{~Hz}$ <br> for 1 minute | $>5$ | - | $50000$ <br> at In 250V~ $\cos \varphi=0,6)$ | 125 | 850 |
| Monostable relays | CEI 94-4/CEI-EN 61810-1 <br> (EN 60669-1/EN 60669-2-2) | $2000 \text { a } 50 \mathrm{~Hz}$ <br> for 1 minute | $>5$ | $1.25 \mathrm{In}$ <br> (200 changes <br> of position) | 50000 <br> at In 250V~ $\cos \varphi=0,6)$ | 125 | 850 |
| Automatic MCBs | CEI 23-3 <br> (EN 60898) | $2000 \text { a } 50 \mathrm{~Hz}$ <br> for 1 minute | - | 1.5...3kA | 8000 | 125 | 850 |
| Automatic RCDs | CEI 23-95 | $2000 \text { a } 50 \mathrm{~Hz}$ <br> for 1 minute | - | 1.5...3kA | 4000 | 125 | 850 |
| Supports and frames | $\begin{aligned} & \text { CEI 23-9 } \\ & \text { (EN 60669-1) } \end{aligned}$ | - | - | - | - | 75 | 650 |

*For the rated voltages and currents see the specifications for the individual part codes

Clamping capacity of the terminals

| Flexible wires | Rigid wires |  | Cable traction resistance of terminals: $>50 \mathrm{~N}$ |  |
| :--- | :--- | :--- | :--- | :--- |
| Min. $0.75 \mathrm{~mm}^{2}$ | Max. $2 \times 4 \mathrm{~mm}^{2}$ | Min. $0.5 \mathrm{~mm}^{2}$ | Max. $2 \times 2.5 \mathrm{~mm}^{2}$ |  |

## Mylos - Technical details

 Installation solutionsComposition method of switches and support


Installing and removing switches from the support


## Mylos - Technical details Installation solutions

Installation on concrete walls


Installation on plasterboard walls


Installation on surface mounted boxes


Installation on Lusy table towers


Installation on DIN rail adapter


| No. modules | Lusy tower | Frame |
| :--- | :--- | :--- |
| 4 | 10507 | Use 4M mounting support and frame |

Note: for further information on Lusy Undernet table towers please refer to the catalog

| No. modules | Dedicated adapter |
| :--- | :--- |
| 2 | 2CSY1618MY |

Note: The DIN rail adapter allows devices to be assembled without the aid of supports. The devices are inserted from the front.

## Mylos - Technical details Construction details

Conventional switches (screw terminals)

Screwless switches (spring terminals) ©


Cleaning and maintenance of the Velvet finish
All switches and devices of the Mylos wiring accessories' range have a Velvet finish, also available for the frames, that gives a velvet effect to the touch.
If there is a build-up of dirt or dust, for cleaning you can simply use common liquid or cream detergents (non-abrasive) on a soft cloth.
In the case of dirt, the use of degreasers is also tolerated. We recommend the use of specific products for cleaning the plastic opaque parts/dashboard. The use of alcohol/bleach/ harsh acids can damage the finish and the pad printing.

Specifications of screws and terminals All the contact blocks with conventional terminals of the Mylos wiring accessories' range have open position captive screws with cross and slot head and clamping frame.
PH2 impression.


## Mylos - Technical details <br> Illumination of switches and selection of LED lamps

Night-time location signalling


The 2CSY1632MY and 2CSY1633MY LEDs can be added to conventional switches (see page $2 / 4$ ) for night-time location. The LED electrically connected in parallel with the ON operating mechanism: it is lit when the load is off (OFF command), and it turns off when the load is powered ( ON command).

Location signalling
(Always ON)


Load functional signalling


Switches with incorporated LED (see page 2/8) have preinstalled 250V~ LEDs and dedicated terminals for wiring. It is possible to implement any type of functional indication, also with LEDs at different voltages.


Wiring of double-pole switches 2CSY1006MC/S for Always ON signalling. The LED is built in.


Wiring of double-pole switches 2CSY1006FC/S for load functional indication. The LED is built in.

Since the double-pole switches with incorporated LED do not have dedicated terminals for wiring, they have different part codes depending on which type of functional indication needs to be implemented.

## Mylos - Technical details

Illumination of switches and selection of LED lamps

## Plug-in LED illumination.

Conventional switches are lit by plug-in LEDs.
There is no need for additional wiring because once the device is fixed in place, it is already ready to light up. In this way it is possible to implement night-time location signalling in a very easy manner.


Incorporated LED illumination.
Switches with incorporated LEDs provide maximum freedom for wiring the signalling LED through the presence of dedicated terminals.


| White $\square$ | Black ■ | Description | LED type | Possible signalling |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conventional switches |  |  | Accessorizable with plug-in LED (230V) | Night-time location (discordant load) | Functional (concordant load) | Location (always ON) |
| 2CSY1001MC | 2CSY1001MS | Single-pole switch | 2CSY1632MY | YES | NO | NO |
| 2CSY1002MC | 2CSY1002MS | Double-pole switch | 2CSY1632MY | YES | NO | NO |
| 2CSY1001XC | 2CSY1001XS | Single-pole switch, 2 modules | 2CSY1632MY | YES | NO | NO |
| 2CSY1003MC | 2CSY1003MS | Single-pole two-way switch | 2CSY1633MY | YES | NO | NO |
| 2CSY1003XC | 2CSY1003XS | Single-pole two-way switch, 2 modules | 2CSY1633MY | YES | NO | NO |
| 2CSY1010MC | 2CSY1010MS | Intermediate switch | 2CSY1633MY | YES | NO | NO |
| 2CSY1010XC | 2CSY1010XS | Intermediate switch, 2 modules | 2CSY1633MY | YES | NO | NO |
| 2CSY1011MC | 2CSY1011MS | 3-position change-over switch | NO | NO | NO | NO |
| 2CSY1005MC | 2CSY1005MS | Single-pole push switch, normally open | 2CSY1632MY | YES | NO | NO |
| 2CSY1016MC | 2CSY1016MS | Single-pole push switch, normally closed | 2CSY1632MY | NO | YES | NO |
| 2CSY1017MC | 2CSY1017MS | Double single-pole push switch | NO | NO | NO | NO |
| 2CSY1018MC | 2CSY1018MS | Double single-pole push switch with interlock | NO | NO | NO | NO |
| 2CSY1022MC | 2CSY1022MS | Single-pole push switch with ON symbol | 2CSY1632MY | YES | NO | NO |
| 2CSY1023MC | 2CSY1023MS | Single-pole spush switch with OFF | 2CSY1632MY | YES | NO | NO |
| 2CSY1008MC | 2CSY1008MS | Double-pole push switch with key control | NO | NO | NO | NO |
| 2CSY1009MC | 2CSY1009MS | Double-pole push switch with universal key control | NO | NO | NO | NO |
| 2CSY1028MC | 2CSY1028MS | Single-pole push switch with „bell" symbol | 2CSY1632MY | YES | NO | NO |
| 2CSY1029MC | 2CSY1029MS | Single-pole push switch with „key" symbol | 2CSY1632MY | YES | NO | NO |
| 2CSY1030MC | 2CSY1030MS | Single-pole push switch with „stair light" symbol | 2CSY1632MY | YES | NO | NO |
| Screwless switches |  |  | Accessorizable with plug-in LED (230V) |  |  |  |
| 2CSY1001SC | 2CSY1001SS | Switch | NO | NO | NO | NO |
| 2CSY1002SC | 2CSY1002SS | Double-pole switch | NO | NO | NO | NO |
| 2CSY1001ZC | 2CSY1001ZS | Single-pole switch, 2 modules | NO | NO | NO | NO |
| 2CSY1003SC | 2CSY1003SS | Two-way switch | NO | NO | NO | NO |
| 2CSY1003ZC | 2CSY1003ZS | Single-pole two-way switch, 2 modules | NO | NO | NO | NO |
| 2CSY1010SC | 2CSY1010SS | Intermediate switch | NO | NO | NO | NO |
| 2CSY1010ZC | 2CSY1010ZS | Single-pole intermediate switch, 2 modules | NO | NO | NO | NO |
| 2CSY1005SC | 2CSY1005SS | Single-pole push switch | NO | NO | NO | NO |

## Mylos - Technical details

Illumination of switches and selection of LED lamps


| Warning lights with incorporated LED (230V) |  |  | Incorporated LED replaceable with |  | YES | YES | YES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2CSY1310MC | 2CSY1310MS | Orange warning light | 2CSY1609MY | (9V) |  |  |  |
|  |  |  | 2CSY1622MY | (12V) |  |  |  |
|  |  |  | 2CSY1624MY | (24V) |  |  |  |
| 2CSY1311MC | 2CSY1311MS | White warning light | 2CSY1609MY | (9V) | YES | YES | YES |
|  |  |  | 2CSY1622MY | (12V) |  |  |  |
|  |  |  | 2CSY1624MY | (24V) |  |  |  |
| 2CSY1312MC | 2CSY1312MS | Red warning light | 2CSY1609MY | (9V) | YES | YES | YES |
|  |  |  | 2CSY1622MY | (12V) |  |  |  |
|  |  |  | 2CSY1624MY | (24V) |  |  |  |
| 2CSY1313MC | 2CSY1313MS | Green warning light | 2CSY1609MY | (9V) | YES | YES | YES |
|  |  |  | 2CSY1622MY | (12V) |  |  |  |
|  |  |  | 2CSY1624MY | (24V) |  |  |  |

## Mylos - Technical details <br> Control devices

## Switches, two-way switches, intermediate switches, push switches

## Area of application

Control (on and off) of ohmic-inductive loads:

- with filament and fluorescent lamps (corrected and uncorrected);
- dedicated circuits for powered equipment (aspirators, range hoods, shutters, blinds, fans, etc..) and controllable outlets.

To eliminate architectural barriers in creating installations, we recommend the use of illuminable switches (Article 4 of Italian Ministerial Decree no. 236 of 14.06.1989).

| Technical specifications |
| :--- |
| Rated voltage |
| Rated current |
| Opening distance of the contacts |
| Dielectric strength |

## Reference standards

LV Directive, EN 60669-1.

## Wiring diagrams

The diagrams provided below represent the most widely applied engineering solutions for creating lighting points and are to be considered exhaustive of the possible signalling solutions that can be implemented on switches.

Light control from one point


## Mylos - Technical details Control devices

Light control from one point


Location (Always ON)


Light control from two points

## Circuit with two two-way switches



LED
2CSY1633MY
installed
at the front

LED
2CSY1633MY
installed
at the front

Light control from two points

## Circuit with push switches and relay



## Mylos - Technical details

## Control devices

Light control from three points

Circuit with two two-way switches + one intermediate switch


IED
2CSY1633MY installed at the front

LED
2CSY1633MY
installed
at the front

LED
2CSY1633MY installed
at the front

Light control from three points

## Circuit with push switches and relay



## Mylos - Technical details

## Control devices

## Relays

| Description | Code |
| :--- | :--- |
| Single-pole latching relay, with 230V~ coil, output contact 10A | 2CSY1012MC |
|  | 2CSY1012MS |

Relay with latching operation for control and adjustment from multiple lamp points by means of single-pole push switches with NO (normally open) contact.

## Wiring diagrams

2CSY1012MC - 2CSY1012MS


| Description | Code |
| :--- | :--- |
| Monostable relay, with 230V ~ coil, output contact 10A | 2CSY1014MC |
|  | 2CSY1014MS |

For the implementation of automation or separations between the control circuit and power circuit. It can be used as an auxiliary element for controlling particular loads.

## Wiring diagrams

2CSY1014MC-2CSY1014MS


| Technical specifications |  |
| :--- | :---: |
| Power supply voltage (coil) | $230 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| Output contact | 10 A (AC1) 7A (AC15) |
| 2CSY1012MC - 2CSY1012MS |  |

## Reference standards

EN 60669-1, EN 60669-2-2.

| Technical specifications |
| :--- |
| Power supply voltage (coil) |
| Output contact |
| 2CSY1014MC - 2CSY1014MS |

## Reference standards

EN 60669-1, EN 60669-2-2, CEI EN 61810-1.

## Examples of application

The flush-mounted relays of the Mylos wiring accessories' range can be used to implement a simple disabled bathroom calling system with a reset pushbutton:


## Mylos - Technical details

## Key covers

## Key covers

## Customization of switches' key covers

Mylos series allows customization of the control switches thanks to a wide choice of available key covers. Replacing them is very simple: it does not require the use of special tools and can be done without removing the switch from the support. Customization of control switches is possible both for devices with a one module key and for those with a halfmodule key.
The range includes key covers with/without functional labels and with/without symbols.

Note: the screwless control devices
on page $2 / 7$ do not allow the replacement of key covers.


Standard key cover composition


Key cover composition on 2CSY1017MY

Part codes 2CSY1011MC/S and 2CSY1018MC/S do not allow the replacement of key covers.

## Mylos - Technical details <br> Socket outlets

## Plug sockets

## Area of application

Powering of household appliances, lighting equipment etc.

Main features of Italian and German standard sockets

| Technical specifications |  |
| :--- | :--- |
| Rated voltage | $250 \mathrm{~V} \sim$ |
| Rated current | $10 \mathrm{~A} \circ$ |
| Shuttered and elastic live cells |  |

The cells of the sockets are segregated and protected when the plug is disconnected: the live parts are accessible only with the corresponding plug fully inserted.

Possibility of coupling Mylos sockets with the various types of plugs on the market


Plug sockets, 250V~, Italian standard with safety shutters


Plug sockets, 250V~, Italian/German standard with safety shutters and side/central earth


Special sockets

${ }^{(1)}$ Shaver socket, European/American standard with insulating transformer 230V~ - 50/60 Hz

## Reference standards

CEI 23-5, CEI 23-50, CEI 23-16 (IEC 60884-1).

[^4]
## Plug sockets for dedicated lines

Plug sockets for dedicated lines allow outlet points to be differentiated according to their particular application, avoiding incorrect connection of unsupported appliances.
Different coloured enclosures (red, orange, green) distinguish them from common socket outlets.
There are as yet no standard regulations on the correspondence between the colour of the socket and the type of power supply. In order to distinguish the area of application, the following usage customs are adopted.

## Special sockets

| Description | Code |
| :--- | :--- |
| 2P shaver socket outlet with insulating transformer, power supply | 2CSY1113MC |
| 230~50/60 Hz, output voltage 125V ~ (American standard 2P socket) | 2CSY1113MS |
| or 230V $\sim$ (2P socket P11 type) |  |

## Components



The shaver socket incorporates an insulating transformer with a power rating of 20 VA , protected against overload and resistant to short-circuits.
Power supply is guaranteed by a pushbutton that is operated automatically whenever the plug is inserted in the socket. The secondary circuit, to which the cells of the socket are connected, is isolated from the primary power supply circuit by double insulation: additional protections (shutter devices) on the cells of the socket are therefore not necessary.

Red: continuous power supply with UPS (uninterruptible power supply) through an insulating transformer.

Orange: power supply protected by network-generator unit through an insulating transformer.

Green: safety power supply with network-generator unit.

The socket is suitable for the insertion of Italian standard plugs of the P11 type (2P) and American standard plugs (2P). The shaver socket is protected against overload with a thermal interruption device without auto-reclosing. After the protection is tripped, the cells of the socket are not energized. To reclose the circuit, the plug of the device that caused the overload must be disconnected, waiting a few minutes in order to allow the transformer to cool down.

| Technical specifications |  |
| :---: | :---: |
| Power supply | $230 \mathrm{~V} \sim 50-60 \mathrm{~Hz}$ |
| Output voltage | $230 \mathrm{~V} \sim$ for $2.5 \mathrm{~A} \mathrm{P11(2P)}$ plugs 120 V~ for 15 A 125 V~ 2P plugs American standard with nonpolarized flat pins |
| Available power | 20VA |
| Operation with auto-protected | temperature |

## Reference standards

EN 61558-2-5, EN 61000-3-2, EN 55014-1, EN 55014-2.

## Mylos - Technical details

 Socket outlets| Description | Code |
| :--- | :--- |
| Flush-mounted USB charger 500-650mA, with male type A | 2CSY1160MC |
| connector, power supply 230~50/60Hz, output voltage 5V DC | 2CSY1160MS |

## Components



The flush-mounted USB charger allows you supply and recharge the most common portable electronic devices. With the simple use of a USB cable with Type A male connector it is possible to power mobile phones, smartphones, tablets and cameras that support standard USB power supply (up to 650 mA ), independently of the manufacturer.

## Wiring diagrams



## Caution!

The device absorbs up to 60 mW in the absence of connected electronic devices. To exclude this absorption, it is recommended to use a Double-pole switch.

## Operating method

Connect the USB cable with the type A male connector to the charger and the opposite end to the device to be powered. Type A, B, miniUSB and microUSB USB connectors can be used indifferently. The device is now being charged.

Caution: the device supplies power according to the USB data transmission protocol, with a maximum current of 650 mA at $5 \mathrm{~V}=$. Some devices may require a higher power supply current. Look up the manual of the connected device to check its absorption specifications.
The charging time depends on the connected device and may vary compared with the original charger.

## Examples of application



The device is protected against short-circuits by an internal fuse (not replaceable).

## TV/SAT sockets

The TV/SAT coaxial sockets for the Mylos series offer a complete range of products for implementing the terminal part of modern antenna systems. Manufactured fully from die cast Zama, they include a pressure terminal with safety screw in order to guarantee proper grip of the cable.

Individual sockets are available with male IEC or female F bushing, and double demixed sockets with both connection possibilities. Various levels of attenuation are available, installation.

## Components



TV/SAT
coaxial sockets


Double demixed TV/SAT coaxial sockets


Coaxial cable housing

Attenuation values of the TV/SAT coaxial sockets

| Code | Bushing | Passing attenuation [dB] |  |  | Bridging attenuation [dB] |  |  | Inverse attenuation[dB] | Direct current transit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $5 \div 40$ | $47 \div 862$ | 950 -2402 | $5 \div 40$ | $47 \div 862$ | 950 -2400 |  |  |
|  |  | MHz | MHz | MHz | MHz | MHz | MHz |  |  |
| 2CSY1118MC/S | Male IEC Terr. | - | - | - | 0.5 | 0.5 | 0.5 | - | YES |
| 2CSY1132MC/S | Male IEC Terr. | $\leq 2$ | $\leq 2$ | $\leq 3$ | $\leq 7$ | $\leq 7$ | $\leq 8$ | $\geq 35$ | NO |
| 2CSY1136MC/S | Male IEC Terr. | $\leq 2$ | $\leq 2$ | $\leq 2.5$ | $\leq 10.5$ | $\leq 10$ | $\leq 11$ | $\geq 35$ | NO |
| 2CSY1137MC/S | Male IEC Terr. | $\leq 1.5$ | $\leq 1.5$ | $\leq 2.5$ | $\leq 14.5$ | $\leq 14$ | $\leq 14.5$ | $\geq 35$ | NO |
| 2CSY1140MC/S | F Female | - | - | - | $\leq 0,5$ | $\leq 0.5$ | 0.5 | - | YES |

Attenuation values of double demixed TV/SAT coaxial sockets

| Code | Bushing | Passing attenuation [dB] |  | Bridging attenuation [dB] |  | Inverse attenuation | Direct current transit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | TV | SAT | TV | SAT | [dB] |  |
| 2CSY1133MC/S | Male IEC Terr. <br> F female SAT | - | - | $\leq 2$ | $\leq 2$ | - | YES |
| 2CSY1130MC/S | Male IEC Terr. <br> F female SAT | $\leq 3$ | $\leq 4.5$ | $\leq 10$ | <11 | $\geq 35$ | YES |
| 2CSY1131MC/S | Male IEC Terr F female SAT | , 2 | $\leq 3$ | $\leq 14$ | $\leq 15$ | $\geq 35$ | YES |

## Mylos - Technical details

## Socket outlets

## Wiring diagrams


TV/SAT
Mixed TV/SAT system, single consumption
SAT
SAT
SAT system, single consumption
SAT and Multiswitch system

## Instructions for installation



Feedthrough socket converted to


| Technical specifications |  |
| :---: | :---: |
| Frequency range | from 5 to 2400 MHz |
| Coaxial cable diameter | from $\varnothing 5$ to $\varnothing 7 \mathrm{~mm}$ |
| Return channel | from 5 to 40 MHz |
| Shielding | class A |
| Wiring system | with front panel |
| Unequal chrominance/ <br> luminance delay | $<1 \mathrm{~ns}$ for all models |
| Relative humidity | max 93\% (non-condensing) |

## Reference standards

EN 50083-1, EN 50083-2, EN 50083-4

## Mylos - Technical details Socket outlets

## Network and telephone sockets

The range includes devices for the implementation of telephone and computer networks, RJ11 4-contact telephone connectors for telephones, telefax, modems and RJ12 6 -contact telephone connectors for intercommunicating telephone installations.
RJ45 category 5 e and 6 connectors are also available. These devices allow computer equipment (computers, modems, printers, etc) to be connected in a network and connection of multimedia devices.

## Components



| Code | Connector type | No. contacts | Cable type | Shielded | Category | Speed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2CSY1121MC/S | RJ11 | 4 | twin core | NO | 3 | up to $16 \mathrm{Mb} / \mathrm{s}$ |
| 2CSY1122MC/S | RJ12 | 6 | twin core | NO | 3 | up to $16 \mathrm{Mb} / \mathrm{s}$ |
| 2CSY1124MC/S | RJ45 | 8 | UTP | NO | 5 e | up to $100 \mathrm{Mb} / \mathrm{s}$ |
| 2CSY1125MC/S | RJ45 | 8 | FTP | YES | 5e | up to $100 \mathrm{Mb} / \mathrm{s}$ |
| 2CSY1127MC/S | RJ45 | 8 | UTP | NO | 6 | up to $10 \mathrm{Mb} / \mathrm{s}$ |
| 2CSY1128MC/S | RJ45 | 8 | FTP | YES | 6 | up to $10 \mathrm{Mb} / \mathrm{s}$ |

FTP = cable shielded with aluminium tape
UTP = unshielded cable

## Instructions for installation

Unshielded connectors:

1. wire the connector making sure that the connection terminals match;
2. operate the lever wiring device on the connector;
3. latch the connector on the adapter and proceed with the installation on the frame.

Shielded connectors:

1. wire the connector making sure that the connection terminals match;
2. position the cover of the connector and squeeze with pliers to make sure the contacts are tight;
3. apply the shielding, ensuring insulation of the connector;
4. latch the connector on the adapter and proceed with the installation on the frame.

## Keystone adapter 2CSY1135MC/S

The structured wiring systems for data transmission are distinguished by their flexibility of use, installation independent of location and the use of the terminal outputs. The suppliers of components for wiring, when dealing with installations of a certain complexity and size, must be in able to show certification of conformity of the installation, directly or through accredited installations.
ABB meets this requirement with the adapter of the Mylos wiring accessorie's range, which is compatible with various Keystone coupling connectors available on the market and enables integration between the Mylos wiring accessories range and data transmission components of systems with structured wiring.

1. latch the connector on the adapter and proceed with the installation on the support.


Unshielded connectors


Shielded connectors


Keystone adapter 2CSY1135MC/S

Wiring diagrams for RJ11 and RJ12 telephone connectors


For telephone use, 2 wires of the RJ11 and RJ12 connectors, use the central contacts 3-4


Terminals 3 and 4 are connected via the internal contact to the telephone (closed with the receiver hung up). Lifting the receiver causes interruption of the downstream line (L1), guaranteeing secrecy of the conversation.


Each socket captures the line signal (there is no secrecy of conversation).
$\prod_{2} \prod_{0}^{\square}$
2345

Note: extracting one of the plugs causes disconnection of sockets located downstream. In order to prevent this, you just need to insert a plug in the socket from which the telephone device was removed with a jumper between terminal 4 and 5 .

Wiring diagrams for RJ45 data connectors
To obtain the EIA/TIA 568A or 568B configuration included below, follow the colour code shown on the terminal box.


| Technical specifications |  |
| :--- | :--- |
| Connections | With perforated insulation |
| Conductors | non-butted, inserted in the appropriate blade slots |

## Reference standards

EN 50083-1, EN 50083-2, EN 50083-4, ISO 11801.

## Mylos - Technical details <br> Protection devices

Fuse holders and overvoltage limiters

| Description | Code |
| :--- | :--- |
| Fuse holder, $\varnothing 5 \times 20 / \emptyset 6.3 \times 32,16 \mathrm{~A}$ | 2 CSY1301MC |
|  | 2 CSY 1301 MS |

## Replacement of the fuse

After removing the removable cover with a screwdriver, proceed with replacement as in the drawing:

## Components



Removable cover for removal of the fuse


Fuses with dimension $\varnothing 5 \times 20 \mathrm{~mm}$ or $\varnothing 6.3 \times 32 \mathrm{~mm}$ can be installed.
The use of the fuses on page $4 / 23$ is recommended.

| Description | Code |
| :--- | :--- |
| Surge prtection device limiter 75J, 250V~ | 2CSY1302MC |
|  | 2CSY1302MS |

## Components



This device provides protection for power supply sockets for all types of household appliances and in particular for those containing electronic components (Hi-Fi, TV, computers, video recorders, programming mechanisms, cash registers etc.) from damage caused by over-voltages present in power supply networks.

## Instructions for installation and operation

The protection device is housed in the removable front cover. To replace it, after disconnecting the voltage from the installation, extract the cover from the limiter and separate the SPD block from the plastic cover, levering it with a screwdriver. Replace it with spare part 2CSY1302MY.


## Functions

When the red warning light is on, it indicates that the protection has tripped and needs to be replaced (the load remains energised but it is not protected).

## Examples of application

Over-voltages in domestic networks can be caused both by atmospheric interference and by control, operation or programming of connected inductive loads (air conditioners, burner motors, water pumps, reactors of fluorescent or discharge lamps, washing machines, etc.).


Wiring diagram


| Technical specifications |  |
| :---: | :---: |
| Residual current limiting | protection (line-to-neutral) |
| Rated voltage (Un) | 120-230 V $50 / 60 \mathrm{~Hz}$ |
| Number of ports | 1 |
| Rated load current IL | 16 A |
| Max steady current (Uc) | 250 V~ |
| Test class | III |
| Protection level (Up) | < 1.2 kV |
| Test voltage of combined wave generator Uoc | 2.5 kV |
| Rated flashover current (In) | $1 \mathrm{kA}(8 / 20 \mathrm{~ns}) 20$ times |
| Max flashover current (Imax) | $2 \mathrm{kA}(8 / 20 \mathrm{~ns})$ once |
| Temperature range | $-5^{\circ} \mathrm{C}-+40^{\circ} \mathrm{C}$ |
| Internal integrated protection | fuse |

## Reference standards

LV Directive, Standard EN 61643-11

## Mylos - Technical details Protection devices

## Miniature circuit-breakers and Residual current circuit-breakers

| Description | Code |
| :---: | :---: |
| Automatic MCB, 1P+N, C6, breaking capacity 1.5kA | 2CSY1304MC |
|  | 2CSY1304MS |
| Automatic MCB, 1P+N, C10, breaking capacity 3kA | 2CSY1305MC |
|  | 2CSY1305MS |
| Automatic MCB, 1P+N, C16, breaking capacity 3kA | 2CSY1306MC |
|  | 2CSY1306MS |
| Automatic RCD, 1P+N, C6-10 mA, breaking capacity 1.5 kA | 2CSY1307MC |
|  | 2CSY1307MS |
| Automatic RCD, 1P+N, C10-10 mA, breaking capacity 3kA | 2CSY1308MC |
|  | 2CSY1308MS |
| Automatic RCD, 1P+N, C16-10 mA, breaking capacity 3kA | 2CSY1309MC |
|  | 2CSY1309MS |

## Components

Automatic RCD


Automatic MCB


Automatic MCBs and automatic RCDs provide protection against over-currents and earth fault currents of terminal circuits. Protection class with the device embedded in smooth vertical walls with the associated support, frame and blank covers, if required: IP41.

## Instructions for installation and operation

UUse in dry and dust-free locations.

- Temperature between $-5^{\circ} \mathrm{C}$ and $+40^{\circ} \mathrm{C}$.
- Suitability for installation on the supply side of a socket or device for the protection against overloads and short circuits of the equipment and, at the same time, for protection of the users against contact voltages.
- The sensitivity (operating residual current) of 10 mA and the suitability for operation also in the presence of nonsinusoidal fault currents (alternating currents mixed with unidirectional pulsating currents) allow the protection devices of the Mylos range to be classified as "type A RCBOs" (identified by the symbol ), particularly suitable for the protection of:
- terminal uses in rooms where there is a greater risk of electrocution (bathrooms, showers, kitchens etc.), as prescribed by the CEI standards;
- class I consumer power sockets with electronic circuits (computers and accessories, electronic scales, electronic typewriters, cash registers etc.). In domestic and service industry networks non-sinusoidal fault currents are often present because of the use of electronic boards in domestic appliances.
- The electromagnetic part of the circuit breakers guarantees protection against overloads and short circuits; the residual current part of the devices, for current values of 10 mA , guarantees protection of persons against the contact voltages.
- Closing the circuit: manually press the lever of the circuit breaker at the "I" symbol.
- Opening the circuit:
- manually, by pressing the lever of the circuit breaker at the " 0 " symbol or the yellow test button (test);
- automatically, due to thermal (overload), magnetic (short-circuit) or residual current (earth fault current) tripping.
- The device must not be used as a control breaker.
- To check that the circuit breaker is installed and behaving correctly, the yellow test button (test) must be pressed every month. If the device is correctly installed and powered, the circuit breaker trips; if it does not, you must immediately inform the installation technician because safety will be compromised. After the test, you need to press the main key near the "I" symbol in order to reset the circuit breaker.
- Thermomagnetic tripping with characteristic "C" (see the current-time tripping diagram provided below).
- Double-pole operation with one protected pole + N, type A for alternated fault currents and unidirectional pushbuttons.
- Operating residual current (sensitivity) I $\Delta \mathrm{n} 10 \mathrm{~mA}$; the circuit breaker must be connected according to the electrical diagram provided below.


## Functions

- Green front LED for signalling normal operation: presence of line voltage and closed circuit.
- Internal temperature checking: the circuit breaker automatically operates the opening of the circuit as soon as the safety threshold is exceeded.
- Self-test function to check the electrical continuity of the internal residual current circuit (in the absence of continuity, the circuit breaker will open).
- Opening the circuit if voltages occur higher than the predefined threshold at the circuit breaker input(for example, in 380V $\sim$ three-phase systems the circuit breaker prevents an erroneous "line-to line" connections, instead of "line-to-neutral").


## Characteristics

- Main lever operated control part: "l" symbol (closed circuit); " 0 " symbol (open circuit).
- Front LED for signalling the presence of line voltage and closed circuit
- Yellow test button (test) for checking that the device is functioning properly.
- Terminals protects with captive screws for clamping two conductors up to 4 mm 2 each.
- Construction of the thermomagnetic part as prescribed by Standards EN 60898 and IEC 60898.
- Construction of the residual current part according to Standards EN 61009 and IEC 61009.
- Power supply voltage: $120-230 \mathrm{~V} \sim \pm 10 \% 50-60 \mathrm{~Hz}$.

The supply line can be connected to either the upper or the lower terminals of the circuit breaker, which must be installed downstream of a general residual current circuit breaker (Standard CEI 64-8/5, paragraph 532.2.2.2).
The line voltage determines operation (Standard IEC 1009-1, paragraph 4.1.2).

## Wiring diagram



## Characteristic curves



Short circuit current

## Current-time tripping diagrams for circuit breakers of the Mylos range



## Mylos - Technical details <br> Protection devices

## Examples of application



| Technical specifications |  |  |
| :---: | :---: | :---: |
| Type of circuit breaker | MCB | RCD |
| Rated voltage | 230 V | 230 V |
| Rated frequency | $50 \div 60 \mathrm{~Hz}$ | $50 \div 60 \mathrm{~Hz}$ |
| Rated residual current | - | 10 mA or 30 mA |
| Short-circuit breaking capacity | 6A 1,500A | 6A 1,500A |
|  | 10A 3,000A | 10A 3,000A |
|  | 16A 3,000A | 16A 3,000A |
| Rated currents | 6-10-16A | 6-10-16A |
| Number of poles | $1 \mathrm{P}+\mathrm{N}$ | $1 \mathrm{P}+\mathrm{N}$ |
| Tripping characteristic |  |  |
| - Overcurrent protection | Type C | Type C |
| - Limitation class | 3 | 3 |
| - Residual current protection | - | Class A |



Reference standards
Magnetotermico: EN 60898-1 - Differenziale: IEC 61009-1

# Mylos - Technical details <br> Safety and comfort devices 

## Thermostats and time-programmed thermostats

| Description | Code |
| :--- | :--- |
| Electronic time-programmed thermostat, day/week programming, | 2CSY1201MC |
| summer/winter function, with LCD display, 3 modules, | 2CSY1201MS |
| powered by 1.5V AA batteries |  |

## Components



## External keys

A Key for selecting the SET temperatures:
Comfort t1, Activity t2, Economy t3; adjustable from $+5^{\circ} \mathrm{C}$ to $+39^{\circ} \mathrm{C}$
B Key $\boldsymbol{\Delta}$ to raise the selected temperature
C Key $\boldsymbol{\nabla}$ to lower the selected temperature
Note: the $\boldsymbol{\Delta}$ and $\boldsymbol{\nabla}$ keys also perform many other functions purposely designed to facilitate the programming and use of the time-programmed thermostat (for example, setting the hour, minutes and day etc.)
D Key for setting manual operation and deactivating the time-programmed thermostat (OFF)

The flush-mounted 3 -module weekly time-programmed thermostat, battery powered (3V), suitable for heating and/ or cooling systems, is equipped with a bright backlit display (timed) to monitor all its functions in real time.
Easy programming is its essential feature. In fact, despite its complete set of functions, it is very easy to use.
Various programs with 3 and 4 temperature levels are already set up in its permanent memory, designed to offer maximum comfort. However, it only takes a few seconds to choose your preferred temperatures throughout the entire day (even every


| Disp |  |
| :---: | :---: |
| 1 | Signalling the set temperature |
| 2 | Display in tenths of a degree |
| 3 | Days of the week |
| 4 | Current time or ambient temperature |
| 5 | Activation by telephonic programmer |
| 6 | Manual operation indicator |
| 7 | Symbol signalling run-down batteries (replace the batteries within 30 days of the alarm) |
| 8 | Intelligent operation (Auto) |
| 9 | Appliance in operation signal (for example, a boiler) |
| 10 | Active heating program |
| 11 | Thermal scale over 24 hours: <br> - Upper digit = temperature t1 Comfort <br> - Middle digit = temperature t2 Attività <br> - Lower digit = temperature t3 Economy <br> $\square$ no Digit = temperature t墦 Anti-freeze <br> The presence of 2 Digits one above the other is equivalent to HALF AN HOUR ( $1 / 2 \mathrm{~h}$ ) of operation for each type of temperature specified by the two digits. <br> A flashing Digit indicates that the current time is set. |
| 12 | SET Temperature t3 Economy (saving) |
| 13 | Cooling program active |
| 14 | SET Temperature t2 Attività (precomfort) |
| 15 | SET Temperature t1 Comfort |

30 minutes) and for each day of the week.
The time-programmed thermostat is factory set to regulate the temperature in a differential ON/OFF manner and is configurable from $0.2^{\circ} \mathrm{C}$ to $2^{\circ} \mathrm{C}$ so as to adapt to the thermal inertia of any system. Alternatively, you can select proportional operation with cycles of a duration that can be set (7-10-1520 minutes). This system makes it possible to maintain the desired temperature more stable, increasing the feeling of comfort for the user and saving on energy consumption. In addition, the time-programmed thermostat can start up

## Mylos - Technical details <br> Safety and comfort devices

in advance automatically (intelligent operation) so that the desired temperature can already be reached for a particular time.
The set temperature scale is in degrees Centigrade (Celsius) and it is possible to calibrate temperature measurement by setting a correction value (by -1.9 to $+1.9^{\circ} \mathrm{C}$ ). When changing over to degrees Fahrenheit, all the temperature settings configured are updated according to the new scale. Particular attention was also focussed on energy saving: the Holiday function, interruption for household cleaning, the optional locking of set temperatures, the anti-freeze temperature that is adjustable from 4 to $12^{\circ} \mathrm{C}$, control via telephone (with optional telephonic programmer), all contribute to avoiding waste of energy with consequent financial savings.

## Functional specifications

The time-programmed thermostat is equipped with a convenient removable front panel that allows the batteries to be replaced without interfering with electrical connections and in order to allow easier programming of the main functions.


## Wiring diagram



Connection to a motorized valve and a telephonic programming device.


Connection to a boiler and a telephonic programming device.

| Technical specifications |  |
| :---: | :---: |
| Power supply | 2 AA (LR6) 1.5V alkaline batteries (not included) |
| Battery life | approximately 2 years |
| Battery life from the moment the "run-down batteries" symbol | 1 month |
| Blue display backlighting | time for 6 seconds from the last time that a key was pressed |
| Type of action, disconnection and device | 1 / B / U / Electronic |
| Output type | relay with change-over contact COM / NO / NC, potential-free - max 8(2)A / 250 V ac |
| Software | class A |
| Rated pulse voltage | 4 kV |
| Cross-section of the cables at the terminals | $0.75 \mathrm{~mm}^{2} \div 2.5 \mathrm{~mm}^{2}$ |
| Input for telephonic programming device | for potential-free NO contact |
| Type of insulation | class III |
| Protection class | IP30 |
| Pollution level | normal |
| Ambient temperature display scale | $-5^{\circ} \mathrm{C} \div+39^{\circ} \mathrm{C}$ |
| Ambient temperature indicator resolution | $0,1^{\circ} \mathrm{C}$ |
| Temperature set adjustment range (t1/t2/t3) | $+5^{\circ} \mathrm{C} \div+39^{\circ} \mathrm{C}$ |
| Temperature setting resolution | $0.1{ }^{\circ} \mathrm{C}$ |
| Temperature correction (Offset) | adjustable from $-1.9^{\circ} \mathrm{C} \mathrm{a}+1.9^{\circ} \mathrm{C}$ (default $0.0^{\circ} \mathrm{C}$ ) |
| Anti-freeze temperature (t******) | adjustable from $+4^{\circ} \mathrm{C} \mathrm{a}+12^{\circ} \mathrm{C}$ (default $5^{\circ} \mathrm{C}$ ) |
| Temperature adjustment method |  |
| - DIFFERENTIAL (factory setting) | adjustable from $0.2{ }^{\circ} \mathrm{C} \mathrm{a} 2^{\circ} \mathrm{C}$ (default $0.6{ }^{\circ} \mathrm{C}$ ) |
| - PROPORTIONAL | cycles of 7-10-15-20 minutes can be set (default 10') |
| Thermal gradient | max $1^{\circ} \mathrm{K} / 15$ min |
| Operating temperature limits | $-5^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Storage temperature limits | $-10^{\circ} \mathrm{C} \div+65^{\circ} \mathrm{C}$ |

## Reference standards

EN 60730-1/EN 60730-2-7/EN 60730-2-9

| Description | Code |
| :--- | :--- |
| Electronic thermostat, summer/winter function, with LCD display, | 2CSY1202MC |
| 3 temperature levels can be set, 3 modules, powered by 1.5V AA |  |
| batteries | 2CSY1202MS |

## Components



| External keys |  |
| :---: | :---: |
| A | Mode key <br> Pressed at rapid intervals for "User" settings: <br> - operating mode with COMFORT temperature: WINTER (heating) or SUMMER (cooling) <br> - operating mode with NIGHT-TIME REDUCTION temperature Winter or Summer <br> - thermostat OFF mode <br> Pressed at length (4 sec.) for "Installer" settings: <br> - access the PROGRAMMABLE FUNCTIONS menu |
| B | UP key ( $\mathbf{A}$ ) allows you to increase the value of a setting |
| C | DOWN keys ( $\boldsymbol{\nabla}$ ) allows you to decrease the value of a setting |
| D | OK key |

Pressed briefly: confirm the operation
Prolonged pressing ( 4 sec .): exit from the PROGRAMMABLE FUNCTIONS menu

The flush-mounted 3-module thermostat, battery powered $(3 \mathrm{~V})$, suitable for heating and/or cooling systems, is equipped with a bright backlit display (timed) to monitor all its functions in real time.
The thermostat is factory set to regulate the temperature in a differential ON/OFF manner and is configurable from $0.2^{\circ} \mathrm{C}$ to $2^{\circ} \mathrm{C}$ so as to adapt to the thermal inertia of any system. Alternatively, you can select proportional operation with cycles of a duration that can be set (7-10-15-20 minutes). This system makes it possible to maintain the desired temperature more stable, increasing the feeling of comfort for the user and saving on energy consumption.

| Display |  |
| :---: | :---: |
| 1 | Configured temperature setting: COMFORT or ECONOMY or ANTI-FREEZE |
| 2 | SUMMER mode (cooling) |
| 3 | Connected appliance operating signal (ON with symbol or flashing) |
| 4 | WINTER mode (heating) |
| 5 | Night-time Reduction mode (saving) |
| 6 | Activation of the appliance connected to the thermostat through the telephonic programmer (optional) |
| 7 | Ambient temperature display |
| 8 | Low battery signal |
| 9 | Timed backlit display |



The set temperature scale is in degrees Centigrade (Celsius) and it is possible to calibrate temperature measurement by setting a correction value (by -1.9 to $+1.9^{\circ} \mathrm{C}$ ). When changing over to degrees Fahrenheit, all the temperature settings configured are updated according to the new scale. Particular attention was also focussed on energy saving: optional locking of set temperatures, anti-freeze temperature value adjustable from 4 to $12^{\circ} \mathrm{C}$, control via telephone (with optional telephonic programmer), all contribute to avoiding waste of energy with consequent financial savings.

## Mylos - Technical details

Safety and comfort devices

## Functional specifications

The time-programmed thermostat is equipped with a convenient removable front panel that allows the batteries to be replaced without interfering with electrical connections and in order to allow easier programming of the main functions.


## Wiring diagram

Connection to a motorized valve and a telephonic programming device.


Connection to a boiler and a telephonic programming device.


| Technical specifications |  |
| :---: | :---: |
| Power supply | 2 AA (LR6) 1.5V alkaline batteries (not included) |
| Battery life | approximately 2 years |
| Battery life from the moment that the "batteries run down" symbol lights up on the display | approximately 1 month |
| Blue display backlighting | timed for 6 seconds from the last time that a key was pressed |
| Software | class A |
| Rated pulse voltage | 4kV |
| Type of action, disconnection and device | 1 / B / U / Electronic |
| Output type | relay with change-over contact COM / NO / NC, potential-free - max 8(2)A / 250 V ac |
| Connection of a consumer (load) | 2 or 3 conductors |
| Input for telephonic programming device | for potential-free NO contact |
| Cross-section of the cables at the terminals | $0,75 \mathrm{~mm}^{2} \div 2.5 \mathrm{~mm}^{2}$ |
| Temperature levels that can be set | COMFORT / ECONOMY (saving) / ANTI-FREEZE (OFF) |
| Ambient temperature display field | $0^{\circ} \mathrm{C} \div+37.7^{\circ} \mathrm{C}$ |
| Ambient temperature resolution | $0.1{ }^{\circ} \mathrm{C}$ |
| T Set temperature adjustment field COMFORT and ECONOMY | $+5^{\circ} \mathrm{C} \div+37.7^{\circ} \mathrm{C}$ (limitabile) |
| SET temperature resolution | $0.1{ }^{\circ} \mathrm{C}$ |
| Tolerance on temperature reading | $\pm 0.5{ }^{\circ} \mathrm{C}$ |
| Ambient temperature reading correction (Offset) | adjustable from $-2{ }^{\circ} \mathrm{Ca}+2^{\circ} \mathrm{C}$ (default $0.0{ }^{\circ} \mathrm{C}$ ) |
| Anti-freeze temperature (t******) | $+4^{\circ} \mathrm{C} \div+12^{\circ} \mathrm{C}$ (adjustable or excludable set) (default $4^{\circ} \mathrm{C}$ ) |
| Temperature adjustment method |  |
| - ON/OFF with RCD | that can be set from $0.2^{\circ} \mathrm{C} \mathrm{a} 1.2^{\circ} \mathrm{C}$ (default $0.5^{\circ} \mathrm{C}$ ) |
| - PROPORTIONAL with control frequency | that can be set from 7 to 20 minutes (default 10 minutes) |
| Thermal gradient | $1^{\circ} \mathrm{K} / 15 \mathrm{~min}$ |
| Protection class | IP30 |
| Insulation class | 11 回 |
| Pollution level | normal |
| Operating temperature limits | $0^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Storage temperature limits | $-10^{\circ} \mathrm{C} \div+65^{\circ} \mathrm{C}$ |

## Reference standards

EN 60730-1/EN 60730-2-9

| Description | Code |
| :--- | :--- |
| Electronic time-programmed thermostat, day/week programming, | 2CSY1201XC |
| summer/winter function, with LCD display, 2 modules, | 2CSY1201XS |
| $230 \sim 50 / 60 H z$ power supply |  |

## Components



The Mylos 2-module time-programmed thermostat provides a simple solution to manage the thermoregulation of a home installation. It is possible to choose between operation in Summer or Winter mode and to define time-based operating programs, with a choice of 3 predefined programs or 4 user customizable programs. The additional Party and Holiday modes enable intuitive management of some common requirements in the house.

## Examples of installation

Caution: before carrying out the installation, deactivate the line voltage.
Heating systems with a time-programmed thermostat that controls:
A) wall-mounted boiler;
B) burner or circulation pump or motorized solenoid valve;
C) zone solenoid valve.


## Wiring diagram



| Technical specifications |  |
| :---: | :---: |
| Power supply | 250V~ |
| Blue display backlighting | timed for 6 seconds from the last time that a key was pressed |
| Output type | with NO relay 10A res./ 4A ind. 250V~, potential-free |
| Connection of a consumer (load) | 2 conductors |
| Cross-section of the cables at the terminals | $0.75 \mathrm{~mm}^{2} \div 1.5 \mathrm{~mm}^{2}$ |
| Temperature levels that can be set | in addition to ANTI-FREEZE and TOO HOT |
| Ambient temperature display field | $0^{\circ} \mathrm{C} \div+37.7{ }^{\circ} \mathrm{C}$ |
| Ambient temperature resolution | $0.1{ }^{\circ} \mathrm{C}$ |
| Tolerance on temperature reading | $\pm 0.5{ }^{\circ} \mathrm{C}$ |
| Ambient temperature reading correction (Offset) | adjustable $-3{ }^{\circ} \mathrm{C} \div+3{ }^{\circ} \mathrm{C}$ (default $0.0{ }^{\circ} \mathrm{C}$ ) |
| ANTI-FREEZE temperature | adjustable $5^{\circ} \mathrm{C} \div 40^{\circ} \mathrm{C}$ (default $5^{\circ} \mathrm{C}$ ) |
| TOO WARM temperature | adjustable $5^{\circ} \mathrm{C} \div 40^{\circ} \mathrm{C}$ (default $35^{\circ} \mathrm{C}$ ) |
| ON-OFF regulation modes | adjustable hysteresis $0.1^{\circ} \mathrm{C} \div 1^{\circ} \mathrm{C}$ (default $0.1^{\circ} \mathrm{C}$ ) |
| PID-proportional regulation mode | time base 10 min , not adjustable |

## Reference standards

EN 60730-1/EN 60730-2-7/EN 60730-2-9

## Mylos - Technical details

Safety and comfort devices

| Description | Codice |
| :--- | :--- |
| Electronic thermostat, summer/winter function, with LCD display, <br> 3 temperature levels can be set, 2 modules, 230~50/60Hz <br> power supply | 2CSY1202XC |
| $2 C S Y 1202 X S$ |  |

## Components



## Wiring diagram



| Technical specifications |  |
| :---: | :---: |
| Power supply | 250V~ |
| Blue display backlighting | timed for 6 seconds from the last time that a key was pressed |
| Output type | with relay with NO contact 10A res./ 4A ind. 250V~ potential-free (2CSY1202XC/S), on an actuator delocalized via bus (2CSYE1202C/S) |
| Connection of a consumer (load) | 2 conductors |
| Cross-section of the cables at the terminals | $0.75 \mathrm{~mm}^{2} \div 1.5 \mathrm{~mm}^{2}$ |
| Temperature levels that can be set | ANTI-FREEZE / TOO HOT |
| Ambient temperature display field | $0^{\circ} \mathrm{C} \div+37.7{ }^{\circ} \mathrm{C}$ |
| Ambient temperature resolution | $0.1{ }^{\circ} \mathrm{C}$ |
| Tolerance on temperature reading | $\pm 0.5{ }^{\circ} \mathrm{C}$ |
| Ambient temperature reading correction (Offset) | adjustable $-3{ }^{\circ} \mathrm{C} \div+3{ }^{\circ} \mathrm{C}$ (default $0,0^{\circ} \mathrm{C}$ ) |
| ANTI-FREEZE temperature | minimum $5^{\circ} \mathrm{C}$ (Default) |
| TOO WARM temperature | adjustable $5^{\circ} \mathrm{C} \div 40^{\circ} \mathrm{C}$ (default $35^{\circ} \mathrm{C}$ ) |
| ON-OFF regulation modes | adjustable hysteresis $0.1^{\circ} \mathrm{C} \div 1^{\circ} \mathrm{C}$ <br> (default $0,1^{\circ} \mathrm{C}$ ) |
| PID-proportional regulation mode | time base 10 min , not adjustable |

## Reference standards

EN 60730-1/EN 60730-2-9

## Dimmer

Loads that can be controlled with the dimmer

| Dimmer type |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |


| Description | Code |
| :--- | :--- |
| Electronic dimmer with rotary control for resistive loads 100-500W | 2CSY1205MC |
| $230 \mathrm{~V} \sim 50 / 60 \mathrm{~Hz}$ | 2CSY1205MS |

## Components



Electronic dimmer with rotary control for resistive loads 100-500W 230V~50/60Hz (visible in the dark).

## Operation

The load can be controlled and adjusted by rotating the knob. The light intensity of the location LED is attenuated as the brightness of the controlled lamps increases.

## Wiring diagram

The connection can be made between phase and neutral or between phase and phase, always in series with the load.

Control with dimmer


Control with a switch and adjustment with a dimmer


| Technical specifications |  |
| :--- | :--- |
| Rated voltage | $230 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| Resistive load power | $100-500 \mathrm{~W}$ |
| Inductive load power | $100-500 \mathrm{VA}$ |
| Technology |  |
| Operating temperature |  |
| TRIAC | $-50-250 \mathrm{~W}$ |
| Adjustable load |  |

## Reference standards

CEI 23-9 (EN 60669-1)

## Mylos - Technical details

Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Electronic dimmer with pushbutton control for resistive and inductive | 2CSY1206MC |
| loads 60-500W (60-500VA) 230V $\sim 50 / 60 \mathrm{~Hz}$ | 2CSY1206MS |

Components


Electronic dimmer with pushbutton control for resistive and inductive loads 60-500W 60-500VA 230V~ -50/60Hz (visible in the dark).

## Operation

The load can be controlled and adjusted using a pushbutton. The light intensity of the location LED is attenuated as the brightness of the controlled lamps increases.
The load can be turned on, adjusted and turned off using the pushbutton present on the dimmer or with normal non-luminous NO pushbuttons connected to the dimmer.

- Storage of the adjustment set when the load was switched off (apart from network outages).
- Switch-on and switch-off of the load is gradual.
- Pressing the pushbutton quickly causes the load to be switched on or off. Adjustment is obtained by keeping it pressed. To reverse the direction of adjustment, interrupt and then resume pressing the pushbutton.
- If the pushbutton is pressed approximately between 0.3 s and 1 s , the dimmer will light up the controlled lamps, automatically and gradually, to their maximum brightness.


## Wiring diagramo

The connection can be made between phase and neutral or between phase and phase, always in series with the load.

Control and adjustment with a dimmer pushbutton


Control and adjustment with a dimmer pushbutton and NO button connected in parallel


| Technical specifications |  |  |
| :--- | :--- | :--- |
| Rated voltage | $230 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ | $110 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| Resistive load power | $60-500 \mathrm{~W}$ | $30-250 \mathrm{~W}$ |
| Inductive load power | $60-500 \mathrm{VA}$ | $30-250 \mathrm{VA}$ |
| Technology | TRIAC | TRIAC |
| Operating temperature | $-5^{\circ} \mathrm{C} \div+35^{\circ} \mathrm{C}$. |  |
| Adjustable load | Filament and halogen lamps, ferromagnetic |  |
|  | transfor |  |

## Reference standards

CEI 23-9 (EN 60669-1)

| Description | Code |
| :--- | :--- |
| Electronic dimmer with rotary control and two-way switch for resistive | 2CSY1207MC |
| loads 100-500W 230V $\sim 50 / 60 \mathrm{~Hz}$ | 2CSY1207MS |

## Components



Electronic dimmer with rotary control and two-way switch for resistive loads 100-500W 230V~ -50/60Hz (visible in the dark).

## Operation

The load is controlled directly by means of a pressed two-way switch. Adjustment is performed by rotating the knob.
The light intensity of the location LED is attenuated as the brightness of the controlled lamps increases.
Once the desired lighting level has been set, pressing the knob will switch the light source off, while pressing it again will switch it back on at the set lighting level.

## Wiring diagram

The connection can be made between phase and neutral or between phase and phase, always in series with the load.

Control and adjustment with a dimmer

Control with two-way switch and dimmer, adjustment with dimmer


Control with two-way switch, intermediate switch and dimmer, adjustment with dimmer


| Technical specifications |  |  |
| :---: | :---: | :---: |
| Rated voltage | 230V-50/60Hz | 110V-50/60Hz |
| Resistive load power | 100-500W | 50-250W |
| Inductive load power | 100-500VA | 50-250VA |
| Technology | TRIAC | TRIAC |
| Operating temperature | $-5^{\circ} \mathrm{C} \div+35^{\circ} \mathrm{C}$. |  |
| Adjustable load | Filament and halogen lamps |  |

## Reference standards

CEI 23-9 (EN 60669-1)

## Mylos - Technical details Safety and comfort devices

## Gas detectors

| Description | Code |
| :---: | :---: |
| Natural gas electronic detector with acoustic and luminous signal, relay output, 1 NO/NC change-over contact | 2CSY1210MC |
| 6 A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50Hz. <br> Equipped with dedicated frame for installation on type 503 box | 2CSY1210MS |
| LPG gas presence electronic detector with acoustic and luminous signal, relay output, 1 NO/NC change-over contact (AC1)/ | 2CSY1211MC |
| 2A (AC15) - 250V~. Power supply 230V~ - 50Hz. <br> Equipped with dedicated frame for installation on type 503 box | 2CSY1211MS |

## Components




Yellow LED 2 - Replacement of the probe module (after the first 5 years) replacement of the entire product (after another 5 years) consisting
of the power supply module and the replaced probe module

Green LED -
Socket without network
"Test/Reset" key: cancellation of the alarm memory, silencing the probe module replacement or entire product replacement alarm,
test to check the installation

Red LED - Alarm tripping / alarm memory completed

Holder for the label specifying the sensor module replacement date

The wiring accessories' natural gas (CH4) or LPG gas detectors, flush-mounted with 3 modules ( 503 box embedded in the wall) contribute to guaranteeing the safety of civil environments where gas operated domestic appliances are installed, such as: boilers, cookers.
The equipment consists of a fixed power supply module and removable sensor module, which must be replaced after 5 years of continuous use. This allows a saving on the purchase and installation costs, with a lower impact on the environment due to the extension of the life time of the power supply/relay module for a further 5 years.

## Positioning of the detector

The installation of the gas detector does not exonerate users from observance of all current laws and standards in the country of installation regarding the specifications, installation and use gas powered equipment, the ventilation of rooms and the release of combustion products.


- Install the natural gas detector at a maximum of 30 cm from the ceiling
- Install the LPG detector at a maximum of 30 cm from the floor surface.
- Install the detectors between 1 m and 4 m from the gas appliances..
- Do not install the detectors outdoors or in places exposed to atmospheric agents
- Do not install the detectors close to: sinks, air intakes, heating and air conditioning devices, windows and ventilation devices; in addition, the detectors must not be installed in closed spaces, such as behind a curtain or inside


Illustrative example: installation with 3 gas detectors (natural gas) that command the solenoid valve for shutting off the gassupply.

Extraction of the probe module（for example：to replace it） CAUTION：always deactivate the line voltage 230V～

1．Remove the frame．
2．Delicately insert the flat blade of a small screwdriver and use it as a lever to uncouple the sensor module．
3．Rotate the sensor module upwards in order to uncouple it completely．

Replacement sensor modules：
2CSY1220MC／S：Natural Gas replacement probe module 2CSY1223MC／S：LPG Gas replacement probe module


## Characteristics

－Devices equipped with a control circuit with microprocessor that performs self－diagnosis tasks to ensure the perfect efficiency of the sensor over time．
－Sensor equipped with a special selective filter in order to avoid alarms in response to the presence of gas vapours that are not meant to be detected，such as steam from cooking，vapours from cleaning fluids etc．
－Devices equipped with an operating time meter，in order to signal the necessary replacement of the sensor module after the firsts 5 years of use．
－Luminous（red LED）and acoustics alarm signal．e．
－TEST（to verify that the device is operating properly）and Reset system with a single pushbutton．
－The gas detectors are equipped with an output relay that can command a valve to shut off the distribution of gas．

| Key to signals |  |
| :---: | :---: |
| Luminous LED | Acoustic BUZZER |
| $\bigcirc$ off | －off |
|  | 4）））intermittent |
| $\longrightarrow$ on，fixed | － |

## Reference standards

LVD CEI 216－8－EMC EN 50270

## Wiring diagrams

CAUTION：the power supply network must incorporate a device to guarantee omnipolar disconnection．
The detector must be powered by a voltage of $230 \mathrm{~V} \sim 50 \mathrm{~Hz}$ with continuity in order to guarantee maximum safety and correct signalling of replacement within the declared time limits．
For the electrical connections，bring cables with a maximum cross－section of $2.5 \mathrm{~mm}^{2}$ to the terminals of the detector．

The diagrams（illustrative examples）show the position of the relay contacts at rest（no alarm）．

Connection with solenoid valve normally closed


Connection with solenoid valve normally open


| Technical specifications |  |
| :---: | :---: |
| Power supply voltage | 230 V ＋／－10\％ 50 Hz |
| Solenoid valve command relay | 1 potential－free change－over contact |
| Capacity of relay contacts（max） | 6 （2）A 250 V ～ |
| Protection class | IP40 |
| Type of insulation | Class II $\square^{\text {l }}$ |
| Area of application | Domestic－type A |
| Semiconductor sensor | Installed inside the probe module |
| Operating temperature limits | $-10^{\circ} \mathrm{C} \div+40^{\circ} \mathrm{C}$ |
| Operating humidity | 90\％UR（maximum） |
| Types of gas detected | Natural Gas－with model for natural gas LPG－with model for LPG gas |
| Alarm tripping | 10\％LIE（Lower Explosiveness Limit） <br> For both models |
| Acoustic alarm | 85 dB at 1 m |
| Sensor warm－up time at switch－on | 1 minute |
| Storage temperature limits | $-15^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |

## Mylos - Technical details Safety and comfort devices

## Emergency lighting

| Description | Code |
| :--- | :--- |
| LED lamp for emergency lighting or steplight. Charge reserve up to 3h | 2CSY1303MC |
| and recharge time 12h. Power supply 230V~ - 50Hz. |  |
| Equipped with dedicated frame for installation on type 503 box |  |

## Components



High efficiency LED lit emergency device for embedded installation. Dimensions of 3 modules. Suitable for installation of frames of the Mylos wiring accessories' range.

## Instructions for installation and operation

The lamp provides 6 distinct operating modes, that can be set by programming.

| Mode | Description | Battery life | Terminals 1 e 2 |
| :---: | :---: | :---: | :---: |
| 1 | inhibition not activated | 1h | Switch-on / switch-off / adjustment |
| 2 | inhibition not activated | 2h | Switch-on / switch-off / adjustment |
| 3 | inhibition not activated | 3h | Switch-on / switch-off / adjustment |
| 4 | Inhibition activated | 1h | Connection for inhibition switch |
| 5 | Inhibition activated | 2h | Connection for inhibition switch |
| 6 | Inhibition activated | 3h | Connection for inhibition switch |

To access programming mode you need to connect the batteries using the appropriate connector: the yellow LED will light up and the green LED will flash a number of times equal to the mode set (for example, 2 flashes=mode 2).
This sequence will be repeated 3 times.
If you wish to change the operating mode, press the transparent diffuser: the yellow LED will switch off for a fraction of a second to indicate that the key has been pressed and the green LED will indicate the value of the new mode by the number of flashes. Each time the diffuser is pressed,
it increments the operating mode by one unit. After three cycles of displaying the mode, the device will automatically complete the programming procedure, store the mode that has been set and the GREEN and YELLOW LEDs will switch off.

In modes 1-2-3 it is possible to adjust the lighting level (dimmering) by pressing the transparent diffuser.

## Functions

The device is equipped with 2 signalling LEDs:

| Green LED | Meaning |
| :--- | :--- |
| Flashing | Device connected to the electrical network being |
| On | Quick-charged. |
| Off | Device connected to the electrical network being |
|  | Device in emergency state. |
| Yellow LED | Meaning |
| On | The device has faults (monthly test NOT passed) |
| Off | No malfunction |

## Wiring diagram



| Technical specifications |  |
| :---: | :---: |
| Power supply voltage | $230 \mathrm{~V} \sim \pm 10 \%, 50-60 \mathrm{~Hz}$. |
| Emergency light flow | 50 lumen with 1h autonomy 35 lumen with 3h autonomy |
| Consumption | SE mode (not permanent) 5mA at $230 \mathrm{~V} \sim=1.6 \mathrm{~W}$ |
|  | SA mode (permanent) 30mA at 230V~ $=7 \mathrm{~W}$ |
|  | Ni-Mh batteries, AA 3.6V 1300mAh High Temperature |
| Battery recharge time | 12 hours quick charge |
| Battery life | 1h, 2 h and 3 h |
| Lamp | 2 white high efficiency 1W LEDs |
| Signalling | 2 GREEN and YELLOW LEDs |
| Ambient Temperature | $25^{\circ} \mathrm{C}$ |

## Reference standards

EN 60598-2-22

| Description | Code |
| :--- | :--- |
| Anti black-out removable light, 230V~. Charge reserve 4.5h and | 2CSY1214MC |
| recharge time 10-20h. To be combined with 230V ~ sockets | 2CSY1214MS |

## Components



Pushbutton for manual activation

Battery


The anti-blackout light is an automatic removable, rechargeable electronic lamp that can be inserted in any Schuko socket or Italian P11 standard 10A bivalent socket. Socket outlets particularly recommended for holding the lamp are the sockets of the Mylos wiring accessories' range 2CSY1108MC/S and 2CSY1109MC/S, that allow the body of the lamp to be embedded in the socket outlet, thus minimizing the external dimensions.
The device was designed to light up automatically in the event of a blackout (no voltage warning), or to be used as a portable lighting device, useful in order to guarantee visibility and facilitate maintenance operations and/or searching for faults in unlit environments.

## Functions

A light source is activated automatically whenever the line voltage is missing (blackout) thanks to rechargeable backup batteries.

- Possibility to extract it from the socket and use it as a normal pocket torch with an on/off button on the front.
- Long autonomy, 4.5 hours of continuous operation.
- Small dimensions - protrusion from the Schuko profile (only 8 mm ).
On the front part there are two LEDs (one red and one green) that indicate the state of the lamp when is powered:
- Red LED on, recharging in progress, in the event of a blackout the lamp will remain off (battery saving condition, used in the case of prolonged absence).
- Green LED on, recharging in progress, in the event of a blackout the lamp will light up and will switch off automatically when the network is restored
The pushbutton on the front part allows you to switch from one condition to another.


| Technical specifications |
| :--- |
| Plug |
| Center distance of the pins |
| $\varnothing$ of the pins |
| Power supply |
| Recharge time |
| Renm |
| Useful battery life |

Reference standards
EN 60598-1, EN 60598-2

## Mylos - Technical details

Safety and comfort devices

## Other devices

| Description | Code |
| :--- | :--- |
| IR motion detector, with twilight sensor and adjustment of | 2CSY1216MC |
| operation time | 2CSY1216MS |

## Components

## 

Adjustment of the twilight tripping threshold


## Instructions for installation

- for installation inside
- flush-mounting installation: 1.1-1.2 m from the walking surfaceo

The apparatus cannot be installed in: - environments with sudden changes temperature.


- environments with high humidity.
- environments with presence of gas, corrosive fluids, sea air or dust.

Wiring diagram


Examples of application


Reference standards
LV Directive; EMC Directive; EN 60730

| Description | Code |
| :--- | :--- |
| IR receiver for remote control, 1-channel, 230V~ | 2CSY1217MC <br>  <br>  |

## Components



IR receiver with 1 channel. This device allows operating commands to be received that are generated by a dedicated remote control, sold separately (code 2CSE1217EL).
The active signal bandwidth of the remote control is selected by a dip-switch on the receiver (1 receiver for every channel of the remote control).

## Wiring diagram



| Technical specifications |
| :--- |
| Operating temperature |
| Protection class |
| Max load |
| Place of use |
| indoors, dry |
| 16A resistive |
| indoors, dry |

## Reference standards

CEI 64-8

## Examples of application



## Mylos - Technical details

Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Universal badge switch with location light | 2CSY1426MC |
|  | 2CSY1426MS |

2
Components


## Operation

Load OFF


Vertical badge electronic switch, relay output 16 A $250 \mathrm{~V} \sim$, power supply $230 \mathrm{~V} \sim 50-60 \mathrm{~Hz}$, modules. Supplied without ISO card (badge). The device is equipped with a courtesy LED for night-time localization.

Wiring diagram


| Technical specifications |
| :--- |
| Power supply |
| Output |
| Typical absorption |
| Operating temperature |$\quad$| relay with clean contact 10 A |
| :--- | :--- |

## Reference standards

LV Directive; EMC Directive; Standard EN 60669-2-1

## Mylos - Technical details <br> Frames

Mylos frames feature an under-plate that guarantees maximum adhesion to every type of surface and allows the application of finishing materials, while maintaining minimal protrusion from the wall.
The under-plate is black except for the Pure White finishes, where it is white in order to guarantee maximum integration with the wall.
In the 4+4 module frames, the separator is painted with a white or black velvet finish. The combination is that shown for each finish in the section from page $2 / 22$ to page $2 / 24$

## Reference standards

CEI 23-9 (EN 60669-1).


Frames customized with a logo/text string can be supplied on request. They are produced by means of monochromatic pad printing on the highlighted areas.


Customization possible with standard colours (black, Pantone Cool Gray 3 C, Pantone 5425 C) or with a colour specified by the customer.
Minimum order batch: 36 pieces including various modularities..
For quotes and delivery times contact the local $A B B$ salesman.

## Application

Discover all the combinations and possibilities for customization of the Mylos series with the new dedicated app!


## Mylos - Coding <br> Order information

## Coding criteria of the devices

| 2 | C | S | Y | 1 |  |  |  | M |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fixed part of the code |  |  |  |  | Product function | Product progressive number |  |  | Product colour |
| 0 | Control devices |  |  |  |  | C | White |  |  |
| 1 | Socket outlets |  |  |  |  | S | Black |  |  |
| 2 | Safety and comfort devices |  |  |  |  |  |  |  |  |
| 3 | Protection devices and signalling devices |  |  |  |  |  |  |  |  |
| 4 | Special systems |  |  |  |  |  |  |  |  |
| 5 | Key covers |  |  |  |  |  |  |  |  |
| 6 | Components for installation and accessories |  |  |  |  |  |  |  |  |

Example: White single-pole switch

| 2 | $C$ | $S$ | $Y$ | 1 | 0 | 0 | 1 | $M$ | $C$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



## Coding criteria of the frames



Example: 3-module frame, Metal, silver satin finish, square

| 2 | $C$ | $S$ | $Y$ | 0 | 3 | 0 | 1 | $\mathbf{Q}$ | L | Z |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Packaging

To enable automatic warehouse management using optical readers, the devices and frames of the Mylos wiring accessories' range are packed individually in boxes that bear the EAN bar code and that protect the contents adequately against dust and shocks. For a better explanation of the installation methods, a specific instruction sheet is supplied. Multiple packages are available for all the codes with the highest turnover.

## Mylos

## Overall dimensions



## Overall dimensions

| Code $\square$ | Code ■ | Description | No. Modules | Depth mm |
| :---: | :---: | :---: | :---: | :---: |
| 2CSY1114MR |  | 2P+E socket outlet, 16A - 250V~, P30 type, red | 2 | 35 |
| 2CSY1115MV |  | 2P+E socket outlet, 16A-250V~, P30 type, green | 2 | 35 |
| 2CSY1116MA |  | 2P+E socket outlet, 16A - 250V , P30 type, orange | 2 | 35 |
| 2CSY1118MC | 2CSY1118MS | Coaxial TV/SAT sockets, direct, male IEC connector, $\emptyset 9.5 \mathrm{~mm}$, DC | 1 | 25 |
| 2CSY1121MC | 2CSY1121MS | Telephone connector, RJ11 | 1 | 21 |
| 2CSY1122MC | 2CSY1122MS | Telephone connector, RJ12 | 1 | 21 |
| 2CSY1124MC | 2CSY1124MS | RJ45 connector, Cat.5e, UTP (unshielded) | 1 | 21 |
| 2CSY1125MC | 2CSY1125MS | RJ45, Cat.5e, FTP (shielded) | 1 | 21 |
| 2CSY1127MC | 2CSY1127MS | RJ45 connector, Cat.6, UTP (unshielded) | 1 | 21 |
| 2CSY1128MC | 2CSY1128MS | RJ45 connector, Cat.6, FTP (shielded) | 1 | 21 |
| 2CSY1130MC | 2CSY1130MS | Coaxial TV/SAT sockets, double demixed, feedthrough, male IEC connector $\emptyset 9.5 \mathrm{~mm}$ and female F connector, attenuation 10 dB | 1 | 25 |
| 2CSY1131MC | 2CSY1131MS | Coaxial TV/SAT sockets: double demixed, feedthrough, male IEC connector $\emptyset 9.5 \mathrm{~mm}$ and female F connector, attenuation 14 dB | 1 | 25 |
| 2CSY1132MC | 2CSY1132MS | Coaxial TV/SAT sockets, feedthrough, male IEC connector, $\emptyset 9.5 \mathrm{~mm}$, attenuation 7 dB | 1 | 25 |
| 2CSY1133MC | 2CSY1133MS | Coaxial TV/SAT sockets, double demixed, feedthrough, male IEC connector, $\emptyset 9.5 \mathrm{~mm}$ and female F connector | 1 | 25 |
| 2CSY1136MC | 2CSY1136MS | Coaxial TV/SAT sockets, feedthrough, male IEC connector, $\emptyset 9.5 \mathrm{~mm}$, attenuation 10 dB | 1 | 25 |
| 2CSY1137MC | 2CSY1137MS | Coaxial TV/SAT sockets, feedthrough, male IEC connector, Ø 9.5 mm , attenuation 14 dB | 1 | 25 |
| 2CSY1140MC | 2CSY1140MS | Coaxial TV/SAT sockets, direct, female F connector, DC | 1 | 25 |
| 2CSY1160MC | 2CSY1160MS | Flush-mounted USB charger 500-650mA, with male type A connector, power supply 230V~50/60Hz, output voltage 5V DC | 1 | 35 |
| 2CSY1201MC | 2CSY1201MS | Electronic time-programmable thermostat, day/week programm., summer/winter function, with LCD display, 3 modules | 3 | 39 |
| 2CSY1201XC | 2CSY1201XS | Electronic time-programmable thermostat, day/week programm., summer/winter function, with LCD display, 2 modules | 2 | 31 |
| 2CSY1202MC | 2CSY1202MS | Electronic thermostat, summer/winter function, with LCD display, 3 temperature levels can be set, 3 modules | 3 | 39 |
| 2CSY1202XC | 2CSY1202XS | Electronic thermostat, summer/winter function, with LCD display, 3 temperature levels can be set, 2 modules | 2 | 31 |
| 2CSY1205MC | 2CSY1205MS | Electronic dimmer with rotary control for resistive loads 100-500W 230V~ 50/60Hz | 1 | 32 |
| 2CSY1206MC | 2CSY1206MS | Electronic dimmer with push-button control for resistive and inductive loads 60-500W (60-500VA) 230V~50/60Hz | 1 | 32 |
| 2CSY1207MC | 2CSY1207MS | Electronic dimmer with rotary control and two-way switch for resistive loads 100-500W 230V~50/60Hz | 1 | 32 |
| 2CSY1210MC | 2CSY1210MS | Natural gas electronic detector with acoustic and luminous signal | 3 | 39 |
| 2CSY1211MC | 2CSY1211MS | LPG gas electronic detector with acoustic and luminous signal | 3 | 39 |
| 2CSY1214MC | 2CSY1214MS | Anti black-out removable light, 230V~ | 2 | 26 |
| 2CSY1216MC | 2CSY1216MS | IR motion detector, with twilight sensor and adjustment of operation time | 1 | 32 |
| 2CSY1217MC | 2CSY1217MS | IR receiver for remote control, 1-channel, 230V~ | 2 | 32 |
| 2CSY1301MC | 2CSY1301MS | Fuse holder, $\varnothing 5 \times 20$ / $\emptyset 6.3 \times 32,16 \mathrm{~A}$ | 1 | 26 |
| 2CSY1302MC | 2CSY1302MS | Surge protection device limiter 75J, 250V~ | 1 | 26 |
| 2CSY1303MC | 2CSY1303MS | LED lamp for emergency or stairwell lighting | 3 | 50 |
| 2CSY1304MC | 2CSY1304MS | Automatic MCB, 1P+N, C6, breaking capacity 1.5 kA | 1 | 37,5 |
| 2CSY1305MC | 2CSY1305MS | Automatic MCB, 1P+N, C10, breaking capacity 3kA | 1 | 37,5 |
| 2CSY1306MC | 2CSY1306MS | Automatic MCB, $1 \mathrm{P}+\mathrm{N}, \mathrm{C} 16$, breaking capacity 3 kA | 1 | 37,5 |
| 2CSY1307MC | 2CSY1307MS | Automatic RCD, $1 \mathrm{P}+\mathrm{N}, \mathrm{C} 6-10 \mathrm{~mA}$, break. cap. 1.5 kA | 2 | 37,5 |
| 2CSY1308MC | 2CSY1308MS | Automatic RCD, 1P+N, C10-10 mA, break. cap. 3kA | 2 | 37,5 |


| Code $\square$ | Code $\quad$ - | Description | No. Modules | Depth mm |
| :---: | :---: | :---: | :---: | :---: |
| 2CSY1309MC | 2CSY1309MS | Automatic RCD, 1P+N, C16-10 mA, break. cap. 3kA | 2 | 37,5 |
| 2CSY1310MC | 2CSY1310MS | Orange warning light, (incorporated LED) | 1 | 25 |
| 2CSY1311MC | 2CSY1311MS | White warning light, (incorporated LED) | 1 | 25 |
| 2CSY1312MC | 2CSY1312MS | Red warning light, (incorporated LED) | 1 | 25 |
| 2CSY1313MC | 2CSY1313MS | Green warning light, (incorporated LED) | 1 | 25 |
| 2CSY1317MC | 2CSY1317MS | Electro-mechanical bell, 12V, 5VA power, 80 dB sound intensity | 1 | 32 |
| 2CSY1318MC | 2CSY1318MS | Electro-mechanical bell, $230 \mathrm{~V}, 8 \mathrm{VA}$ power, 80 dB sound intensity | 1 | 32 |
| 2CSY1321MC | 2CSY1321MS | Electro-mechanical buzzer 12V, 5VA power, 70dB sound intensity | 1 | 32 |
| 2CSY1322MC | 2CSY1322MS | Electro-mechanical buzzer 230V, 8VA power, 80dB sound intensity | 1 | 32 |
| 2CSY1426MC | 2CSY1426MS | Universal badge switch with location light | 2 | 32 |

## Mylos

## Overall dimensions

Frames round
Round 2 modules
2


Round 3 modules


Round 4 modules


Round 4+4 modules


Square 4 modules


Square 4+4 modules


All measurements are given in millimetres.

## Supports

2 modules
Screw distance of the box: 60 mm


## 7 modules

Screw distance of the box: 100 mm


## 4 modules

Screw distance of the box: 108 mm

$4+4$ modules
Screw distance of the box: 108 mm


## Mylos Home Automation <br> Order codes and technical details

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## Mylos Home Automation Your new house

Solutions and features that change the experience of domestic life, simplifying every action.

## With Mylos the word comfort assumes a new meaning



A simpler house.
Simplicity is the real revolution in home automation. Both for the installer and for the end user.
With one pushbutton you can turn off all the lights in the house before you go out.
It is possible to program the lights in the various environments so that you have the right brightness set for different activities (chatting with friends, watching TV, working or studying, and so on). All the devices can be controlled from a single control unit and can be programmed as required. Moreover, it is possible control them remotely directly from a mobile phone. Thanks to the BUS technology, in order to change lighting
points, integrate new services, or to implement the installation the installer does not need to lay new cables or carry out any new building work: it is only necessary to reprogram the previous installation, with considerable savings in terms of cost, time and labour.

A safer house.
With DomusTech solutions it is possible to extend the power of the Mylos system. The intelligent management of electric loads means that the current will never be interrupted due to too many devices being on at the same time: the system takes care of automatically switching off the "excessive"

devices and will reactivate them as soon as a drop in energy requirements allows it. Mylos and DomusTech work together in the event of danger: if the event of intrusion, it is possible to activate alarms and at the same time to perform commands on the home automation system. If, on the other hand, the problem is a gas leak, the system is able to detect it and interrupt emission of gas. Similarly, in the event of flooding it can interrupt the flow of water. Smoke detectors and anything else required can also be integrated in order to increase the safety of houses and apartments.

Thanks to Mylos it is easy to save energy.
The climate of each environment can be managed in a differentiated manner, so that you always have the right temperature, only where it is needed, without waste of gas or electricity. You can program lights to switch on in the morning, the opening of roller shutters, heating of the bathroom and the exclusion of specific electrical devices during the night, or during the day when you are away from home. Energy is used in a better way, only when it is needed, and the house is more comfortable, because there is no waste and everything is gauged to the real requirements and preferences of its inhabitants.

## Mylos Home Automation

Many environments, many solutions, a single control device




Mylos Home Automation
Product wiring diagram



## Mylos Home Automation <br> The BUS for everyone

Mylos: the house is made to measure.
With Mylos, programming is carried out through the time-programmed thermostat or the touch panel that can manage up to 64 devices.

With Mylos, configuration is performed in a simplified manner through a device installed on the same system.


Time-programmed
thermostat
Press any key to enter the device menu.


Rename the group It is possible to rename the group so that it identifies more clearly where the devices are located or the load that they will control. Press "OK" twice with the cursor on the space to continue.


Configuration menu As you scroll through the icons, select the "settings" menu for the configuration of the Mylos Home Automation system.


Add a device
By selecting this item, the timeprogrammed thermostat will add a device to the group that has just been created and will configure it.


Groups
A group is a logical set of devices: select this item to acquire the devices of the system.


Programming
At this point the time-programmed thermostat waits for the programming key on the device to be pressed and the channel to be acquired to be selected. When this has been done, an identification number will appear and the device will at this point be configured.


Groups
The system suggests a series of possible common names for a group: this can be customized later on.


After pressing the programming key and acquiring the device it is possible to customize the way it operates from the time-programmed thermostat parameters menu. The changes will be applied instantly, without the need to repeat the programming.

## Simplifying technology to make life easier for everyone. This is the philosophy behind Mylos, a dedicated BUS system to make every home a unique and comfortable environment.

Mylos works on a BUS, exploiting the experience of ABB with KNX technology. Created specifically to meet the needs of a particular application context, it is ideal for a residential system.

Its distinguishing features are as follows:

- in a system it is possible to install up to 64 intelligent devices, an adequate number, considering that most residential installations rarely involve more than 30 devices;
- all the devices are flush-mounted, allowing maximum flexibility of installation without having to intervene on the home control unit.

Line installation types

- 01 Linear
- 02 Star
- 03 Mixed


Power supply


Connection of the BUS cable


The shielding of the two wires guarantees the electrical insulation of the BUS cable from the 230 V cables, allowing them to be installed in the same duct.


Terminals, for the connection of other devices to the system (inputs) or for connection of loads in devices with an actuator.


## Mylos Home Automation - Order codes <br> Home automation devices




2CSYE1702M


## 2CSYE1103C

 2CSYE1106C
## orem conex 

Technical details from page 3/25.


2CSYE1103S 2CSYE1106S

2CSYE1105C


2CSYE1205C 2CSYE1206C

## 2CSYE1218C




2CSYE1105S


2CSYE1205S 2CSYE1206S


2CSYE1218S

Lighting and comfort

| Description | Nodules | Code | Box/Pack <br> No. items |
| :--- | :--- | :--- | :--- |
| 350W dimmer actuator, 1 rocker switch | 2 | 2CSYE1205C | $1 / 1$ |
| $1 / 10 \mathrm{~V}$ DC dimmer actuator, 1 rocker switch | 2 | 2CSYE1205S | $1 / 1$ |
| IR receiver for remote control | 2 | 2CSYE1206C | $1 / 1$ |

Technical details from page 3/31.

## Mylos Home Automation - Order codes Home automation devices




2CSYE1701M


Power supply and accessories

| Description | $\mathrm{N}^{\circ}$ modules | Code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| BUS power supply unit 320mA, 30V~, 4 DIN modules | 4 | 2CSYE1701M | 1/50 |
| DomusTech Interface | - | 2CSYE1703M | 1/50 |
| BUS cable (100 m coil) | - | ED 0633 | 1/50 |
| BUS cable ( 500 m coil) | - | ED 0641 | 1/50 |
| BUS connection terminal | - | EC 7324 | 1/50 |

Technical details from page 3/37.

ED 063
ED 0641


EC 7324
$\square$ Spare parts

| Description |  | $\mathrm{N}^{\circ}$ <br> modules | Code | Box/Pack No. items |
| :---: | :---: | :---: | :---: | :---: |
| Mylos HA/KNX key covers, 1 module | NEW | - | 2CSYE1501C | 4/96 |
|  |  | - | 2CSYE1501S | 4/96 |
| Customisation labels | NEW | - | 2CSYE1502C | 1/24 |
|  |  | - | 2CSYE1502S | 1/24 |
| Mylos HA/KNX key covers, 2 modules | NEW | - | 2CSYE1503C | 4/96 |
|  |  | - | 2CSYE1503S | 4/96 |
| Mylos HA/KNX key covers, 2 modules with shutter symbol | NEW | - | 2CSYE1504C | 4/96 |
|  |  | - | 2CSYE1504S | 4/96 |
| Mylos HA/KNX key covers, 2 modules with dimmer symbol | NEW | - | 2CSYE1505C | 4/96 |
|  |  | , | 2CSYE1505S | 4/96 |

3

2CSYE1503S
4/96


2CSYE1503C


2CSYE1504C

2CSYE1505C




Technical details from page 3/19.

2CSYE1505S


2CSYE1504S


2CSYE1503S



# Mylos Home Automation - Order codes <br> Mylos Touch control unit 



2CSYE1301M


2CSYE1302M


2CSYE1301C


2CSYE1301S


Mylos Touch control unit

| Descrizione | $\mathrm{N}^{\circ}$ modules | Code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| Mylos Touch | - | 2CSYE1301M | 1/1 |
| Flush mounting box for Mylos Touch | - | 2CSYE1302M | 1/1 |
| Mylos Touch glass frames | - | 2CSYE1301C | 1/1 |
|  | - | 2CSYE1301S | 1/1 |
| BUS Interface for Mylos Touch (spare part) | - | 2CSYE1303M | 1/1 |

Technical details from page $3 / 40$.

## Mylos Home Automation Mylos Touch control unit



## With Mylos Touch every house becomes unique. And everyone can reinvent it every day.

With the Mylos Touch control panel it is possible to individually activate lights, air conditioning and safety devices. Alternatively, you can create temperature and lighting scenarios for every occasion: coming home in the evening, bath time, waking up in the morning, dinner, etc. Just lightly touch the control panel and the house comes to life at your finger tips. The graphical interface is intuitive and fast.
Mylos Touch has a 5.7" LCD touch screen.
Assembly is very simple, thanks to its flush-mounted wall box and elegant minimalist trim, perfectly coordinated with the Mylos wiring accessories.

Main features of Mylos Touch

5.7" touch screen, resolution $320 \times 240$


Time-programmed thermostat and three integrated actuators


Monitoring of energy consumption*

MicroSD reader for photo slideshows and saving the configuration


Programming
the Mylos
Home Automation system



[^5]
# Mylos Home Automation - Technical details Description of Mylos Home Automation system 

## Basic concepts

The information contained in this chapter are crucial to fully understand the operation of the Mylos Home Automation system and to structure the system correctly.

A system always consists of three families of devices:

- Input devices: they make it possible to send actuation instructions over the bus. These controls may come from configurable commands of the devices or from external devices such as pushbuttons, sensors, IR remote controls, etc.
- Actuation devices: they make it possible to receive actuation instructions over the bus. There are different types of actuators, depending on the load to be controlled (relay actuators, dimmer actuators, shutter actuators). In some cases the actuation can also be controlled locally via the controls on the device itself.
- Programming device: only one programming device should be present in each installation. The programming devices carry out also the function of master devices for temperature regulation.

The programming timed thermostat described in this manual is a programming device that allows you to configure the functions of other devices that are present in a Mylos Home Automation system.

Refer to the instruction sheet of each single device for the corresponding functional details.

## Glossary

Device
It is a physical object of the system that corresponds to a buyable product code. Each device is able to perform different functions.

## Channel

 A device consists of one or more channels. Each channel allows you to manage a particular device function.For example:

1) 16A Relay actuator: device with 1 actuation channel. In this case the channel corresponds to the device itself.
2) 16A Relay actuator 2 rocker switches: device with 2 channels. 1 channel corresponds to the actuator, which can be controlled locally using a rocker switch. The second channel corresponds to a rocker switch that can be configured to send other actuation signals to the system.
3) 2 Inputs module 1 rocker switch: device with 3 channels. Each channel manages the sending of different actuation commands over the bus. 2 channels correspond to inputs for NO free contacts (belonging to sensors, relays, switches), whereas a channel corresponds to the rocker switch placed on the device.

System design must take place considering first of all the functions to be performed and only subsequently preparing the list of necessary devices.

For example:

- Functional requirement: you may wish to realise a system with 2 loads controlled by as many actuators and one of the two loads has to be controlled by two points.
- Necessary devices to meet the functional requirement:

1) no. 1 16A Relay actuator and 2 rocker switches;
2) no. 1 16A Relay actuator;
3) no. 12 Inputs module 1 rocker switch.


| Configuration | Sequence of operations to be carried out on the programming device which allow you to create the logic connection among the various channels. In the previous example, the configuration allows you to combine the channels corresponding to each configurable control to the corresponding actuation channel. |
| :---: | :---: |
| Group | It is a set of channels logically linked to each other so as to provide a system function (ex: two pushbuttons controlling a single actuator). The creation of groups is the first step of system configuration. IMPORTANT: the groups must contain similar actuation channels: it is not possible to add a relay actuator channel in the same group (for example to control lamp switching on and an actuator channel to control a shutter). |
| Bus line | It is the physical means composed of a dedicated BUS cable which allows different devices to be connected, ensuring the mutual control and information exchange among the different system devices. <br> The system can be composed of a maximum of 64 devices and one or two power supply units can be necessary, according to the number of devices and to bus length. |
| Parameters | They make it possible to customise the operation of each channel. The operating parameters can be modified instantaneously using the programming device. |
| Scenery | It is the storage of a certain status of actuators that are present in one or more groups (for example, it is possible to lower the shutters and to turn the lights on). <br> The scenery can be recalled from any input channel (for example a duly configured rocker switch or a 2CSE1217EL IR remote control pushbutton). <br> A scenery can be activated also by a temporal configurable program in the "Events" menu (see next point) or remotely via the Mylos Home Automation Domuslink interface. |
| Event | Events are temporal programs on a logical basis that allow you to control groups based on the input status. An event can activate a Scenery. |

In-depth information
During system configuration the first necessary operation is to create groups. It is good practice to plan the groups and functions you wish to use before installation. Once the groups have been created, the programming device only manages the modification, air conditioning and program recalling functions. Any advanced operations such as the creation of sceneries and events should be considered as a system customisation.

## Installation topology

Installation topology is the particular physical disposition of the devices in the system.
In the Mylos Home Automation system all devices are connected to each other via a cable for bus systems which provides them with both power and command and control packages.
It is good practice to plan the groups and functions you wish to use before installation.


System configuration occurs interacting only with the programming timed thermostat and the configuration pushbuttons placed on the rear of the devices.

## Mylos Home Automation - Technical details Description of Mylos Home Automation system

## System composition

The minimum system composition should include at least:

- one programming timed thermostat;
- one power supply unit;
- one or more input devices;
- one or more actuators (relays, dimmers, shutter) with or without switches..
In each system there can be only one programming timed thermostat, a maximum of two power supply units and 64 devices.


## Installing the bus system

## General rules and system topology

A) The connections among devices occur via a dedicated Bus cable type ED 0633 ( 100 m ) or ED 0641 ( 500 m ); the cable is shielded and sheathed, therefore it can be introduced in the same corrugated tube where the electrical cables pass.
B) The connection of devices can occur without distinction according to the diagrams shown below, on condition that the polarity of terminals is observed.
The ideal condition is the linear one, with only one power supply unit in the central part of the system or two power supply units at the two ends.

C) The total power absorbed by the devices must not exceed the sum of the maximum currents of the power supply units.
Upon voltage restoration, for example after a black-out, the actuators will keep the status they had before.
After resetting an actuator, it will go back to the open contact condition.

## General rules for bus cable length

- Distance between power supply unit and device: 350m max.
- Distance among the devices: 700m max.
- BUS cable length: 1000 m max.
- Distance between 2 power supply units: greater than 40 m .
- If there are 2 power supply units, these have to be installed as far as possible from each other.
Schematic representation of the maximum bus cable length (the rectangle represents the power supply unit).



## Installing a system

System installation foresees:

1) prepare the bus cable connecting the dedicated connector and paying particular attention to polarity;

2) prepare the conventional electrical cable between the actuators and loads;
3) wire the power supply unit, the devices and the programming device;
4) supply the system.

## First power on

At first power on the system is ready to be configured: the programming timed thermostat displays the factory set hour and date and all devices need to be programmed.
The LED of the devices with integrated rocker switches are ON All actuator devices with switch for local control can already control the corresponding loads.

Installation notes for recessed devices
Flush mounted devices must always be installed with the bus connector oriented downwards. The terminals in the upper part of the devices allow conventional cables to be connected.


Each device package contains 1 bus connector and the instruction sheet with wiring diagrams and channel acquisition procedures.
The devices with 2 rocker switches are characterised by the presence of a plate holder on the front side.
The packaging contains labels for rocker switch customisation.



Device installed and ready for configuration


The device must be fitted into the support as shown below.


Remove the device using the screwdriver on the claws,
as shown below.

## Mylos Home Automation - Technical details Inputs and sensor units

## 2 binary inputs module

| Description | Code |
| :--- | :--- |
| 2 binary inputs module | 2CSYE1001C |
|  | 2CSYE1001S |

## Components



The " 2 binary inputs module" is a recessed device for the ABB Mylos Home Automation system.
There are two inputs on the rear for voltage free contacts such as relays, pushbuttons and switches.

## Configurable parameters

INPUTS
The device allows two input channels to be managed to which relay contacts, pusbuttons or switches can be associated. Each input channel can be configured through the programming device for the following operating parameters.

- Switch: the input device allows the ON/OFF control of loads and devices.
- Dimmer: the input device allows the control to increase the light loads intensity (+ Brighter), decrease it (- Darker) or dimming in Toggle mode.
Shutter: the input device allows the control of the rise, drop and rest of Shutters and Blinds
- Pushbutton: the input device is a pushbutton which can be used to activate loads (ON), deactivate them (OFF) or in Toggle mode.
Recall scenery: the input device allows an already configured scenery to be recalled.


## Acquisition



INPUTS:

1) press the programming key situated on the rear;
2) check the lighting of the programming LED;
3) close the contact corresponding to channel (A or B) which you want to acquire.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | 4 mA |
| Number of inputs | 2 on the rear free of SELV voltage (max 10m) |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |

## Reference standards

EN50090-2-2

## 2 binary inputs module, 1 rocker switch

| Description | Code |
| :--- | :--- |
| 2 binary inputs module, 1 rocker switch | 2CSYE1002C |
|  | 2CSYE1002S |

## Components



The " 2 binary inputs module, 1 rocker switch" is a recessed device for the ABB Mylos Home Automation system. There are two inputs on the rear for voltage free contacts such as relays, pushbuttons or switches.
There is a rocker switch with programmable LED light indications on the front.

## Configurable parameters

## INPUTS

The device allows two input channels to be managed to which relay contacts, pusbuttons or switches can be associated. Each input channel can be configured through the programming device for the following operating parameters.

- Switch: the input device allows the ON/OFF control of loads and devices.
- Dimmer: the input device allows the control to increase the light loads intensity (+ Brighter), decrease it (- Darker) or dimming in Toggle mode.
- Shutter: the input device allows the control of the rise, drop and rest of Shutters and Blinds.
- Pushbutton: the input device is a pushbutton which can be used to activate loads (ON), deactivate them (OFF) or in Toggle mode.
- Recall scenery: the input device allows an already configured scenery to be recalled.


## ROCKER SWITCH

The front rocker switch may be used to send a command to other Mylos Home Automation system devices.
It can be configured with the switch, dimmer, shutter and recall scenery, operating modes as for the inputs.

## LED MODE:

The LEDs associated to the command can be configured according to the following operating modes: always on, always off, actuator status, inverted status (the status is representive only for the actuators and the dimmers).

## Acquisition



INPUTS:

1) press the programming key situated on the rear;
2) check the lighting of the programming LED;
3) close the contact corresponding to channel (A or B) which you want to acquire.

## CONTROL:

1) press the programming key situated on the rear.
2) check the lighting of the programming LED;
3) press the front rocker switch to make the acquisition.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 9 mA |
| Number of inputs | 2 on the rear free of SELV voltage (max 10m) |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |

## Reference standards

EN50090-2-2

# Mylos Home Automation - Technical details Inputs and sensor units 

## 2 binary inputs module, 2 rocker switches

| Description | Code |
| :--- | :--- |
| 2 binary inputs module, 2 rocker switches | 2CSYE1003C |
| (customisation labels included) | 2CSYE1003S |

## Components



The " 2 binary inputs module, 2 rocker switches" is a recessed device for the ABB Mylos Home Automation system.
There are two inputs on the rear for voltage free contacts such as relays, pushbuttons or switches.
There are two rocker switches with programmable LED light indications on the front.

## Configurable parameters

## INPUTS

The device allows two input channels to be managed to which relay contacts, pusbuttons or switches can be associated.
Each input channel can be configured through the programming device for the following operating parameters.

- Switch: the input device allows the ON/OFF control of loads and devices. - Dimmer: the input device allows the control to increase the light loads intensity (+ Brighter), decrease it (- Darker) or dimming in Toggle mode.
- Shutter: the input device allows the control of the rise, drop and rest of Shutters and Blinds.
Pushbutton: the input device is a pushbutton which can be used to activate loads (ON), deactivate them (OFF) or in Toggle mode.
- Recall scenery: the input device allows an already configured scenery to be recalled.


## ROCKER SWITCHES

The front rocker switches may be used to send a command to other Mylos Home Automation system devices. Each command can be configured independently with switch, dimmer, shutter or recall scenery operating mode as for the inputs.
LED MODE
The LEDs associated to the commands can be configured according to the following operating modes: always on, always off, actuator status, inverted status (the status is representive only for the actuators and the dimmers).

## Acquisition



1) press the programming key situated on the rear;
2) check the lighting of the programming LED;
3) press the lower part of the left rocker switch to acquire channel A. Press the lower part of the right rocker switch to acquire channel $B$.
ROCKER SWITCHES:
4) press the programming key situated on the rear;
5) check the lighting of the programming LED;
6) press the upper part of the left rocker switch or of the right rocker switch to make the acquisition.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 12 mA |
| Number of inputs | 2 sul retro liberi da tensione SELV (max 10m) |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |

## Reference standards

EN50090-2-2

## 2 binary inputs module, 1 module

| Description | Code |
| :--- | :--- |
| 2 binary inputs module, 1 module | 2CSYE1011C <br>  <br>  2CSYE1011S |

## Components



The " 2 binary inputs module, 1 module" is a recessed device for the ABB Mylos Home Automation system.
There are two inputs on the rear for voltage free contacts such as relays, keys and switches.

## Configurable parameters

The device allows two input channels to be managed to which relay contacts, pusbuttons or switches can be associated. Each input channel can be configured through the programming device for the following operating parameters.

- Switch: il dispositivo di ingresso permette il controllo ON/OFF di carichi e dispositivi
- Dimmer: the input device allows the control to increase the light loads intensity (+ Brighter), decrease it (- Darker) or dimming in Toggle mode.
- Shutter: the input device allows the control of the rise, drop and rest of Shutters and Blinds.
- Pushbutton: the input device is a pushbutton which can be used to activate loads (ON), deactivate them (OFF) or in Toggle mode.
- Recall scenery: the input device allows an already configured scenery to be recalled.


## Acquisition



INPUTS:

1) press the programing key on the rear.;
2) check the lighting of the programming led;
3) close the contact corresponding to channel (A or B) which you want to acquire.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | 4 mA |
| Number of inputs | 2 on the rear free of SELV voltage (max 10m) |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |

## Reference standards

EN50090-2-2

## Mylos Home Automation - Technical details Inputs and sensor units

## Input module 1 rocker switch, 1 module

$\left.\begin{array}{ll|l}\hline \text { Description } & \text { Codice } \\ \hline \text { Input module 1 rocker switch, } 1 \text { module } & & \text { 2CSYE1012C } \\ \text { 2CSYE1012S }\end{array}\right]$

The "Input module 1 rocker switch, 1 module" is a recessed device for the ABB Mylos Home Automation system. The device has the bus connector housing and the programming key on the rear.
There is a rocker switch with programmable LED lighting indications on the front.

## Configurable parameters

The front rocker switch may be used to send a command to other Mylos Home Automation system devices. It can be configured with the switch, dimmer, shutter and recall scenery, operating modes as for the inputs.
The LEDs associated to the rocker switch can be configured according to the following operating modes: always on, always off, actuator status, inverted status (the status is representive only for the actuators and the dimmers).

Look up the manual of the programming device for further details regarding the configuration of the parameters.

## Acquisition



ROCKER SWITCH:

1) press the programming key situated on the rear.
2) check the lighting of the programming LED.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 9 mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| BUS cable | standard bus connector |
| Degree of protection | IP20 |

## Reference standards

EN50090-2-2

## 2 recessed binary inputs module

| Description | Code |
| :--- | :--- |
| 2 recessed binary inputs module to integrate traditional devices in <br> home automation | 2CSYE1702M |

## Components



The " 2 recessed binary inputs module" is a device of the ABB Mylos Home Automation system.
There are connection terminals corresponding to two inputs for voltage free contacts such as contacts, relays, pushbuttons and switches.

## Configurable parameters

## INPUTS

The device allows two input channels to be managed to which relay contacts, pusbuttons or switches can be associated. Each input channel can be configured through the programming device for the following operating parameters.

- Switch: the input device allows the ON/OFF control of loads and devices.
- Dimmer: the input device allows the control to increase the light loads intensity (+ Brighter), decrease it (- Darker) or dimming in Toggle mode.
- Shutter: the input device allows the control of the rise, drop and rest of Shutters and Blinds.
- Pushbutton: the input device is a pushbutton which can be used to activate loads (ON), deactivate them (OFF) or in Toggle mode.
- the input device allows an already configured scenery to be recalled.


## Acquisition



INPUTS:

1) press the programing key on the rear.;
2) check the lighting of the programming LED;
3) close the contact corresponding to channel (A or B) which you want to acquire.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | 4 mA |
| Number of inputs | 2 free of SELV voltage (max 10m) |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |

## Reference standards

EN50090-2-2

## Mylos Home Automation - Technical details Actuator units

## 16A relay actuator

| Description | Code |
| :--- | :--- |
| 16 A relay actuator | 2CSYE1101C |
|  | 2CSYE1101S |



The "16A relay actuator" is a recessed device for the ABB Mylos Home Automation system.
There is 1 actuator composed of 1 relay with exchange contact ( $\mathrm{NO} / \mathrm{NC}$ ) at the back which can be configured for the control of loads of a different nature.
After programming, the relay may receive a commutation command from other Mylos Home Automation system devices or from conventional control devices (pushbuttons, switches, relays) connected to the Mylos Home Automation devices via input channels.

## Configurable parameters

The device allows the activation and deactivation of an electric load when receiving a command signal through the bus. The exchange contact of the relay can be used to manage electric loads of a different nature. The actuator can be configured to realise the following functions:

- delay: allows the setting of a deactivation delay with a selection of variable times (0s -> 5h max).


## Acquisition



For the acquisition of the actuator:

1) press the programing key on the rear;
2) check the lighting of the programming LED.

Connection diagram


| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 11mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |
| Max. load | AC1: 16A, 250 V AC <br> AC5: 10A, 250V AC $(\cos \varphi=0,6)$ |

## Reference standards

EN50090-2-2

## 16A relay actuator, 1 rocker switch

| Description | Code |
| :--- | :--- |
| 16 A relay actuator, 1 rocker switch | 2CSYE1102C |
|  | 2CSYE1102S |

## Components



## Acquisition



For the acquisition of the device:

1) Press the programing key on the rear;
2) Check the lighting of the programming LED.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 11mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |
| Max. load | AC1: 16A, 250V AC <br> AC5: 10A, 250V AC $(\cos \varphi=0,6)$ |

## Reference standards

EN50090-2-2

## Mylos Home Automation - Technical details Actuator units

## 16A relay actuator, 2 rocker switches

| Description | Code |
| :--- | :--- |
| 16A relay actuator, 2 rocker switches | 2CSYE1103C |
| (customisation labels included) | 2CSYE1103S |

## Components



The "16A Relay actuator, 2 rocker switches" is a recessed device for the ABB Mylos Home Automation system. There is 1 actuator composed of 1 relay with exchange contact ( $\mathrm{NO} / \mathrm{NC}$ ) at the back which can be configured for the control of loads of a different nature.
After programming, the device relay can receive a commutation command from other Mylos Home Automation system devices or from conventional control devices (pushbuttons, switches, relays) connected to the Mylos Home Automation devices via input channels.
On the front there is a rocker switch that allows to control only the relay of the device itself and a configurable rocker switch. Both of the commands are equipped with programmable LED light indications.

## Configurable parameters

ACTUATOR
The device allows the activation and deactivation of an electric load when receiving a command signal.
The exchange contact of the relay can be used to manage electric loads of a different nature.The actuator can be configured to realise the following functions:

- delay: allows the setting of a deactivation delay with a
selection of variable times (0s -> 5h max).
ROCKER SWITCHES
The right rocker switch can be used to send a command to other Mylos Home Automation system devices.
It can be configured independently with switch, dimmer, shutter and recall scenery operating modes.
The left rocker switch cannot be configured but allows only the relay of the device itself to be actuated.
LED MODE
The LEDs associated to the rocker switches can be configured according to the following operating modes: always on, always off, actuator status, inverted status.


## Acquisition



## ACTUATOR:

1) press the programming key situated on the rear;
2) check the lighting of the programming LED;
3) press the left rocker switch.

## ROCKER SWITCH:

1) press the programming key situated on the rear;
2) check the lighting of the programming LED;
3) press the right rocker switch.

To exchange the configurable rocker switch and the one for local control of the actuator, before the acquisition press the programming key, check the lighting of the programming LED lights and press the lower part of the switch you want to use as the local control of the actuator.

## Schema di collegamento



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 11mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |
| Max. load | AC1: 16A, 250V AC <br> AC5: 10A, 250V AC $(\cos \varphi=0,6)$ |

## Reference standards

EN50090-2-2

## Mylos Home Automation - Technical details Actuator units

## 230V AC shutter actuator

| Description | Code |
| :--- | :--- |
| 230V AC shutter actuator, 1 rocker switch | 2CSYE1104C |
|  | 2CSYE1104S |



## Acquisition



For the acquisition of the actuator:

1) press the programming pushbutton situated on the rear;
2) check the lighting of the programming LED.

Connection diagram


| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 11mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |
| Max. load | 8A resistive, 3A inductive 230V AC |

## Reference standards

EN50090-2-2

## 230V AC shutter actuator, 1 rocker switch

| Description | Code |
| :--- | :--- |
| $230 V$ AC shutter actuator, 1 rocker switch | 2CSYE1105C |
|  | 2CSYE1105S |

## Components



The " 230 V AC Shutter actuator, 1 rocker switch" is a recessed device for the ABB Mylos Home Automation system.
On the rear there is an actuator with connection terminals for the interlocked rise and drop of 230V AC motorised shutters, curtains and blinds.
On the front there is a rocker switch with programmable LED light indications which allows the independent control of the motorised shutter connected to the actuator of the same device.
The actuator can also be actuated by other input devices of Mylos Home Automation systems suitably configured by programming.

Warning: the running time of the shutter is not parameterizable through this device: in the absence of a new command the actuator status will be maintained for a period of 3 minutes. The shutters/blinds or similar must be provided with a microswitch device.

## Configurable parameters

ACTUATOR
The device has an actuator dedicated to the control of motorised shutters.
The actuator can be configured according to two distinct operating modes:

- Blind: allows the rise, drop and rest of the "blind" to be controlled with the discrete regulation of the angle of incidence of the rising and falling plates;
- Shutter: allows the rise, drop and rest of the conventional shutters and motorised curtains to be controlled.

ROCKER SWITCH
The front rocker switch may only be used for the local control of the shutter actuator, it cannot be configured.

## LED MODE

The LEDs associated to the command can be configured according to the following operating modes: always on, always off, actuator status, inverted status.

## Acquisition



For the acquisition of the actuator:

1) Press the programming pushbutton situated on the rear.
2) Check the lighting of the programming LED.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 11mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |
| Max. motor load | 8A resistive, 3A inductive 230V AC |

## Reference standards

EN50090-2-2

# Mylos Home Automation - Technical details Actuator units 

## 2X8A relay actuator, 2 rocker switches

| Description | Code |
| :--- | :--- |
| 2X8A relay actuator, 2 rocker switches | 2CSYE1106C |
| (Including personalization labels) | 2CSYE1106S |

## Components



The "2X8A Relay actuator, 2 rocker switches" is a recessed device for the ABB Mylos Home Automation system.
There are 2 actuators at the back of the device, each one of them is composed of a relay ( NO ) which can be configured for the control of loads of a diverse nature.
After programming, the devices relay can receive a commutation command from the device itself, from other Mylos Home Automation system devices or from conventional control devices (pushbuttons, switches, relays) which are connected to Mylos Home Automation devices via input channels.
On the front side the device has 2 rocker switches with programmable LED light indications which allow only the relay of the device itself to be activated.

## Configurable parameters

## ACTUATORS

The device allows the activation and deactivation of electric loads when receiving command signals.
Each one of the 2 actuators can be configured to realise the following functions:

- delay: allows the setting of a deactivation delay with a selection of variable times (0s -> 5h max).


## ROCKER SWITCHES

The front rocker switches may be used to control the respective device actuators, they are not programmable. The left rocker switch controls actuator 1 , the right rocker switch controls actuator 2 .

LED MODE
The LEDs associated to the rocker switches can be configured according to the following operating modes: always on, always off, actuator state, inverted state.

## Acquisition



ACTUATORS:

1) press the programing key on the rear;
2) check the lighting of the programming LED;
3) Press the left rocker switch to acquire actuator 1, press the right rocker switch for the acquisition of actuator 2 .

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | 11 mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |
| Max. load | 8A resistive, 3A inductive |

## Reference standards

EN50090-2-2

# Mylos Home Automation - Technical details Lighting and comfort 

## 350W dimmer actuator, 1 rocker switch

| Description | Code |
| :--- | :--- |
| $350 W$ dimmer actuator, 1 rocker switch | 2CSYE1205C |
|  | 2CSYE1205S |

## Components



The "350W Dimmer actuator, 1 rocker switch" is a recessed device for the ABB Mylos Home Automation system.
An actuator with the connection terminals for light loads allowing dimming regulation is present on the rear of the device. After programming, the dimming command may come from the device itself, from other Mylos Home Automation system devices or from conventional control devices (pushbuttons, switches, relays) which are connected to Mylos Home Automation devices via input channels.
A rocker switch is situated on the front with programmable LED light indications, and allows only the load connected to the dimmer itself to be activated.

## Configurable parameters

## ACTUATOR

The device allows the dimming of suitable light loads connected to the relative outlet.
The following operating parameters can be modified:

- dimming speed: allows 3 dimming speeds to be set (slow/medium/fast)
LOAD
Inductive (for the non-electric transformers, incandescent bulbs), capacitive (for electronic transformers), automatic (selects between inductive and capacitive, in case of flickering try manual setting). Always look up the datasheet of the light load to be regulated to ensure that the correct operating mode is selected.


## ROCKER SWITCH

The front rocker switch may only be used for the local control of the dimmer, it cannot be configured.

## LED MODE

The LEDs associated to the rocker switch can be configured according to the following operating modes: always on, always off, actuator state, inverted state.

## Acquisition



1) press the programing key on the rear;
2) Check the lighting of the programming LED.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via bus and relays |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | 7 mA (from bus) |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |
| Maximum adjustable load | 350 W 230V AC |

## Reference standards

EN50090-2-2, EN60669-2-1

# Mylos Home Automation - Technical details Lighting and comfort 

## 1/10V DC dimmer actuator, 1 rocker switch

| Description | Code |
| :--- | :--- |
| 1/10V DC dimmer actuator, 1 rocker switch | 2CSYE1206C |
|  | 2CSYE1206S |



The "1/10V DC Dimmer actuator, 1 rocker switch" is a recessed device for the ABB Mylos Home Automation system. Terminals for the connection of the external actuators such as ballast, dimmers with $1 / 10 \mathrm{~V}$ input are situated on the rear. There are 4 connection terminals on the rear: 2 corresponding to a relay for the activation of the external actuator and two corresponding to a $1 / 10 \mathrm{~V}$ input for the regulation of the same. After programming, the dimming command may come from the device itself, from other devices of the Mylos Home Automation system or from conventional control devices (pushbuttons, switches, relays) which are connected to Mylos Home Automation devices via input channels.
A rocker switch is situated on the front with programmable LED light indications which allows only the load connected to the dimmer itself to be activated.

## Configurable parameters

## ACTUATOR

The device allows the dimming of suitable light loads connected to the relative outlet.
The following operating parameters can be modified:

- dimming speed: allows 3 dimming speeds to be set (slow/ medium/fast)
ROCKER SWITCH
The front rocker switch may only be used for the local control of the dimmer.
LED MODE
The LEDs associated to the switch can be configured according to the following operating modes: always on, always off, actuator status, inverted status.

Warning: Look up the manual of the programming device for further details regarding the configuration of the parameters.

## Acquisition



ACTUATOR
For the acquisition of the device:

1) press the programming key 3 situated on the rear;
2) check the lighting of the programming LED 6.

## Connection diagram



| Technical data |  |
| :---: | :---: |
| Supply | via bus and relays |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 11mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |
| Input voltages | 1-10V DC |
| Max. relay load | AC1: 16A, 250V AC <br> AC5: 10A, 250 V AC $(\cos \varphi=0,6)$ |
| Max dimmer outlet current | 1 mA |

## Reference standards

EN50090-2-2

## IR receiver for remote control

| Description | Code |
| :--- | :--- |
| IR receiver for remote control | 2CSYE1218C |
|  | 2CSYE1218S |

## Components



The "IR receiver for remote control" is a recessed device for the ABB Mylos Home Automation system.
The device allows incoming infrared signals to be received through a dedicated remote control (ref. 2CSE1217EL) which manages up to 6 different channels.
1 actuator composed of 1 relay with outgoing exchange contact $(\mathrm{NO} / \mathrm{NC})$ is situated on the rear of the device, and it can be configured for the control of loads of a different nature.

## Configurable parameters

INPUTS
The device allows up to 6 input channels corresponding to IR remote control pushbuttons to be managed.
The channels corresponding to keys from 2 to 6 can be configured through the programming device for the following operating parameters.

- Switch: il pulsante del telecomando permette il controllo ON/OFF, ritardo all'attivazione/disattivazione con selezione del tempo variabile (0s -> 5h max).
- Dimmer: the remote control key allows to increase the light loads intensity (+ Brighter), decrease it (- Darker) or dimming in Toggle mode.
- Shutter: the remote control pushbutton allows the control of the rise, drop and rest of Shutters and Blinds.
- Pushbutton: the remote control pushbutton can be used to activate loads (ON), deactivate them (OFF) or in Toggle mode.
- Recall scenery: the remote control pushbutton allows an already configured scenery to be recalled.
The input channel corresponds to the number 1 pushbutton of the remote control and is not configurable: this pushbutton only allows the control of the receiver's relay in commutation.


## ACTUATOR

The device allows the activation and deactivation of an electric load when receiving a command signal.
The exchange contact can be used to manage electric loads of a different nature. The actuator can be configured to realise the following functions:

- delay: allows the ON/OFF, deactivation delay with a selection of variable times (0s -> 5h max).


## Acquisition



INGRESSI:

1) press the programming key situated on the rear;
2) check the lighting of the programming LED;
3) press the pushbuttons (from 2 to 6) of the remote control which correspond to the channel you wish to acquire.
ACTUATOR:
4) press the programming key 3 situated on the rear;
5) check the lighting of the programming LED;
6) press key 1 of the remote control.

## Connection diagram

* Prodotto venduto separatamente.

| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) o ED 0641 (500m) |
| Absorption | ower than 11mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | standard bus connector |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | IP20 |

## Reference standards

EN50090-2-2


## Mylos Home Automation - Technical details Heat regulation

The Mylos Home Automation system allows you to manage a heat regulation system divided into 4 different zones. The main zone is the zone where the programming device is located (time-programmed thermostat or Mylos Touch), which also performs the function of the heat regulation Master device. In the other three zones, probe thermostats are used, code 2CSYE1202C/S.


It is possible to control the entire heat regulation system locally from the Master device, forcing a change of state in the configured zones. The Mylos Touch display also shows the active state in each zone and the corresponding set-point temperatures.
The same type of control can be achieved remotely via GSM when interfacing is set up with the Domuslink central unit equipped with interface 2CSYE1703M (see page 3/38).

From the Master device you can define independent timebased programs (Automatic Mode) for each of the 4 zones: either the time-programmed thermostat or the Mylos Touch panel will send the change of state signal to each thermostat at the established time.

Mylos touch has 3 internal integrated relays, one of which can be associated via programming to control of the Master zone (see page $3 / 40$ ).
The time-programmed thermostat 2CSYE1201C/S and the thermostats 2CSYE1202C/S, on the other hand, do not have an integrated actuator for direct control of the magnet valve. Therefore you need to have a BUS actuator that can be associated via programming (e.g. 2CSYE1107C/S).
You are advised to keep the actuator at a distance from the flush-mounted box of the thermostat for a more accurate reading of the temperature by the sensor, as illustrated in the following schematic diagrams:


## Heating systems with a time-programmed thermostat that controls:

A Wall-mounted boile
B Burner or circulation pump or motorized magnet valve
C Zone magnet valve
(1) BUS line
(2) BUS actuator

It is possible to define the behaviour of the heat regulation system in the event of remote manual forcing, with one of 3 operating possibilities:

- Automatic Temperature Mode: at the established time, the Master device sends the remote thermostat the temperature to which it has to be set.
- Forced Automatic Mode: at the established time the Master device sends the remote thermostat the temperature to which it has to be set, forcing it into operation. The command is always performed.
- Forced Automatic Mode + state: at the established time the Master device sends the remote thermostat the temperature to which it has to be set, forcing it into automatic operation. In addition, the state of the Master device is replicated on the thermostat (e.g. if the ANTI-FREEZE mode is set on the time-programmed thermostat, this state is replicated on the thermostat). The command is always performed.

The predefined Set Point temperatures and the settings for each zone can be defined independently on the respective thermostats.
The technical characteristics of the time-programmed thermostat/Mylos Home Automation thermostat are listed below.

| Technical specifications |  |
| :---: | :---: |
| Power supply | via BUS with dedicated connector |
| Blue display backlighting | time for 6 seconds from the last time that a key was pressed |
| Output type | on delocalized actuator via BUS |
| Temperature levels that can be set | in addition to ANTI-FREEZE and TOO WARM |
| Ambient temperature display field | $0^{\circ} \mathrm{C} \div+37.7^{\circ} \mathrm{C}$ |
| Ambient temperature resolution | $0.1{ }^{\circ} \mathrm{C}$ |
| Tolerance on temperature reading | $\pm 0.5{ }^{\circ} \mathrm{C}$ |
| Ambient temperature reading correction (Offset) | adjustable $-3^{\circ} \mathrm{C} \div+3^{\circ} \mathrm{C}$ (default $0,0^{\circ} \mathrm{C}$ ) |
| ANTI-FREEZE temperature | Adjustable $5^{\circ} \mathrm{C} \div 40^{\circ} \mathrm{C}$ (default $5^{\circ} \mathrm{C}$ ) |
| TOO WARM temperature | Adjustable $5^{\circ} \mathrm{C} \div 40^{\circ} \mathrm{C}$ (default $35^{\circ} \mathrm{C}$ ) |
| ON-OFF regulation modes | adjustable hysteresis $0.1^{\circ} \mathrm{C} \div 1^{\circ} \mathrm{C}$ (default $0.1^{\circ} \mathrm{C}$ ) |
| Adjustment mode | time base 10 min , not adjustable |
| PID-proportional |  |

## Mylos Home Automation - Technical details Heat regulation

## 8A relay actuator, 1 module

| Description | Code |
| :--- | :--- |
| 8A relay actuator, 1 module | 2CSYE1107C |
|  | 2CSYE1107S |

## Components



The " 8 A relay actuator, 1 module" is a recessed device for the ABB Mylos Home Automation system.
The device has 1 actuator composed of 1 relay with NO contact on the rear which can be configured for the control of loads of a different nature.
After programming, the relay of the device may receive a commutation command from other Mylos Home Automation system devices or from conventional control devices (pushbuttons, switches, relays) which are connected to Mylos Home Automation devices via input channels.

## Configurable parameters

The device allows the activation and deactivation of an electric load when receiving a command signal.
The exchange contact can be used to manage electric loads of a different nature. The actuator can be configured to realise the following functions:i:

- delay: allows the setting of a deactivation delay with a selection of variable times (0s -> 5h max).

Warning: Look up the manual of the programming device for further details regarding the configuration of the parameters.

## Acquisition



For the acquisition of the actuator:

1) press the programing key 1 on the side of the device;
2) check the lighting of the programming LED.

Connection diagram


| Technical data |  |
| :---: | :---: |
| Supply | via BUS |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | lower than 11mA |
| Use environment | inside, dry |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non condensating) |
| Connection to bus | screw terminal max 0.5 Nm |
| Electric connections | screw terminal max 0.5 Nm |
| Degree of protection | 1 P 20 |
| Max. relay load | 8A resistive, 3A inductive |

## Reference standards

EN50090-2-2

## Mylos Home Automation - Technical details Power supplies and accessories

Bus power supply unit

| Description | Code |
| :--- | :--- |
| Bus power supply unit 320mA, 30V~, 4 DIN modules | 2CSYE1701M |

## Components



The power supply unit supplies and controls the power supply of the Mylos Home Automation system. The bus line is isolated from the power supply by an integrated coil. The power supply unit is connected to the bus line through a bus connector. The device is protected from short circuits.

## Functions

In case of the removal and subsequent restoration of the AC supply voltage, the power supply unit guarantees the correct operation of the Mylos Home Automation system's devices and the callback of the states prior to the voltage drop. If the BUS power supply is removed, the system devices maintain the state of the actuators unaltered.

| Technical data |  |
| :---: | :---: |
| Supply voltage | 230V AC +10/-15\%, 50... 60 Hz |
| BUS cable | ED 0633 (100m) o ED 0641 (500m) |
| Outputs: |  |
| - voltage | 30 V DC, +/-1V, SELV |
| - current | 320 mA , protec. against short circuit |
| - maintenance time | $>100 \mathrm{~ms}$ |
| Display and command elements |  |
| - supply | 3 screw teminals |
|  | Cable section: |
|  | 0,2 ... 2,5 mm² braid |
|  | 0,2 ... 4,0 mm² unipole |
| - output | terminale di connessione BUS |
| Degree of protection | IP 20 according to EN 60529 |
| Ambient temperature |  |
| - operation | -5C ... 45C |
| - storing | -25C ... 55C |
| - transport | -25C ... 70C |
| Execution | modular, pro M |
| Case colour | Plastic container, grey |
| Assembly | on 35mm guide, DIN EN 50022 |
| Measurements | $90 \times 72 \times 64 \mathrm{~mm}(\mathrm{H} \times \mathrm{L} \times \mathrm{P})$ |
| Depth/Width | $68 \mathrm{~mm} / 4$ modules of 18 mm |
| Weight | 0.210 kg |

## Reference standards

EC standard according to the EMC indications and those for low voltage

Connection diagram


## Mylos Home Automation - Technical details Power supplies and accessories

DomusTech interface

| Description | Code |
| :--- | :--- |
| DomusTech interface | 2CSYE1703M |

## Components



The Mylos Home Automation - DomusTech interface allows connection between the ABB Mylos Home Automation system and the DomusLink central unit.
This interface allow you to remotely control the home automation system via SMS commands using the GSM module of the central unit.
It is also possible to activate interaction functions between the automation and anti-intrusion systems, for example performing commands on activation/deactivation of a burglar alarm or when a technical/intrusion alarm is detected by the DomusLink central unit.

## Instructions for acquisition



1) Press the programming pushbutton located on the interface.
2) Make sure that the programming LED is on.

Summary table of remote operation SMS commands
The available SMS commands for controlling the remote operation functions of the Domuslink station are listed. All you have to do is send an SMS to the number of the SIM contained in the central unit from an enabled telephone number. Alternatively, you can use the dedicated Java ${ }^{\circledR} /$ iPhone $^{\oplus} /$ Android ${ }^{\circledR}$ application. For further information look up the manual of the DomusLink central unit.

| Function | SMS |
| :---: | :---: |
| Activation/ | A1/A0 = activation/deactivation |
| Deactivation of total safety | of total safety |
| Group with Remote Control 1 | $\mathrm{B} 1 / \mathrm{BO}=$ activation/deactivation of group 1 actuators |
| Group with Remote Control 2 | C1/C0 = activation/deactivation of group 2 actuators |
| Remote scenario 1 | D1 = Call up scenario 1 |
| Remote scenario 2 | F1 = Call up scenario 2 |
| Status Request | E1 = global system request |
|  | E2 = only safety |
|  | E3 = only climate and safety |
|  | E4 = only safety actuators |
|  | E5 = only automation been |
| Time-programmed thermostat command | T0 = System Off |
|  | T1 = Manual Operation |
|  | T2 = Anti-freeze Operation |
|  | T3 = Automatic Operation |
| Remote Thermostat 1 command | T4 = System Off |
|  | T5 = Manual Operation |
|  | T6 = Anti-freeze Operation |
|  | T7 = Automatic Operation |
| Remote Thermostat 2 command | T8 = System Off |
|  | T9 = Manual Operation |
|  | TA = Anti-freeze Operatio |
|  | TB = Automatic Operation |
| Remote Thermostat 3 command | TC = System Off |
|  | TD = Manual Operation |
|  | TE = Anti-freeze Operatio |
|  | TF = Automatic Operatio |

Each SMS command must be sent followed by the PIN of the central station from an enabled telephone number.

Example: A1 2222


Alternatively, the GSM remote operation commands can be managed with the handy ABB "Menu Domotico" application:


Download the application for iPhone (Italian only)

Download the application for Android (Italian only)

## Technical specifications

| Power supply | via BUS |
| :---: | :---: |
| BUS cable | ED 0633 (100m) or ED 0641 (500m) |
| Absorption | less than 10 mA |
| Place of use | inside the DomusLink station |
| Operating temperature | $-5-+45^{\circ} \mathrm{C}$ |
| Relative humidity | max 93\% (non-condensing |
| Connection to the BUS | BUS screw connecto |
| Protection class | IP20 |

## Reference standards

CEI EN 50090

## Mylos Home Automation - Technical details <br> Mylos Touch control unit

## Mylos touch control unit

| Description | Code |
| :--- | :--- |
| Mylos Touch | 2CSYE1301M |

Components


## Wiring diagram



Note: for the connection of a external energy pulse meter it is advised to use a C11 or B21 single phase energy meter.

| Technical specifications |  |  |
| :---: | :---: | :---: |
| Characteristics | Terminals | Description |
| Input for voltage supply from the network |  |  |
| Power supply voltage | L (Phase) | 230 V AC 50 Hz |
|  | $N$ (Neutral) |  |
| 3 screw clamps with plug-in connector |  |  |
| Inputs / Outputs |  |  |
| Energy pulse meter input | E1 | 2 terminals with polarity (+,-) suitable for the connection of energy meters of the type 100p x KW/ |
| Binary outputs | R1 (Relay1) <br> R2 (Relay2) <br> R3 (Relay3) | 3 binary outputs with potential-free relay (NO contact). Maximum power for each output: 2.5 AX (230V AC) <br> Each relay output has 2 terminals |
| BUS connection | BUS | Input voltage: 30V DC, +/- 1V SELV <br> Absorption: from 1 to 10 V DC <br> Maximum load current: 50 mA <br> 2 terminals with polarity (+, -) |
| Screen / Audio |  |  |
| Screen |  | Hitachi 5.7" CCFL Display LCD TFT <br> Resolution: 320x240 pixel <br> Touchscreen |
| Microphone |  | Sensitivity -40dB S/N 58dB |
| Loudspeaker |  | 8W, 2W, $400-20,000 \mathrm{~Hz}$ |
| Connection of optional and other modules |  |  |
| Slot for MicroSD card |  | MicroSD memory card reader (integrated) <br> Supported SD card capacity: <br> 2GB (compatible <br> SD card supplied in the package of the device) |
| Temperature |  |  |
| Detectable ambient temperature |  | $-5^{\circ} \mathrm{C} \mathrm{a}+40^{\circ} \mathrm{C}$ |


C11

B21

| Description | Type | Code |
| :--- | :--- | :--- |
| C11 single-phase electronic energy meter | C11 | M670550 |
| B21 single-phase electronic energy meter | B21 | 2CMA100149R1000 |

## Mylos Home Automation - Coding <br> Order information



Coding criteria for Home and Building Automation devices


Example: Shutter actuator, black

| 2 | C | S | Y | E | 1 | 1 | 0 | 4 | $\mathbf{S}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Packaging

To enable automatic warehouse management using optical readers, the Mylos Home Automation and Mylos KNX devices are packaged individually in boxes that display the EAN bar codes and protect the contents adequately against dust and shocks. For a more detailed explanation of the installation methods, a specific instruction sheet is supplied.

## Mylos Home Automation

## Overall dimensions

| Code $\square$ | Code ■ | Description | Modules | Depth mm |
| :---: | :---: | :---: | :---: | :---: |
| 2CSYE1001C | 2CSYE1001S | 2 binary inputs module | 2 | 32 |
| 2CSYE1002C | 2CSYE1002S | 2 binary inputs module, 1 rocker switch | 2 | 32 |
| 2CSYE1003C | 2CSYE1003S | 2 binary inputs module, 2 rocker switches | 2 | 32 |
| 2CSYE1011C | 2CSYE1011S | 2 binary inputs module, 1 module | 1 | 32 |
| 2CSYE1012C | 2CSYE1012S | Input module 1 rocker switch, 1 module | 1 | 32 |
| 2CSYE1101C | 2CSYE1101S | 16A relay actuator | 2 | 32 |
| 2CSYE1102C | 2CSYE1102S | 16A relay actuator, 1 rocker switch | 2 | 32 |
| 2CSYE1103C | 2CSYE1103S | 16A relay actuator, 2 rocker switches | 2 | 32 |
| 2CSYE1104C | 2CSYE1104S | Shutter actuator | 2 | 32 |
| 2CSYE1105C | 2CSYE1105S | 230 V AC shutter actuator, 1 rocker switch | 2 | 32 |
| 2CSYE1106C | 2CSYE1106S | 2X8A relay actuator, 2 rocker switches | 2 | 32 |
| 2CSYE1107C | 2CSYE1107S | 8 A relay actuator, 1 module | 1 | 32 |
| 2CSYE1205C | 2CSYE1205S | 350W dimmer actuator, 1 rocker switch | 2 | 32 |
| 2CSYE1206C | 2CSYE1206S | 1/10V DC dimmer actuator, 1 rocker switch | 2 | 32 |
| 2CSYE1218C | 2CSYE1218S | IR receiver for remote control | 2 | 32 |
| 2CSYE1201C | 2CSYE1201S | Time-programmable thermostat | 2 | 32 |
| 2CSYE1202C | 2CSYE1202S | Thermostat | 2 | 32 |

1 module


2 modules


Mylos Touch

Mylos Touch


## Other Mylos Home Automation devices

BUS power supply, 4 DIN modules


2 inputs module, flush-mounted


## Mylos KNX

## Building automation devices



2CSYK1002C


2CSYK1012C
2CSYK1012S


2CSYK1003C

2CSYK1003S

$\mathbf{K N X}$ certified devices
 2CSYK1104C


2CSYK1102C


2CSYK1101S 2CSYK1104S


2CSYK1102S


2CSYK1103C 2CSYK1106C


2CSYK1103S 2CSYK1106S

2CSYK1205C 2CSYK1206C


2CSYK1105S


2CSYK1205S 2CSYK1206S


2CSYK1218S

\section*{crem onem | or | cm |
| :---: | :---: |
|  |  |

 .}


Actuator units

| Description | $\mathrm{N}^{\circ}$ modules | Code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| Relay actuator unit, 16A | 2 | 2CSYK1101C | 1/1 |
|  | 2 | 2CSYK1101S | 1/1 |
| Relay actuator unit, 16A, 1 rocker switch | 2 | 2CSYK1102C | 1/1 |
|  | 2 | 2CSYK1102S | 1/1 |
| Relay actuator unit, 16A, 2 rocker switches | 2 | 2CSYK1103C | 1/1 |
|  | 2 | 2CSYK1103S | 1/1 |
| 230 V shutter actuator | 2 | 2CSYK1104C | 1/1 |
|  | 2 | 2CSYK1104S | 1/1 |
| 230 V shutter actuator 1 rocker switch | 2 | 2CSYK1105C | 1/1 |
|  | 2 | 2CSYK1105S | 1/1 |
| 2 relay actuator, $2 \times 8 \mathrm{~A}, 2$ rocker switches | 2 | 2CSYK1106C | 1/1 |
|  | 2 | 2CSYK1106S | 1/1 |

Refererence Standards IRV EN 50090.
$\widehat{\mathbf{K N X}}$ certified devices

2CSYK1218C

Lighting and comfort

| Description | $\begin{aligned} & \mathrm{N}^{\circ} \\ & \text { modules } \end{aligned}$ | Code | Box/Pack No. items |
| :---: | :---: | :---: | :---: |
| 350W dimmer with rocker switch | 2 | 2CSYK1205C | 1/1 |
|  | 2 | 2CSYK1205S | 1/1 |
| 1/10v reg dimmer with rocker switch | 2 | 2CSYE1206C | 1/1 |
|  | 2 | 2CSYE1206S | 1/1 |
| IR receiver for remote controls | 2 | 2CSYE1218C | 1/1 |
|  | 2 | 2CSYE1218S | 1/1 |

Refererence Standards IRV EN 50090.
KNX certified devices

## Mylos KNX

## Building automation devices



2CSYK1201C


2CSYK1202C
 2CSYK1202S

Heat regulation

| Description | Nodules | Code | Box/Pack <br> No. items |
| :--- | :--- | :--- | :--- |
| Time-programmable thermostat | 2 | 2CSYK1201C | $1 / 1$ |
|  | 2 | 2CSYK1201S | $1 / 1$ |
| Thermostat | 2 | 2CSYK1202C | $1 / 1$ |
|  | 2 | 2CSYK1202S | $1 / 1$ |

Refererence Standards IRV EN 50090.
KNX certified devices

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## Élos

Components and functions


## Control devices

Switches, push switches, two-way switches, intermediate switches, relays and change-over switches in different versions to configure functions and control points for appliances in the most flexible manner, suitable for all residential and work contexts.
The range includes devices with light signalling to indicate the status of the connected appliances or for night-time location; items with a key allow their use to be prevented under specific conditions.
The torpedo lamps and bulb lamps with which illuminable switches can be equipped must be ordered separately; the codes are listed under the accessories.


## Key covers

These are used to identify the available functions and the appliances connected with different symbols.
They are used for replacement of the keys with which the control devices are supplied as standard.
Available 1 and $1 / 2$ module versions.


## Socket outlets

The versions with 2P+E 10-16A plugs for 250V lines are available in the Italian and German standards, with safety shutters and side/central earth. There are also power sockets available for the most widespread international standards. The range also includes interlocked sockets, European and American standard shaver sockets, SELV sockets for very low safety voltage appliances and other special sockets. For telephone and data transmission applications, various types of connectors compatible with the most widespread and advanced international wiring standards are available.


## Protection devices

These devices intervene in the event of overloads, short circuits, overvoltages and other phenomena that involve a risk for the safety of persons and which compromise proper operation of connected appliances, performing their protection function directly downstream without impacting the power supply to the other points in the electrical installation. Among the devices in this range, the anti-interference filter is inserted on the supply side of appliances that are particularly sensitive to network electrical noise.


## Signalling devices

Warning lights to display the operating status of connected appliances, as well as bells and buzzers (also available in a single device).
The steplight lamp is used as a courtesy light in order to illuminate pathways and transit zones, for example corridors, garages, basement rooms, and so on.
The torpedo lamps and bulb lamps with which warning lights need to be equipped must be ordered separately; the codes are listed under the accessories.


## Safety and comfort devices

To optimize operation of the electrical appliances and to increase the liveability of the environments, the range includes programming, adjustment and timer devices, thermostats and electronic time-programmed thermostats, timers.
In the event of leaks of natural gas and LPG, the detectors automatically shut the solenoid valve to which they are connected in order to interrupt gas distribution and to prevent hazardous situations; the alarm can be relayed to multiple points with the signal repeater.
The anti-blackout light switches on in the event of a power cut with autonomy up to 4.5 hours. It can be removed from the socket and used as a torch.

All the products in the range that require the IMQ mark have obtained it, in compliance with the specific standards.

## Élos

## Components and functions



## Accessories

Accessory articles and spare parts for the devices and components in the range are available.


## Components for installation

Blank covers for unused modules and 3, 4, 6, 8 and 12 module supports for the installation of appliances and components in rectangular flush-mounted boxes, single-pole frames with enclosure for rails.


## Frames

The Élos Soft frames are available in glass with both satinfinish and glossy versions; the metal and technopolymer frames are available in glossy as well as pearlescent finishes. Metal frames are also supplied with special surface treatments: glossy chromium, brushed steel, natural zama. The Élos Smart frames are made from technopolymer, with pearlescent versions; they have a satin finish.


## Other installation solutions

Products and solutions for protected installation (IP55 airtight escutcheon plates and IP40/IP55 enclosures) are available, as well as adapters for installation in an Undernet floor turret.

Élos
A recognized beauty




Élos was selected among the best products in the Design category competing for the prestigious "Augusto Morello" Intel Design prize.

## Élos - Order codes <br> Élos Soft switches



2CSE1001SF


2CSE1007EL


2CSE1009EL


2CSE1010SF


2CSE1011SF

Switches

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole switch, 16A-250V~ | 1 | 2CSE1001SF | 24/96 |
| Double-pole switch, 16A-250V~ | 1 | 2CSE1002SF | 24/48 |
| Single-pole switch, 16A-250V , illuminable | 1 | 2CSE1004SF | 24/48 |
| Double-pole switch, 16A-250V~, illuminable | 1 | 2CSE1006SF | 24/48 |
| Double-pole switch, 10A-250V~, with key | 1 | 2CSE1007EL | 1/12 |

Information on the illumination of switches from page 4/47
Technical details from page 4/48

Two-way switches

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole two-way switch, 16A-250V~ | 1 | 2CSE1003SF | 24/96 |
| Single-pole two-way switch, 16A-250V~, illuminable | 1 | 2CSE1008SF | 24/48 |
| Single-pole two-way switch, 10A-250V~, with key | 1 | 2CSE1009EL | 1/12 |

Information on the illumination of switches from page 4/47
Technical details from page 4/48

Intermediate switches

| Description | No. <br> Packing/ |  |  |
| :--- | :--- | :--- | :--- |
| Intermediate switch, 16A-250V | modules | Code | Pacing <br> No. items |

Information on the illumination of switches from page 4/47
Technical details from page 4/48
Switches

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Change-over switch, 10A-250V~, 3 positions, with central 0FF | 1 | 2CSE1011SF | $24 / 48$ |

[^6]

2CSE1012EL 2CSE1013EL 2CSE1014EL


2CSE1005SF


2CSE1016SF


2CSE1018SF


2CSE1020EL


2CSE1015SF


2CSE1017EL


2CSE1019SF


2CSE1021EL

Relays

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Latching relay, 1 pole. Output contact 10A (AC1)/7A (AC15) - 250V~. With $230 \mathrm{~V} \sim 50 / 60 \mathrm{~Hz}$ coil | 1 | 2CSE1012EL | 1/12 |
| Latching relay, 2 poles. Output contacts 10A (AC1)/7A (AC15) - 250V~. With 230V~50/60Hz coil | 1 | 2CSE1013EL | 1/12 |
| Monostable relay, 1 pole. Output contact 10A (AC1)/4A (AC15) - 250V~. With 230V~50/60Hz coil | 1 | 2CSE1014EL | 1/12 |

Technical details on page $4 / 50$

Push switches

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switch NO, 16A-250V~ | 1 | 2CSE1005SF | 24/96 |
| Single-pole push switch NO, 16A - 250V~, lightable | 1 | 2CSE1015SF | 12/24 |
| Single-pole push switch NC, 16A-250V~ | 1 | 2CSE1016SF | 12/24 |
| Double single-pole push switch, N0, 16A - 250V~ | 1 | 2CSE1017EL | 12/24 |
| Double single-pole push switch, NO, 10A - 250V~, with interlock | 1 | 2CSE1018SF | 12/24 |
| Double-pole push switch NO, 16A-250V~ | 1 | 2CSE1019SF | 24/48 |
| Double-pole push switch NO, 16A - 250V~, with cord pull, 150 cm | 1 | 2CSE1020EL | 4/32 |
| Double-pole push switch, N0, 10A - 250V~, with key | 1 | 2CSE1021EL | 1/24 |
| Single-pole push switch NO, 10A - 250V $\sim$, START, with auxiliary NC contact, 10A - 250V~ | 1 | 2CSE1022SF | 12/24 |
| Single-pole push switch NC, 10A-250V~, STOP, with auxiliary NO contact, 10A-250V~ | 1 | 2CSE1023SF | 12/24 |

Information on the illumination of switches from page 4/47
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## Élos - Order codes Élos Soft switches



2CSE1024EL



2CSE1027SF


2CSE1029SF

Special push switches

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switch NO, 16A-250V~, with red diffuser | 1 | 2CSE1024EL | 12/24 |
| Single-pole push switch NO, 16A-250V~, with green diffuser | 1 | 2CSE1025EL | 12/24 |
| Single-pole push switch NO, 10A-250V~, with backlit label holder plate (with 12 V or 24 V lamps) | 2 | 2CSE1026EL | 12/36 |
| Single-pole push switch NO, 16A-250V~, illuminable, with DOOR OPENER symbol | 1 | 2CSE1027SF | 12/24 |
| Single-pole push switch NO, 16A-250V~, illuminable, with BELL symbol | 1 | 2CSE1028SF | 12/24 |
| Single-pole push switch NO, 16A-250V~, illuminable, with LAMP symbol | 1 | 2CSE1029SF | 12/24 |
| Single-pole push switch N0, 16A - 250V~, illuminable, with STAIR LIGHT symbol | 1 | 2CSE1030SF | 12/24 |

Information on the illumination of switches from page 4/47
Technical details from page 4/48

## Élos - Order codes

## Élos Smart switches



2CSE1001SM


2CSE1004SM


2CSE1007EL


2CSE1003SM


2CSE1009EL


2CSE1010SM


2CSE1011SM


2CSE1006SM

Switches

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole switch, 16A-250V~ | 1 | 2CSE1001SM | 24/96 |
| Double-pole switch, 16A-250V~ | 1 | 2CSE1002SM | 24/48 |
| Single-pole switch, 16A-250V~, illuminable | 1 | 2CSE1004SM | 24/48 |
| Double-pole switch, 16A-250V~, illuminable | 1 | 2CSE1006SM | 24/48 |
| Double-pole switch, 10A - 250V~, with key | 1 | 2CSE1007EL | 1/12 |

Information on the illumination of switches from page 4/47
Technical details from page 4/48

Two-way switches

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Single-pole two-way switch, $16 \mathrm{~A}-250 \mathrm{~V} \sim$ | 1 | 2CSE1003SM | $24 / 96$ |
| Single-pole two-way switch, $16 \mathrm{~A}-250 \mathrm{~V} \sim$, illuminable | 1 | 2CSE1008SM | $24 / 48$ |
| Single-pole two-way switch, $10 \mathrm{~A}-250 \mathrm{~V} \sim$, with key | 1 | 2CSE1009EL | $1 / 12$ |

Information on the illumination of switches from page 4/47
Technical details from page 4/48

Intermediate switches

| Description | No. <br> Pocking/ |  |  |
| :--- | :--- | :--- | :--- |
| Intermediate switch, 16A-250V~ | modules | Code | Pack <br> No. items |

Information on the illumination of switches from page 4/47
Technical details from page 4/48
Switches

| Description | No. |  | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Change-over switch, 10A - 250V~, 3 positions, with central OFF | modules | Code | 2CSE1011SM |

Information on the illumination of switches from page 4/47
Technical details from page 4/48

## Élos - Order codes

## Élos Smart switches



2CSE1012EL 2CSE1013EL 2CSE1014EL


2CSE1016SM


2CSE1018SM


2CSE1020EL


2CSE1022SM

Relays

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Latching relay, 1 pole. Output contact 10A (AC1)/7A (AC15) - 250V~. With 230V~50/60Hz coil | 1 | 2CSE1012EL | 1/12 |
| Latching relay, 2 poles. Output contacts 10A (AC1)/7A (AC15)-250V~. With 230V~50/60Hz coil | 1 | 2CSE1013EL | 1/12 |
| Monostable relay, 1 pole. Output contact 10A (AC1)/4A (AC15) - 250V~. With 230V~50/60Hz coil | 1 | 2CSE1014EL | 1/12 |

Technical details on page 4/50

Push switches

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switch N0, 16A - 250V~ | 1 | 2CSE1005SM | 24/96 |
| Single-pole push switch NO, 16A-250V~, illuminable | 1 | 2CSE1015SM | 12/24 |
| Single-pole push switch NC, 16A-250V~ | 1 | 2CSE1016SM | 12/24 |
| Double single-pole push switch, NO, 16A-250V~ | 1 | 2CSE1017EL | 12/24 |
| Double single-pole push switch, N0, 10A - 250V , with interlock | 1 | 2CSE1018SM | 12/24 |
| Double-pole push switch NO, 16A - 250V~ | 1 | 2CSE1019SM | 24/48 |
| Double-pole push switch NO, 16A - 250V , with cord pull, 150 cm cord with ball grip | 1 | 2CSE1020EL | 4/32 |
| Double-pole push switch, NO, 10A - 250V~, with key | 1 | 2CSE1021EL | 1/24 |
| Single-pole push switch NO, 10A - 250V~, START, with auxiliary NC contact, 10A-250V~ | 1 | 2CSE1022SM | 12/24 |
| Single-pole push switch NC, 10A-250V~, STOP, with auxiliary NO contact, 10A-250V~ | 1 | 2CSE1023SM | 12/24 |

Information on the illumination of switches from page 4/47
Technical details from page 4/48


2CSE1027SM


2CSE1029SM

Special switches

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switches N0, 16A-250V~, with red diffuser | 1 | 2CSE1024EL | 12/24 |
| Single-pole push switches NO, 16A-250V~, with green diffuser | 1 | 2CSE1025EL | 12/24 |
| Single-pole push switches NO, 10A-250V~, with backlit label holder plate (with 12 V or 24 V lamps) | 2 | 2CSE1026EL | 12/36 |
| Single-pole push switches NO, 16A - 250V~, illuminable, with DOOR OPENER symbol | 1 | 2CSE1027SM | 12/24 |
| Single-pole push switches NO, 16A - 250V ~, illuminable, with BELL symbol | 1 | 2CSE1028SM | 12/24 |
| Single-pole push switches NO, 16A-250V~, illuminable, with LAMP symbol | 1 | 2CSE1029SM | 12/24 |
| Single-pole push switches NO, 16A-250V , illuminable, with STAIR LIGHT symbol | 1 | 2CSE1030SM | 12/24 |

Information on the illumination of switches from page 4/47
Technical details from page 4/48

## Élos - Order codes

## Élos Soft key covers



2CSE1501SF


2CSE1502EL


2CSE1504SF


2CSE1506SF


2CSE1508SF


2CSE1522SF


2CSE1503SF


2CSE1505SF


2CSE1507SF
 2CSE1509SF


Key cover 1 module

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Key cover 1 module, generic | 1 | 2CSE1501SF | 4/48 |
| 1-module key cover, for devices with functional indication | 1 | 2CSE1522SF | 4/48 |
| 1-module key cover, generic with labe | 1 | 2CSE1502EL | 4/48 |
| 1-module key cover, with NURSE symbol and transparent diffuser | 1 | 2CSE1503SF | 4/48 |
| 1-module key cover, with TABLE LAMP symbol and transparent diffuser | 1 | 2CSE1504SF | 4/48 |
| 1-module key cover, with DIMMER symbol and transparent diffuser | 1 | 2CSE1505SF | 4/48 |
| 1-module key cover, with FAN symbol and transparent diffuser | 1 | 2CSE1506SF | 4/48 |
| 1-module key cover, with TELEPHONE symbol and transparent diffuser | 1 | 2CSE1507SF | 4/48 |
| 1-module key cover, with DOOR/GATE OPENING symbol and transparent diffuser | 1 | 2CSE1508SF | 4/48 |
| 1-module key cover, with DOOR/GATE CLOSING symbol and transparent diffuser | 1 | 2CSE1509SF | 4/48 |

Technical details on page 4/51
$1 / 2$ module key covers

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| $1 / 2$ module key cover, generic | 1/2 | 2CSE1511EL | 4/48 |
| 1/2 module key cover, generic with label | 1/2 | 2CSE1512EL | 4/48 |
| $1 / 2$ module key cover, with red diffuser | 1/2 | 2CSE1513EL | 4/48 |
| 1/2 module key cover, with green diffuser | 1/2 | 2CSE1514EL | 4/48 |
| $1 / 2$ module key cover, with amber diffuser | 1/2 | 2CSE1515EL | 4/48 |
| 1/2 module key cover, with transparent diffuser | 1/2 | 2CSE1516EL | 4/48 |
| 1/2 module key cover, with blue diffuser | 1/2 | 2CSE1517EL | 4/48 |
| $1 / 2$ module key cover, with VERTICAL ARROW symbol | 1/2 | 2CSE1518EL | 4/48 |
| $1 / 2$ module key cover, with HORIZONTAL ARROW symbol | 1/2 | 2CSE1519EL | 4/48 |
| $1 / 2$ module key cover, with DOOR/GATE OPENING symbol | 1/2 | 2CSE1520EL | 4/48 |
| $1 / 2$ module key cover, with DOOR/GATE CLOSING symbol | 1/2 | 2CSE1521EL | 4/48 |

[^7]
## Élos - Order codes

## Élos Smart key covers



2CSE1501SM


2CSE1502EL


2CSE1504SM


2CSE1506SM


2CSE1508SM

Copritasti 1 modulo

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Key cover 1 module, generic | 1 | 2CSE1501SM | 4/48 |
| 1-module key cover, for devices with functional indication | 1 | 2CSE1522SM | 4/48 |
| 1-module key cover, generic with label | 1 | 2CSE1502EL | 4/48 |
| 1-module key cover, with NURSE symbol and transparent diffuser | 1 | 2CSE1503SM | 4/48 |
| 1-module key cover, with TABLE LAMP symbol and transparent diffuser | 1 | 2CSE1504SM | 4/48 |
| 1-module key cover, with DIMMER symbol and transparent diffuser | 1 | 2CSE1505SM | 4/48 |
| 1-module key cover, with FAN symbol and transparent diffuser | 1 | 2CSE1506SM | 4/48 |
| 1-module key cover, with TELEPHONE symbol and transparent diffuser | 1 | 2CSE1507SM | 4/48 |
| 1-module key cover, with DOOR/GATE OPENING symbol and transparent diffuser | 1 | 2CSE1508SM | 4/48 |
| 1-module key cover, with DOOR/GATE CLOSING symbol and transparent diffuser | 1 | 2CSE1509SM | 4/48 |

Technical details on page 4/51


2CSE1507SM


2CSE1509SM
 2CSE1512EL
 2CSE1514EL


2CSE1516EL


2CSE1518EL

$1 / 2$ module key covers

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| $1 / 2$ module key cover, generic | 1/2 | 2CSE1511EL | 4/48 |
| 1/2 module key cover, generic with label | 1/2 | 2CSE1512EL | 4/48 |
| $1 / 2$ module key cover, with red diffuser | 1/2 | 2CSE1513EL | 4/48 |
| $1 / 2$ module key cover, with green diffuser | 1/2 | 2CSE1514EL | 4/48 |
| $1 / 2$ module key cover, with amber diffuser | 1/2 | 2CSE1515EL | 4/48 |
| $1 / 2$ module key cover, with transparent diffuser | 1/2 | 2CSE1516EL | 4/48 |
| 1/2 module key cover, with blue diffuser | 1/2 | 2CSE1517EL | 4/48 |
| $1 / 2$ module key cover, with VERTICAL ARROW symbol | 1/2 | 2CSE1518EL | 4/48 |
| $1 / 2$ module key cover, with HORIZONTAL ARROW symbol | 1/2 | 2CSE1519EL | 4/48 |
| 1/2 module key cover, with DOOR/GATE OPENING symbol | 1/2 | 2CSE1520EL | 4/48 |
| 1/2 module key cover, with DOOR/GATE CLOSING symbol | 1/2 | 2CSE1521EL | 4/48 |

[^8]
## Élos - Order codes

## Socket outlets



2CSE1101EL


2CSE1102EL


2CSE1104EL

Plug sockets, Italian standard with safety shutters

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2P+E socket outlet, 10A - 250V~, P11 type | 1 | 2CSE1101EL | 24/96 |
| 2P+E socket outlet, 16A-250V~, P17 type PHASE OUT | 1 | 2CSE1102EL | 24/96 |
| $2 \mathrm{P}+$ E socket outlet, 16A-250V~, P17/11 type | 1 | 2CSE1103EL | 24/96 |
| 2P+E socket outlets, 16A-250V~, P17/11 type, coloured for privileged circuits | 1 | 2CSE1104EL | 24/48 |
|  | 1 | 2CSE1105EL | 24/48 |
|  | 1 | 2CSE1106EL | 24/48 |
| 2P+E double socket, 16A-250V~, P17/11 type | 2 | 2CSE1107EL | 24/48 |

Technical details from page 4/51


2CSE1105EL

2CSE1107EL


2CSE1108EL


2CSE1110EL 2CSE1111EL


2CSE1112EL

Technical details from page 4/52


2CSE1109EL
Plug sockets, Italian/German standard with safety shutters and side/central earth

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2P+E socket outlet, 16A - 250V~, P30 type | 2 | 2CSE1108EL | 12/48 |
| $2 \mathrm{P}+$ E socket outlet, 16A-250V , P30/17 type | 2 | 2CSE1109EL | 12/48 |
| $2 \mathrm{P}+$ E socket outlets, 16A-250V~, P30/17 type, coloured for privileged circuits | 2 | 2CSE1110EL | 12/24 |
|  | 2 | 2CSE1111EL | 12/24 |
|  | 2 | 2CSE1112EL | 12/24 |



2CSE1324EL


2CSE1325EL


2CSE1326EL


## 2CSE1113EL



2CSE1116EL


Interlocked socket outlets with automatic MCB and automatic RCD

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| 2P+E socket outlet, 16A-250V , interlocked with MCB, P17/11 | 2 | 2CSE1324EL | $1 / 6$ |
| 2P+E socket outlet, 16A-250V , interlocked with MCB, P30 | 3 | 2CSE1325EL | $1 / 4$ |
| 2P+E socket outlet, 16A-250V $\sim$, with RCD, 10mA, P17/11 | 3 | 2CSE1326EL | $1 / 4$ |

Technical details from page 4/53

Special sockets


Technical details from page 4/55

Plug sockets, foreign standard with safety shutters

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2P+E socket outlet, 16A - 250V~, French Standard | 2 | 2CSE1144EL | 24/48 |
| 2P+E socket outlet, 10A - 250V~/15A - 125V~, EuroAmerican Standard | 1 | 2CSE1136EL | 24/48 |
| 2P+E socket outlet, 13A-250V~, British Standard | 2 | 2CSE1134EL | 24/48 |
| 2P+E socket outlet, 15A-125V , American Standar | 1 | 2CSE1145EL | 24/48 |
| $2 \mathrm{P}+$ E socket outlet, 10A - 250V , Australian / South American Standard | 2 | 2CSE1141EL | 24/48 |
| 2P+E socket outlet, 10A - 250V~, Swiss Standard | 1 | 2CSE1148EL | 24/48 |

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## Élos - Order codes

## Socket outlets

2CSE1147EL

2CSE1121EL 2CSE1122EL


2CSE1126EL


2CSE1143EL 2CSE1146EL

TV/SAT sockets

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| TV/SAT coaxial socket, direct, male IEC connector, $\emptyset 9.5 \mathrm{~mm}$ | 1 | 2CSE1137EL | 24/48 |
| TV/SAT coaxial socket, feedthrough, male IEC connector, $\varnothing 9.5 \mathrm{~mm}$, attenuation 5 dB | 1 | 2CSE1138EL | 1/24 |
| TV/SAT coaxial socket, direct, female connector | 1 | 2CSE1139EL | 24/48 |
| TV/SAT coaxial socket, feedthrough, female connector, attenuation 5 dB | 1 | 2CSE1140EL | 1/24 |
| TV coaxial socket/SAT, feedthrough, male IEC connector $\varnothing 9.5 \mathrm{~mm}$ and female connector | 1 | 2CSE1147EL | 1/12 |

Technical details from page 4/56

## Network and telephone sockets

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| RJ11 telephone connector | 1 | 2CSE1121EL | 1/24 |
| RJ12 telephone connector | 1 | 2CSE1122EL | 1/12 |
| RJ11 double telephone connector | 1 | 2CSE1123EL | 1/12 |
| RJ45 data connector, Cat. 5e, UTP | 1 | 2CSE1124EL | 1/24 |
| RJ45 data connector, Cat. 5e, FTP | 1 | 2CSE1125EL | 1/24 |
| RJ45 data connector, Cat. 3, UTP | 1 | 2CSE1126EL | 1/24 |
| RJ45 socket, Cat. 6, UTP | 1 | 2CSE1143EL | 1/24 |
| RJ45 socket, Cat. 6, FTP | 1 | 2CSE1146EL | 1/24 |
| Adapter for RJ45 connector, Keystone type | 1 | 2CSE1135EL | 1/96 |

Technical details from page 4/58

Data connectors

| Description |  | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: | :---: |
| BNC connector, 75/93 ohm, for crimping cable RG59/62 | PHASE OUT | 1 | 2CSE1128EL | 1/12 |
| Connector for data transmission, IBM Cabling System type, with perforated insulation for IBM1/2/6 cables | PHASE OUT | 2 | 2CSE1129EL | 1/12 |
| TWINAX connector, for soldering a 100 ohm biaxial cable | PHASE OUT | 2 | 2CSE1130EL | 1/12 |
| 9 -pole connector, SUB D, to be soldered | PHASE OUT | 2 | 2CSE1131EL | 1/12 |
| 15-pole connector, SUB D, to be soldered | PHASE OUT | 2 | 2CSE1132EL | 1/12 |
| 25 -pole connector, SUB D, to be soldered | PHASE OUT | 2 | 2CSE1133EL | 1/12 |

## Élos - Order codes

## Protection devices



2CSE1301EL


2CSE1303EL


2CSE1304EL


2CSE1306EL


2CSE1308EL 2CSE1329EL

Fuse holders, overvoltage limiters, filters

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- | :--- |
| Fuse holder, for fuses $\varnothing 6.3 \times 32 \mathrm{~mm}, 16 \mathrm{~A}-250 \mathrm{~V} \sim$ | 1 | 2CSE1301EL | $24 / 48$ |
| Overvoltage limiter with tripping signal, 75J, 250V $\sim$ | 1 | 2CSE1302EL | $1 / 12$ |
| Anti-interference filter, $3.5 \mathrm{~A}-250 \mathrm{~V} \sim$, attenuation at 1MHz equal to 55 dB | 1 | 2CSE1303EL | $1 / 12$ |

Technical details from page 4/61

Miniature circuit-breakers and Residual current circuit-breakers

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Automatic MCB, 1P+N, C6, breaking capacity 1.5kA | 1 | 2CSE1304EL | 1/12 |
| Automatic MCB, 1P+N, C10, breaking capacity 3kA | 1 | 2CSE1305EL | 1/12 |
| Automatic MCB, 1P+N, C16, breaking capacity 3kA | 1 | 2CSE1306EL | 1/12 |
| Automatic RCD, 1P+N, C6-10mA, breaking capacity 1.5 kA | 2 | 2CSE1307EL | 1/6 |
| Automatic RCD, $1 \mathrm{P}+\mathrm{N}, \mathrm{C} 10-10 \mathrm{~mA}$, breaking capacity 3 kA | 2 | 2CSE1308EL | 1/6 |
| Automatic RCD, 1P+N, C16-10mA, breaking capacity 3kA | 2 | 2CSE1309EL | 1/6 |
| Automatic RCD, 1P+N, C6-30mA, breaking capacity 1.5 kA | 2 | 2CSE1328EL | 1/6 |
| Automatic RCD, 1P+N, C10-30mA, breaking capacity 3kA | 2 | 2CSE1329EL | 1/6 |
| Automatic RCD, 1P+N, C16-30mA, breaking capacity 3 kA | 2 | 2CSE1330EL | 1/6 |

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## Élos - Order codes

Signalling devices


2CSE1310EL



2CSE1311EL


2CSE1313EL


2CSE1315EL

Warning lights

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Warning lights, 12/24/250V , with connector for torpedo lamps, amber | 1 | 2CSE1310EL | 24/48 |
| Warning lights, 12/24/250V , with connector for torpedo lamps, transparent | 1 | 2CSE1311EL | 24/48 |
| Warning lights, $12 / 24 / 250 \mathrm{~V}$, with connector for torpedo lamps, red | 1 | 2CSE1312EL | 24/48 |
| Warning lights, 12/24/250V , with connector for torpedo lamps, green | 1 | 2CSE1313EL | 24/48 |
| Warning lights, 12/24/250V , with connector for torpedo lamps, blue | 1 | 2CSE1314EL | 24/48 |
| Double warning light, red and green, 12/24/250V , with connector for bulb lamps | 1 | 2CSE1315EL | 24/48 |
| Opal steplight lamp with adjustable light beam, 12/24V, with connector for bulb lamps | 3 | 2CSE1316EL | 8/16 |

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2CSE1316EL


2CSE1321EL 2CSE1322EL

## Élos - Order codes

## Safety and comfort devices



2CSE1219EL


2CSE1202EL


2CSE1223EL


2CSE1204EL


Thermostats and time-programmed thermostats

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Summer/winter electronic time-programmed thermostat, with daily and weekly programming and 3 temperature levels that can be set. <br> Potential-free relay output contact 1 NO/NC, 5A (AC1)/2A (AC15) - 250V~ | 2 | 2CSE1219EL | 1/2 |
| Summer/winter electronic thermostat, with input for night-time reduction remote control and 3 temperature levels that can be set. <br> Output contact N0, 5A (AC1)/2A (AC15) - 250V~ | 3 | 2CSE1202EL | 2/4 |

Technical details from page 4/68

Programmers and timers

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Daily/weekly electronic programmer, 1 channel, overall dimensions 2 Élos modules, 1 NO/NC changeover output contact, 8A (AC1)/4A (AC15) 230V~ - 50/60 Hz | 2 | 2CSE1223EL | 1/12 |
| Electronic timed button with input for remote control, 1 output contact NO, 10A (AC1)/5A (AC15) - 250V~ | 2 | 2CSE1204EL | 2/4 |

Technical details from page 4/71

Dimmers

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :---: | :--- | :--- |
| Electronic dimmer with rotary control for resistive loads, $100-500 \mathrm{~W}, 230 \mathrm{~V} \sim-50 / 60 \mathrm{~Hz}$ | 1 | 2CSE1205EL | $1 / 12$ |
| Electronic dimmer with pushbutton control for resistive and inductive loads, | 2 | 2CSE1206EL | $1 / 6$ |
| $60-500 \mathrm{~W}(60-500 \mathrm{VA}), 230 \mathrm{~V} \sim-50 / 60 \mathrm{~Hz}$ |  |  |  |

Technical details from page 4/74

## Élos - Order codes

Safety and comfort devices


2CSE1220EL 2CSE1222EL

2CSE1211EL


2CSE1212EL
Gas detectors

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Natural gas presence electronic detector with acoustic and luminous signal, relay output, 1 NO/NC change-over contact 10A (AC1)/5A (AC15) - 250V~. <br> 12V ~ power supply with code 2CSE1222EL | 2 | 2CSE1220EL | 1/1 |
| $230 \mathrm{~V} \sim-50-60 \mathrm{~Hz}$ power supply, output 12V | 1 | 2CSE1222EL | 1/1 |
| LPG gas presence electronic detector with acoustic and luminous signal, relay output, 1 NO/NC change-over contact 10A (AC1)/5A (AC15) - 250V~. <br> Power supply 230V~-50Hz | 3 | 2CSE1211EL | 1/2 |
| Acoustic and luminous signal repeater with silencer pushbutton, 230V - 50/60Hz | 2 | 2CSE1212EL | 1/2 |
| Solenoid valve for gas systems with manual reset, normally open, 230V~-50Hz | - | 2CSE1213EL | 1/2 |

Technical details from page 4/79


2CSE1224EL


Emergency lighting

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Removable anti-blackout light. Charge reserve equal to 4.5 h and recharge time equal to 10-20 h. To be combined with 230V~ plug sockets; particularly recommended for codes 2CSE1108EL and 2CSE1109EL. |  | 2CSE1214EL | 1/6 |
| Flush-mounted anti-blackout light, dimension 2 Élos modules, suitable for fixed or removable use. Power supply voltage $230 \mathrm{~V}-50 / 60 \mathrm{~Hz}$. Duration without mains supply 2 h , recharge time 5 h | 2 | 2CSE1224EL | 1/12 |

Technical details from page 4/84

Other devices

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Digital clock/calendar with display of hour-minutes/day-month, 230V~ - 50Hz | 1 | 2CSE1215EL | 1/6 |
| IR motion detector with twilight threshold for control and adjustment of the operation time of lighting devices. <br> Relay output NO 5A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50/60Hz. | 1 | 2CSE1216EL | 1/6 |
| Portable remote control, 6 channels/3 bands, range 15 m |  | 2CSE1217EL | 1/2 |
| IR receiver, 1 channel, 1 pushbutton Relay output NO 5A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50/60Hz. | 1 | 2CSE1218EL | 1/6 |
| Universal badge circuit-breaker with location light, 250V~ | 3 | 2CSE1426EL | 1/2 |

Technical details from page 4/86

## Élos - Order codes

## Accessories



2CSE1608EL 2CSE1609EL


2CSE1610EL


2CSE1611EL 2CSE1612EL


2CSE1619EL
2CSE1620EL
2CSE1621EL
2CSE1622EL 2CSE1623EL 2CSE1624EL

Wiring

| Description | Dimensions <br> mm | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Shielding cables for connecting external audio sources in a MONO system | - | 2CSE1608EL | $1 / 12$ |
| Shielding cables for connecting external audio sources in a STEREO system | - | 2CSE1609EL | $1 / 12$ |

Resistor for TV sockets

| Description | Dimensions <br> Closing terminal resistor, 750 hm | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |

Keys

| Description | Dimensions <br> $m m$ | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Set of two spare keys for switches/two-way switches | - | 2CSE1611EL | $1 / 100$ |
| Set of two spare keys for pushbuttons | - | 2CSE1612EL | $1 / 100$ |

Bulb lamps

| Description | Dimensions mm | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| White filament lamp, 12V, 0.4W | - | 2CSE1613EL | 50 |
| White filament lamp, 24V, 0.8 W | - | 2CSE1614EL | 50 |
| Red fluorescent lamp, 230V, 0.4W | - | 2CSE1615EL | 50 |
| Green fluorescent lamp, 230V, 0.8 W | - | 2CSE1616EL | 50 |
| Blue LED lamp, $230 \mathrm{~V} / 110 \mathrm{~V}, 1 \mathrm{~W}$, with cables | - | 2CSE1632EL | 50 |
| White LED lamp, 230V/110V, 1W, with cables | - | 2CSE1633EL | 50 |
| Blue LED lamp, 9V, 0.4 W , with cables | - | 2CSE1641EL | 50 |

Information on the illumination of switches on page 4/47

Torpedo lamp

| Description | Dimensions mm | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| White filament lamp, 12V, 2W dimension S6x36 mm | $\emptyset 6 \times 36$ | 2CSE1619EL | 50 |
| White filament lamp, 12V, 2W dimension S6x31 mm | $\emptyset 6 \times 31$ | 2CSE1621EL | 50 |
| Red fluorescent lamp, 110/230V, 0.4 W dimension $\mathrm{S} 6.3 \times 28 \mathrm{~mm}$ | ø 6,3x28 | 2CSE1623EL | 50 |
| White filament lamp, 24V, 2W dimension $\mathrm{S} 6 \times 36 \mathrm{~mm}$ | $\emptyset 6 \times 36$ | 2CSE1620EL | 50 |
| White filament lamp, 24V, 2W dimension $\mathrm{S} 6 \times 31 \mathrm{~mm}$ | $\emptyset 6 \times 31$ | 2CSE1622EL | 50 |
| Green fluorescent lamp, 110/230V, 0.4 W dimension $\mathrm{S} 6.3 \times 28 \mathrm{~mm}$ | ¢ 6,3x28 | 2CSE1624EL | 50 |

Information on the illumination of switches on page 4/47

## Élos - Order codes

## Accessories

## m

2CSE1625EL
2CSE1626EL
2CSE1627EL
2CSE1628EL
2CSE1629EL

Fuses, 250V~

| Description | Dimensions mm | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Fuse for dimmer, 2.5A, $5 \times 20 \mathrm{~mm}$ | $\emptyset 5 \times 20$ | 2CSE1625EL | 20/200 |
| Fuse for fuse holders, 4A, $6.3 \times 32 \mathrm{~mm}$ | ø 6,3x32 | 2CSE1627EL | 10/200 |
| Fuse for fuse holders, 10A, $6.3 \times 32 \mathrm{~mm}$ | $\emptyset 6,3 \times 32$ | 2CSE1629EL | 10/200 |
| Fuse for fuse holders, 2A, $6.3 \times 32 \mathrm{~mm}$ | ø 6,3x32 | 2CSE1626EL | 10/200 |
| Fuse for fuse holders, 6A, $6.3 \times 32 \mathrm{~mm}$ | ø 6,3x32 | 2CSE1628EL | 10/200 |
| Fuse for fuse holders, 16A, $6.3 \times 32 \mathrm{~mm}$ | ø 6,3x32 | 2CSE1630EL | 10/200 |

## Élos - Order codes

## Components for installation



2CSE1601EL


Blank covers

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Blank cover, 1 module | 1 | 2CSE1601EL | $24 / 96$ |
| Blank cover, 1 module with hole for cable outlet $\varnothing 4 \mathrm{~mm}$ and $\emptyset 8 \mathrm{~mm}$ | 1 | 2CSE1602EL | $24 / 48$ |

Enclosures, 1 module

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| White frame with enclosure for rails, 1 module | 1 | 2CSE3101EL | $1 / 6$ |
| Anthracite frame with enclosure for rails, 1 module | 1 | 2CSE3102EL | $1 / 6$ |

Supports

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Support, 3 modules for rectangular box (center distance 3.29 in) | 3 | 2CSE1603EL | 10/150 |
| Support, 4 modules for rectangular box (center distance 4.27 in ) | 4 | 2CSE1604EL | 10/100 |
| Support, 6 modules for rectangular box (center distance 100 mm ) | 6 | 2CSE1605EL | 10/100 |
| Support, 8 modules for rectangular box (center distance 4.27 in) (Only for Élos Smart frames) | 4+4 | 2CSE1606EL | 5/50 |
| Support, 12 modules for rectangular box (center distance 163.5 mm ) (Only for Élos Smart frames) | 6+6 | 2CSE1607EL | 5/50 |

Installation solutions from page 4/41

2CSE1605EL


2CSE1606EL


2CSE1607EL

## Élos - Order codes

## Other installation solutions



IP40 wall-mounted enclosures

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2-space enclosure, IP40 | 2 | 2CSE2240EL | 10/40 |
| 3 -space enclosure, IP40 | 3 | 2CSE2340EL | 10/30 |
| 4 -space enclosure, IP40 | 4 | 2CSE2440EL | 10/20 |
| 8 -space enclosure, IP40 | 8 | 2CSE2840EL | 5/10 |

Installation solutions from page 4/41 - Technical details on page 4/88


2CSE2840EL


2CSE2455EL


2CSE4355EL
IP55 flush-mounted escutcheon plates

| Description | No. |  |  |
| :--- | :--- | :--- | :--- |
| Podules | Code | Packing/ <br> No. items |  |
| IP 55 frame, 3 modules, white | 3 | 2CSE4355EL | $1 / 40$ |

Undernet towers and adapters

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Undernet tower, 16 contact blocks with hollow cover - $300 \times 310$ | - | 10900 | 1/1 |
| Undernet tower, 16 contact blocks with stainless steel cover - $300 \times 310$ | - | 10901 | 1/1 |
| Élos 4 contact blocks support for Undernet tower 10900-10901 | 4 | 10917 | 1/12 |
| Undernet tower, 10 contact blocks with hollow cover - 300x235 | - | 10902 | 1/1 |
| Undernet tower, 10 contact blocks with stainless steel cover - $300 \times 235$ | - | 10903 | 1/1 |
| Élos 5 contact blocks support for Undernet tower 10902-1090 | 5 | 10916 | 1/12 |

Lusy table tower

|  | No. |  | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Description | modules | Code |  |
| For mounting-frames and 4-module frames | PHASE OUT | 4 | 10507 |

Installation solutions from page 4/41
IP55 wall-mounted enclosures

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2-space enclosure, IP55 | 2 | 2CSE2255EL | 10/40 |
| 3-space enclosure, IP55 | 3 | 2CSE2355EL | 10/30 |
| 4-space enclosure, IP55 | 4 | 2CSE2455EL | 10/20 |
| 8-space enclosure, IP55 | 8 | 2CSE2855EL | 5/10 |

Installation solutions from page 4/41-Technical details on page 4/88


Undernet towers


Lusy table tower

## Élos - Order codes

## Quick selection table for Élos Soft frames

Glass frames


Turquoise blue satin finish page 4/30


Pearl white satin finish page 4/30


Topaz orange satin finish page 4/30


Quartz white
page 4/30

Emerald green satin finish
page 4/30


Zircon yellow page 4/30

Metal frames with special surface treatments


Glossy chromium page 4/31


Brushed steel page 4/31


Natural zama page 4/31


Glossy gold page 4/31

## Élos - Order codes

## Quick selection table for Élos Soft frames

Pearlescent metal frames with glossy finish


Silver grey
page 4/31


Titanium grey
page 4/32


Copper red ${ }^{(1)}$
page 4/32


Fjord blue ${ }^{(1)}$
page 4/33


Light silver grey
page 4/31


Dune yellow ${ }^{(1)}$
page 4/32


Clay red ${ }^{(1)}$
page 4/32


Lake green ${ }^{(1)}$
page 4/33


Volcano grey
page 4/31


Sahara yellow ${ }^{(1)}$
page 4/32


Atlantic blue ${ }^{\text {(1) }}$
page 4/32


Forest green ${ }^{(1)}$
page 4/33


Slate grey page 4/31


Havana brown page 4/32


Mediterranean blue ${ }^{(1)}$ page 4/33

[^9]Metal frames with glossy finish


Anthracite grey
page 4/33


Antarctic white page 4/33


ABB red ${ }^{(1)}$
page 4/33

## Élos - Order codes

## Quick selection table for Élos Soft frames

Pearlescent technopolymer frames with glossy finish


Silver grey
page 4/34


Dune yellow
page 4/34


Clay red
page 4/35


Lake green
page 4/35


Light silver grey
page 4/34


Sahara yellow
page 4/34


Arizona red
page 4/35

Forest green
page 4/35



Volcano grey
page 4/34


Havana brown page 4/34


Atlantic blue
page 4/ 35


Slate grey page 4/34


Copper red
page 4/34


Mediterranean blue page 4/35

Technopolymer frames with glossy finish


Anthracite grey page 4/36


Antarctic white page 4/36


ABB red
page 4/36

## Élos - Order codes

## Quick selection table for Élos Smart frames

Pearlescent technopolymer frames with satin finish


Silver grey
page 4/37


Titanium grey
page $4 / 37$


Arizona red
page 4/38


Forest green
page 4/38


ABB red
page 4/39


Light silver grey
page 4/37


Sahara yellow
page 4/37


Atlantic blue
page 4/38


Anthracite grey
page 4/39


Volcano grey
page 4/37


Havana brown page 4/37


Mediterranean blue pag. $4 / 38$


Stone grey
page 4/39


Slate grey
page $4 / 37$


Copper red
page 4/37


Lake green
page 4/38


Antarctic white
page 4/39

## Élos - Order codese

## Élos Soft glass frames



Turquoise blue satin-finish colour


Topaz orange satin-finish colour


## Glass frames

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Turquoise blue satin finish | 3 | 2CSE0330SFV | 1/12 |
|  | 4 | 2CSE0430SFV | 1/6 |
| Topaz orange satin finish | 3 | 2CSE0315SFV | 1/12 |
|  | 4 | 2CSE0415SFV | 1/6 |
| Emerald green satin finish | 3 | 2CSE0340SFV | 1/12 |
|  | 4 | 2CSE0440SFV | 1/6 |
| Zircon yellow | 3 | 2CSE0317SFV | 1/12 |
|  | 4 | 2CSE0417SFV | 1/6 |
| Pearl white satin finish | 3 | 2CSE0312SFV | 1/12 |
|  | 4 | 2CSE0412SFV | 1/6 |
| Quartz white | 3 | 2CSE0313SFV | 1/12 |
|  | 4 | 2CSE0413SFV | 1/6 |

[^10]Emerald green satin finish colour


Zircon yellow colour


Pearl white satin finish colour


Quartz white colour

## Élos - Order codes

## Élos Soft metal frames



Glossy chromium colour


Brushed steel colour


Natural zama colour


Glossy gold colour


Silver grey colour


Light silver grey colour


Volcano grey colour


Slate grey colour

Metal frames with special surface treatments

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Glossy chromium | 3 | 2CSE0350SFZ | 1/12 |
|  | 4 | 2CSE0450SFZ | 1/6 |
|  | 6 | 2CSE0650SFZ | 1/6 |
| Brushed steel | 3 | 2CSE0351SFZ | 1/12 |
|  | 4 | 2CSE0451SFZ | 1/6 |
|  | 6 | 2CSE0651SFZ | 1/6 |
| Natural zama | 3 | 2CSE0352SFZ | 1/12 |
|  | 4 | 2CSE0452SFZ | 1/6 |
|  | 6 | 2CSE0652SFZ | 1/6 |
| Glossy gold | 3 | 2CSE0353SFZ | 1/12 |
|  | 4 | 2CSE0453SFZ | 1/6 |
|  | 6 | 2CSE0653SFZ | 1/6 |

Technical details and customization on page 4/90

Pearlescent metal frames with glossy finish

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Silver grey | 3 | 2CSE0302SFZ | 1/12 |
|  | 4 | 2CSE0402SFZ | 1/6 |
|  | 6 | 2CSE0602SFZ | 1/6 |
| Light silver grey | 3 | 2CSE0303SFZ | 1/12 |
|  | 4 | 2CSE0403SFZ | 1/6 |
|  | 6 | 2CSE0603SFZ | 1/6 |
| Volcano grey | 3 | 2CSE0304SFZ | 1/12 |
|  | 4 | 2CSE0404SFZ | 1/6 |
|  | 6 | 2CSE0604SFZ | 1/6 |
| Slate grey | 3 | 2CSE0305SFZ | 1/12 |
|  | 4 | 2CSE0405SFZ | 1/6 |
|  | 6 | 2CSE0605SFZ | 1/6 |

[^11]
## Élos - Order codes

## Élos Soft metal frames



Titanium grey colour


Dune yellow colour


Sahara yellow colour


Havana brown colour


Copper red colour


Clay red colour


Atlantic blue colour

Pearlescent metal frames with glossy finish

| Colour |  | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: | :---: |
| Titanium grey |  | 3 | 2CSE0306SFZ | 1/12 |
|  |  | 4 | 2CSE0406SFZ | 1/6 |
|  |  | 6 | 2CSE0606SFZ | 1/6 |
| Dune yellow | PHASE OUT | 3 | 2CSE0315SFZ | 1/12 |
|  |  | 4 | 2CSE0415SFZ | 1/6 |
|  |  | 6 | 2CSE0615SFZ | 1/6 |
| Sahara yellow | PHASE OUT | 3 | 2CSE0316SFZ | 1/12 |
|  |  | 4 | 2CSE0416SFZ | 1/6 |
|  |  | 6 | 2CSE0616SFZ | 1/6 |
| Havana brown |  | 3 | 2CSE0317SFZ | 1/12 |
|  |  | 4 | 2CSE0417SFZ | 1/6 |
|  |  | 6 | 2CSE0617SFZ | 1/6 |
| Copper red | PHASE OUT | 3 | 2CSE0321SFZ | 1/12 |
|  |  | 4 | 2CSE0421SFZ | 1/6 |
|  |  | 6 | 2CSE0621SFZ | 1/6 |
| Clay red | PHASE OUT | 3 | 2CSE0322SFZ | 1/12 |
|  |  | 4 | 2CSE0422SFZ | 1/6 |
|  |  | 6 | 2CSE0622SFZ | 1/6 |
| Atlantic blue | PHASE OUT | 3 | 2CSE0330SFZ | 1/12 |
|  |  | 4 | 2CSE0430SFZ | 1/6 |
|  |  | 6 | 2CSE0630SFZ | 1/6 |

[^12]

Mediterranean blue colour


Fjord blue colour


Lake green colour


Forest green colour


Anthracite grey colour


Antarctic white colour


ABB red colour

Pearlescent metal frames with glossy finish

| Colour |  | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: | :---: |
| Mediterranean blue | PHASE OUT | 3 | 2CSE0331SFZ | 1/12 |
|  |  | 4 | 2CSE0431SFZ | 1/6 |
|  |  | 6 | 2CSE0631SFZ | 1/6 |
| Fjord blue | PHASE OUT | 3 | 2CSE0332SFZ | 1/12 |
|  |  | 4 | 2CSE0432SFZ | 1/6 |
|  |  | 6 | 2CSE0632SFZ | 1/6 |
| Lake green | PHASE OUT | 3 | 2CSE0340SFZ | 1/12 |
|  |  | 4 | 2CSE0440SFZ | 1/6 |
|  |  | 6 | 2CSE0640SFZ | 1/6 |
| Forest green | PHASE OUT | 3 | 2CSE0341SFZ | 1/12 |
|  |  | 4 | 2CSE0441SFZ | 1/6 |
|  |  | 6 | 2CSE0641SFZ | 1/6 |

Technical details and customization on page 4/90

Metal frames with glossy finish

| Colour |  | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: | :---: |
| Anthracite grey |  | 3 | 2CSE0301SFZ | 1/12 |
|  |  | 4 | 2CSE0401SFZ | 1/6 |
|  |  | 6 | 2CSE0601SFZ | 1/6 |
| Antarctic white |  | 3 | 2CSE0311SFZ | 1/12 |
|  |  | 4 | 2CSE0411SFZ | 1/6 |
|  |  | 6 | 2CSE0611SFZ | 1/6 |
| ABB red | PHASE OUT | 3 | 2CSE0320SFZ | 1/12 |
|  |  | 4 | 2CSE0420SFZ | 1/6 |
|  |  | 6 | 2CSE0620SFZ | 1/6 |

Technical details and customization on page 4/90

## Élos - Order codes

## Élos Soft technopolymer frames



Silver grey colour


Light silver grey colour


Volcano grey colour


Slate grey colour


Dune yellow colour


Sahara yellow colour


Havana brown colour

Copper red colour


Pearlescent technopolymer frames with glossy finish

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Silver grey | 3 | 2CSE0302SFP | 1/12 |
|  | 4 | 2CSE0402SFP | 1/6 |
|  | 6 | 2CSE0602SFP | 1/6 |
| Light silver grey | 3 | 2CSE0303SFP | 1/12 |
|  | 4 | 2CSE0403SFP | 1/6 |
|  | 6 | 2CSE0603SFP | 1/6 |
| Volcano grey | 3 | 2CSE0304SFP | 1/12 |
|  | 4 | 2CSE0404SFP | 1/6 |
|  | 6 | 2CSE0604SFP | 1/6 |
| Slate grey | 3 | 2CSE0305SFP | 1/12 |
|  | 4 | 2CSE0405SFP | 1/6 |
|  | 6 | 2CSE0605SFP | 1/6 |
| Dune yellow | 3 | 2CSE0315SFP | 1/12 |
|  | 4 | 2CSE0415SFP | 1/6 |
|  | 6 | 2CSE0615SFP | 1/6 |
| Sahara yellow | 3 | 2CSE0316SFP | 1/12 |
|  | 4 | 2CSE0416SFP | 1/6 |
|  | 6 | 2CSE0616SFP | 1/6 |
| Havana brown | 3 | 2CSE0317SFP | 1/12 |
|  | 4 | 2CSE0417SFP | 1/6 |
|  | 6 | 2CSE0617SFP | 1/6 |
| Copper red | 3 | 2CSE0321SFP | 1/12 |
|  | 4 | 2CSE0421SFP | 1/6 |
|  | 6 | 2CSE0621SFP | 1/6 |

Technical details and customization on page 4/90


Clay red colour


Arizona red colour


Atlantic blue colour


Mediterranean blue colour


Mediterranean blue colour


Forest green colour

Pearlescent technopolymer frames with glossy finish

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Clay red | 3 | 2CSE0322SFP | 1/12 |
|  | 4 | 2CSE0422SFP | 1/6 |
|  | 6 | 2CSE0622SFP | 1/6 |
| Arizona red | 3 | 2CSE0323SFP | 1/12 |
|  | 4 | 2CSE0423SFP | 1/6 |
|  | 6 | 2CSE0623SFP | 1/6 |
| Atlantic blue | 3 | 2CSE0330SFP | 1/12 |
|  | 4 | 2CSE0430SFP | 1/6 |
|  | 6 | 2CSE0630SFP | 1/6 |
| Mediterranean blue | 3 | 2CSE0331SFP | 1/12 |
|  | 4 | 2CSE0431SFP | 1/6 |
|  | 6 | 2CSE0631SFP | 1/6 |
| Lake green | 3 | 2CSE0340SFP | 1/12 |
|  | 4 | 2CSE0440SFP | 1/6 |
|  | 6 | 2CSE0640SFP | 1/6 |
| Forest green | 3 | 2CSE0341SFP | 1/12 |
|  | 4 | 2CSE0441SFP | 1/6 |
|  | 6 | 2CSE0641SFP | 1/6 |

[^13]
## Élos - Order codes

## Élos Soft technopolymer frames



Anthracite grey colour


Antarctic white colour


ABB red colour

Technopolymer frames with glossy finish

| Colour | No. <br> modules | Code | Packing/ <br> No. items |  |
| :--- | :--- | :--- | :--- | :--- |
| Anthracite grey | 3 |  | 2CSE0301SFP | $1 / 12$ |
|  | 4 | 6 | 2CSE0401SFP | $1 / 6$ |
|  | 3 | 2CSE0601SFP | $1 / 6$ |  |
| Anthracite grey | 4 | 2CSE0311SFP | $1 / 12$ |  |
|  | 6 | 2CSE0411SFP | $1 / 6$ |  |
| ABB red | 3 | 2CSE0611SFP | $1 / 6$ |  |
|  | 4 | 2CSE0320SFP | 2CSE0420SFP | $1 / 12$ |

[^14]
## Élos - Order codes

## Élos Smart technopolymer frames



Silver grey colour


Light silver grey colour


Volcano grey colour


Slate grey colour


Titanium grey colour


Sahara yellow colour


Havana brown colour


Copper red colour

Pearlescent technopolymer frames with satin finish

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Silver grey | 3 | 2CSE0302SMP | 1/24 |
|  | 4 | 2CSE0402SMP | 1/12 |
|  | 6 | 2CSE0602SMP | 1/8 |
|  | 8 | 2CSE0802SMP | 1/8 |
| Light silver grey | 3 | 2CSE0303SMP | 1/24 |
|  | 4 | 2CSE0403SMP | 1/12 |
|  | 6 | 2CSE0603SMP | 1/8 |
|  | 8 | 2CSE0803SMP | 1/8 |
| Volcano grey | 3 | 2CSE0304SMP | 1/24 |
|  | 4 | 2CSE0404SMP | 1/12 |
|  | 6 | 2CSE0604SMP | 1/8 |
|  | 8 | 2CSE0804SMP | 1/8 |
| Slate grey | 3 | 2CSE0305SMP | 1/24 |
|  | 4 | 2CSE0405SMP | 1/12 |
|  | 6 | 2CSE0605SMP | 1/8 |
|  | 8 | 2CSE0805SMP | 1/8 |
| Titanium grey | 3 | 2CSE0306SMP | 1/24 |
|  | 4 | 2CSE0406SMP | 1/12 |
|  | 6 | 2CSE0606SMP | 1/8 |
|  | 8 | 2CSE0806SMP | 1/8 |
| Sahara yellow | 3 | 2CSE0316SMP | 1/24 |
|  | 4 | 2CSE0416SMP | 1/12 |
|  | 6 | 2CSE0616SMP | 1/8 |
|  | 8 | 2CSE0816SMP | 1/8 |
| Havana brown | 3 | 2CSE0317SMP | 1/24 |
|  | 4 | 2CSE0417SMP | 1/12 |
|  | 6 | 2CSE0617SMP | 1/8 |
|  | 8 | 2CSE0817SMP | 1/8 |
| Copper red | 3 | 2CSE0321SMP | 1/24 |
|  | 4 | 2CSE0421SMP | 1/12 |
|  | 6 | 2CSE0621SMP | 1/8 |
|  | 8 | 2CSE0821SMP | 1/8 |

Technical details and customization on page 4/90

## Élos - Order codes

## Élos Smart technopolymer frames



Arizona red colour


Atlantic blue colour


Mediterranean blue colour


Lake green colour

Forest green colour


Pearlescent technopolymer frames with satin finish

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Arizona red | 3 | 2CSE0323SMP | 1/24 |
|  | 4 | 2CSE0423SMP | 1/12 |
|  | 6 | 2CSE0623SMP | 1/8 |
|  | 8 | 2CSE0823SMP | 1/8 |
| Atlantic blue | 3 | 2CSE0330SMP | 1/24 |
|  | 4 | 2CSE0430SMP | 1/12 |
|  | 6 | 2CSE0630SMP | 1/8 |
|  | 8 | 2CSE0830SMP | 1/8 |
| Mediterranean blue | 3 | 2CSE0331SMP | 1/24 |
|  | 4 | 2CSE0431SMP | 1/12 |
|  | 6 | 2CSE0631SMP | 1/8 |
|  | 8 | 2CSE0831SMP | 1/8 |
| Lake green | 3 | 2CSE0340SMP | 1/24 |
|  | 4 | 2CSE0440SMP | 1/12 |
|  | 6 | 2CSE0640SMP | 1/8 |
|  | 8 | 2CSE0840SMP | 1/8 |
| Forest green | 3 | 2CSE0341SMP | 1/24 |
|  | 4 | 2CSE0441SMP | 1/12 |
|  | 6 | 2CSE0641SMP | 1/8 |
|  | 8 | 2CSE0841SMP | 1/8 |

Technical details and customization on page 4/90


Anthracite grey colour


Stone grey colour


Antarctic white colour


ABB red colour

Pearlescent technopolymer frames with satin finish

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Anthracite grey | 3 | 2CSE0301SMP | 1/24 |
|  | 4 | 2CSE0401SMP | 1/12 |
|  | 6 | 2CSE0601SMP | 1/8 |
|  | 8 | 2CSE0801SMP | 1/8 |
|  | 12 | 2CSE0901SMP | 1/8 |
| Stone grey | 3 | 2CSE0307SMP | 1/24 |
|  | 4 | 2CSE0407SMP | 1/12 |
|  | 6 | 2CSE0607SMP | 1/8 |
|  | 8 | 2CSE0807SMP | 1/8 |
| Antarctic white | 3 | 2CSE0311SMP | 1/24 |
|  | 4 | 2CSE0411SMP | 1/12 |
|  | 6 | 2CSE0611SMP | 1/8 |
|  | 8 | 2CSE0811SMP | 1/8 |
|  | 12 | 2CSE0911SMP | 1/8 |
| $\overline{\text { ABB red }}$ | 3 | 2CSE0320SMP | 1/24 |
|  | 4 | 2CSE0420SMP | 1/12 |
|  | 6 | 2CSE0620SMP | 1/8 |
|  | 8 | 2CSE0820SMP | 1/8 |

[^15]
## Élos - Technical details General information

Main technical data and reference standards for the devices in the range

| Component | Reference standards | Basic electrical data* |  |  | Prolonged operation No. changes of position | Resistance to abnormal heat and fire |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Test voltage withstand (V) | Insulation resistance <br> (MW) | Breaking capacity or usage category |  | Thermal pressure with ball $\left({ }^{\circ} \mathrm{C}\right)$ | Glow wire tests $\left({ }^{\circ} \mathrm{C}\right)$ |
| Operating mechanisms | CEI 23-9 <br> (EN 60669-1) | 2000 at 50 Hz <br> for 1 minute | > 5 | 1.25 In <br> (200 changes <br> of position) | 40000 <br> at In 250V~ $\cos \varphi=0.6)$ | 125 | 850 |
| Socket outlets | CEI 23-5/CEI 23-50/CEI 23-16 <br> (EN 60884-1) | 2000 at 50 Hz <br> for 1 minute | >5 | 1.25 ln <br> (100 changes of position) | $10000$ <br> at In 250V~ $\cos \varphi=0.8)$ | 125 | 850 |
| Latching relay | $\begin{aligned} & \text { CEI 23-9/CEI 23-62 } \\ & \text { (EN 60669-1/EN 60669-2-2) } \end{aligned}$ | 2000 a 50Hz <br> for 1 minute | > 5 | $-{ }^{-}$ | 50000 <br> at In 250V~ $\cos \varphi=0,6)$ | 125 | 850 |
| Monostable relays | CEI 94-4/CEI-EN 61810-1 <br> (EN 60669-1/EN 60669-2-2) | 2000 a 50Hz <br> for 1 minute | > 5 | 1.25 ln <br> (200 changes <br> of position) | $50000$ <br> at In 250V~ $\cos \varphi=0,6)$ | 125 | 850 |
| Automatic MCBs | CEI 23-3 <br> (EN 60898) | $2000 \text { a } 50 \mathrm{~Hz}$ <br> for 1 minute | - | 1.5...3kA | 8000 | 125 | 850 |
| Automatic RCDs | CEI 23-95 | $\begin{aligned} & 2000 \text { a } 50 \mathrm{~Hz} \\ & \text { for } 1 \text { minute } \end{aligned}$ | - | 1.5... 3 kA | 4000 | 125 | 850 |
| Supports and frames | $\begin{aligned} & \text { CEI 23-9 } \\ & (\text { EN 60669-1) } \end{aligned}$ | - | - | - | - | 75 | 650 |

*For the rated voltages and currents see the specifications for the individual part codes.

Clamping capacity of the terminals

| Flexible wires | Rigid wires |  |  | Cable traction resistance of terminals: $>50 \mathrm{~N}$ |
| :--- | :--- | :--- | :--- | :--- |
| Min. $0.75 \mathrm{~mm}^{2}$ | Max. $2 \times 4 \mathrm{~mm}^{2}$ | Min. $0.5 \mathrm{~mm}^{2}$ | Max. $2 \times 2.5 \mathrm{~mm}^{2}$ |  |

Élos - Technical details Installation solutions

Composition method for contact blocks and support
Élos Smart

Élos Soft


## Élos - Technical details

 Installation solutionsInstalling and removing switches from the support


Specifications of screws and terminals

- Captive screws in open position with cross and slot head and clamping plate.
- Double input protected terminals for one or two conductors (rigid or flexible).


Installation on concrete walls


Installation of plasterboard walls


| No. Modules | Screw distance | Recommended box |
| :---: | :---: | :---: |
| 3 | 83.5 mm | 1SL006A00 |
| 4 | 108.5 mm | 00053 |
| 6 | 100 mm | 1SL0064A00 |
| $4+4$ (only Élos Smart) | 103.5 mm | Gewiss GW2437 |
| 6+6 (only Élos Smart) | 153.5 mm | Gewiss GW2438 |

Note: for further information on ABB boxes for masonry walls please refer to the catalog 1SLC001001D0905 - Insulating Enclosures and Installation Materials (see page 5/66).

| No. Modules | Screw distance | Recommended box |
| :--- | :--- | :--- |
| 3 | 83.5 mm | Gewiss GW24207 |
| 4 | 108 mm | Gewiss GW24245 |
|  |  | Vimar V71604 |
| 6 |  |  |
|  |  | Gewiss GW24246 |

Note: for further information on ABB boxes for plasterboard walls please refer to the catalog 1SLC001001D0905 - Insulating Enclosures and Installation Materials (see page 5/66).

## Élos - Technical details

## Installation solutions

Protected installation with IP40/55 wall-mounted enclosures


| No. Modules | IP40 enclosure | IP55 enclosure |
| :---: | :---: | :---: |
| 2 | 2CSE2240EL | 2CSE2255EL |
| 3 | 2CSE2340EL | 2CSE2355EL |
| 4 | 2CSE2440EL | 2CSE2455EL |
| 8 | 2CSE2840EL | 2CSE2855EL |

Note: the airtight enclosures allow devices to be assembled directly without the aid of supports. The contact blocks are inserted from the rear. See technical details on page 4/99.
For further information on IP40/IP55 wall-mounted enclosures, please refer to the catalog
1SLC001001D0905 - Insulating Enclosures and Installation Materials (see page 5/66).

Protected installation with airtight escutcheon plate


| No. Modules | White IP55 escutcheon <br> plate | Anthracite IP55 <br> escutcheon plateon plate |
| :--- | :--- | :--- |
| 3 | 2CSE4355EL | 2CSE3355EL |

Note: the airtight escutcheon plates provide a self-supporting solution that allows direct assembly devices without the aid of mounting frames. The cdevices are inserted from the rear.

Installation on raised floors with Undernet under-floor turrets


| No. Modules | Dedicated adapter | Undernet tower |
| :--- | :--- | :--- |
| 4 (max 16 devices) | 10917 | 10900 e 10901 |
| 5 (max 10 devices) | 10916 | 10902 e 10903 |

Note: the dedicated adapter provides a self-supporting solution that allows direct assembly of devices without the aid of mounting frames. The devices are inserted from the rear. The use of trim frames is not supported.
For further information on Undernet under-floor towers please refer to the catalog 1SLC006001D0903 - Floor Distribution Systems (see page 5/66).

## Installation on surface mounted boxes



| No. Modules | Wall box | Frame |
| :---: | :---: | :---: |
| 3 | 41823 | Use a 3-module mounting frame and an Élos Soft or Élos Smart frame |
| 3 | 41822 | Use a 3 -module mounting frame and an Élos Soft or Élos Smart frame |
| 4 | 41830 | Use a 4-module mounting frame and an Élos Soft or Élos Smart frame |

Note: for further information on wall boxes and duct systems please refer to the catalog 1SLC800001D0905 - Plastic and Metal Duct Systems (see page 5/66).

## Élos - Technical details

## Installation solutions

Installation on Lusy table towers


Installation on rails


| No. Modules | Enclosure with white frame | Enclosure with anthracite frame |
| :--- | :--- | :--- |
| 1 | 2CSE3101EL | 2CSE3102EL |

Note: the enclosure provides a self-supporting solution that allows the devices to be assembled directly without the aid of mounting frames. The contact blocks are inserted from the rear.

## Élos - Technical details

## Selection of lights

Selection of lights for devices incorporating luminous signalling
Control devices, push switches with diffuser and warning lights

| Bulb lamps |  | Filament |  | Fluorescence |  | LED |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2CSE1004SF | 1P switch, 16A with functional indication | 2CSE1613EL <br> White <br> 12V <br> 0.4 W | 2CSE1614EL <br> White <br> 24V <br> $0,8 \mathrm{~W}$ | $\begin{aligned} & \text { 2CSE1615EL } \\ & \text { Red } \\ & 230 \mathrm{~V} \\ & 0.4 \mathrm{~W} \end{aligned}$ | $\begin{gathered} \text { 2CSE1616EL } \\ \text { Green } \\ 230 \mathrm{~V} \\ 0.8 \mathrm{~W} \end{gathered}$ | $\begin{gathered} \text { 2CSE1632EL } \\ \text { Blue } \\ 230 \mathrm{~V} / 110 \mathrm{~V} \\ 1 \mathrm{~W} \end{gathered}$ | 2CSE1633EL <br> White 230V/110V 1W |
| 2CSE1004SM | 1 P switch, 16A with functional indication |  |  |  |  |  |  |
| 2CSE1006SF | 2 P switch, 16A with functional indication |  |  |  |  |  |  |
| 2CSE1006SM | 2 P switch, 16A with functional indication |  |  |  |  |  |  |
| 2CSE1008SF | 1P two-way switch, 16A with functional indication |  |  |  |  |  |  |
| 2CSE1008SM | 1 P two-way switch, 16A with functional indication |  |  |  |  |  |  |
| 2CSE1015SF | 1 P push switches NO, 16A, with functional indication |  |  |  |  |  |  |
| 2CSE1015SM | 1 P push switches NO, 16A, with functional indication |  |  |  |  |  |  |
| 2CSE1024EL | 1 P push switches NO, 16A, with red diffuser |  |  |  |  |  |  |
| 2CSE1025EL | 1 P push switches N0, 16A, with green diffuser |  |  |  |  |  |  |
| 2CSE1027SF | 1 1 push switches NO, 16A, with DOOR OPENER symbol |  |  |  |  |  |  |
| 2CSE1027SM | 1 1 push switches NO, 16A, with DOOR OPENER symbol |  |  |  |  |  |  |
| 2CSE1028SF | 1 P push switches NO, 16A, with BELL symbol |  |  |  |  |  |  |
| 2CSE1028SM | 1 P push switches NO, 16A, with BELL symbol |  |  |  |  |  |  |
| 2CSE1029SF | 1 P push switches NO, 16A, with LAMP symbol |  |  |  |  |  |  |
| 2CSE1029SM | 1P push switches NO, 16A, with LAMP symbol |  |  |  |  |  |  |
| 2CSE1030SF | 1 P push switches NO, 16A, with STAIR LIGHT symbol |  |  |  |  |  |  |
| 2CSE1030SM | 1 P push switches NO, 16A, with STAIR LIGHT symbol |  |  |  |  |  |  |
| 2CSE1315EL | Double warning light 12/24/250V , red/green |  |  |  |  |  |  |
| Torpedo lamp |  | Filament |  | Fluorescence |  | LED |  |
| 2CSE1026EL | Single-pole push switch NO, 10A, with backlit label holder plate | $\begin{gathered} \text { 2CSE1619EL } \\ \text { Bianca } \\ 12 \mathrm{~V} 2 \mathrm{~W} \\ \text { S6x36 } \end{gathered}$ | $\begin{gathered} \text { 2CSE1620EL } \\ \text { Bianca } \\ 24 \mathrm{~V} 2 \mathrm{~W} \\ \text { S6x36 } \end{gathered}$ |  |  |  |  |

Signalling devices

| Torpedo lamp |  | Filament |  | Fluorescence |  | LED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2CSE1310EL | Amber warning light, 12/24/250V~ | $\begin{aligned} & \text { 2CSE1621EL } \\ & \text { White } \\ & \text { 12V 2W } \\ & \text { S6X31 } \end{aligned}$ | $\begin{aligned} & \text { 2CSE1622EL } \\ & \text { White } \\ & \text { 24V 2W } \\ & \text { S6X31 } \end{aligned}$ | $\begin{gathered} \text { 2CSE1623EL } \\ \text { Red } \\ 110 / 230 \mathrm{~V} \\ 0.4 \mathrm{~W} \text { S6,3X28 } \end{gathered}$ | $\begin{gathered} \text { 2CSE1624EL } \\ \text { Green } \\ 110 / 230 \mathrm{~V} \\ 0.4 \mathrm{~W} 56,3 \mathrm{X} 28 \end{gathered}$ |  |
| 2CSE1311EL | Transparent warning light, 12/24/250V~ |  |  |  |  |  |
| 2CSE1312EL | Red warning light, 12/24/250V~ |  |  |  |  |  |
| 2CSE1313EL | Green warning light, 12/24/250V |  |  |  |  |  |
| 2CSE1314EL | Blue warning light, 12/24/250V~ | $\begin{aligned} & \text { 2CSE1619EL } \\ & \text { White, } \\ & \text { 12V 2W } \\ & \text { S6X36 } \end{aligned}$ | 2CSE1620EL |  |  |  |
| 2CSE1316EL | Opal steplight lamp with adjustable beam, 12/24V |  | White, $24 \mathrm{~V} 2 \mathrm{~W}$ S6X36 |  |  |  |



## Élos - Technical warning <br> Control devices

Switches, two-way switches, intermediate switches, push switches

## Area of application

Control (on and off) of ohmic-inductive loads:

- with filament and fluorescent lamps (corrected and uncorrected);
- dedicated circuits for powered equipment (aspirators, range hoods, shutters, blinds, fans, etc..) and controllable outlets.

To eliminate architectural barriers in creating installations, we recommend the use of illuminable switches (Article 4 of Italian Ministerial Decree no. 236 of 14.06.1989).

| Technical specifications |  |
| :---: | :---: |
| Rated voltage | 250V~ |
| Rated current | 10A (16A for push switches) |
| Opening distance of the contacts | $>3 \mathrm{~mm}$ |
| Dielectric strength | $>2000 \mathrm{~V}$ |

## Reference standards

LV Directive, EN 60669-1.

## Customization of the control device keys

The illuminable keys of the Élos wiring accessories' range are supplied with all most widely used functional symbols. In addition, it is possible to replace the standard control key covers with other covers bearing different symbols.

## Wiring diagrams

The diagrams provided below are the most widely applied installation solutions in creating lighting points.

Control from one point


Control from two points and regulation from one point


Regulation from three points and control from a point


## Example of functional indication



Indicator light on when the circuit-breaker is OFF (if the circuit-breaker is in the ON state, the indicator light is off while the user is energised).


The two indicator lights switch on and off respectively when the user is in OFF and ON state.

## Example of remote signalling



Warning light placed in parallel to the user device, of which indicates the ON/OFF state (it is on when the switch is ON).


Two warning lights placed in parallel with the user (they switch on and off with it).

## Instructions for installation in systems with relays and illuminable push switches

LEDs and lamps must be connected in parallel. In addition, the LEDs must be mounted in phase with all the cathodes, identified by wires marked as "ABB 230V", connected to the phase or the neutral.
Using single-pole latching relays 2CSE1012EL, it is possible to connect up to nine LEDs and up to four fluorescent lamps: by adding a $0.94 \mu \mathrm{~F}$ capacitor to the heads of the relay, up to twelve fluorescent lamps can be connected.
Using double-pole latching relays 2CSE1013EL, it is possible to connect one LED or two fluorescent lamps: by adding a $1.41 \mu \mathrm{~F}$ capacitor to the heads of the relay, up to twelve fluorescent lamps can be connected.

## Backlighting of the control devices

| Night-time location |  |
| :---: | :---: |
|  | Characteristics <br> - It allows the command key to be located in the dark. <br> - We recommend the use of white, blue, green or red Élos lamps <br> Applications <br> - Bedrooms <br> - Corridors |
| Functional indication |  |
|  | Characteristics <br> - This allows the command key to be identified and the ON/OFF status of a circuit to be signalled in the dark. <br> - With a red, white or blue lamp, the signalling is intense. <br> - With a green lamp, the luminosity level is low and does not interfere with sleep. <br> Applications <br> - General services of a building complex (entrance halls, stair lights, landings etc.) <br> - Public environments (cinemas, theatres etc.) |
| Signalling with symbols |  |
|  | Characteristics <br> - This allows the command key and its specific function to be identified in the dark. <br> Applications <br> - Warehouses, shops, offices <br> - Hotels <br> - Nursing homes, hospitals |
| Con spia luminosa |  |
| - | Characteristics <br> - Allows the ON/OFF status of an appliance or a lighting circuit, even at a distance. <br> - Visible from both a front and side position. <br> Applications <br> - Signalling the lighting up of lighting points outside the environment in which the operating device is installed |

## Élos - Technical details

## Control devices

Relays

| Description | Code |
| :---: | :---: |
| Latching relay, 1 pole. Output contact 10A (AC1)/7A (AC15) - 250V~ . With 230V~ 50/60Hz coil | 2CSE1012EL |
| Latching relay, 2 poles. Output contacts 10A (AC1)/7A (AC15) 250V . With 230V~50/60Hz coil | 2CSE1013EL |

Relay with latching operation for control and adjustment from multiple lamps by means of single-pole push switches with NO (normally open) contact.

## Wiring diagrams

2CSE1012EL


2CSK1014CH


| Technical specifications |
| :--- |
| Power supply voltage (coil) |
| Output contact |
|  |
|  |

## Reference standards

EN 60669-1, EN 60669-2-2.

| Description | Code |
| :--- | :--- |
| Monostable relay, 1 pole. Output contact 10A (AC1)/4A (AC15) - | 2CSE1014EL |
| 250V~. With 230V $\sim 50 / 60 \mathrm{~Hz}$ coil |  |

For the implementation of automation or separations between the control circuit and power circuit. It can be used as an auxiliary element for the control of particular loads.

## Wiring diagrams



Wiring diagram for the relays with NO push switches


## Reference standards

EN 60669-1, EN 60669-2-2, CEI EN 61810-1.

## Examples of application

The flush-mounted relays of the Élos wiring accessories' range can be used to implement a disabled bathroom calling system with a reset push switch:


## Élos - Technical details Key covers and sockets

## Key covers

## Customization of the control device keys

The Élos series allows customization of the control devices thanks to the wide choice of available key covers. Replacing them is very simple, does not require the use of special tools and can be done without disassembling the components. Customization of control devices is possible both for devices with a one module key and for those with a half-module key. The range includes key covers with/without functional labels and with/without symbols.

## Plug sockets

## Area of application

Powering of household appliances, lighting equipment etc.

## Main features Italian and German standard sockets

The cells of the sockets are segregated and protected when the plug is disconnected: the live parts are accessible only with the corresponding plug fully inserted.

| Technical specifications |
| :--- |
| Rated voltage |
| Rated current |
| Shielded and elastic live cells |

The $1 / 2$ module key covers are suitable for installation as a replacement on code 2CSE1017EL, except for the "key covers with diffuser" that can be installed as a replacement on codes 2CSE1024EL and 2CSE1025EL.


## Double sockets

Characteristics

- Three terminals for powering the multiple socket
- It is not necessary to use jumpers


## Applications

- Drawing of current for all the devices installed in the environment and linked from a functional point of view


## Benefits

- Safety of the connections and the earthing continuity
- Shorter wiring times
- Smaller total dimensions in the flush-mounted box

Possibility of coupling Élos sockets with the various types of plugs on the market


Plug sockets, 250V~, Italian standard with safety shields


## Élos - Technical details <br> Socket outlets

2P, 10A

Plug sockets, 250V~, Italian/German standard with safety shutters and side/central earth


Plug sockets, foreign standard with safety shutters


Special sockets

${ }^{(1)}$ Shaver socket, European/American standard with insulating transformer 230V~-50/60 Hz - (2) 2P socket, 6A, 24V (SELV) - (3) Polarised socket 2P, 6A, 24V (SELV)

## Reference standards

CEI 23-5, CEI 23-50, CEI 23-16 (IEC 60884-1).

Note: In general, no plug sockets of any standard for domestic use fall under the European low voltage directive, because there is no harmonized European standard for these types of sockets: in fact, each country has its own standard and therefore a single standard is impossible.
For this reason the plug sockets do not bear the CE mark. All the sockets of the Élos wiring accessories' range conforming to CEI 23-50 are however are certified by IMQ as a further guarantee of their quality and compliance with standards.

## Interlocked socket outlets

| Description | Code |
| :---: | :---: |
| 2P+E socket outlet, 16A - 250V , interlocked with MCB, P17/11 | 2CSE1324EL |
| $2 \mathrm{P}+$ E socket outlet, 16A-250V~, interlocked with MCB, P30 | 2CSE1325EL |
| 2P+E socket outlet, 16A-250V~, with RCD, 10mA, P17/11 | 2CSE1326EL |

## Components

Interlocked socket outlets with MCB (PIA)


Interlocked socket outlets with automatic RCD (PID)


## Interlocked socket outlets with MCB (PIA)

These sockets are suitable for installation in the system terminations for protection of the load supplied from the outlet against dangers of short circuits and overloads.

Interlocked socket outlets with automatic RCD (PID)
These sockets are suitable for installation in the system terminations for protection of the load supplied from the outlet against dangers of short circuits and overloads, as well as protection of the user against contact voltages.
The residual current function with sensitivity of 10 mA also acts in the presence of non-sinusoidal fault currents (alternating currents mixed with unidirectional pulsating currents).
In compliance with installation standards, they are particularly suitable for the protection of:

- terminal user devices in rooms where there is a greater risk of electrocution (bathrooms, showers, etc.)
- sockets that power class 1 users with electronic circuits
- sockets for portable user devices in domestic or similar environments (irons, drills, etc.


## Operation

The MCB or RCD interlocked with the socket energises the cells of the socket only after the plug has been inserted and automatically cuts off voltage to the socket before the plug is fully extracted.
Therefore the plug is always inserted and extracted without an electrical arc.
The lever of the circuit-breaker can be closed only after the plug is inserted; without the plug, the lever operates without effect and does not close the switch.

Current-time tripping diagrams for automatic circuit-breakers of the Élos range


## Élos - Technical details <br> Socket outlets

Wiring diagrams


## 2CSE1324EL

4


2CSE1326EL

| Technical specifications |  |
| :---: | :---: |
| Power supply voltage | $230 \mathrm{~V} \sim-50 \mathrm{~Hz}$ |
| Residual current (sensitivity) | 1 n 10 mA |
| Operation dependent on the line voltage | they must be installed downstream of a general residual current circuitbreaker |
| Thermomagnetic tripping | with characteristic C |
| Double-pole isolation | with 1 protected pole |
| Breaking capacity | 3000 A |

Rated current corresponding to the standard of the socket
Type A RCBO for alternating and unidirectional pulsating currents Front LED with green light indicates normal operation with the presence of network power supply of network and contact closed

## Reference standards:

Interlocked socket outlets with MCB:
LV Directive, Standard CEI 23-97
Interlocked socket outlets with RCD:
LV Directive, Standard CEI 23-96

## Plug sockets for dedicated lines

Plug sockets for dedicated lines allow outlet points to be differentiated according to their particular application, avoiding incorrect connection of unsupported appliances. Different coloured enclosures (red, orange, green) distinguish them from common power sockets.
There are as yet no standard regulations on the correspondence between the colour of the socket and the type of power supply. In order to distinguish the area of application, the following usage customs are adopted.

## Special sockets

| Description | Code |
| :--- | :--- |
| 2P shaver socket with insulating transformer. Power supply 230V~ - | 2CSE1113EL |
| 50/60Hz. Output voltage 125V~ (American standard 2P socket) |  |
| or 230V $\sim$ (2P socket P11 type) |  |

## Components



The shaver socket of the Élos wiring accessories' range is equipped with a protection mechanism against overloads that disconnects the primary circuit if the energy drawn exceeds 20VA. In fact, the socket contains an insulating transformer with a power rating of 20VA, resistant to short circuits and powered by a button operated directly by the plug inserted in the socket. After the device cooling time has passed, reconnection takes place automatically.
In accordance with the prescriptions of Standard CEI 64-8 for domestic appliances and the like, the shaver socket can be installed in non-dusty environments and where no special protection against the penetration of water is necessary. A double insulation isolates the secondary power supply circuit, to which the cells of the socket are connected, from the primary circuit, allowing the elimination of additional protections on the cells of the socket under the same safety conditions.

Red: continuous power supply with UPS (uninterruptible power supply) through an insulating transformer.

Orange: power supply protected by network-generator unit through an insulating transformer.

Green: safety power supply with network/generator unit.

## Wiring diagrams



| Technical specifications |  |
| :---: | :---: |
| Power supply | 230V~ 50-60Hz |
| Output voltage | 230V~ 2.5A 2P plugs (European standard) <br> 120V~ for 15A 125V~ 2P plugs (American standard) <br> with non-polarized flat pins |
| Available power | 20VA |
| Built-in protection against overload, with automatic reset |  |
| Dimensions | 3 modules |
| Isolation transformer conforming to Standards CEI 96-1 |  |
| Primary | 230V~ |
| Secondary | 120 e 230V~ |
| Frequency | $50 / 60 \mathrm{~Hz}$ |
| Power rating | 20 VA |

## Reference standards

CEI 23-5, CEI 23-50, CEI 23-16 (IEC 60884-1).

## Élos - Technical details Socket outlets

## TV/SAT sockets

The recent evolution of television transmission systems and of the services aimed at users has made it necessary to increase the level of performance and quality of signal distribution system.
The new EN 50083 Reference Standards (cable distribution system for television and audio signals) define the European standard by prescribing the requirements for the components of the installation, included the terminal sockets.
The TV/SAT coaxial sockets of the Élos wiring accessories' range allow appliances to be connected to audio and video signal distribution systems, analog and digital, from satellite, terrestrial and via cable with bandwidth between 5 and 2400 MHz , ensuring the optimal distribution of analog and digital signals, as required by the operators in order to access their services.

The shielding of the sockets, enclosed in metallic enclosures, complies with the standards in force and protects them against electromagnetic emissions (EMC) that may be present in the environment.
To allow the remotely supplied voltage/current and control signals to be passed to the user port (max. 24V - 500mA), direct sockets are provided. The 75 ohm terminal resistor (code 2CSE1610EL) allows terminal sockets to be implemented, combined with feedthrough type sockets. The TV/SAT coaxial sockets with a bridging attenuation value of 5 dB (sockets with conditional use) are special feedthrough sockets. The user port must always be connected to a 75 ohm load (SAT receiver, television set, video recorder or other 75 ohm loads).


Attenuation values of the TV/SAT sockets

| Rated attenuation <br> (dB) | Bridging attenuation (flatness of the response) |  |  |  | Bridging attenuation (flatness of the response) |  |  |  | Directivity |  | Return loss (dB) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Return channel | TV | SAT |  | Return channel | TV | SAT |  | Return channel | TV/SAT | Return channel | TV/SAT |
|  | $5-40 \mathrm{MHz}$ | 47-862MHz | $950-2150 \mathrm{MHz}$ | $2150-2400 \mathrm{MHz}$ | $5-40 \mathrm{MHz}$ | $47-862 \mathrm{MHz}$ | $950-2150 \mathrm{MHz}$ | $2150-2400 \mathrm{MHz}$ | $5-40 \mathrm{MHz}$ | $47-2400 \mathrm{MHz}$ | $5-40 \mathrm{MHz}$ | $47-2400 \mathrm{MHz}$ |
| 0 | - | - | - | - | $\begin{aligned} & \leq 0.5 \mathrm{~dB} \\ & (\leq 0.2 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 0.5 \mathrm{~dB} \\ & (\leq 0.5 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 0.8 \mathrm{~dB} \\ & (\leq 0.5 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 0.8 \mathrm{~dB} \\ & (\leq 0.5 \mathrm{~dB}) \end{aligned}$ | - | - | $\geq 10 \mathrm{~dB}$ | $\begin{aligned} & \text { CEI-EN } \\ & 50083-4 \end{aligned}$ |
| Rated attenua- | Bridging attenuation / Basic loss (flatness of the response) |  |  |  | Bridging attenuation / Basic loss (flatness of the response) |  |  |  | Directivity |  | Return loss (dB) |  |
| tion <br> (dB) | Return channel | TV | SAT |  | Return channel | TV | SAT |  | Return channel | TV/SAT | Return channel | TV/SAT |
|  | $5-40 \mathrm{MHz}$ | $47-862 \mathrm{MHz}$ | $950-2150 \mathrm{MHz}$ | $2150-2400 \mathrm{MHz}$ | $5-40 \mathrm{MHz}$ | 47-862MHz | $950-2150 \mathrm{MHz}$ | $2150-2400 \mathrm{MHz}$ | $5-40 \mathrm{MHz}$ | $47-2400 \mathrm{MHz}$ | $5-40 \mathrm{MHz}$ | $47-2400 \mathrm{MHz}$ |
| 5 | $\begin{aligned} & \leq 5 \mathrm{~dB} \\ & (\leq 1.5 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 5 \mathrm{~dB} \\ & (\leq 1.5 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 6 \mathrm{~dB} \\ & (\leq 1.5 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 6,5 \mathrm{~dB} \\ & (\leq 1.5 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 5 \mathrm{~dB} \\ & (\leq 1.5 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 5 \mathrm{~dB} \\ & (\leq 1.5 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 6 \mathrm{~dB} \\ & (\leq 1.5 \mathrm{~dB}) \end{aligned}$ | $\begin{aligned} & \leq 6,5 \mathrm{~dB} \\ & (\leq 1.5 \mathrm{~dB}) \end{aligned}$ | $>12 \mathrm{~dB}$ | > 10 dB | $\geq 10 \mathrm{~dB}$ | $\begin{aligned} & \text { EN 50083-4 } \\ & \text { Grade } 3 \end{aligned}$ |

## Installation Instructions



## Examples of application

| TV |  | SAT <br> Single user SAT system | TV/SAT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Centralized installation with star distribution | Centralized installation with cascading distribution |  | Single user combined TV/SAT system | Centralized combined TV/SAT system with star distribution | Centralized combined TV/SAT system with feedthrough sockets |
|  |  |  |  |  |  |

## Wiring diagrams



| Technical specifications |  |
| :---: | :---: |
| Frequency range | from 5 to 2400 MHz |
| Coaxial cable diameter | from $\varnothing 5$ to $\varnothing 7 \mathrm{~mm}$ |
| Return channel | from 5 to 40 MHz |
| Shielding | class A |
| Wiring system | with front panel |
| Unequal chrominance/luminance delay | <1 ns for all models |

## Reference standards

EN 50083-1, EN 50083-2, EN 50083-4.

## Élos - Technical details Socket outlets

## Network and telephone sockets

The range includes devices for the implementation of telephone and computer networks, RJ11 4-contact telephone connectors for telephones, telefax, modems and RJ12 6 -contact telephone connectors for intercommunicating telephone installations.

## Main features

- Perforated insulation connection.
- Non-butted conductors, inserted in the appropriate blade slots.
- Complete incision of the insulation and electrical continuity with the contact ensured by the closing of the cover.

Telephone systems connected to Telecom Italia lines are subject to the regulations of Italian Law no. 109 of 28.03.1991.

| Connector type | RJ11 | RJ12 |
| :--- | :--- | :--- |
| Number of contacts | 4 | 6 |
| Terminals | with insulation perforation |  |
|  | (without the use of a tool) |  |

## Installation Instructions



## Wiring diagrams



## Connection in series



Terminals 3 and 4 are connected via the internal contact to the telephone (closed with the receiver hung up). Lifting the receiver causes interruption of the downstream line (L1), guaranteeing secrecy of the conversation.

## Connection in parallel



Each socket captures the signal from the line (there is no secrecy of conversation).


Note: extracting one of the plugs causes disconnection of sockets located downstream. In order to prevent this, you just need to insert a plug in the socket from which the telephone device was removed with a jumper between terminals 3 and 4 .

## Reference standards

EN 50083-1, EN 50083-2, EN 50083-4.

RJ45 connectors for data transmission, category 3 and 5 e , partially shielded and not are available.
These devices allow computer equipment (computers, modems, printers, etc) to be connected in a network and connection of multimedia devices.
They can also be used for traditional and centralized telephone installations.

## Wiring diagrams

To obtain the EIA/TIA 568A or 568B configuration included below, follow the colour code shown on the terminal box.


| Connector type | RJ45 unshielded | RJ45 partially shielded | RJ45 unshielded |
| :---: | :---: | :---: | :---: |
| Type of cables that can be used | UTP | FTP | UTP |
| Number of contacts | 8 | 8 | 8 |
| Terminals | with insulation perforation (without the use of tools) |  |  |
| Category | Cat. 3 | Cat. 5e | Cat. 5e |
| Transmission speed | up to $16 \mathrm{Mb} / \mathrm{s}$ | up to $100 \mathrm{Mb} / \mathrm{s}$ | up to $100 \mathrm{Mb} / \mathrm{s}$ |
| Transmission protocols that can be used | EIA/TIA 658A - EIA/TIA 568B | EIA/TIA 658A - EIA/TIA 568B | EIA/TIA 658A - EIA/TIA 568B |

Key
FTP = cable shielded with aluminium tape
UTP = unshielded cable


## Élos - Technical details Socket outlets

## Adapter for structured wiring connectors

The structured wiring systems for data transmission are distinguished by their flexibility of use, installation independent of location and the use of the terminal outputs.
The suppliers of components and systems for structured wiring, when dealing with installations of a certain complexity and size, must be in able to show certification of conformity of the installation, directly or through accredited installers.

ABB meets this requirement with the adapter of the Élos, wiring accessories' range, which is compatible with various Keystone coupling connectors available on the market and enables integration between the Élos wiring accessories' range (code 2CSE1135EL) and the components for transmission of the data of the structured wiring systems.

## Élos - Technical details

Protection devices

Fuse holders, overvoltage limiters and filters

Fuse holder

| Description | Code |
| :--- | :--- |
| Fuse holder, for fuses $\emptyset 6.3 \times 32 \mathrm{~mm}, 16 \mathrm{~A}-250 \mathrm{~V} \sim$ | 2CSE1301EL |

## Components



## Choice of fuses

Fuses for fuse holders
2CSE1301EL Fuse holder, for fuses of the type ø $6,3 \times 32 \mathrm{~mm}, 16 \mathrm{~A}, 250 \mathrm{~V}$ ~

Overvoltage limiter

| Description | Code |
| :--- | :--- |
| Overvoltage limiter with tripping signal, 75J, 250V~ | 2CSE1302EL |

## Components



Signalling LED

The overvoltage limiter is a surge arrester of the type with a varistor that protects a terminal circuit terminal against overloads caused by operations or by atmospheric discharges that involve a risk to the safety of persons and that could compromise the correct operation of the connected consumers.
The varistor absorbs the over-voltage peak when the voltage value is greater than the priming value, acting as a very low value resistance. The over-voltage peak does not reach the connected consumer, or is extremely attenuated. In the event that the varistor breaks (indicated by the corresponding LED switching off), a fuse prevents a short-circuit occurring.

Wiring diagram


| Technical specifications |  |
| :--- | :--- |
| Rated voltage | $250 \mathrm{~V} \sim$ |
| Max. flashover current | $8 \mathrm{kA}(8 / 20 \mu \mathrm{~s})$ |
| Max. discharge energy | 75 J |

Reference standards
EN 60099-4.

## Élos - Élos - Technical details

## Protection devices

Anti-interference filter

| Description | Code |
| :--- | :--- |
| Anti-interference filter, 3.5A-250V~, attenuation at 1MHz equal | 2CSE1303EL |
| to 55 dB |  |

Components


The anti-interference filter is a passive type attenuator for the protection of connected electronic consumers against disturbances that occur in electrical networks due to operations or proximity to appliances or lines.
The filter is inserted upstream of consumers particularly sensitive to network disturbance and performs the function of discharging noise that occurs on the line (such as high frequency signals) to earth.
Only the voltage at the line frequency reaches the connected consumer; the harmonics of a higher grade are interrupted or attenuated.

## Wiring diagram



| Technical specifications |  |  |
| :--- | :--- | :--- |
| Rated voltage | $250 \mathrm{~V} \sim$ |  |
| Rated current | $3,5 \mathrm{~A}$ |  |
| Attenuation (at 1 MHz ) |  | 55 dB |
| Leakage current | $2 \times 0,5 \mathrm{~mA}$ |  |

Reference standards
CEI 40-7, CEI 40-8, EN 60065.

## Miniature circuit-breakers and Residual current circuit-breakers

| Description | Code |
| :---: | :---: |
| Automatic MCB, 1P+N, C6, breaking capacity 1.5 kA | 2CSE1304EL |
| Automatic MCB, 1P+N, C10, breaking capacity 3kA | 2CSE1305EL |
| Automatic MCB, 1P+N, C16, breaking capacity 3kA | 2CSE1306EL |
| Automatic RCD, <br> $1 \mathrm{P}+\mathrm{N}$, C6-10 mA, breaking capacity 1.5 kA 2CSE1307EL | 2CSE1307EL |
| Automatic RCD, <br> 1P+N, C10-10 mA, breaking capacity 3kA | 2CSE1308EL |
| Automatic RCD, <br> 1P+N, C16-10 mA, breaking capacity 3kA | 2CSE1309EL |
| Automatic RCD, $1 \mathrm{P}+\mathrm{N}, \mathrm{C} 6-30 \mathrm{~mA}$, breaking capacity 1.5 kA | 2CSE1328EL |
| Automatic RCD, <br> 1P+N, C10-30 mA, breaking capacity 3kA | 2CSE1329EL |
| Automatic RCD, 1P+N, C16-30 mA, breaking capacity 3kA | 2CSE1330EL |

## Components

Automatic RCD


Automatic MCB


Automatic MCBs and automatic RCDs provide protection against over-currents and earth fault currents of terminal circuits. Protection class with the device embedded in smooth vertical walls with the associated support, frame and blank covers, if required: IP41.

## Instructions for installation and operation

Use in dry and dust-free locations.

- Temperature between $-5^{\circ} \mathrm{C}$ and $+40^{\circ} \mathrm{C}$.
- Suitability for installation on the supply side of a socket or device for the protection against overloads and short circuits of the equipment and, at the same time, for protection of the users against contact voltages.
- The sensitivity (operating residual current) of 10 mA and the suitability for operation also in the presence of nonsinusoidal fault currents (alternating currents mixed with unidirectional pulsating currents) allow the protection devices of the Élos range to be classified as "type A RCBOs" (identified by the symbol ), particularly suitable for the protection of:
- terminal uses in rooms where there is a greater risk of electrocution (bathrooms, showers, kitchens etc.), as prescribed by the CEI standards;
- class I consumer power sockets with electronic circuits (computers and accessories, electronic scales, electronic typewriters, cash registers etc.). In domestic and service industry networks non-sinusoidal fault currents are often present because of the use of electronic boards in domestic appliances.
- The electromagnetic part of the circuit-breakers guarantees protection against overloads and short circuits; the residual current part of the devices, for current values of 10 mA , guarantees protection of persons against the contact voltages.
- Closing the circuit: manually press the lever of the circuit breaker at the "I" symbol.
- Opening the circuit:
- manually, by pressing the lever of the circuit-breaker near the " 0 " symbol or the yellow test button (test);
- automatically, due to thermal (overload), magnetic (short-circuit) or residual current (earth fault current) tripping.
- The device must not be used as a control breaker.
- To check that the circuit breaker is installed and behaving correctly, the yellow test button (test) must be pressed every month. If the device is correctly installed and powered, the circuit breaker trips; if it does not, you must immediately inform the installation technician because safety will be compromised. After the test, you need to press the main key near the "।" symbol in order to reset the circuit breaker.
- Thermomagnetic tripping with characteristic "C" (see the current-time tripping diagram provided below).
- Double-pole operation with one protected pole + N, type A for alternated fault currents and unidirectional pushbuttons.
- Operating residual current (sensitivity) I 1 n 10 mA ; the circuit breaker must be connected according to the electrical ciao Angelo, come va? tutto bene? spero di si. Finalmente mi sono fatta un nuovo indirizzo di posta elettronica, dopo che ho perso la password della vecchia...


## Élos - Technical details

 Protection devices
## Functions

- Green front LED for signalling normal operation: presence of line voltage and closed circuit.
- Internal temperature checking: the circuit breaker automatically operates the opening of the circuit as soon as the safety threshold is exceeded.
- Self-test function to check the electrical continuity of the internal residual current circuit (in the absence of continuity the circuit-breaker will open).
- Opening the circuit if voltages occur higher than the predefined threshold at the circuit-breaker input(for example, in 380V ~ three-phase systems the circuit-breaker prevents an erroneous "line-to line " connections, instead of "line-to-neutral").


## Characteristics

- Main lever operated control part:"।" symbol (closed circuit); "0" symbol (open circuit).
- Front LED for signalling the presence of line voltage and closed circuit.
- Yellow test button (test) for checking that the device is functioning properly.
- Terminals protected with captive screws for clamping two conductors up to $4 \mathrm{~mm}^{2}$ each.
- Construction of the thermo magnetic part as prescribed by Standards EN 60898 and IEC 60898
- Construction of the residual current part according to Standards EN 61009 and IEC 61009.
- Power supply voltage: $120-230 \mathrm{~V} \sim \pm 10 \% 50-60 \mathrm{~Hz}$.

The supply line can be connected to either the upper or the lower terminals of the circuit breaker, which must be installed downstream of a general residual current circuit breaker (Standard CEI 64-8/5, paragraph 532.2.2.2).
The line voltage determines operation (Standard IEC 1009-1, paragraph 4.1.2).

## Wiring diagram



Characteristic curves


Current-time tripping diagrams for circuit-breakers of the Élos range


## Examples of application



| Technical specifications |  |  |
| :---: | :---: | :---: |
| Type of circuit breaker | MCB | RCD |
| Rated voltage | 230 V | 230 V |
| Rated frequency | $50 \div 60 \mathrm{~Hz}$ | $50 \div 60 \mathrm{~Hz}$ |
| Rated residual current | - | 10 mA or 30 mA |
| Short-circuit breaking capacity | $\begin{aligned} & 6 \mathrm{~A} 1500 \mathrm{~A} \\ & 10 \mathrm{~A} 3000 \mathrm{~A} \\ & 16 \mathrm{~A} 3000 \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 6 A \quad 1500 A \\ & 10 A 3000 A \\ & 16 A 3000 A \end{aligned}$ |
| Rated currents | 6-10-16A | 6-10-16A |
| Number of poles | $1 P+N$ | $1 \mathrm{P}+\mathrm{N}$ |
| Tripping characteristic |  |  |
| - Overcurrent protection | Type C | Tipo C |
| - Limitation class | 3 | 3 |
| - Residual current protection | - | Class A |



4

## Reference standards

Thermomagnetic: EN 60898-1 - Differential: IEC 61009-1

## Élos - Technical details

## Signalling devices

Light signals

| Description | Code |
| :--- | :--- |
| Opal steplight lamp with adjustable light beam, 12/24V, <br> with connector for torpedoing lamps | 2CSE1316EL |

Components


Adjustment of the speaker


Recommended for the lighting of transit areas in residential environments (corridors, stairs), with the possibility of adjusting the light beam using the appropriate cover.
It accepts S6x36 12V or 24 V torpedo lamps.
It is provided without a lamp.
Examples of application


## Bells and buzzers

| Description | Code |
| :---: | :---: |
| Bell, $12 \mathrm{~V}, 50 \mathrm{~Hz}, 8 \mathrm{VA}$, sound intensity $80 \mathrm{~dB} / 1 \mathrm{~m}$ | 2CSE1317EL |
| Bell, $230 \mathrm{~V}, 50 \mathrm{~Hz}, 8 \mathrm{VA}$, sound intensity $80 \mathrm{~dB} / 1 \mathrm{~m}$ | 2CSE1318EL |
| Bell/buzzer, 12V - 50/60Hz, sound intensity: buzzer $75 \mathrm{~dB} / 1 \mathrm{~m}$, bell $70 \mathrm{~dB} / 1 \mathrm{~m}$ | 2CSE1319EL |
| Bell/buzzer, 230V - $50 / 60 \mathrm{~Hz}$, <br> buzzer sound intensity $75 \mathrm{~dB} / 1 \mathrm{~m}$, bell $70 \mathrm{~dB} / 1 \mathrm{~m}$ | 2CSE1320EL |
| Buzzer, $12 \mathrm{~V}-50 \mathrm{~Hz}$, 8 VA , sound intensity $70 \mathrm{~dB} / 1 \mathrm{~m}$ | 2CSE1321EL |
| Buzzer, $230 \mathrm{~V}-50 \mathrm{~Hz}$, 8VA, sound intensity $70 \mathrm{~dB} / 1 \mathrm{~m}$ | 2CSE1322EL |

## Components



The multi-function acoustic signallers are suggested for implementing two clearly distinguishable signals (for example, called by the bathroom cord pull button and the entrance bell).
The wiring diagram can be modified in order to obtain a threetone sound (mi, fa, so) or a buzz.
It is also possible to establish whether the duration of the two types of sounds depends on time for which the pushbutton is pressed (dependent sequence) or if the note is emitted once each time the command is activated (independent sequence). The signal function acoustic signalers - buzzers and bells are produced in versions powered by either 12 V or 230 V .

## Wiring diagrams

## Entrance bell



## Buzzer for bathroom alarm



## Bathroom alarm + entrance bell



With dependent sequence buzzer

| Technical specifications |  |  |
| :---: | :---: | :---: |
| Power supply voltage | 2CSE1319EL | 12V -50/60Hz |
|  | 2CSE1320EL | 230V-50/60Hz |
| Sound intensity | Buzzer 75 dB | a 1 m |
|  | Bell 70 dB | a 1 m |
| Consumption | $0.1 \div 2 \mathrm{VA}$ |  |

## Reference standards

EN 60065, EN 50081-1, EN 50082-1.

## Élos - Technical details Safety and comfort devices

## Thermostats and time-programmed thermostats

| Description | Code |
| :--- | :--- |
| Summer/winter electronic time-programmed thermostat, with daily | 2CSE1219EL |
| and weekly programming and 3 temperature levels that can be set. |  |
| Potential-free relay output contact 1 NO/NC, |  |
| 5 A (AC1)/2A (AC15) - $250 \mathrm{~V} \sim$ |  |

## Components



Temporary deactivation of the programs. HOLIDAY - PARTY function

GSM remote activation
Ambient temperature display Programmed daily cycle profile

Programming pushbuttons: Mode,
Increment, decrease, parameter selection,
programme setting and programming

Operating modes

The time-programmed thermostat makes it possible to automatically control the temperature and the timing within the installation environment on a weekly basis, in combination with the heating or air conditioning systems.

- Power supply at line voltage
- Relay output contact to control the boiler, air conditioner, zone solenoid valve, etc
- Backlit white LCD display (backlighting is activated whenever one of the keys is pressed and is deactivated 5 second after the last key press)
- Programming on a weekly basis (a program for 7 days with time profiles independently configurable for each day)
- Setting of time profiles on a 24 -hour basis with 3 different temperature levels (T1, T2, T3) and display of the profile
- Programming of the time profile with a resolution of 15 minutes without limits on the number daily variations
- Differential adjustment configurable and differentiated by HEATING and AIR CONDITIONING (from 0.2 to $2^{\circ} \mathrm{C}$ )
- PARTY (from 1 to 23 hours) and HOLIDAY (from 1 to 99 days) functions for programming of special operational regimes of different durations
- Operating modes that can be activated: AUTOMATIC / MANUAL / OFF
- Possibility to select the self-learning function of the thermal gradient of the installation. This function optimizes early activation of heating (up to 2 hours) so that the temperature set can be guaranteed right from the start of the program;
- Rechargeable backup battery


## Areas of application

In the residential sector:

- apartments and villas with independent heating;
- apartments with centralized heating;
- apartments and villas with independent air conditioning;o.

In the service sector:

- environments equipped air conditioning systems using fan coils;
- environments with centralized heating and zone valves.


## Battery

Removal of the battery for replacement or for disposal of the device


## Operating modes

The time-programmed thermostat provides three different operating modes:

## - AUTOMATIC <br> - MANUAL <br> - OFF/ANTI-FREEZE / HIGH TEMPERATURE PROTECTION <br> To switch from one mode to another use the MODE key.



## Automatic operation

In automatic operation, the timeprogrammed thermostat uses a program that can be set by the user, and which can also be differentiated for each day of the week.
The text AUTO, the measured ambient temperature, and the set point symbol for the current quarter hour appear on the display. In the hourly profile, the column relating to the current hour flashes showing the active set point.

## Manual operation

In manual operation, the timeprogrammed thermostat uses a temperature set point permanently, that it can be set as desired using the keys $\mathbf{N V}$.
The text MAN and the measured ambient temperature appear on the display.

## Anti-freeze and protection operation

The anti-freeze/high temperature protection functions are active, respectively, in the heating and air conditioning modes.
In both these cases, the timeprogrammed thermostat uses the antifreeze/high temperature protection set point that has been set. The text OFF and the measured ambient temperature appear on the display.

## Wiring diagrams



| Technical specifications |  |
| :---: | :---: |
| Power supply voltage | 230V~ 50/60Hz |
| Backup battery | ML1220 3V in the case of a power cut |
| Output contact | with potential-free relay 1 NO/NC 5A (AC1)/2A (AC15), 250V~ |
| Interval between two measurement cycles | 1 minute |
| Unit of measurement | ${ }^{\circ} \mathrm{C}-{ }^{\circ} \mathrm{F}$ |
| Forcing | possible manually |
| Temperature values that can be set | $+5^{\circ} \mathrm{C} /+40^{\circ} \mathrm{C}$ |
| Anti-freeze temperature | adjustable from $+2^{\circ} \mathrm{C} /+7^{\circ} \mathrm{C}$ |
| Tolerance | $\pm 0.5^{\circ} \mathrm{C}$ to $20^{\circ} \mathrm{C}$ |
| Max num. of temperature changes | 4 per hour |
| Time programming resolution | 15 minutes |
| Temperature set point resolution | $0.1^{\circ} \mathrm{C}$ |
| Temperature probe | NTC, $100 \mathrm{k} \Omega$ a $25^{\circ} \mathrm{C}$ |
| Dimensions | 2 Élos modules |

## Élos - Technical details Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Summer/winter electronic thermostat, with input for night-time | 2CSE1202EL |
| reduction remote control and 3 temperature levels that can be set. |  |
| Output contact NO, 5A (AC1)/2A (AC15) - 250V $\sim$ |  |

## Components

## Wiring diagrams



* Temperatures below $-9.9^{\circ} \mathrm{C}$ are displayed without decimals.


## Reference standards

EN 60730-1, EN 60730-2-9, EN 61000-3-2, EN 61000-3-3, EN 55014, EN 55104.

## Programmers and timers

| Description | Code |
| :--- | :--- |
| Daily/weekly electronic programmer, 1 channel, <br> overall dimensions 2 Élos modules, $1 \mathrm{NO} / \mathrm{NC}$ changeover output <br> contact, 8A (AC1)/4A (AC15) 230V $-50 / 60 \mathrm{~Hz}$ | 2CSE1223EL |

One-channel electronic programmer (daily or weekly cycle) to control and time loads of various nature.
Front panel programming using 4 keys:

1) MODE key to select the mode;
2) "up arrow" key to increase/select parameters;
3) "down arrow" key to decrease/select parameters;
4) SET/PROG key to set programs/perform programming.

The backlit LCD display signals:

- profile of the daily program;
- state of the relay (ON/OFF);
- day, time and operating mode.


## Components



## Wiring diagrams



## Examples of application

External lighting


Irrigation system


| Operating modes | Automatic, manual, off. |
| :---: | :---: |
| Time programming resolution | 5 minutes |
| Max num. of relay switching operations that can be set | 12 per hour |
| Output contact | With relay, potential-free <br> 1 NO/NC 8A (AC1)/4A (AC15), 250Vac |
| Power supply | Mains (230V ac) - normal operation <br> Rechargeable battery (ML1220) - absence of mains network |
| Dimensions | 2 Élos modules |

Potential-free relay contacts (not suitable for directly controlling fluorescent lamps with a correction capacitor).

## Reference standards

EN 50082-1, EN 50081-1, EN 60730-1, EN 60730-2-7.

## Élos - Technical details Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Electronic timed button with input for remote control, 1 output contact | 2 CSE1204EL |
| N0, 10A (AC1)/5A (AC15) - 250V~ |  |

## Components

Multi-function timer with local command pushbutton that allows automatic delayed switch-off of extractor fans, air agitators, cooker hoods, lamps, fans etc.

## Wiring diagrams

Examples of application in the residential and service sector:

- entrance halls and entrances, stair lights, service rooms (diagram with pushbuttons);
- extractor fans for bathrooms without windows (diagrams with switch and two-way switch).

With pushbuttons


Possibility to reset the delay with lamps still lit.

With circuit-breaker


Delay in stopping the extractor fan after the lamp is switched off (the extractor fan starts when the lamp is switched on).

With pushbuttons


Without delay reset.

With two-way switch


Delayed switch-on and switch-off of the extractor fan take place after the lamp is switched off.

| Technical specifications |  |
| :--- | :--- |
| Power supply voltage | $230 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| Output contacts (relay) |  |
|  | $1 \mathrm{NO}, 10 \mathrm{~A}(\mathrm{AC1}) / 5 \mathrm{~A}(\mathrm{AC15})-250 \mathrm{~V}$ ~ |
| Adjustment of operation time | $30 \mathrm{~s} / 15 \mathrm{~min}$. |

## Reference standards

EN 60669-1, EN 60669-2-3.

## Dimmer

Loads that can be controlled with the dimmer

| Dimmer type |  | Loads |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Fluorescent or halogen lamps 230V | Fluorescent lamps | Toroidal transformers | Electronic transformers | Electromechanical transformers | Drills | Air agitators |
| Dimmer code | Description |  |  |  |  |  | $\int^{\square \square}$ |  |
| 2CSE1205EL | Electronic dimmer with rotary control for resistive loads, 100-500W, 230V~ 50/60Hz | YES | NO | NO | NO | NO | NO | NO |
| 2CSE1207EL | Electronic dimmer with rotary control and with two-way switch for resistive and inductive loads, 40-300W (40-300VA), 230V~ - 50/60Hz | YES | NO | YES | NO | YES | NO | NO |
| 2CSE1206EL | Electronic dimmer with pushbutton control for resistive and inductive loads, 60-500W (60-500VA), 230V~ - 50/60Hz | YES | NO | YES | NO | YES | NO | NO |
| 2CSE1208EL | Electronic dimmer with pushbutton control for resistiveinductive loads and electronic power supplies for very low voltage halogen lamps, 25-180W (25-180VA), 230V~ $50 / 60 \mathrm{~Hz}$ | YES | NO | YES | YES | YES | NO | NO |
| 2CSE1209EL | Electronic dimmer with pushbutton control for resistiveinductive loads and electronic power supplies for very low voltage halogen lamps, 25-300W (25-250VA), 230V~ $50 / 60 \mathrm{~Hz}$ | YES | NO | YES | YES | YES | NO | NO |

## Élos - Technical details <br> Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Electronic dimmer with rotary control for resistive loads, 100-500W, | 2CSE1205EL |
| $230 \mathrm{~V} \sim-50 / 60 \mathrm{~Hz}$ |  |

## Components



## Operation

Adjustment of the conventional potentiometric load and static shutdown with knob in position " 0 ".

## Area of application

In the residential context: adjustment of conventional light sources.

## Wiring diagrams



Adjustment from 1 point (1 dimmer) and control from another 2 points (2 two-way switches)


| Technical specifications |  |
| :--- | :--- |
| Rated voltage | $40-30 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| Resistive load power | $40-300 \mathrm{VA}$ |
| Inductive load power | TRIAC |
| Technology | 230 V |
| Rated voltage at $50 / 60 \mathrm{~Hz}$ | $100-500 \mathrm{~W}$ |
| Adjustable power | filament and halogen lamps |
| Adjustable load |  |

## Reference standards

EN 60669-1, EN 60669-2-1, EN 50081-1, EN 55104.

| Description | Code |
| :--- | :--- |
| Electronic dimmer with rotary control and with two-way switch | 2CSE1207EL |
| for resistive and inductive loads, 40-300W (40-300VA), 230V~ |  |
| $-50 / 60 \mathrm{~Hz}$ |  |

## Components



The electronic dimmers with rotating control for resistive and inductive loads of the Élos range are equipped with a two-way switch that makes it possible to switch connected appliances on and off, from a second point (using the two-way switch) or from several points (by means of intermediate switches).

## Operation

Pressing the knob of the device activates switching on and off, while rotation of the knob adjusts the brightness level. After having set the desired lighting level, pressing the knob will switch off the source; pressing it again will turn it back on, again according to the lighting level set.

## Area of application

- In the residential context: adjustment of light sources.
- In existing installations: possibility to replace two-way switches without modifying the original circuit.
Dimmers for resistive and inductive loads of the Élos range must be protected by a fuse with high breaking capacity.


## Wiring diagrams

Lighting control from one point


Lighting control from 2 points


Lighting control from 3 or more points


Dimmers for resistive and inductive loads of the Élos range must be protected by a fuse with high breaking capacity.

| Technical specifications |  |
| :---: | :---: |
| Rated voltage | 110V-50/60Hz |
| Resistive load power | 20-150W |
| Inductive load power | 20-150VA |
| Technology | TRIAC |
| Rated voltage at $50 / 60 \mathrm{~Hz}$ | 110 V |
| Adjustable power | 50-250W |
| Adjustable load | filament and halogen lamps toroidal and electromechanical transformers |

## Reference standards

EN 60669-1, EN 60669-2-1, EN 50081-1, EN 55104.

## Élos - Technical details Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Electronic dimmer with pushbutton control for resistive and inductive | 2CSE1206EL |
| loads, $60-500 \mathrm{~W}(60-500 \mathrm{VA}), 230 \mathrm{~V} \sim-50 / 60 \mathrm{~Hz}$ |  |
| Electronic dimmer with pushbutton control for resistive-inductive loads | 2CSE1209EL |
| and electronic power supplies for very low voltage halogen lamps, <br> 25-300W (25-250VA), 230V~ - 50/60Hz |  |

## Components

## Area of application

- In the residential context: adjustment of light sources.
- In a services context (community environments, hotel rooms, conference rooms etc.): adjustment of light sources.
- In existing installations: possibility to replace two-way switches without modifying the original circuit.


## Characteristics

- Possibility to control electronic power supplies and reduced loads
- Storage and automatic search for the maximum adjustment level.
- Warning light to signal the protection adjustment and tripping level.
- Electronic auto-protection in the case of overloads or short circuits (2CSE1209EL) or with a fuse with high breaking capacity (2CSE1206EL).


## Replacement of the fuse on the dimmer 2CSE1206EL

Caution!
Before replacing the fuse, disconnect the voltage from the system.

| Fuses for dimmers |  |
| :--- | :--- |
| 2CSE1206EL | Electronic dimmer with pushbutton <br> for resistive and inductive loads, <br>  <br>  <br> 230V~, $60-500 \mathrm{~W}(60-500 \mathrm{VA})$ |



## Wiring diagrams

Dimmer 2CSE1206EL
Control from one point


Control from multiple points


Dimmer 2CSE1209EL
Lighting control and adjustment from Lighting control from one point multiple points with NO pushbuttons


| Technical specifications | 2CSE1209EL | 2CSE1206EL |
| :---: | :---: | :---: |
| Technology | based on transistors (IGBT) | TRIAC |
| Power supply voltage | 230V-50Hz | 230V-50/60Hz |
| Adjustable power | 25 $\div 300 \mathrm{~W}^{*}$ (2CSE1209EL) | 60 $\div 500 \mathrm{~W}$ |
|  | 25 - 180W (2CSE1208EL |  |
| Adjustable load: filament and halogen lamps | $\square$ | $\square$ |
| toroidal transformers | $\square$ | $\square$ |
| lamellar transformers |  | $\square$ |
| electronic transformers | $\square$ |  |
| protection | electronic protection against overload and/or short circuit, resettable | built-in quick fuse ø $5 \times 20 \mathrm{~mm} 2.5 \mathrm{~A}$ |

* For inductive loads The adjustable power is $25-250 \mathrm{VA}$.


## Reference standards

EN 60669-1, EN 60669-2-1, EN 50081-1, EN 55104.

## Élos - Technical details <br> Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Electronic dimmer with pushbutton control for resistive-inductive | 2CSE1208EL |
| loads and electronic power supplies for very low voltage halogen |  |
| lamps, 25-180W (25-180VA), 230V~-50/60Hz |  |
|  |  |

The electronic dimmers with pushbutton control for resistive and inductive loads of the Élos range allow control and adjustment from multiple points, through single-pole pushbuttons with NO contact.
Switching on and off are performed by pressing the pushbutton briefly according to the pre-defined adjustment level (intensity memory); for adjustment the button must be pressed and held down.

## Operation

To set the appropriate lighting level, press the pushbutton until you arrive at the desired level. Pressing the pushbutton briefly again will switch off the source; pressing it again will switch the source on again, at the set lighting level.

## Area of application

- In the residential context: adjustment of light sources.
- In a services context (community environments, hotel rooms, conference rooms etc.): adjustment of light sources.
- In existing installations: possibility to replace two-way switches without modifying the original circuit.


## Characteristics

- Possibility to control electronic power supplies and reduced loads.
- Storage and automatic search for the maximum adjustment level.
- Warning light to signal the protection adjustment and tripping level (flashing).
- Electronic auto-protection in the case of overloads or short circuits.

Wiring diagrams
Lighting control from one point


Lighting control and adjustment from multiple points with NO pushbuttons


| Technical specifications | 2CSE1208EL |
| :---: | :---: |
| Technology | based on transistors (IGBT) |
| Power supply voltage | 230V-50Hz |
| Adjustable power | $25 \div 300 W^{*}$ (2CSE1209EL) |
|  | 25 $\div 180 W$ (2CSE1208EL |
| Adjustable load: filament and halogen | $\square$ |
| lamps |  |
| toroidal transformers | ■ |
| lamellar transformers |  |
| electronic transformers | $\square$ |
| protection | electronic protection against overload and/or short circuit, resettable |

* For inductive loads The adjustable power is $25-250 \mathrm{VA}$.


## Reference standards

EN 60669-1, EN 60669-2-1, EN 50081-1, EN 55104.

## Gas detectors

| Description | Code |
| :--- | :--- |
| Natural gas presence electronic detector with acoustic and luminous | 2CSE1220EL |
| signal, relay output, 1 NO/NC change-over contact |  |
| $10 \mathrm{~A}($ AC1 $1 / 5 \mathrm{~A}(\mathrm{AC} 15)-250 \mathrm{~V} \sim$. |  |
| $12 \mathrm{~V} \sim$ power supply with code 2CSE1222EL |  |

## Components



The gas detectors of the Élos range are suitable for detection, in a domestic environment, of concentrations of natural gas that are abnormal but well below the hazard threshold
These detectors are equipped with:

- sensor with tin dioxide semiconductor
- output relay with hermetic contacts for commanding the gas interception solenoid valve
- acoustic/luminous alarm signalling.

The devices work only in the presence of line voltage. In the event of no line voltage or during installation, they delay their own operation by approximately one minute in order allowing stabilization of the electronic components.

The tin dioxide semiconductor sensor reaches full operation 10 days after it has been powered.

When the alarm terminates, the detector returns automatically to the its normal operation status.

## $\triangle$ CAUTION: In the event of an alarm:

1 - Extinguish all naked flames.
2 - Turn off the gas meter tap.
3 - Do not switch lights on or off; do not to operate electrically powered appliances or devices.
4 - Open doors and windows to increase the ventilation of the environment.

If the alarm stops, you must identify the cause that provoked it and take the necessary actions.
If the alarm continues and the cause of the presence of gas cannot be established or eliminated, abandon the building and notify the emergency service from outside.a.

CAUTION: it is possible that a smell of gas may be perceived before the apparatus generates the alarm.

## Operation



In the of a fault on the detector sensor, the green LED and the yellow LED light up permanently.

## Device in alarm status.

Immediately, as soon as the alarm threshold is exceeded, the green and red LEDs light up and the acoustic signal is activated. After 20 seconds the relay switches (solenoid valve command).


When switched on for the first time, the detector performs the initialization phase, lasting approximately 60 seconds, during which the device is not operational. detector is ready for normal operation.

## Élos - Technical details <br> Safety and comfort devices

## Description of the terminals

The detector can be connected to the network 230V 50 Hz (if required) through a 230V -12 V DC supply module (2CSE1222EL).

4


L ${ }_{(+)}^{(+)} 12 \mathrm{~V}$ c.a./c.c.


1 NA/NC, 10A (NA) / $3 \mathrm{~A}(\mathrm{NC})-250 \mathrm{~V}$ c.a.

Potential-free contact to be used to interrupt the flow of gas via a solenoid valve with manual reset (NO or NC). Additional NO contact for local and/or remote signalling function. The installation and electrical connection of the devices and equipment must be performed by qualified personnel and in compliance with the standards and laws in force. The manufacturer does not assume any responsibility in relation to the use of products that must conform to particular environmental and/or installation regulations, the responsibility for which remains with the installer.
The examples provided in this documentation are indicative; for connection operations you must strictly adhere to the laws and regulations in force.

Wiring diagrams for natural gas sensor


Caution: Before installing the product, deactivate the line voltage.

| Technical specifications | Sensor $\mathrm{CH}_{4}$ |
| :---: | :---: |
| Power supply | 12V AC/DC +10/-15\% |
| Power absorbed | 2VA |
| Alarm threshold | 9\% LIE (lower limit of explosiveness) |
| Acoustic alarm | piezoelectric acoustic signal for alarm, 85dB at 1 m |
| Relay output | one change-over contact 1 NO/NC, 10A (NA) / 3A (NC) - 250V ~ |
| Operating temperature | from $+41.00^{\circ} \mathrm{F}$ to $+40^{\circ} \mathrm{C}$ |
| Relative ambient humidity | +30 $\div 90 \%$ without condensation |
| Mounting | flush-mounted on ÉLOS support |
| Dimensions | IP40 (inserted in the embedded enclosure) |
| Duration | the installed detector has a life time of 5 years from the moment that it is powered up |

## Reference standards

EN 50081-1; EN 50082-1; CEI 216-8

| Description | Code |
| :--- | :--- |
| LPG gas presence electronic detector with acoustic and luminous | 2CSE1211EL |
| signal, relay output, 1 NO/NC change-over contact 10A (AC1)/ |  |
| 5A (AC15) - 250V~. Power supply 230V $\sim-50 \mathrm{~Hz}$ |  |

## Components



The LPG presence detectors of the Élos range are equipped with:

- sensor with tin dioxide semiconductor;
- output relay with hermetic contacts for controlling the gas interception solenoid valve.
- microprocessor-based logic and self-diagnosis, with thermal compensation;
- luminous pre-alarm system and acoustic-luminous alarm signal.
The devices work only in the presence of line voltage. In the event of no line voltage or during installation, they delay their own operation by approximately one minute in order allowing stabilization of the electronic components.


## Instructions for operation

Pressing the pushbutton:

- in normal conditions, interrupts the operation of the device, putting it into standby state (reactivation takes place automatically after ten minutes);
- in alarm conditions, it interrupts the acoustic signal momentarily (the function is restored automatically after twenty seconds).


## Wiring diagrams for LPG sensor




## Élos - Technical details <br> Safety and comfort devices

| Technical specifications | LPG sensor |
| :---: | :---: |
| Power supply | 230V~ +10/-15\% 50/60Hz |
| Power absorbed | 4VA |
| Prealarm threshold | 6\% LIE (lower limit of explosiveness) isobutane |
| Alarm threshold | 12\% LIE (lower limit of explosiveness) isobutane |
| Calibration | electronic, compensated thermally on non-volatile memory |
| Acoustic alarm | piezoelectric acoustic signal for alarm, 85 dB at 1 m |
| Relay output | piezoelectric acoustic signal for alarm, 85 dB at 1 m |
| Auxiliary output for signal repeater | through polarised terminals, 240V DC max., 100mA DC max. |
| Operating temperature | from $-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$ |
| Relative ambient humidity | +30 $\div 90 \%$ without condensation |
| Enclosure | plastic material, self-extinguishing UL94 V1 |
| Protection class of the detector | IP40 (inserted in the embedded enclosure) |
| Duration of the sensor | five years from the moment of installation and activation (the sensor reaches full operation 10 days after being powered up) |

Reference standards
CEI 116-1, UNI-CEI 70028, DM 30-5-95, EN 50081-1, EN 50082-1.

## Signal repeater (only for LPG gas detectors)

| Description | Code |
| :--- | :--- |
| Acoustic and luminous signal repeater with silencer pushbutton, | 2CSE1212EL |
| $230 \mathrm{~V} \sim-50 / 60 \mathrm{~Hz}$ |  |

## Components

| Location and line voltage |
| ---: |
| presence luminous signalling (green) |

Alarm luminous signalling (red)
Delayed silencing pushbutton
which is reactivated automatically after 20 s.

| Technical specifications |
| :--- |
| Power supply voltage |
| Alarm sound level |
| Input for communication with the |
| detectors |

Reference standards
EN 60065, EN 50081-1, EN 50082-1.

| Description | Code |
| :--- | :--- |
| Solenoid valve for gas systems with manual reset, normally open, | 2CSE1213EL |
| $230 \mathrm{~V} \sim-50 \mathrm{~Hz}$ |  |



Solenoid valve with manual reset

The manually resettable solenoid valve of the Élos range for gas systems is a valve of the type normally open. If the coil is energised, the closing device is tripped in order to interrupt the flow of gas.
The electric impulse to the coil can be sent by a gas leak detector, by a safety thermostat or by other devices. If the valve is activated, you need to verify the cause and above all make sure that there are no gas leaks in progress; the solenoid valve can then be reset manually by raising the knob above the coil. Proper operation of the device and safety are not compromised by possible buzzing of the solenoid valve when it is energised: this is an operational characteristic of the valve when supplied with alternating current used appropriately for the acoustic signalling of the system alarm.

## Examples of application

The installation of the gas detector does not exonerate users from observance of all the rules regarding the specifications, installation and use of gas powered equipment, the ventilation of rooms and the release of combustion products prescribed by the regulations that implement Article 3 of Italian Law 1083/71 and by legal requirements.


## Installation Instructions

The installation of the detector must be carried out exclusively by authorised technicians carefully observing the information provided below. The IP40 protection class refers exclusively to the apparatus in normal installation conditions.

Caution! Do not install the detector near cooking equipment, sinks, extractor fans and wherever environmental conditions could compromise its proper operation.


Natural gas


Gas GPL

| Technical specifications |
| :--- |
| Power supply |
| Power absorbed in service |
| Coil |
| Max. incoming pressure |
| Connectors |
| Ambient temperature limits |
| Electrical insulation |
| Positionable coil unit |

## Élos - Technical details <br> Safety and comfort devices

## Emergency lighting

| Description | Code |
| :--- | :--- |
| Removable anti-blackout light. | 2CSE1214EL |
| Charge reserve equal to 4.5 h and recharge time equal to 10-20 h. |  |
| To be combined with 230V ~ plug sockets; particularly recommended |  |
| for codes 2CSE1108EL and 2CSE1109EL. |  |

## Components



The anti-blackout light is an automatic removable, rechargeable electronic lamp that can be inserted in any Schuko socket or Italian P11 standard 10A bivalent socket. Socket outlets particularly recommended for holding the lamp are the sockets of the Élos wiring accessories' range 2CSE1108EL and 2CSE1109EL, that allow the body of the lamp to be embedded in the socket, thus reducing the external dimensions to a minimum.
The device was designed to light up automatically in the event of a blackout (no voltage warning), or to be used as a portable lighting device, useful in order to guarantee visibility and facilitate maintenance operations and/or searching for faults in unlit environments.

## Functions

A light source is activated automatically whenever the line voltage is missing (blackout) thanks to rechargeable backup batteries.

- A light source is activated automatically whenever the line voltage is missing (blackout) thanks to rechargeable backup batteries.
- Long autonomy, 4.5 hours of continuous operation.
- Small dimensions - protrusion from the Schuko profile (only 8 mm ).
On the front part there are two LEDs (one red and one green) that indicate the state of the lamp when it is powered:
- Red LED on, recharging in progress. In the event of a blackout the lamp will remain off (battery saving condition, used in the case of prolonged absence).
- Green LED on, recharging in progress. In the event of a blackout the lamp will light up and will switch off automatically when the network is restored.
The pushbutton on the front part allows you to switch from one condition to another.


Technical specifications

| Plug |
| :--- |
| Center distance of the pins |
| Ø of the pins |
| Power supply |
| Recharging time |
| Useful battery life |

Reference standards
EN 60598-1, EN 60598-2

| Description | Code |
| :--- | :--- |
| Flush-mounted anti-blackout light, dimension 2 Élos modules, | 2CSE1224EL |
| suitable for fixed or removable use Power supply voltage 230V - 50/60 |  |
| Hz. Duration without mains supply 2h, recharge time 5h |  |

## Components

ON/OFF switch, 16A

- Removable emergency lamp with the possibility to use it as an electrical torch.
- Duration (after 36 hours recharging) of approximately 2 h .
- Possibility to turn off the emergency lamp using the front circuit-breaker.
The product includes a battery for proper operation. If the battery is replaced, it must be sent for differential disposal in accordance with the local waste disposal regulations in force.


## nstallation Instructions

Installation for removable use


## Installation for fixed use



## Instructions for use

\begin{tabular}{|c|c|c|}
\hline \& © ON \& $\bigcirc$ OFF <br>
\hline  \&  \&  <br>
\hline  \&

2h MAX \&  <br>
\hline
\end{tabular}

## Key

Red LED off
Green LED of
Red LED on
Green LED on
4 Presence of line voltage


## Wiring diagram



| Technical specifications |
| :--- |
| Power supply voltage |
| Absorption |
| Batteries |
| Lamp |
| Dimensions |

## Reference standards

EN 60598-1, EN 60598-2

## Élos - Technical details Safety and comfort device

## Other devices

| Description | Code |
| :--- | :--- |
| IR motion detector with twilight threshold for control and adjustment of | 2CSE1216EL |
| the operation time of lighting devices. |  |
| Relay output NO 5A (AC1)/2A (AC15) - 250V $\sim$. |  |
| Power supply 230V $\sim-50 / 60 \mathrm{~Hz}$. |  |

## Components



The infrared beam motion detector of the Élos range detects variations in heat, closing the contact of a relay according to the environmental light. When the movement stops, the contact is reopened automatically after a preset adjustable delay. To avoid it being activated when it is not necessary, the device incorporates a twilight sensor with an adjustable tripping threshold.
The apparatus is suitable for directly controlling small uncorrected fluorescent lamps or similar loads, while it is not suitable for fluorescent lamps with a correction capacitor.

## Coverage area




## Area of application

- Operating mechanism for lighting in transit areas(stairs, showrooms, entrance halls and garages, corridors etc.)
- Whenever the operating mechanism needs to be subject to the presence of persons in the area.


## Examples of application



Wiring diagrams


Contact closing time

$\pi$
Min. 5 s. - Max. 180 s.

The detector trips when a person passes in dark or dusk conditions


LUX

Min. 5 lux - Max. 300 lux

The detector trips when a person passes in light conditions


LUX
Min. 5 lux - Max. 300 lux

| Technical specifications |  |
| :--- | :--- |
| Power supply voltage | $230 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| Adjustment of the luminous | 5 lux/300 lux |
| threshold | $5 \mathrm{~s} / 180 \mathrm{~s}$ |
| Adjustment of operation time | 1NA, 5 A (AC1)/2A (AC15) - 250V |
| Output contact (relay) |  |

## Reference standards

EN 60669-1, EN 60669-2-1.

| Description | Code |
| :--- | :--- |
| Portable remote control, 6 channels/3 bands, range 15 m | 2CSE1217EL |
| IR receiver, 1 channel, 1 pushbutton Relay output NO 5A (AC1)/2A | 2CSE1218EL |
| (AC15) - 250V $\sim$. Power supply 230V $\sim-50 / 60 \mathrm{~Hz}$. |  |

Components

Selector for selecting the channel recognizable by the remote
control, configuration with 18 channels

## Wiring diagrams

The Portable infrared beam remote control of the Élos range has six channels and three bands; the single-channel receiver has an output on relay for ON/OFF command of the specific consumers (lighting point, fan etc

## Area of application

- Buildings with a high level of comfort in the modern residential or services sector.
- Renovations where the installation of terminal command circuits is considered burdensome or unaesthetic.
- Places intended for disabled persons.

| Technical specifications of the remote control |
| :--- |
| Channels |
| Pushbuttons |
| Band selector |
|  |
|  |
|  |
|  |
| Max. range |
| (the setting of the internal microswitch on 3 bands |
| makes it possible to avoid interference with other |
| Power supply |

Technical specifications of the receiver
Power supply voltage $230 \mathrm{~V}-50 / 60 \mathrm{~Hz}$
Output contact, 1 relay 1NA,5A (AC1)/2A (AC15)-250V~
Monostable output relay
(only energized for the duration of the command)
Potential-free relay contact (it is not suitable for directly controlling
fluorescent lamps with a correction capacitor)

## Reference standards

For the remote control: EN 50082-1.
For the receiver: EN 60669-1, EN 60669-2-1, EN 60669-2-2.

Load command


Control and adjustment of resistive and inductive loads



2CSE1217EL

Control and adjustment through remote control and receiver

Impulse command for loads (bells, electrical locks, etc.)


## Élos - Technical details

## Wall-mounted accessories and enclosures

## IP40 and IP55 wall-mounted enclosures



## Area of application

The IP40 wall-mounted enclosures, pursuant to Standard CEI 64-8, extend the area of application of the devices of the Élos series to environments such as boiler rooms, warehouses, mechanical workshops, basements etc., where protection class IP40 is prescribed, defined by Standard EN 60529 (CEI 70-1).
This is guaranteed through devices installed in the enclosures, if the installation is carried out according to the supported procedures, through the use of connections, cable grommets and pipe ducts.
For devices with an open front (e.g. sockets) the protection class is less than IP40 but never less than IP20.
IP55 watertight wall-mounted enclosures, on the other hand, allow the application of the equipment of the Élos series in environments such as building sites, sports installations, marinas, industrial and agricultural establishments, gardens, camp sites etc. The protection class IP55, defined by Standard EN 60529 (CEI 70-1), is guaranteed by devices installed in the enclosures, if the installation is carried out according to the supported procedures, through the use of suitable accessories and with the cover closed..

Dimensions of IP40 and IP55 enclosures


## Élos - Technical details

## Wall-mounted accessories and enclosures

Because of the maximum depth dimension H, the IP40 and IP55 wall-mounted enclosures of the Élos series cannot house the following devices:

| Code | Description | Code | Description |
| :---: | :---: | :---: | :---: |
| 2CSE1012EL | Latching relay, 1 pole. Output contact 10A (AC1)/7A (AC15) 250V~. With 230V~50/60Hz coil | 2CSE1209EL | Electronic dimmer with pushbutton control for resistive-inductive loads and electronic power supplies for halogen lamps with very low |
| 2CSE1013EL | Latching relay, 2 poles. Output contacts 10A (AC1)/7A (AC15) - |  | voltage, 25-300W (25-250VA), 230V~-50/60Hz |
|  | 250V ~. With 230V ~ 50/60Hz coil | 2CSE1216EL | IR motion detector with twilight threshold for control and adjustment of the operation time of lighting devices. Relay output NO 5A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50/60Hz. |
| 2CSE1014EL | Monostable relay, 1 pole. Output contact 10A (AC1)/4A (AC15) 250V~. With 230V~50/60Hz coil |  |  |
| 2CSE1113EL | 2P shaver socket with insulating transformer, Power supply | 2CSE1304EL | Automatic MCB, 1P+N, C6, breaking capacity 1.5 kA |
|  | 230V - 50/60Hz. Output voltage 125V ( American standard 2P | 2CSE1305EL | Automatic MCB, 1P+N, C10, breaking capacity 3kA |
|  | socket) or 230V~ (2P socket P11 type) | 2CSE1306EL | Automatic MCB, 1P+N, C16, breaking capacity 3kA |
| 2CSE1202EL | Summer/winter electronic thermostat, with input for night-time | 2CSE1307EL | Automatic RCD $1 \mathrm{P}+\mathrm{N}, \mathrm{C} 6-10 \mathrm{~mA}$, breaking capacity 1.5 kA |
|  | reduction remote control and 3 temperature levels that can be set. | 2CSE1308EL | Automatic RCD 1P+N, C10-10mA, breaking capacity 3kA |
|  | Output contact NO, 5A (AC1)/2A (AC15) - 250V~ | 2CSE1309EL | Automatic RCD 1P+N, C16-10mA, breaking capacity 3kA |
| 2CSE1204EL | Electronic timed button with input for remote control, 1 output contact N0, 10A (AC1)/5A (AC15) - 250V~ | 2CSE1319EL | Bell/buzzer, 12V - 50/60Hz, sound intensity buzzer $75 \mathrm{~dB} / 1 \mathrm{~m}$, bell $70 \mathrm{~dB} / 1 \mathrm{~m}$ |
| 2CSE1205EL | Electronic dimmer with rotating control for resistive loads 100500W, 230V~ - 50/60Hz | 2CSE1320EL | Bell/buzzer, 230V -50/60Hz, sound intensity buzzer $75 \mathrm{~dB} / 1 \mathrm{~m}$, bell $70 \mathrm{~dB} / 1 \mathrm{~m}$ |
| 2CSE1206EL | Electronic dimmer with pushbutton control for resistive and inductive loads, $60-500 \mathrm{~W}$ ( $60-500 \mathrm{VA}$ ), 230V~ - 50/60Hz | 2CSE1324EL | $2 \mathrm{P}+$ E socket outlet, 16A-250V~, bivalent, interlocked with MCB, P17/11 |
| 2CSE1207EL | Electronic dimmer with rotating control and with two-way switch for resistive and inductive loads, 40-300W (40-300VA),230V~ - 50/60Hz | 2CSE1325EL | 2P+E socket outlet, 16A-250V , interlocked with MCB, P30 |
|  |  | 2CSE1326EL | 2P+E socket outlet, 16A - 250V , bivalent with RCD, 10mA, P17/11 |
|  |  | 2CSE1426EL | Universal badge circuit-breaker with location light, 250V~ |
| 2CSE1208EL | Electronic dimmer with pushbutton control for resistive-inductive loads and electronic power supplies for halogen lamps with very low voltage, 25-180W (25-180VA), 230V~ - 50/60Hz |  |  |

The installation of similar devices in the form of a DIN rail in the distribution board is recommended where possible.

## Élos - Technical details

## Frames

The frames of the Élos Soft line have a black under-plate that guarantees maximum adhesion to every type of surface and allows the application of finishing materials, while maintaining minimal protrusion from the wall.

to all surfaces

The frames of the Élos Smart line are made from technopolymer coated with a pearlescent finish and are characterized by their very limited protrusion from the wall, since they are not fitted with an under-plate.

to all surfaces

Reference standards
CEI 23-9 (EN 60669-1).

## Customization

Frames customized with a logo/text string can be supplied on request. They are produced by means of monochromatic pad printing on the areas highlighted below.

| Position 2 |
| :--- | ---: | ---: | ---: |

Customization is possible with standard colours (black, Pantone cool gray 3C, Pantone 5425 C) or with a colour specified by the customer.
Minimum order batch: 36 pieces including various modularities.
For quotes and delivery times contact an $A B B$ sales executive.

The Élos Soft frames with glossy glass finish cannot be customized.

## Élos - Coding <br> Order information

## Coding criteria of devices

| 2 | C | S | E | 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fixed part of the code |  |  |  | Product family | Product progressive numbe |  | Product line |
| 0 | Control devices |  |  |  |  | SF | Components for the Élos Soft line |  |
| 1 | Socket outlets |  |  |  |  | SM | Components for the Élos Smart line |  |
| 2 | Safety and comfort devices |  |  |  |  |  |  |  |
| 3 | Protection devices and signalling devices |  |  |  |  | EL | Components for both lines, Élos Soft and Élos Smart |  |
| 4 | Special systems |  |  |  |  |  |  |  |
| 5 | Key covers |  |  |  |  |  |  |  |
| 6 | Components for installation, accessories and spare parts |  |  |  |  |  |  |  |

Example: Single-pole circuit-breaker, Élos Soft

| 2 | $C$ | $S$ | $E$ | 1 | 0 | 0 | 1 | $S$ | $F$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



Coding criteria of the frames


Example: Élos Smart technopolymer frame, 3 modules, silver grey colour

| 2 | C | S | E | 0 | 3 | 0 | 2 | S | M | $\mathbf{P}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Packaging

To enable automatic warehouse management using optical readers, the devices and frames of the Élos wiring accessories' range are packaged individually in boxes that display the EAN bar codes and that protect the contents adequately against dust and shocks. For a better explanation of the installation methods, a specific instruction sheet is supplied. Multiple packages are available for all the bar codes with the highest turnover.

## Élos

## Overall dimensions

| Élos Soft Code | Élos Smart Code | Description | No. Modules | Depth mm |
| :---: | :---: | :---: | :---: | :---: |
| 2CSE1001SF | 2CSE1001SM | Single-pole switch, 16A - 250V~ | 1 | 29 |
| 2CSE1002SF | 2CSE1002SM | Double-pole switch, 16A - 250V~ | 1 | 29 |
| 2CSE1003SF | 2CSE1003SM | Single-pole two-way switch, 16A-250V~ | 1 | 29 |
| 2CSE1004SF | 2CSE1004SM | 1P switch, 16A with functional indication | 1 | 29 |
| 2CSE1005SF | 2CSE1005SM | Single-pole push switch NO, 16A - 250V~ | 1 | 29 |
| 2CSE1006SF | 2CSE1006SM | 2P switch, 16A with functional indication | 1 | 29 |
| 2CSE1007EL | - | Double-pole switch, 10A - 250V~, with key | 1 | 32 |
| 2CSE1008SF | 2CSE1008SM | 1 P two-way switch, 16A with functional indication | 1 | 29 |
| 2CSE1009EL | - | Single-pole two-way switch, 10A - 250V , with key | 1 | 32 |
| 2CSE1010SF | 2CSE1010SM | Intermediate switch, 16A - 250V~ | 1 | 29 |
| 2CSE1011SF | 2CSE1011SM | Change-over switch, 10A - 250V~, 3 positions, with central OFF | 1 | 29 |
| 2CSE1012EL | - | Latching relay, 1 pole. Output contact 10A (AC1)/7A (AC15) - 250V~. With 230V~50/60Hz coil | 1 | 38 |
| 2CSE1013EL | - | Latching relay, 2 poles. Output contacts 10A (AC1)/7A (AC15) - 250V~. With 230V~ 50/60Hz coil | 1 | 38 |
| 2CSE1014EL | - | Monostable relay, 1 pole. Output contact 10A (AC1)/4A (AC15) - 250V~. With 230V~50/60Hz coil | 1 | 38 |
| 2CSE1015SF | 2CSE1015SM | 1 P push switch NO, 16A, with functional indication | 1 | 29 |
| 2CSE1016SF | 2CSE1016SM | Single-pole push switch NC, 16A - 250V~ | 1 | 29 |
| 2CSE1017EL | - | Double single-pole push switch, NO, 16A-250V~ | 1 | 29 |
| 2CSE1018SF | 2CSE1018SM | Double single-pole push switch, NO, 10A - 250V~, with interlock | 1 | 29 |
| 2CSE1019SF | 2CSE1019SM | Double-pole push switch NO, 16A - 250V~ | 1 | 29 |
| 2CSE1020EL | - | Double-pole push switch NO, 16A - 250V~, with cord pull, 150 cm cord with ball grip | 1 | 29 |
| 2CSE1021EL | - | Double-pole push switch, NO, 10A - 250V~, with key | 1 | 32 |
| 2CSE1022SF | 2CSE1022SM | Single-pole push switch NO, 10A - 250V~, START, with auxiliary NC contact, 10A - 250V~ | 1 | 29 |
| 2CSE1023SF | 2CSE1023SM | Single-pole push switch NC, 10A - 250V~, STOP, with auxiliary NO contact | 1 | 29 |
| 2CSE1024EL | - | Single-pole push switch NO, 16A - 250V~, with red diffuser | 1 | 29 |
| 2CSE1025EL | - | Single-pole push switch NO, 16A-250V~, with green diffuser | 1 | 29 |
| 2CSE1026EL | - | Single-pole push switch NO, 10A - 250V~, with backlit label holder plate (with 12 V or 24 V lamps) | 2 | 30 |
| 2CSE1027SF | 2CSE1027SM | Single-pole push switch NO, 16A - 250V~, illuminable, with DOOR OPENER symbol | 1 | 29 |
| 2CSE1028SF | 2CSE1028SM | Single-pole push switch NO, 16A - 250V~, illuminable, with BELL symbol | 1 | 29 |
| 2CSE1029SF | 2CSE1029SM | Single-pole push switch NO, 16A - 250V~, illuminable, with LAMP symbol | 1 | 29 |
| 2CSE1030SF | 2CSE1030SM | Single-pole push switch NO, 16A - 250V~, illuminable, with STAIR LIGHT symbol | 1 | 29 |
| 2CSE1101EL | - | 2P+E socket outlet, 10A - 250V~, P11 type, std IT with safety shutters | 1 | 25 |
| 2CSE1102EL | - | 2P+E socket outlet, 16A - 250V~, P17 type, std IT with safety shutters | 1 | 25 |
| 2CSE1103EL | - | 2P+E socket outlet, 16A-250V~, bivalent, P17/11 type, std IT with safety shutters | 1 | 25 |
| 2CSE1104EL | - | 2P+E socket outlets, 16A - 250V~, bivalent, P17/11 type, std IT with safety shutters | 1 | 25 |

1 modulo


2 moduli


3 moduli


| Élos Soft Code | Élos Smart Code | Description | No. Modules | Depth mm |
| :---: | :---: | :---: | :---: | :---: |
| 2CSE1105EL | - | $2 \mathrm{P}+\mathrm{E}$ socket outlets, 16A-250V~, std IT with safety shutters | 1 | 25 |
| 2CSE1106EL | - | 2P+E socket outlets, 16A-250V~, P17/11 type, std IT with safety shutters | 1 | 25 |
| 2CSE1107EL | - | 2P+E double socket, 16A - 250V~, P17/11 type, std IT | 2 | 27 |
| 2CSE1108EL | - | 2P+E socket outlet, 16A - 250V~, P30 type, std IT/DE with safety shutters | 2 | 32 |
| 2CSE1109EL | - | 2P+E socket outlet, 16A - 250V~, P30/17 type, std IT/DE with safety shutters | 2 | 32 |
| 2CSE1110EL | - | 2P+E socket outlet, 16A - 250V~, P30/17 type, std IT/DE with safety shutters | 2 | 32 |
| 2CSE1111EL | - | 2P+E socket outlet, 16A - 250V~, P30/17 type, std IT/DE with safety shutters | 2 | 32 |
| 2CSE1112EL | - | $2 \mathrm{P}+$ E socket outlet, 16A-250V~, P30/17 type, std IT/DE with safety shutters | 2 | 32 |
| 2CSE1113EL | - | 2 P shaver socket with insulating transformer | 3 | 44 |
| 2CSE1121EL | - | RJ11 telephone connector | 1 | 23 |
| 2CSE1122EL | - | RJ12 telephone connector | 1 | 23 |
| 2CSE1123EL | - | RJ11 double telephone connector | 1 | 23 |
| 2CSE1124EL | - | RJ45 data connector, Cat. 5e, UTP | 1 | 23 |
| 2CSE1125EL | - | RJ45 data connector, Cat. 5e, FTP | 1 | 23 |
| 2CSE1126EL | - | RJ45 data connector, Cat. 3, UTP | 1 | 23 |
| 2CSE1134EL | - | 2P+E socket outlet, 13A - 250V~, British Standard | 2 | 32 |
| 2CSE1136EL | - | 2P+E socket outlet, 10A-250V~/15A - 125V~, EuroAmerican Standard | 1 | 27 |
| 2CSE1137EL | - | TV/SAT coaxial socket, direct, male IEC connector, ø 9.5 mm | 1 | 27 |
| 2CSE1138EL | - | TV/SAT coaxial socket, feedthrough, male IEC connector, $\varnothing 9.5 \mathrm{~mm}$, attenuation 5 dB | 1 | 27 |
| 2CSE1139EL | - | TV/SAT coaxial socket, direct, female connector | 1 | 27 |
| 2CSE1140EL | - | TV/SAT coaxial socket, feedthrough, female connector, attenuation 5 dB | 1 | 27 |
| 2CSE1141EL | - | 2P+E socket outlet, 10A - 250V~, Australian / South American Standard | 2 | 32 |
| 2CSE1144EL | - | 2P+E socket outlet, 16A - 250V~, French Standard | 2 | 32 |
| 2CSE1145EL | - | 2P+E socket outlet, 15A - 125V , American Standar | 1 | 27 |
| 2CSE1148EL | - | 2P+E socket outlet, 10A - 250V~, Swiss Standard | 1 | 27 |
| 2CSE1202EL | - | Summer/winter electronic thermostat | 3 | 42 |
| 2CSE1204EL | - | Electronic timed button with input for remote control | 2 | 44 |
| 2CSE1205EL | - | Electronic dimmer with rotary control for resistive loads $100-500 \mathrm{~W}, 230 \mathrm{~V} \sim-50 / 60 \mathrm{~Hz}$ | 1 | 44 |
| 2CSE1206EL | - | Electronic dimmer with pushbutton control $60-500 \mathrm{~W}$ (60-500VA), 230V~ - 50/60Hz | 2 | 44 |
| 2CSE1207EL | - | Electronic dimmer with rotary control 40-300W (40-300VA), 230V~ - 50/60Hz | 1 | 41 |
| 2CSE1208EL | - | Electronic dimmer with pushbutton control 25-180W (25-180VA), 230V~ - 50/60Hz | 1 | 44 |
| 2CSE1209EL | - | Electronic dimmer with pushbutton control 25-300W (25-250VA), 230V~ - 50/60Hz | 2 | 44 |
| 2CSE1211EL | - | LPG gas presence electronic detector . <br> Power supply 230V~ - 50Hz | 3 | 44 |
| 2CSE1212EL | - | Acoustic and luminous signal repeater with silencer pushbutton, 230V~ - 50/60Hz | 2 | 44 |

## Élos

## Overall dimensions

| Élos Soft Code | Élos Smart Code | Description | No. Modules | Depth mm |
| :---: | :---: | :---: | :---: | :---: |
| 2CSE1215EL | - | Digital clock/calendar with display of hour-minutes/daymonth, 230V~ - 50Hz | 1 | 40 |
| 2CSE1216EL | - | IR motion detector with twilight thresholds | 1 | 40 |
| 2CSE1218EL | - | IR receiver, 1 channel, 1 pushbutton | 1 | 40 |
| 2CSE1219EL | - | Summer/winter electronic time-programmed thermostat | 2 | 35 |
| 2CSE1220EL | - | Natural gas presence electronic detector with acoustic and luminous signal | 2 | 40 |
| 2CSE1222EL | - | 230V~ - 50-60Hz power supply, output 12V~ | 1 | 40 |
| 2CSE1223EL | - | Daily/weekly electronic programmer, 1 channel, 1 NO/NC changeover output contact, 8A (AC1)/4A (AC15) 230V~ - 50/60 Hz | 2 | 35 |
| 2CSE1224EL | - | Flush-mounted anti-blackout light, dimension 2 Élos modules | 2 | 35 |
| 2CSE1301EL | - | Fuse holder, for fuses ø $6.3 \times 32 \mathrm{~mm}, 16 \mathrm{~A}$ - 250V~ | 1 | 25 |
| 2CSE1302EL | - | Overvoltage limiter with tripping signal, 75J, 250V~ | 1 | 25 |
| 2CSE1303EL | - | Anti-interference filter, 3.5A-250V~ | 1 | 25 |
| 2CSE1304EL | - | Automatic MCB, $1 \mathrm{P}+\mathrm{N}, \mathrm{C} 6$, breaking capacity 1.5 kA | 1 | 37 |
| 2CSE1305EL | - | Automatic MCB, 1P+N, C10, breaking capacity 3kA | 1 | 37 |
| 2CSE1306EL | - | Automatic MCB, 1P+N, C16, breaking capacity 3kA | 1 | 37 |
| 2CSE1307EL | - | Automatic RCD, 1P+N, C6-10mA, breaking capacity 1.5 kA | 2 | 37 |
| 2CSE1308EL | - | Automatic RCD, 1P+N, C10-10mA, breaking capacity 3kA | 2 | 37 |
| 2CSE1309EL | - | Automatic RCD, 1P+N, C16-10mA, breaking capacity 3 KA | 2 | 37 |
| 2CSE1310EL | - | Amber warning light, 12/24/250V~ | 1 | 24 |
| 2CSE1311EL | - | Transparent warning light, 12/24/250V~ | 1 | 24 |
| 2CSE1312EL | - | Red warning light, 12/24/250V | 1 | 24 |
| 2CSE1313EL | - | Green warning light, 12/24/250V~ | 1 | 24 |
| 2CSE1314EL | - | Blue warning light, 12/24/250V | 1 | 24 |
| 2CSE1315EL | - | Double warning light, 12/24/250V~, red/green | 1 | 24 |
| 2CSE1316EL | - | Opal steplight lamp with adjustable beam, 12/24V | 3 | 27 |
| 2CSE1317EL | - | Bell, 12V, $50 \mathrm{~Hz}, 8 \mathrm{VA}$, sound intensity $80 \mathrm{~dB} / 1 \mathrm{~m}$ | 1 | 24 |
| 2CSE1318EL | - | Bell, $230 \mathrm{~V}, 50 \mathrm{~Hz}, 8 \mathrm{VA}$, sound intensity $80 \mathrm{~dB} / 1 \mathrm{~m}$ | 1 | 24 |
| 2CSE1319EL | - | Bell/buzzer, $12 \mathrm{~V}-50 / 60 \mathrm{~Hz}$, sound intensity buzzer $75 \mathrm{~dB} / 1 \mathrm{~m}$, bell $70 \mathrm{~dB} / 1 \mathrm{~m}$ | 2 | 40 |
| 2CSE1320EL | - | Bell/buzzer, 230V $-50 / 60 \mathrm{~Hz}$, sound intensity buzzer 75 dB/1 m, bell 70 dB/1 m | 2 | 40 |
| 2CSE1321EL | - | Buzzer, $12 \mathrm{~V}-50 \mathrm{~Hz}, 8 \mathrm{VA}$, sound intensity $70 \mathrm{~dB} / 1 \mathrm{~m}$ | 1 | 24 |
| 2CSE1322EL | - | Buzzer, 230V - 50Hz, 8VA, sound intensity $70 \mathrm{~dB} / 1 \mathrm{~m}$ | 1 | 24 |
| 2CSE1324EL | - | 2P+E socket outlet, 16A - 250V~, bivalent, interlocked with MCB, P17/11 | 2 | 37,5 |
| 2CSE1325EL | - | $2 \mathrm{P}+$ E socket outlet, 16A-250V~, interlocked with MCB, P30 | 3 | 37,5 |
| 2CSE1326EL | - | 2P+E socket outlet, 16A - 250V~, bivalent with RCD, 10mA, P17/11 | 3 | 37,5 |
| 2CSE1328EL | - | Automatic RCD, 1P+N, C6-30mA, breaking capacity 1.5 kA | 2 | 37 |
| 2CSE1329EL | - | Automatic RCD, 1P+N, C10-30mA, breaking capacity 3kA | 2 | 37 |


| Élos Soft Code | Élos Smart Code | Description | No. <br> Modules | Depth mm |
| :---: | :---: | :---: | :---: | :---: |
| 2CSE1330EL | - | Automatic RCD, 1P+N, C16-30mA, breaking capacity 3kA | 2 | 37 |
| 2CSE1426EL | - | Universal badge circuit-breaker with location light, 250V~ | 3 | 42 |
| 2CSE3101EL | - | White frame with enclosure for rails, 1 module | $1^{*}$ | 60 |
| 2CSE3102EL | - | Anthracite frame with enclosure for rails, 1 module | $1^{*}$ | 60 |
| 2CSE1213EL | - | Solenoid valve for gas systems with manual reset, normally open, 230V~ - 50Hz | drawing |  |
| 2CSE1214EL | - | Removable anti-blackout light. | drawing |  |
| 2CSE1217EL | - | Portable remote control, 6 channels/3 bands, range 15 m | drawing |  |

* Supplied with frame, support and dedicated housing


## Élos

## Overall dimensions

Anti-blackout light


4
Remote control


Sound diffuser


Solenoid valve


Electronic power supply


## Frames

3 modules


8 modules (Élos Smart)


## Supports

3 modules


Screw distance of the box: 83.5 mm

4 modules


## 6 modules



12 modules (Élos Smart)


4 modules


Screw distance of the box: 108.5 mm

## 6 modules



Screw distance of the box: 100 mm

## 8 modules (Élos Smart)



Screw distance of the box: 103.5 mm

12 modules (Élos Smart)


[^16]
## Élos

## Overall dimensions

IP40 wall-mounted enclosure

2 modules


4 modules


3 modules


8 modules



IP55 wall-mounted enclosures

2 modules


3 modules


4 modules


IP55 flush-mounted escutcheon plate


1-pole frames with enclosure for rails


## Chiara

## Order codes and technical details

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## Chiara

## Components and functions



Control devices
Switches, push switches, two-way switches, intermediate switches, relays and change-over switches in different versions to configure functions and control points for appliances in the most flexible manner, suitable for all residential and work contexts. All the control devices, except for relays and change-over switches, can be lit. The lamp with which they are to be equipped must be ordered separately. The relevant code is listed under accessories.


## Protection devices

These devices intervene in the event of overloads, short circuits and other phenomena that involve a risk for the safety of persons and which compromise proper operation of connected appliances, performing their protection function directly downstream without impacting the power supply to other points in the electrical installation.


## Socket outlets

The versions with 2P+E 10-16A plug sockets for 250 V lines are available in both Italian and German standards, with safety shutters and lateral/central earth. For telephone and data transmission applications, various types of connectors compatible with the most widespread and advanced international wiring standards are available. The range also includes interlocked Italian/German standard sockets.


## Signalling devices

Warning lights to display the operating status of connected appliances, as well as bells and buzzers. The lamp with which the warning lights are to be fitted must be ordered separately. The code is listed under accessories.


## Comfort devices

To optimize operation of the electrical appliances and to increase the liveability of the environments, the range includes programming, adjustment and timer devices such as timeprogrammed thermostats, electronic thermostats, dimmers and IR presence detectors with twilight sensor.
The anti-blackout light switches on in the event of a power cut with autonomy up to 4.5 hours. It can be removed from the socket and used as a torch. A powerful 3-module emergency light is also available with LED lighting.


## Components for installation

Blank covers for unused modules and supports for 2, 3, 4 and 7 modules for the installation of devices and components in round and rectangular flush-mounted boxes.


## Frames

The range consists of eight technopolymer frames with glossy finish in eight colour variants and four colours - gold, metal black, chromium and bronze - made from technopolymer with glossy or satin pearlescent finish.


Other installation solutions
Products and solutions for protected installation (IP55 watertight escutcheon plates and IP40/IP55 enclosures) are available, as well as adapters for installation on a DIN rail or in Undernet under-floor turret. The self-supporting frames provide an economic and flexible solution for more particular installation contexts.

All the products in range that require the IMQ mark have obtained it, in compliance with the specific Reference standards.

## Chiara - Order codes

## Switches




2CSK1011CH


2CSK1012CH 2CSK1014CH


Switches

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole switch, 16A-250V~ | 1 | 2CSK1001CH | 16/96 |
| Double-pole switch, 16A-250V~ | 1 | 2CSK1002CH | 16/48 |
| Single-pole switch, 16A-250V , 2 modules | 2 | 2CSK1004CH | 8/48 |
| Double-pole switch, 16A-250V~, with key control | 1 | 2CSK1006CH | 1/24 |
| Double-pole switch, 16A-250V , with universal key control | 1 | 2CSK1006CHU | 1/24 |

Information on the illumination of switches on page 5/28
Technical details from page 5/29

Two-way switches

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Single-pole two-way switch, 16A-250V~ | 1 | 2CSK1003CH | 16/96 |
| Single-pole two-way switch, 16A-250V~, 2 modules | 2 | 2CSK1007CH | $8 / 48$ |

Information on the illumination of switches on page 5/28
Technical details from page 5/29
Intermediate switches

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Intermediate switch, 16A-250V~ | 1 | 2 CSK1010CH | $16 / 48$ |
| Intermediate switch, 16A-250V~, 2 modules | 2 | 2CSK1008CH | $8 / 48$ |

Information on the illumination of switches on page 5/28
Technical details from page 5/29

## Commutatori

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Change-over switch, 10A-250V~, 3 positions, with central 0FF | 1 | 2CSK1011CH | 16/48 |

Information on the lighting of the control devices on page 5/28
Technical details from page 5/29

Relays

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Single-pole relay with 230V~ coil, 10A output contact | 1 | 2CSK1012CH | $16 / 48$ |
| 4 sequence change-over switch relay, with 230V $\sim$ coil, 2 10A output contacts | 1 | 2CSK1014CH | $16 / 48$ |

Technical details from page 5/30


Push switches

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switches NO, 16A-250V~ | 1 | 2CSK1005CH | 16/96 |
| Single-pole push switches NC, 16A-250V~ | 1 | 2CSK1016CH | 16/96 |
| Double single-pole push switches, NO+N0, 16A-250V~ | 1 | 2CSK1017CH | 16/96 |
| Double single-pole push switches, $\mathrm{NO}+\mathrm{NO}, 16 \mathrm{~A}-250 \mathrm{~V}$, with interlock | 1 | 2CSK1018CH | 16/96 |
| Single-pole push switches, 1NO and1NC, 16A-250V~, with ON symbol | 1 | 2CSK1022CH | 16/96 |
| Single-pole push switches, 1 NO and1NC, 16A-250V , with OFF symbol | 1 | 2CSK1023CH | 16/96 |
| Single-pole push switches NO, 16A-250V , with cord pull, with 2.25 m cord | 1 | 2CSK1020CH | 16/96 |
| Single-pole push switches NC, 16A-250V , with cord pull, with 2.25 m cord | 1 | 2CSK1021CH | 16/96 |
| Double-pole push switches, NO, 16A - 250V , with key control | 1 | 2CSK1009CH | 1/24 |
| Double-pole push switches, NO, 16A - 250V~, with universal key control | 1 | 2CSK1009CHU | 1/24 |

## Chiara - Order codes

## Switches



2CSK1030CH

5


2 CSK 1025 CH


2 CSK 1027 CH


2CSK1029CH


2CSK1024CH


2CSK1026CH


2 CSK 1031 CH

Special push switch

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Single-pole push switches N0, 16A - 250V~, with BELL symbol | 1 | 2CSK1028CH | 16/96 |
| Single-pole push switches NO, 16A-250V , with KEY symbol | 1 | 2CSK1029CH | 16/96 |
| Single-pole push switches NO, 16A-250V~, with STAIR LIGHT symbol | 1 | 2CSK1030CH | 16/96 |
| Single-pole push switches N0, 16A-250V~, with red diffuser | 1 | 2CSK1024CH | 16/96 |
| Single-pole push switches NO, 16A-250V , with green diffuser | 1 | 2CSK1025CH | 16/96 |
| Single-pole push switches NO, 16A-250V~, with orange diffuser | 1 | 2CSK1026CH | 16/96 |
| Single-pole push switches NO, 16A-250V , with white diffuser, 1 module | 1 | 2CSK1027CH | 16/96 |
| Single-pole push switches NO, 16A-250V~, with backlit label holder plate, 2 modules | 2 | 2CSK1031CH | 8/48 |
| Single-pole push switches NO, 16A-250V , with backlit label holder plate, 3 modules | 3 | 2CSK1032CH | 1/12 |

nformation on the illumination of switches on page 5/28
Technical details from page 5/29


2CSK1032CH

## Chiara－Order codes

## Socket outlets

| － | － | Plug sockets，Italian standard with safety shutters |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| －${ }^{\text {－}}$ | －${ }^{\text {－}}$ | Description | No． modules | Code | Packing／ No．items |
| －岩 | －高 | 2P＋E socket outlet，10A－250V～，P11 type | 1 | 2CSK1101CH | 16／96 |
| － | 2CSK1102CH | 2P＋E socket outlet，16A－250V～，P17 type | 1 | 2CSK1102CH | 16／96 |
| 2CSK1101CH | 2 CSK 1102 CH | $2 \mathrm{P}+$ E socket outlet，10／16A－250V～，P17／P11 type | 1 | 2CSK1103CH | 16／96 |
| － | － | 2P＋E socket outlets，10／16A－250V～，P17／P11 type，coloured for privileged circuits | 1 | 2CSK1104CH | 16／96 |
| 8 | 8 |  | 1 | 2CSK1105CH | 16／96 |
| －${ }^{\text {d }}$ | 鮸 |  | 1 | 2CSK1106CH | 16／96 |

2 CSK 1103 CH


2 CSK 1105 CH

Plug sockets，Italian standard with safety shutters

Technical details from page 5／32


2CSK1108CH


2 CSK 1115 CH


2CSK1114CH


2CSK1116CH


2CSK1110CH


2CSK1112CH

Plug sockets，Italian／German standard with safety shutters

| Description | No． modules | Code | Packing／ No．items |
| :---: | :---: | :---: | :---: |
| 2P＋E socket outlet，16A－250V～，P30 type | 2 | 2CSK1108CH | 16／96 |
| 2P＋E socket outlets，16A－250V～，P30 type，coloured for privileged circuits | 2 | 2CSK1114CH | 16／96 |
|  | 2 | 2CSK1115CH | 16／96 |
|  | 2 | 2CSK1116CH | 16／96 |
| 2P＋E socket outlet，16A－250V～，P30／17 type | 2 | 2CSK1109CH | 8／48 |
| $2 \mathrm{P}+$ E socket outlets，16A－250V～，P30／17 type，coloured for privileged circuits | 2 | 2CSK1110CH | $8 / 48$ |
|  | 2 | 2CSK1111CH | 8／48 |
|  | 2 | 2CSK1112CH | 8／48 |

[^17]
## Chiara - Order codes <br> Socket outlets



2 CSK 1324 CH


2 CSK 1325 CH


2CSK1326CH


2 CSK 1113 CH


2CSK1160CH


2CSK1117CH
2CSK1118CH
2CSK1132CH
2CSK1136CH
2CSK1137CH
2CSK1138CH


2CSK1133CH
2CSK1120CH
2CSK1130CH
2CSK1131CH
2CSK1139CH

Interlocked socket outlets with automatic MCB and automatic RCD

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2P+E socket outlet, 16A-250V, interlocked with MCB, P17/11 | 2 | 2CSK1324CH | 1/6 |
| $2 \mathrm{P}+$ E socket outlet, 16A-250V, interlocked with MCB, P30 | 3 | 2CSK1325CH | 1/4 |
| $2 \mathrm{P}+$ E socket outlet, 16A-250V, with RCD $10 \mathrm{~mA}, \mathrm{P} 17 / 11$ | 3 | 2CSK1326CH | 1/4 |

Technical details on page $5 / 35$

Special sockets

| Description | No. modules | Code | Packing/ <br> No. items |
| :---: | :---: | :---: | :---: |
| 2P shaver socket with insulating transformer | 3 | 2CSK1113CH | 1/1 |
| Power supply 230V~ - 50/60Hz |  |  |  |
| Output voltage 125V ~ (American standard 2P socket) or 230V ~ (2P socket, P11 type) |  |  |  |
| Flush-mounted USB charger $500-650 \mathrm{~mA}$, with male type A connector, power supply $230 \sim 50 / 60 \mathrm{~Hz}$, output voltage 5 V DC | 1 | 2CSK1160CH | 1/24 |

Technical details on page $5 / 33$

## TV/SAT sockets

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| TV coaxial socket, direct, male IEC connector $\varnothing 9.5 \mathrm{~mm}$, insulated type | 1 | 2CSK1117CH | 8/48 |
| TV/SAT coaxial socket, direct, male IEC connector $\varnothing 9.5 \mathrm{~mm}$, with feedthrough of direct current | 1 | 2CSK1118CH | 8/48 |
| TV/SAT coaxial socket, feedthrough, male IEC connector $\varnothing 9.5 \mathrm{~mm}$, attenuation 7dB | 1 | 2CSK1132CH | 8/48 |
| TV/SAT coaxial socket, feedthrough, male IEC connector $\varnothing 9.5 \mathrm{~mm}$, attenuation 10dB | 1 | 2CSK1136CH | 8/48 |
| TV/SAT coaxial socket, feedthrough, male IEC connector $\varnothing 9.5 \mathrm{~mm}$, attenuation 14dB | 1 | 2CSK1137CH | 8/48 |
| TV/SAT coaxial socket, feedthrough, male IEC connector $\varnothing 9.5 \mathrm{~mm}$, attenuation 18dB | 1 | 2CSK1138CH | 8/48 |
| TV/SAT coaxial socket, direct, female F connector, with feedthrough of direct current | 1 | 2CSK1119CH | 8/48 |
| Double demixed TV/SAT coaxial socket, direct, male IEC connector $\varnothing 9.5 \mathrm{~mm}$ and female F connector | 1 | 2CSK1133CH | 8/48 |
| Double demixed TV/SAT coaxial socket, feedthrough, male IEC connector $\emptyset 9.5 \mathrm{~mm}$ and female F connector, attenuation 7dB | 1 | 2CSK1120CH | 8/48 |
| Double demixed TV/SAT coaxial socket, feedthrough, male IEC connector $\varnothing 9.5 \mathrm{~mm}$ and female F connector, attenuation 10dB | 1 | 2CSK1130CH | 8/48 |
| Double demixed TV/SAT coaxial socket, feedthrough, male IEC connector $\varnothing 9.5 \mathrm{~mm}$ and female F connector, attenuation 14dB | 1 | 2CSK1131CH | 8/48 |
| Double demixed TV/SAT coaxial socket, feedthrough, male IEC connector $\varnothing 9.5 \mathrm{~mm}$ and female F connector, attenuation 18dB | 1 | 2CSK1139CH | 8/48 |

Technical details from page 5/37

Network and telephone sockets

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| RJ11 telephone connector | 1 | 2CSK1121CH | 1/16 |
| RJ12 telephone connector | 1 | 2CSK1122CH | 1/16 |
| RJ45 connector, Cat. 5e, UTP (unshielded) | 1 | 2CSK1124CH | 16/96 |
| RJ45 connector, Cat. 5e, FTP (shielded) | 1 | 2CSK1125CH | 16/96 |
| RJ45 connector, Cat. 6, UTP (unshielded) | 1 | 2CSK1127CH | 16/96 |
| RJ45 connector, Cat. 6, FTP (shielded) | 1 | 2CSK1128CH | 16/96 |
| Adapter for RJ45 connector, Keystone type | 1 | 2CSK1135CH | 16/96 |

Technical details from page 5/40

## Chiara - Order codes

## Protection devices



2CSK1301CH


2CSY1302MY

5


2 CSK 1304 CH


2CSK1306CH


2CSK1315CH

Fuse holders, overvoltage limiters

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Fuse holder, for fuses $\emptyset 5 \times 20 / \emptyset 6.3 \times 32 \mathrm{~mm}$, max. 16A | 1 | 2 CSK1301CH | $1 / 24$ |
| Overvoltage limiter, $75 \mathrm{~J}, 230 \mathrm{~V} \sim$ | 1 |  | 2 CSK1315CH |
| Spare protection for overvoltage limiter | 1 | $1 / 24$ |  |

Technical details from page 5/42

Miniature circuit-breakers and Residual current circuit-breakers

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Automatic MCB, 1P+N, C6, breaking capacity 1.5 kA | 1 | 2CSK1304CH | 16/96 |
| Automatic MCB, $1 \mathrm{P}+\mathrm{N}, \mathrm{C} 10$, breaking capacity 3 kA | 1 | 2CSK1305CH | 1/12 |
| Automatic MCB, 1P+N, C16, breaking capacity 3 kA | 1 | 2CSK1306CH | 1/12 |
| Automatic RCD, 1P+N, C6-10 mA, breaking capacity 1.5kA | 2 | 2CSK1307CH | 1/6 |
| Automatic RCD, 1P+N, C10-10 mA, breaking capacity 3 kA | 2 | 2CSK1308CH | 1/6 |
| Automatic RCD, 1P+N, C16-10 mA, breaking capacity 3kA | 2 | 2CSK1309CH | 1/6 |
| Automatic RCD, 1P+N, C6-30 mA, breaking capacity 1.5 kA | 2 | 2CSK1328CH | 1/6 |
| Automatic RCD, 1P+N, C10-30 mA, breaking capacity 3kA | 2 | 2CSK1329CH | 1/6 |
| Automatic RCD, 1P+N, C16-30 mA, breaking capacity 3kA | 2 | 2CSK1330CH | 1/6 |



2CSK1308CH


2 CSK 1305 CH


2CSK1307CH

Technical details from page 5/44

## Chiara - Order codes

## Signalling devices



2CSK1310CH


2 CSK 1312 CH


2CSK1311CH


2CSK1313CH

Light signals

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Orange warning light (supplied without lamp) | 1 | 2CSK1310CH | 16/96 |
| White warning light (supplied without lamp) | 1 | 2CSK1311CH | 16/96 |
| Red warning light (supplied without lamp) | 1 | 2CSK1312CH | 16/96 |
| Green warning light (supplied without lamp) | 1 | 2CSK1313CH | 16/96 |

Information on the illumination of the warning lights on page 5/28


2CSK1317CH 2CSK1318CH 2CSK1321CH 2CSK1322CH

Bells and buzzers

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Electro-mechanical bell, 12V, power 5VA, sound intensity 80dB | 1 | 2 2CSK1317CH | $8 / 48$ |
| Electro-mechanical bell, 230V, power 8VA, sound intensity 80dB | 1 | 2 2CSK1318CH | $8 / 48$ |
| Electro-mechanical buzzer, 12V, power 5VA, sound intensity 70dB | 1 | 2 2CSK1321CH | $8 / 48$ |
| Electro-mechanical buzzer, 230V, power 8VA, sound intensity 70dB | 1 | 2 2CSK1322CH | $8 / 48$ |

## Chiara - Order codes

## Safety and comfort devices



2CSK1201CH


2CSK1202CH

## 5



2CSK1205CH 2CSK1204CH

Time-programmed thermostats and thermostats

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Summer/winter electronic time-programmed thermostat with 4 temperature levels, relay output, <br> 1 NO/NC change-over contact 8A (AC1)/2A (AC15) - Power supply 230V~ 50/60Hz | 3 | 2CSK1201CH | 1/12 |
| Summer/winter electronic thermostat, relay output, 1 NO contact 8A (AC1)/2A (AC15) Power supply 230V~50/60Hz | 2 | 2CSK1202CH | 1/12 |

Technical details from page 5/47

Dimmer

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Electronic dimmer with rotary control for resistive loads 100-500W, 230V~ 50/60Hz | 1 | 2CSK1205CH | 2/12 |
| Electronic dimmer with rotary control and with two-way switch for resistive loads 100-500W, 230V~ - 50/60Hz | 1 | 2CSK1204CH | 2/12 |
| Electronic dimmer with pushbutton control for resistive and inductive loads 60-500W, $(60-500 \mathrm{VA}) 230 \mathrm{~V} \sim-50 / 60 \mathrm{~Hz}$ | 1 | 2CSK1207CH | 2/12 |

Technical details from page 5/50

Gas detectors

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Electronic natural gas detector with acoustic and light signal, relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50Hz. <br> Equipped with dedicated frame for installation on type 503 box | 3 | 2CSK1210CH | 1 |
| Electronic LPG gas detector with acoustic and light signal, <br> relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15)-250V~. <br> Power supply 230V~ - 50Hz. <br> Equipped with dedicated frame for installation on type 503 box | 3 | 2CSK1211CH | 1 |
| Natural gas probe replacement module | - | 2CSY1220MC | 1 |
| LPG gas probe replacement module | - | 2CSY1223MC | 1 |

[^18]

2CSK1214CH


2CSK1303CH

| 警 | - | Other devices |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Description | No. modules | Code | Packing/ No. items |
|  | -** | Universal badge switch with location light. | 2 | 2CSK1426CH | 1/12 |
| 2CSK1426CH | 2CSK1216CH | Relay output with NO contact 10A (AC1). Power supply 230V $\sim 50 / 60 \mathrm{~Hz}$ |  |  |  |
|  |  | IR motion detector with twilight sensor for control and adjustment of the operation time of lighting devices. | 1 | 2CSK1216CH | 1/12 |
|  |  | Relay output N0 5A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50/60Hz. |  |  |  |

Technical details from page 5/57

## Chiara - Order codes

## Components for installation



2CSK1601CH


2CSK1606CH

Blank covers

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Blank cover, 1 module | 1 |  | 2CSK1601CH |
| Blank cover, 1 module, with hole for cable outlet $\varnothing 12.5 \mathrm{~mm}$ | 1 | $3 / 45$ |  |

## Supports

| No. |  |  |  |
| :--- | :--- | :--- | :--- |
| Description | modules | Code | Packing/ <br> No. items |
| 2-module support with latching claws for round box | 2 |  | 2CSK1612CH | 20/120

Installation solutions from page 5/23


2CSK1603CH


2CSK1604CH


2CSK1607CH


## Accessories

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Filament lamp, 230V, cable length 100mm. | - | 2CSK1613CH | $0 / 24$ |
| To be used in combination with illuminable switches |  |  |  |

Information on the illumination of switches on page 5/28

## Chiara - Order codes

Other installation solutions


White self-supporting frame


Grey self-supporting frame


Slate grey self-supporting frame


Brown self-supporting frame


## Undernet towers



[^19]Self-supporting frames

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 2-module self-supporting frame, white RAL9016 | 2 | 2CSK1621CH | 1/12 |
| 2-module self-supporting frame, grey RAL7035 | 2 | 2CSK1622CH | 1/12 |
| 2-module self-supporting frame, slate grey RAL7021 | 2 | 2CSK1623CH | 1/12 |
| 2-module self-supporting frame, brown RAL8014 | 2 | 2CSK1624CH | 1/12 |
| 3 -module self-supporting frame, white RAL9016 | 3 | 2CSK1631CH | 1/12 |
| 3-module self-supporting frame, grey RAL7035 | 3 | 2CSK1632CH | 1/12 |
| 3 -module self-supporting frame, slate grey RAL7021 | 3 | 2CSK1633CH | 1/12 |
| 3-module self-supporting frame, brown RAL8014 | 3 | 2CSK1634CH | 1/12 |
| 4-module self-supporting frame, white RAL9016 | 4 | 2CSK1641CH | 1/12 |
| 4-module self-supporting frame, grey RAL7035 | 4 | 2CSK1642CH | 1/12 |
| 4-module self-supporting frame, slate grey RAL7021 | 4 | 2CSK1643CH | 1/12 |
| 4-module self-supporting frame, brown RAL8014 | 4 | 2CSK1644CH | 1/12 |

Installation solutions from page 5/23

## Chiara - Order codes <br> Other installation solutions



Support for DIN bar 1-2-3 modules

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| Support for DIN bar for 1-2-3 modules, versionable | $1 / 2 / 3$ | 2CSK1608CH | $1 / 6$ |

Technical details on page 5/61
Installation solutions from page 5/23

## 2CSK1608CH



Lusy table tower

## Chiara - Order codes

## Wall-mounted enclosures and flush-mounted escutcheon plates



2 CSK 2340 CH


2 CSK 2440 CH


2CSK2155CH 2CSK2255CH


2CSK2355CH


2CSK2455CH


2 CSK 3255 CH

IP40 wall-mounted enclosures

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 1-space enclosure, IP40 | 2 | 2CSK2140CH | 10/40 |
| 2-space enclosure, IP40 | 2 | 2CSK2240CH | 10/40 |
| 3-space enclosure, IP40 | 3 | 2CSK2340CH | 10/30 |
| 4-space enclosure, IP40 | 4 | 2CSK2440CH | 10/20 |

Technical details from page 5/59
Installation solutions from page 5/23

IP55 wall-mounted enclosures

| Description | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| 1-space enclosure, IP55 | 2 | 2CSK2155CH | 10/40 |
| 2-space enclosure, IP55 | 2 | 2CSK2255CH | 10/40 |
| 3-space enclosure, IP55 | 3 | 2CSK2355CH | 8/24 |
| 4-space enclosure, IP55 | 4 | 2CSK2455CH | 8/16 |

Technical details from page 5/59
Installation solutions from page 5/23


2 CSK 3355 CH

IP55 flush-mounted escutcheon plates

| Description | No. <br> modules | Code | Packing/ <br> No. items |
| :--- | :--- | :--- | :--- |
| IP 55 2-module frame, white | 2 | 2CSK3255CH | $1 / 40$ |
| IP 55 3-module frame, white | 3 | 2CSK3355CH | $1 / 40$ |

Installation solutions from page 5/23

## Chiara - Order codes

## Quick selection table for frames

Metallic frames with glossy finish


Glossy bronze
page 5/19


Glossy gold
page 5/19


Glossy chromium page 5/19


Glossy metal black page 5/19

Metallic frames with satin finish


Bronze satin finish
page 5/19


Gold satin finish
page 5/19


Chromium satin finish page 5/19

Stone
page 5/20


Pastel green
page 5/20



Metal black satin finish page 5/19

Technopolymer frames


White
page 5/20


Pastel yellow page 5/20


Sand
page 5/20


Pastel orange page 5/20


Volcano page 5/20


Pastel blue page 5/20

## Chiara - Order codes

## Metallic frames



Glossy bronze colour


Glossy gold colour


Glossy chromium colour


Glossy metal black colour


Bronze satin finish colour


Gold satin finish colour


Chromium satin finish colour

Gold satin finish colour


Metallic frames with glossy finish

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Bronze | 2 | 2CSK0251CH | 1/24 |
|  | 3 | 2CSK0351CH | 1/20 |
|  | 4 | 2CSK0451CH | 1/12 |
|  | 7 | 2CSK0751CH | 1/12 |
| Gold | 2 | 2CSK0253CH | 1/24 |
|  | 3 | 2CSK0353CH | 1/20 |
|  | 4 | 2CSK0453CH | 1/12 |
|  | 7 | 2CSK0753CH | 1/12 |
| Chromium | 2 | 2CSK0215CH | 1/24 |
|  | 3 | 2CSK0315CH | 1/20 |
|  | 4 | 2CSK0415CH | 1/12 |
|  | 7 | 2CSK0715CH | 1/12 |
| Metal black | 2 | 2CSK0217CH | 1/24 |
|  | 3 | 2CSK0317CH | 1/20 |
|  | 4 | 2CSK0417CH | 1/12 |
|  | 7 | 2CSK0717CH | 1/12 |

Technical details and customization on page 5/62

Metallic frames with satin finish

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| Bronze | 2 | 2CSK0252CH | 1/24 |
|  | 3 | 2CSK0352CH | 1/20 |
|  | 4 | 2CSK0452CH | 1/12 |
|  | 7 | 2CSK0752CH | 1/12 |
| Gold | 2 | 2CSK0254CH | 1/24 |
|  | 3 | 2CSK0354CH | 1/20 |
|  | 4 | 2CSK0454CH | 1/12 |
|  | 7 | 2CSK0754CH | 1/12 |
| Chromium | 2 | 2CSK0216CH | 1/24 |
|  | 3 | 2CSK0316CH | 1/20 |
|  | 4 | 2CSK0416CH | 1/12 |
|  | 7 | 2CSK0716CH | 1/12 |
| Metal black | 2 | 2CSK0218CH | 1/24 |
|  | 3 | 2CSK0318CH | 1/20 |
|  | 4 | 2CSK0418CH | 1/12 |
|  | 7 | 2CSK0718CH | 1/12 |

[^20]
## Chiara - Order codes

## Technopolymer frames



White colour


Sand colour


Stone colour


Volcano colour


Pastel yellow colour


Technopolymer frames

| Colour | No. modules | Code | Packing/ No. items |
| :---: | :---: | :---: | :---: |
| White | 2 | 2CSK0201CH | 1/24 |
|  | 3 | 2CSK0301CH | 1/20 |
|  | 4 | 2CSK0401CH | 1/12 |
|  | 7 | 2CSK0701CH | 1/12 |
| Sand | 2 | 2CSK0202CH | 1/24 |
|  | 3 | 2CSK0302CH | 1/20 |
|  | 4 | 2CSK0402CH | 1/12 |
|  | 7 | 2CSK0702CH | 1/12 |
| Stone | 2 | 2CSK0203CH | 1/24 |
|  | 3 | 2CSK0303CH | 1/20 |
|  | 4 | 2CSK0403CH | 1/12 |
|  | 7 | 2CSK0703CH | 1/12 |
| Volcano | 2 | 2CSK0204CH | 1/24 |
|  | 3 | 2CSK0304CH | 1/20 |
|  | 4 | 2CSK0404CH | 1/12 |
|  | 7 | 2CSK0704CH | 1/12 |
| Pastel yellow | 2 | 2CSK0211CH | 1/24 |
|  | 3 | 2CSK0311CH | 1/20 |
|  | 4 | 2CSK0411CH | 1/12 |
|  | 7 | 2CSK0711CH | 1/12 |
| Pastel orange | 2 | 2CSK0212CH | 1/24 |
|  | 3 | 2CSK0312CH | 1/20 |
|  | 4 | 2CSK0412CH | 1/12 |
|  | 7 | 2CSK0712CH | 1/12 |
| Pastel green | 2 | 2CSK0213CH | 1/24 |
|  | 3 | 2CSK0313CH | 1/20 |
|  | 4 | 2CSK0413CH | 1/12 |
|  | 7 | 2CSK0713CH | 1/12 |
| Pastel blue | 2 | 2CSK0214CH | 1/24 |
|  | 3 | 2CSK0314CH | 1/20 |
|  | 4 | 2CSK0414CH | 1/12 |
|  | 7 | 2CSK0714CH | 1/12 |

[^21]Pastel orange colour


Pastel green colour


## Pastel blue colour



## Chiara - Technical details <br> General information

Main technical data and reference standards for the devices in the range

| Component | Reference standards | Basic electrical data* |  |  | Prolonged operation No. changes of position | Resistance to abnormal heat and fire |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Test voltage withstand (V) | Insulation resistance <br> (MW) | Breaking capacity or utilization category |  | Termopressione con biglia $\left({ }^{\circ} \mathrm{C}\right)$ | Glow wire tests <br> ( $\left.{ }^{\circ} \mathrm{C}\right)$ |
| Operating mechanisms | CEI 23-9 <br> (EN 60669-1) | 2000 at 50 Hz <br> for 1 minute | >5 | 1.25 In <br> (200 changes <br> of position) | 40000 <br> at $\ln 250 \mathrm{~V}$ ~ $\cos \varphi=0.6$ | 125 | 850 |
| Socket outlets | CEI 23-5/CEI 23-50/CEI 23-16 <br> (EN 60884-1) | 2000 at 50 Hz <br> for 1 minute | $>5$ | 1.25 In <br> (100 changes <br> of position) | $10000$ <br> at $\ln 250 \mathrm{~V}$ ~ $\cos \varphi=0,8)$ | 125 | 850 |
| Latching relay | CEI 23-9/CEI 23-62 <br> (EN 60669-1/EN 60669-2-2) | 2000 at 50 Hz <br> for 1 minute | $>5$ | - - | $50000$ <br> a In 250V~ $\cos \varphi=0,6)$ | 125 | 850 |
| Monostable relays | CEI 94-4/CEI-EN 61810-1 <br> (EN 60669-1/EN 60669-2-2) | 2000 at 50 Hz <br> for 1 minute | $>5$ | $1.25 \mathrm{ln}$ <br> (200 changes of position) | 50000 <br> at In 250V~ $\cos \varphi=0,6)$ | 125 | 850 |
| Automatic MCBs | CEI 23-3 <br> (EN 60898) | 2000 at 50 Hz <br> for 1 minute | - | $1.5 \ldots 3 \mathrm{kA}$ | 8000 | 125 | 850 |
| Automatic RCDs | CEI 23-95 | 2000 at 50 Hz <br> for 1 minute | - | 1.5...3kA | 4000 | 125 | 850 |
| Supports and frames | $\begin{aligned} & \text { CEI 23-9 } \\ & \text { (EN 60669-1) } \end{aligned}$ | - | - | - | - | 75 | 650 |

*For the rated voltages and currents see the specifications for the individual part codes.

Clamping capacity of the terminals

| Flexible wires | Rigid wires |  | Cable traction resistance of terminals: $>50 \mathrm{~N}$ |  |
| :--- | :--- | :--- | :--- | :--- |
| Min. $0.75 \mathrm{~mm}^{2}$ | Max. $2 \times 4 \mathrm{~mm}^{2}$ | Min. $0.5 \mathrm{~mm}^{2}$ | Max. $2 \times 2.5 \mathrm{~mm}^{2}$ |  |

## Chiara - Technical details

## Installation solutions

Composition method for devices and supports


Specifications of screws and terminals

- Captive screws with open position captive screws with cross and slot head and clamping plate.
- Double input protected terminals for one or two conductors (rigid or flexible).


## Chiara - Technical details <br> Installation solutions

Installation on concrete walls

| No. Modules | Screw distance | Recommended box |
| :---: | :---: | :---: |
| 2 (with claws) | - | 00050 |
| 2 (with screws) | 60 mm | 00050 |
| 3 | 83.5 mm | 1SL006A00 |
| 4 | 108 mm | 00053 |
| 7 | 100 mm | 1SL0064A00 |

Note: For further information on ABB boxes for concrete walls please refer to the catalog 1SLC001001D0905 - Insulating Enclosures and Installation Materials (see page 5/66)

Installation of plasterboard walls


| No. Modules | Screw distance | Recommended box |
| :---: | :---: | :---: |
| 2 (with screws) | - | 10801/10802/10807 |
| 2 (with claws) | 60 mm | 10801/10802/10807 |
| 3 | 83.5 mm | 10804 |
| 4 | 108 mm | Ave 254CG, <br> BTicino PS564N, <br> Gewiss GW24245 <br> Vimar V71604 |
| 7 | 100 mm | Bticino PS567N <br> Gewiss 24246 <br> Vimar V71606 |

Note: For further information on ABB boxes for plasterboard walls please refer to the catalog 1SLC001001D0905 - Insulating Enclosures and Installation Materials (see page $5 / 66$ ).

Protected installation with IP40/55 wall-mounted enclosures


| No. Modules | IP40 enclosure | IP55 enclosure |
| :---: | :---: | :---: |
| 1 (on 2-module enclosure) | 2CSK2140CH | 2CSK2155CH |
| 2 | 2CSK2240CH | 2CSK2255CH |
| 3 | 2CSK2340CH | 2CSK2355CH |
| 4 | 2CSK2440CH | 2CSK2455CH |

The watertight enclosures allow the direct assembly of devices without the aid of supports. The devices are inserted from the rear. See technical details on page $5 / 57$. For further information on IP40/IP55 wall-mounted enclosures, please refer to the catalog 1SLC001001D0905 - Insulating Enclosures and Installation Materials (see page 5/66).

Protected installation with watertight escutcheon plate


IP55 wall-mounted escutcheon plate

| No. Modules | IP55 escutcheon plate |
| :--- | :--- |
| 2 (on a square or round box with screws, center | 2CSK3255CH |
| distance 60 mm ) |  |
| 3 |  |

[^22]
## Chiara - Technical details Installation solutions

Installation on raised floors with Undernet under-floor turrets


Installation on surface mounted boxes


| No. Modules | Wall box | Frame |
| :--- | :--- | :--- |
| 2 | 42096 | Use a 2M self-supporting frame |
| 3 | 41823 |  |
| 3 | 41822 |  |
| 4 | 41830 | Use a 3M self-supporting frame |

Note: The self-supporting frames allow the direct assembly of devices without the aid of supports. The devices are inserted from the rear.
For further information on the wall boxes and duct systems, please refer to the catalog 1SLC800001D0905 - Plastic and Metal Duct Systems (see page 5/66).

Installation on Lusy table towers


| No. Modules | Lusy tower | Frame |
| :--- | :--- | :--- |
| 4 | 10507 | Use a 4M self-supporting frame |

Note: The self-supporting frames allow the direct assembly of devices without the aid of supports. The devices are inserted from the rear.
For further information on the Lusy table towers, please refer to the catalog
1SLC006001D0903 - Under-floor Distribution Systems (see page 5/66).

Installation on DIN rail adapter


| No. Modules | Dedicated adapter |
| :--- | :--- |
| 1 | 2CSK1608CH |
| 2 | 2CSK1608CH |
| 3 | 2CSK1608CH |

Note: The DIN rail adapter allows devices to be assembled without the aid of supports. The devices are inserted from the front. See technical details on page 5/59.

## Chiara - Technical details <br> Selection of lights

| Control devices |  | Lamps |
| :---: | :---: | :---: |
| 2CSK1001CH | Single-pole switch, 16A-250V~ | Filament <br> 2CSK1613CH White <br> 230 V <br> 0.4 W |
| 2CSK1002CH | Double-pole switch, 16A-250V~ |  |
| 2CSK1004CH | Single-pole switch, 16A-250V~, 2 modules |  |
| 2CSK1003CH | Single-pole two-way switch, 16A-250V~ |  |
| 2CSK1007CH | Single-pole two-way switch, 16A-250V~, 2 modules |  |
| 2CSK1010CH | Intermediate switch, 16A-250V~ |  |
| 2 CSK 1008 CH | Intermediate switch, 16A-250V , 2 modules |  |
| 2CSK1005CH | Single-pole push switch NO, 16A |  |
| 2CSK1016CH | Single-pole push switch NC, 16A |  |
| 2CSK1020CH | Single-pole push switch NO with cord pull, 16A with 2.25 m cord |  |
| 2CSK1021CH | Single-pole push switch NC with cord pull, 16A with 2.25 m cord |  |
| 2CSK1022CH | Single-pole push switch 1 NO and 1 NC, 16A, with ON |  |
| 2CSK1023CH | Single-pole push switch 1 NO and 1 NC, 16A, with OFF symbol |  |
| 2 CSK 1024 CH | Single-pole push switch NO, 16A, with red diffuser |  |
| 2CSK1025CH | Single-pole push switch NO, 16A, with green diffuser |  |
| 2CSK1026CH | Single-pole push switch NO, 16A, with orange diffuser |  |
| 2CSK1027CH | Single-pole push switch NO, 16A, with white diffuser |  |
| 2CSK1028CH | Single-pole push switch NO, 16A, with BELL |  |
| 2CSK1029CH | Single-pole push switch NO, 16A, with KEY |  |
| 2CSK1030CH | Single-pole push switch NO, 16A, with STAIR LIGHT |  |
| 2CSK1031CH | Single-pole push switch NO, 16A, with backlit label holder plate |  |
| 2CSK1032CH | Single-pole push switch N0, 16A, with backlit label holder plate, 3 modules |  |


| Signalling devices |  | Lamps |
| :---: | :---: | :---: |
| 2CSK1310CH | Warning light, ORANGE colour | Filament |
| 2CSK1311CH | Warning light, WHITE colour | 2CSK1613CH White |
| 2CSK1312CH | Warning light, RED colour | 230 V |
| 2CSK1313CH | Warning light, GREEN colour | 0.4W |



## Chiara - Technical details

## Control devices

## Switches, two-way switches, intermediate switches and pushbuttons

## Area of application

Control (on and off) of ohmic-inductive loads:

- with filament and fluorescent lamps (corrected and uncorrected);
- dedicated circuits for powered equipment (aspirators, range hoods, shutters, blinds, fans, etc..) and controllable outlets.

To eliminate architectural barriers in creating installations, we recommend the use of luminous controls (Article 4 of Italian Ministerial Decree no. 236 del 14.06.1989).

| Technical specifications |  |
| :---: | :---: |
| Rated voltage | 250V~ |
| Rated current | 10A (16A for pushbuttons) |
| Opening distance of the contacts | > 3 mm |
| Dielectric strength | >2000V~ |

## Reference standards

LV Directive EN 60669-1.

## Customization of the control device keys

The illuminable keys of the Chiara wiring accessories' range are supplied with all most widely used functional symbols.

## Wiring diagrams

The diagrams provided below are the most widely applied installation solutions in creating lighting points.

## Backlighting of the control devices

| Night-time location |  |
| :---: | :---: |
| - | Characteristics <br> - It allows the command key to be identified in the dark. <br> - We recommend the use of white, blue, green or red Chiara lamps. <br> Applications <br> - Bedrooms <br> - Corridors |
| Functional signalling |  |
| 0 | Characteristics <br> - This allows the command key to be identified and the ON/OFF status of a circuit to be signalled in the dark. <br> Applications <br> - General services of a building complex (entrance halls, stair lights, landings etc.) <br> - Public environments (cinemas, theatres etc.) |
| Signalling with symbols |  |
| - | Characteristics <br> - This allows the command key and its specific function to be identified in the dark. <br> Applications <br> - Warehouses, shops, offices <br> - Hotels <br> - Nursing homes, hospitals |
| With warning light |  |
| - | Characteristics <br> - Allows the ON/OFF status of an appliance or a lighting circuit, even at a distance. <br> - Visible from both a front and side position. <br> Applications <br> - Signalling the switching on of lighting points outside the environment in which the control device is installed |

## Chiara - Technical details Control devices

## Example of functional signalling



Warning light on when the switch is OFF (if the switch is in the ON state, the warning light is off while the load is ON ).

## Example of remote signalling



Warning light placed in parallel to the load, of which indicates the ON/OFF state (it is on when the switch is ON).

Instructions for installation in systems with relays and illuminable push switches
The lamps must be connected in parallel.
Using single-pole latching relays 2CSK1012CH, it is possible to connect up to four fluorescent lamps: by adding a $0.94 \mu \mathrm{~F}$ capacitor to the heads of the relay, up to twelve fluorescent lamps can be connected.


The two warning lights switch on and off respectively when the load is in the OFF and ON state.


Two warning lights placed in parallel with the load (they switch on and off with it).

Using double-pole latching relays 2CSK1014CH, it is possible to connect two fluorescent lamps: by adding a $1.41 \mu \mathrm{~F}$ capacitor to the heads of the relay, up to twelve fluorescent lamps can be connected.

## Relays

Relay with latching operation for control and adjustment from multiple lamp points by means of single-pole push switches with NO (normally open) contact.

| Technical specifications |  |
| :--- | :--- |
| Power supply voltage (coil) | 230V $-50 / 60 \mathrm{~Hz}$ |
| Output contact | 2CSK1012CH 1NO / |
|  | 2CSK1014CH 2NO; |
|  | 10A (AC1) / 7A (AC15) - 250V~ |

## Reference standards

EN 60669-1, EN 60669-2-2.

## Wiring diagrams

2CSK1012CH


2CSK1014CH


## Examples of application

The flush-mounted relays of the Chiara wiring accessories' range can be used to implement numerous functions. The example illustrates a disabled bathroom calling system with cancellation via a key operated push switch:


## Chiara - Technical details <br> Socket outlets

## Plug sockets

## Area of application

Powering of household appliances, lighting equipment etc.

## Main features Italian and German standard sockets.

The cells of the sockets are segregated and protected when the plug is disconnected: the live parts are accessible only with the corresponding plug fully inserted.

| Technical specifications |  |
| :--- | :--- |
| Rated voltage | $250 \mathrm{~V} \sim$ |
| Rated current | $10 \mathrm{~A} \circ 16 \mathrm{~A}$ |
| Shuttered and elastic live cells |  |

## Possibility of coupling Chiara sockets with the various types of plugs on the market

$2 \mathrm{P}, 10 \mathrm{~A}$

Plug sockets, 250V~, Italian standard with safety shutters


Plug sockets, 250V~, Italian/German standard with safety shutters and side/central earth


Interlocked socket outlets with automatic MCB


Special sockets


[^23]
## Reference standards

CEI 23-5, CEI 23-50, CEI 23-16 (IEC 60884-1)

[^24]Plug sockets for dedicated lines
Plug sockets for dedicated lines allow outlet points to be differentiated according to their particular application, avoiding incorrect connection of unsupported appliances. Different coloured enclosures (red, orange, green) distinguish them from common power sockets.
There are as yet no standard regulations on the correspondence between the colour of the socket and the type of power supply. In order to distinguish the area of application, the following usage customs are adopted.

## Special sockets

| Description | Code |
| :--- | :--- |
| 2P shaver socket with insulating transformer. Power supply 230V~ - | 2CSK1113CH |
| 50/60Hz. Output voltage 125V~ (American standard 2P socket) |  |
| or 230V ~ (2P socket P11 type) |  |

## Components



The shaver socket incorporates an insulating transformer with a power rating of 20 VA , protected against overload and resistant to short-circuits.
Power supply is guaranteed by a pushbutton that is operated automatically whenever the plug is inserted in the socket. The secondary circuit, to which the cells of the socket are connected, is isolated from the primary power supply circuit by double insulation:
additional protections (shutter devices) on the cells of the socket are therefore superfluous.

Red: continuous power supply with UPS (uninterruptible power supply) through an insulating transformer.

Orange: power supply protected by network-generator unit through an insulating transformer.

Green: safety power supply with network/generator unit.

The socket is suitable for the insertion Italian standard plugs of the P11 type (2P) and American standard plugs (2P). The shaver socket is protected against overload with a thermal interruption device without auto-reclosing.
After the protection is tripped, the cells of the socket are not energized. To reclose the circuit, the plug of the device that caused the overload must be disconnected, waiting a few minutes in order to allow the transformer to cool down.

| Technical specifications |  |
| :--- | :--- |
| Power supply | $230 \mathrm{~V} \sim 50-60 \mathrm{~Hz}$ |
| Output voltage | $230 \mathrm{~V} \sim$ for plugs P11(2P) 2,5 A |
|  | $120 \mathrm{~V} \sim$ for plugs 2P 15 A 125 V~ |
|  | American standard with non- |
|  | polarized flat pins |
| Available power | 20VA |
| Operation with auto-protected | temperature |

## Reference standards

EN 61558-2-5, EN 61000-3-2, EN 55014-1, EN 55014-2.

## Chiara - Technical details <br> Socket outlets

| Description | Code |
| :--- | :--- |
| Flush-mounted USB charger 500-650mA, with male type A connector, | 2 CSK1160CH |
| power supply 230~50/60Hz, output voltage 5V DC |  |

## Components



The flush-mounted USB charger allows you supply and recharge the most common portable electronic devices. Using only a USB cable with Type A male connector it is possible to power mobile phones, smartphones, tablets and cameras that support standard USB power supply (up to 650 mA ), independently of the manufacturer.

## Wiring diagrams



## Caution!

The device absorbs up to 60 mW in the absence of connected electronic devices. To exclude this absorption, it is recommended to use a double-pole switch.

## Operating method

Connect the USB cable with the type A male connector to the charger and the opposite end to the device to be powered. Type A, B, miniUSB and microUSB USB connectors can be used indifferently. The device is now being charged.

Caution: the device supplies power according to the USB data transmission protocol, with a maximum current of 650 mA at $5 \mathrm{~V}=$. Some devices may require a higher power supply current. Look up the manual of the connected device to check its absorption specifications.
The charging time depends on the connected device and may vary compared with the original charger.

## Examples of application



The device is protected against short-circuits by an internal fuse (not replaceable).

## Interlocked socket outlets

| Description | Code |
| :---: | :---: |
| 2P+E socket outlet, 16A - 250V , interlocked with MCB, P17/11 | 2CSK1324CH |
| $2 \mathrm{P}+$ E socket outlet, 16A-250V~, interlocked with MCB, P30 | 2CSK1325CH |
| 2P+E socket outlet, 16A-250V~, with RCD 10mA, P17/11 | 2CSK1326CH |

## Components

Interlocked socket outlets with automatic MCB (PIA)


Interlocked socket outlets with automatic MCD (PID)


Interlocked socket outlets with automatic MCB (PIA)
These sockets are suitable for installation in the system terminations for protection of the load supplied from the outlet against dangers of short circuits and overloads..

Interlocked socket outlets with automatic RCD (PID).
These sockets are suitable for installation in the system terminations for protection of the load supplied from the outlet against dangers of short circuits and overloads, as well as protection of the user against contact voltages. $\approx$ The residual current function with sensitivity of 10 mA also acts in the presence of non-sinusoidal fault currents (alternating currents mixed with unidirectional pulsating currents).
In compliance with installation standards, they are particularly suitable for the protection of:

- terminal user devices in rooms where there is a greater risk of electrocution (bathrooms, showers, etc.)
- sockets that power class 1 users with electronic circuits
- sockets for portable user devices in domestic or similar environments (irons, drills, etc.).


## Operation

The MCB or RCD interlocked with the socket energises the cells of the socket only after the plug has been inserted and automatically cuts off voltage to the socket before the plug is fully extracted.
Therefore the plug is always inserted and extracted without an electrical arc.
The lever of the circuit-breaker can be closed only after the plug is inserted; without the plug, the lever operates without effect and does not close the switch.

Current-time tripping diagrams for circuit-breakers of the Chiara range


## Chiara - Technical details <br> Socket outlets

## Wiring diagrams



2 CSK 1324 CH


2CSK1326CH

| Technical specifications |  |
| :---: | :---: |
| Power supply voltage | $230 \mathrm{~V} \sim-50 \mathrm{~Hz}$ |
| Residual current (sensitivity) | $1 \Delta \mathrm{n} 10 \mathrm{~mA}$ |
| Operation dependent on the line voltage | they must be installed downstream of a general residual current circuitbreaker |
| Thermomagnetic tripping | with characteristic C |
| Double-pole isolation | with 1 protected pole |
| Breaking capacity | 3000 A |
| Rated current corresponding to the standard of the socket |  |
| Type A RCBO for alternating and unidirectional pulsating currents |  |
| Front LED with green light indicates normal operation with the presence of network power supply and contact closed |  |

## Reference standards:

Interlocked socket outlets with MCB:
LV Directive, Standard CEI 23-97.
Interlocked socket outlets with RCD:
LV Directive, Standard CEI 23-96.

## TV/SAT sockets

The TV/SAT coaxial sockets for the Chiara series offer a complete range of products for implementing the terminal part of modern antenna systems. Manufactured fully from die cast Zama, they include a pressure terminal with safety screw in order to guarantee proper grip of the cable. Individual sockets
are available with male IEC or female F bushing, and double demixed sockets with both connection possibilities. Various levels of attenuation are available, ensuring that solutions are available for every type of installation.

## Components



Coaxial cable housing

Attenuation values of the TV/SAT coaxial sockets

| Code | Bushing | Passing attenuation [dB] |  |  | Bridging attenuation [dB] |  |  | Inverse attenuation | Direct current transit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $5 \div 40$ | $47 \div 862$ | 950 $\div 2402$ | $5 \div 40$ | $47 \div 862$ | 950 -2400 | [dB] |  |
|  |  | MHz | MHz | MHz | MHz | MHz | MHz |  |  |
| 2CSK1117CH | Male IEC Terr. | - | - | - | 0,5 | 0,5 | 0,5 | - | NO |
| 2CSK118CH | Male IEC Terr. | - | - | - | 0,5 | 0,5 | 0,5 | - | YES |
| 2 CSK 1132 CH | Male IEC Terr. | $\leq 2$ | $\leq 2$ | $\leq 3$ | $\leq 7$ | $\leq 7$ | $\leq 8$ | $\geq 35$ | NO |
| 2CSK1136CH | Male IEC Terr. | $\leq 2$ | $\leq 2$ | $\leq 2,5$ | $\leq 10,5$ | $\leq 10$ | $\leq 11$ | $\geq 35$ | NO |
| 2CSK1137CH | Male IEC Terr. | $\leq 1,5$ | $\leq 1,5$ | $\leq 2,5$ | $\leq 14,5$ | $\leq 14$ | $\leq 14,5$ | $\geq 35$ | NO |
| 2CSK1138CH | Male IEC Terr. | $\leq 1,5$ | $\leq 1,5$ | $\leq 2,5$ | $\leq 18,5$ | $\leq 18$ | $\leq 18,5$ | $\geq 35$ | NO |
| 2CSK1119CH | Female SAT | - | - | - | $\leq 0,5$ | $\leq 0,5$ | 0,5 | - | YES |

Attenuation values of double demixed TV/SAT coaxial sockets

| Code | Bushing | Passing attenuation [dB] |  | Bridging attenuation [dB] |  | Inverse attenuation [dB] | Direct current transit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | TV | SAT | TV | SAT |  |  |
| 2CSK1133CH | Male IEC Terr. Female SAT | - | - | $\leq 2$ | $\leq 2$ | - | YES |
| 2CSK1120CH | Male IEC Terr. Female SAT | $\leq 4$ | $\leq 5$ | <6,5 | $\leq 7$ | $\geq 35$ | YES |
| 2CSK1132CH | Male IEC Terr. Female SAT | $\leq 3$ | $\leq 4,5$ | $\leq 10$ | $\leq 11$ | $\geq 35$ | YES |
| 2CSK1131CH | Male IEC Terr. Female SAT | $\leq 2$ | $\leq 3$ | $\leq 14$ | $\leq 15$ | $\geq 35$ | YES |
| 2CSK1139CH | Male IEC Terr. Female SAT | $\leq 1$ | $\leq 2$ | $\leq 18$ | $\leq 19$ | : 235 | YES |

## Chiara - Technical details Socket outlets

Instructions for installation

5



## Direct socket



2CSK1117CH
2CSK1118CH
2CSK1119CH
2CSK1133CH

Feedthrough
socket


Feedthrough socket converted to terminal socket


Technical specifications
Manufactured from die cast Zama.
Pressure terminal.
Available with bushing of type: male CEI, female F.

Reference standards
EN 50083-1, EN 50083-2, EN 50083-4

## Wiring diagrams

TV system with branched sockets
from the central unit


## Chiara - Technical details Socket outlets

## Network and telephone sockets

The range includes devices for the implementation of telephone and computer networks, RJ11 4-contact telephone connectors for telephones, telefax, modems and RJ12 6 -contact telephone connectors for intercommunicating telephone installations.
RJ45 category 5 e and 6 connectors are also available. These devices allow computer equipment (computers, modems, printers, etc) to be connected in a network and connection of multimedia devices.

## Components



| Code | Connector type | No. contacts | Cable type | Shielded | Category | Speed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2CSK1121CH | RJ11 | 4 | twin core | NO | 3 | up to $16 \mathrm{Mb} / \mathrm{s}$ |
| 2CSK1122CH | RJ12 | 6 | twin core | NO | 3 | up to $16 \mathrm{Mb} / \mathrm{s}$ |
| 2CSK1124CH | RJ45 | 8 | UTP | NO | 5 e | up to $100 \mathrm{Mb} / \mathrm{s}$ |
| 2CSK1125CH | RJ45 | 8 | FTP | YES | 5 e | up to $100 \mathrm{Mb} / \mathrm{s}$ |
| 2CSK1127CH | RJ45 | 8 | UTP | NO | 6 | up to $10 \mathrm{Mb} / \mathrm{s}$ |
| 2CSK1128CH | RJ45 | 8 | FTP | YES | 6 | up to $10 \mathrm{Mb} / \mathrm{s}$ |

FTP = cable shielded with aluminium tape
UTP = unshielded cable

## Instructions for installation

Unshielded connectors:

1. wire the connector making sure that the connection terminals match;
2. operate the lever wiring device on the connector;
3. latch the connector on the adapter and proceed with the installation on the frame.

Shielded connectors:

1. wire the connector making sure that the connection terminals match;
2. position the cover of the connector and squeeze with pliers to make sure the contacts are tight;
3. apply the shielding, ensuring insulation of the connector;
4. latch the connector on the adapter and proceed with the installation on the support.

Keystone adapter 2CSK1135CH:
the structured wiring systems for data transmission are distinguished by their flexibility of use, installation independent of location and the use of the terminal outputs. The suppliers of components for wiring, when dealing with installations of a certain complexity and size, must be in able to show certification of conformity of the installation, directly or through accredited installations.
ABB meets this requirement with the adapter of the Chiara wiring accessories' range, which is compatible with various Keystone coupling connectors available on the market and enables integration between the Chiara wiring accessories' range and data transmission components of systems with structured wiring.

1. latch the connector on the adapter and proceed with the installation on the frame.


Unshielded connectors


Shielded connectors


Keystone adapter 2CSK1135CH

Wiring diagrams for RJ11 and RJ12 telephone connectors


For telephone use, 2 wires of the telephone connectors, use the central contacts 3-4

Connection in series


Terminals 3 and 4 are connected via the internal contact to the telephone (closed with the receiver hung up). Lifting the receiver causes interruption of the downstream line (L1), guaranteeing secrecy of the conversation.


Each socket captures the line signal (there is no secrecy of conversation).


Note: extracting one of the plugs causes disconnection of sockets located downstream. In order to prevent this, you just need to insert a plug in the socket from which the telephone device was removed with a jumper between terminal 3 and 4 .

Wiring diagrams for RJ45 data connectors
To obtain the EIA/TIA 568A or 568B configuration included below, follow the colour code shown on the terminal box.



| Technical specifications |  |
| :--- | :--- |
| Connections | With perforated insulation |
| Conductors | non-butted, inserted in the appropriate blade slots |

## Reference standards

EN 50083-1, EN 50083-2, EN 50083-4, ISO 11801.

## Chiara - Technical details Protection devices

Fuse holders and overvoltage limiters

| Description | Code |
| :--- | :--- |
| Fuse holder, for fuses $\emptyset 5 \times 20 / \emptyset 6.3 \times 32 \mathrm{~mm}$, max. 16A | 2 CSK1301CH |

## Replacement of the fuse

After removing the removable cover with a screwdriver, proceed with replacement as in the drawing:

## Components



## Replacement fuses

Fuses with dimension $\varnothing 5 \times 20 \mathrm{~mm}$ or $\varnothing 6.3 \times 32 \mathrm{~mm}$ can be installed.
The use of the fuses on page $4 / 23$ is recommended.


| Description | Code |
| :--- | :--- |
| Overvoltage limiter, 75J, 230V~ | 2CSK1315CH |

## Components



This device provides protection for power supply sockets for all types of household appliances and in particular for those containing electronic components (Hi-Fi, TV, computers, video recorders, programming mechanisms, cash registers etc.) from damage caused by over-voltages present in power supply networks.

## Instructions for installation and operation

The protection device is housed in the removable front cover. To replace it, after disconnecting the voltage from the installation, extract the cover from the limiter and separate the SPD block from the plastic cover, levering it with a screwdriver. Replace it with spare part 2CSY1302MY.


## Functions

When the red warning light is on, it indicates that the protection has tripped and needs to be replaced (the load remains energised but it is not protected).

## Examples of application

Over-voltages in domestic networks can be caused both by atmospheric interference and by control, operation or programming of connected inductive loads (air conditioners, burner motors, water pumps, reactors of fluorescent or discharge lamps, washing machines, etc.).


## Wiring diagram



| Technical specifications |  |
| :---: | :---: |
| Residual current limiting | protection (line-to-neutral) |
| Rated voltage (Un) | 120-230 V $50 / 60 \mathrm{~Hz}$ |
| Number of ports | 1 |
| Rated load current IL | 16 A |
| Tensione max continuativa (Uc) | 250 V ~ |
| Test class | III |
| Protection level (Up) | < $1,2 \mathrm{kV}$ |
| Test voltage of combined wave generator Uoc | $2,5 \mathrm{kV}$ |
| Rated flashover current (In) | $1 \mathrm{kA}(8 / 20 \mathrm{~ns}) 20$ times |
| Max flashover current (Imax) | $2 \mathrm{kA}(8 / 20 \mathrm{~ns})$ once |
| Temperature range | $-5^{\circ} \mathrm{C}-+40^{\circ} \mathrm{C}$ |
| Internal integrated protection | fuse |

## Reference standards

LV Directive, Standard EN 61643-11

## Miniature circuit-breakers and Residual current circuit-breakers

| Description | Code |
| :---: | :---: |
| Automatic MCB, 1P+N, C6, breaking capacity 1.5kA | 2CSK1304CH |
| Automatic MCB, 1P+N, C10, breaking capacity 3kA | 2CSK1305CH |
| Automatic MCB, 1P+N, C16, breaking capacity 3kA | 2CSK1306CH |
| Automatic RCD, 1P+N, C6-10 mA, breaking capacity 1.5 kA | 2CSK1307CH |
| Automatic RCD, 1P+N, C10-10 mA, breaking capacity 3kA | 2CSK1308CH |
| Automatic RCD, 1P+N, C16-10 mA, breaking capacity 3kA | 2CSK1309CH |
| Automatic RCD, 1P+N, C6-30 mA, breaking capacity 1.5 kA | 2CSK1328CH |
| Automatic RCD, 1P+N, C10-30 mA, breaking capacity 3kA | 2CSK1329CH |
| Automatic RCD, 1P+N, C16-30 mA, breaking capacity 3kA | 2CSK1330CH |

Components

## Automatic RCD



## Automatic MCB



Automatic MCBs and automatic RCDs provide protection against over-currents and earth fault currents of terminal circuits. Protection class with the device embedded in smooth vertical walls with the associated support, frame and blank covers, if required: IP41.

## Instructions for installation and operation

Use in dry and dust-free locations.

- Temperature between $-5^{\circ} \mathrm{C}$ and $+40^{\circ} \mathrm{C}$.
- Suitability for installation on the supply side of a socket or device for the protection against overloads and short circuits of the equipment and, at the same time, for protection of the users against contact voltages.
- The sensitivity (operating residual current) of 10 mA and
the suitability for operation also in the presence of nonsinusoidal fault currents (alternating currents mixed with unidirectional pulsating currents) allow the protection devices of the Chiara range to be classified as "type A RCBOs" (identified by the symbol), particularly suitable for the protection of:
- terminal uses in rooms where there is a greater risk of electrocution (bathrooms, showers, kitchens etc.), as prescribed by the CEI standards;
- class I consumer power sockets with electronic circuits (computers and accessories, electronic scales, electronic typewriters, cash registers etc.). In domestic and service industry networks non-sinusoidal fault currents are often present because of the use of electronic boards in domestic appliances.
- The electromagnetic part of the circuit breakers guarantees protection against overloads and short circuits; the residual current part of the devices, for current values of 10 mA , guarantees protection of persons against the contact voltages.
- Closing the circuit: manually press the lever of the circuit breaker at the "I" symbol.
- Opening the circuit:
- manually, by pressing the lever of the circuit breaker at the " 0 " symbol or the yellow test button (test);
- automatically, due to thermal (overload), magnetic (short-circuit) or residual current (earth fault current) tripping.
- The device must not be used as a control breaker.
- To check that the circuit breaker is installed and behaving correctly, the yellow test button (test) must be pressed every month. If the device is correctly installed and powered, the circuit breaker trips; if it does not, you must immediately inform the installation technician because safety will be compromised. After the test, you need to press the main key near the "l" symbol in order to reset the circuit breaker.
- Thermomagnetic tripping with characteristic "C" (see the current-time tripping diagram provided below).
- Double-pole operation with one protected pole + N, type A for alternated fault currents and unidirectional pushbuttons.
- Operating residual current (sensitivity) I 1 n 10 mA ; the circuit breaker must be connected according to the electrical diagram provided below.


## Functions

- Green front LED for signalling normal operation: presence of line voltage and closed circuit.
- Internal temperature checking: the circuit breaker automatically operates the opening of the circuit as soon as the safety threshold is exceeded.
- Self-test function to check the electrical continuity of the internal residual current circuit (in the absence of continuity, the circuit breaker will open).
- Opening the circuit if voltages occur higher than the predefined threshold at the circuit breaker input(for example, in 380V ~ three-phase systems the circuit breaker prevents an erroneous "line-to line" connections, instead of "line-to-neutral").


## Characteristics

- Main lever operated control part: "।" symbol (closed circuit); " 0 " symbol (open circuit).
- Front LED for signalling the presence of line voltage and closed circuit.
- Yellow test button (test) for checking that the device is functioning properly.
- Terminals protected with captive screws for clamping two conductors up to $4 \mathrm{~mm}^{2}$ each
- Construction of the thermo magnetic part as prescribed by Standards EN 60898 and IEC 60898.
- Construction of the residual current part according to Standards EN 61009 and IEC 61009.
- Power supply voltage: $120-230 \mathrm{~V} \sim \pm 10 \% 50-60 \mathrm{~Hz}$.

The supply line can be connected to either the upper or the lower terminals of the circuit breaker, which must be installed downstream of a general residual current circuit breaker (Standard CEI 64-8/5, paragraph 532.2.2.2).
The line voltage determines operation (Standard IEC 1009-1, paragraph 4.1.2).

## Wiring diagram



## Characteristic curves



## Current-time tripping diagrams for circuit-breakers

 of the Chiara range

## Chiara - Technical details Protection devices

## Examples of application

5


| Technical specifications |  |  |
| :---: | :---: | :---: |
| Type of circuit breaker | MCB | RCD |
| Rated voltage | 230 V | 230 V |
| Rated frequency | $50 \div 60 \mathrm{~Hz}$ | $50 \div 60 \mathrm{~Hz}$ |
| Rated residual current | - | 10 mA or 30 mA |
| Short-circuit breaking capacity | $\begin{aligned} & 6 A \quad 1500 A \\ & 10 A ~ 3000 A \\ & 16 A \quad 3000 A \end{aligned}$ | $\begin{aligned} & 6 A \quad 1500 A \\ & 10 A 3000 A \\ & 16 A 3000 A \end{aligned}$ |
| Correnti nominali | 6-10-16A | 6-10-16A |
| Number of poles | $1 \mathrm{P}+\mathrm{N}$ | $1 \mathrm{P}+\mathrm{N}$ |
| Tripping characteristic |  |  |
| - Overcurrent protection | Type C | Type C |
| - Limitation class | 3 | 3 |
| - Residual current protection | - | Class A |

## Reference standards

Thermomagnetic: EN 60898-1 - Differential: IEC 61009-1

## Chiara - Technical details Safety and comfort devices

## Thermostats and time-programmed thermostats

| Description | Code |
| :--- | :--- |
| Summer/winter electronic thermostat, relay output, | 2 CSK1202CH |
| 1 contact N0 8A (AC1)/2A (AC15) - Power supply 230V~50/60Hz |  |

## Components

號 While adjusting the value of the DESIRED TEMPERATURE,
it value is displayed (flashing).
About 5 seconds after the last time the keys were pressed, it returns to displaying the AMBIENT TEMPERATURE.


RELAY ENERGISED icon.
This icon is displayed when power is requested from the system controlled by the thermostat. The type of icon displayed ( $(0)$ or depends on the operating mode of the thermostat (heating or air conditioning).

Key to INCREASE the DESIRED TEMPERATURE (in steps of $0.5^{\circ} \mathrm{C}$ ). The maximum value that can be set is $30^{\circ} \mathrm{C}$.
Key to DECREASE the
DESIRED TEMPERATURE (in steps of $0.5^{\circ} \mathrm{C}$ ) The minimum value that can be set is $5.0^{\circ} \mathrm{C}$ (anti-freeze temperature)

ANTI-FREEZE icon. This is displayed when the DESIRED TEMPERATURE is set to the minimum value $\left(5.0^{\circ} \mathrm{C}\right)$

The electronic thermostats of the Chiara series are equipped with a summer/winter switch for heating and air conditioning systems.

## Characteristics

- Display of the current ambient temperature
- Display of the comfort temperature
- Display of the night-time temperature set
- Possibility to increase or decrease of temperature in steps of $0.5^{\circ} \mathrm{C}$
- Minimum configurable value that can be set $5^{\circ} \mathrm{C}$ (anti-freeze temperature) and maximum configurable value $30^{\circ} \mathrm{C}$
- Display of the operating status of the thermostat by means of symbols
- Anti-freeze function set to $5^{\circ} \mathrm{C}$


## Instructions for installation and operation

For correct operation, the thermostat must be installed at a height of approximately 1.5 metres from the floor, on internal walls, protected from direct sunlight and from any thermal interference such as heaters, lamps, televisions or any object that generates heat.
This device for controlling heating or air conditioning systems, uses a special technique that allows greater stability of the ambient temperature to be achieved while guaranteeing better comfort.

## Areas of application

The environmental thermostats can be used for both heating and conditioning systems to control burners, pumps, valves, and refrigeration compressors.

## Wiring diagrams



| Technical specifications |
| :--- |
| Power supply |
| Consumption |
| Output |
| Operating temperature |
| Adjustment range |
| Precision |
| Area of use |
| Type of adjustment |
| Proportional band $0^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$ |
| from $+5^{\circ} \mathrm{C}$ to $+30^{\circ} \mathrm{C}$ |
| $15 \%-50 \mathrm{~Hz}$ |

## Reference standards

EN60730-1, EN60730-2-9, EN61000-3-2, EN61000-3-3, EN55014-1,EN55014-2

## Chiara - Technical details Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Summer/winter electronic time-programmed thermostat with | 2 CSK1201CH |
| 4 temperature levels, relay output, $1 \mathrm{NO} / \mathrm{NC}$ change-over contact |  |
| 8 A (AC1)/2A (AC15) - Power supply $230 \mathrm{~V} \sim 50 / 60 \mathrm{~Hz}$ |  |

## Components

5

Used in heating and air conditioning systems, the electronic time-programmed thermostats of the Chiara series include the possibility of summer/winter switching and the choice four levels of temperature: comfort, activity, reduction and anti-freeze. Each level is already preset in the memory of the device according to specific standards, that can be modified with the maximum simplicity of according to daily needs. On the display, values are displayed in real time for the programme activated, the current temperature, the time and the status of all the other functions set. It is possible to programme the desired temperature for every hour of the day (programming at 30 minute intervals is also possible), and for every day of the week. In addition, using a special function, the time-programmed thermostat of the Chiara series is able to automatically advance or delay switching on or off of systems in order to reach the ideal temperature exactly at the moment for which it was programmed.
Adjustment of the thermal residual current device from $0.2^{\circ} \mathrm{C}$ to $2^{\circ} \mathrm{C}$.

## Characteristics

- Preset, adjustable and modifiable temperature levels: comfort, activity, reduction, anti-freeze fixed at $+5^{\circ} \mathrm{C}$
- Change-over switching: winter for heating, summer for air conditioning
- Limitation of the temperature values that can be set
- Possibility to change at any time from comfort temperature to activity, reduction or anti-freeze
- Display of the time and the ambient temperature
- Temporary or permanent manual operation
- Deletion from memory or modification of all the set information (day, time, temperature levels, etc.)
- Availability of a totally free program, which can be programmed according to the strictest personal requirements
- Possibility to suspend the program in progress for a set time cycle (maximum 999 hours)
- Connection to a telephonic programming device for remote control
- Possibility to activate the pump for 2 minutes every day of the year
- Signalling of faults during operation of the installation (for example, boiler blocked)
- Signalling that the battery for maintaining data in memory is low


## Preset temperature settings

- T1 Comfort temperature $20^{\circ} \mathrm{C}$ adjustable
- T2 Activity temperature $18^{\circ} \mathrm{C}$ adjustable
- T3 Reduction temperature $16^{\circ} \mathrm{C}$ adjustable
- T Anti-freeze temperature $5^{\circ} \mathrm{C}$ fixed


## Shown on the display

- Days, hours, minutes
- Ambient temperature detected
- Temperature levels
- Daily programming
- Type of operation: manual, automatic, summer, winter


## Programming

- 4 fixed programs
- 1 free program
- Programming at intervals of 30 minutes
- Holidays program
- Switching on or off with automatic management


## Areas of application

In residential applications, such as apartments and villas with independent heating, apartments with centralized heating, apartments or villas with independent air conditioning. In the services sector in environments equipped with air conditioning systems with fan coils and in environments equipped with centralized heating and zone valves.

## Wiring diagrams

Example of connection to a motorized solenoid valve


230V~

Example of connection to a boiler and telephonic programmer


| Technical specifications |  |
| :---: | :---: |
| Power supply voltage | 230 V - 50/60 Hz |
| Maintenance of programs during power outages | 72 hours minimum |
| Output contact | NO/COM/NC 8(2)A / 250 V ~ |
| Type of insulation | Class II |
| Protection class | IP 30 (flush-mounted) |
| Temperature adjustment range | from $+5^{\circ} \mathrm{C}$ to $+39^{\circ} \mathrm{C}$ |
| Temperatures setting resolution | $0.5{ }^{\circ} \mathrm{C}$ |
| Temperature display resolution | $0 .{ }^{\circ} \mathrm{C}$ |
| Thermal gradient | $\max 1^{\circ} \mathrm{K} / 15 \mathrm{~min}$. |
| Differential operation | T modifiable from $0,2^{\circ} \mathrm{C}$ to $2^{\circ} \mathrm{C}$ |
| Updating of the temperature display | Once every 60 seconds |
| Operating temperature limits | $-5^{\circ} \mathrm{C}+50^{\circ} \mathrm{C}$ |

## Reference standards

LVD EN60730-2-7, EN60730-2-9, EMC EN60730-2-7, EN60730-2-9

## Chiara - Technical details <br> Safety and comfort devices

## Dimmer

Loads that can be controlled with the dimmer

| Dimmer type |  |  |  |
| :--- | :--- | :--- | :--- | :--- |


| Description | Code |
| :--- | :--- |
| Electronic dimmer with rotary control for resistive loads | $2 \mathrm{CSK1205CH}$ |
| $100-500 \mathrm{~W}, 230 \mathrm{~V} \sim-50 / 60 \mathrm{~Hz}$ |  |

## Components



Electronic dimmer with rotary control for resistive loads 100500W 230V~50/60Hz (visible in the dark).

## Operation

The load can be controlled and adjusted by rotating the knob. The light intensity of the location LED is attenuated as the brightness of the controlled lamps increases.

## Wiring diagram

The connection can be made between phase and neutral or between phase and phase, always in series with the load.

Control with dimmer


Control with a switch and adjustment with a dimmer


| Technical specifications |  |  |
| :--- | :--- | :--- |
| Rated voltage | $230 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ | $110 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| Resistive load power | $100-500 \mathrm{~W}$ | $50-250 \mathrm{~W}$ |
| Inductive load power |  | $100-500 \mathrm{VA}$ |
| Technology | TRIAC | $50-250 \mathrm{VA}$ |
| Operating temperature | $-5^{\circ} \mathrm{C} \div+35^{\circ} \mathrm{C}$. |  |
| Adjustable load | Filament and halogen lamps |  |

## Reference standards

CEI 23-9 (EN 60669-1)

| Description | Code |
| :--- | :--- |
| Electronic dimmer with pushbutton control for resistive and inductive | 2 CSK1207CH |
| loads 60-500W, (60-500VA) 230V - 50/60Hz |  |

## Components



Electronic dimmer with pushbutton control for resistive and inductive loads 60-500W 60-500VA 230V~ -50/60Hz (visible in the dark).

## Operation

The load can be controlled and adjusted using a pushbutton. The light intensity of the location LED is attenuated as the brightness of the controlled lamps increases.
The load can be turned on, adjusted and turned off using the pushbutton present on the dimmer or with normal non-luminous NO pushbuttons connected to the dimmer.

- Storage of the adjustment set when the load was switched off (apart from network outages).
- Switch-on and switch-off of the load is gradual.
- Pressing the pushbutton quickly causes the load to be switched on or off. Adjustment is obtained by keeping it pressed. To reverse the direction of adjustment, interrupt and then resume pressing the pushbutton.
- If the pushbutton is pressed approximately between 0.3 s and 1 s , the dimmer will light up the controlled lamps, automatically and gradually, to their maximum brightness.


## Wiring diagram

The connection can be made between phase and neutral or between phase and phase, always in series with the load.

Control and adjustment with a dimmer pushbutton


Control and adjustment with a dimmer pushbutton and NO button connected in parallel


## Reference standards

CEI 23-9 (EN 60669-1)

## Chiara - Technical details <br> Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Electronic dimmer with rotary control and with two-way switch for <br> resistive loads $100-500 \mathrm{~W}, 230 \mathrm{~V} \sim-50 / 60 \mathrm{~Hz}$ | 2CSK1204CH |

## Components



Line voltage presence indicator light

Electronic dimmer with rotary control and two-way switch for resistive loads 100-500W 230V~ -50/60Hz
(visible in the dark).

## Operation

The load is controlled directly by means of a pressed two-way switch. Adjustment is performed by rotating the knob.
The light intensity of the location LED is attenuated as the brightness of the controlled lamps increases.
Once the desired lighting level has been set, pressing the knob will switch the light source off, while pressing it again will switch it back on at the set lighting level.

## Wiring diagram

The connection can be made between phase and neutral or between phase and phase, always in series with the load.

Control and adjustment with a dimmer


Control with two-way switch and dimmer, adjustment with dimmer


Control with two-way switch, intermediate switch and dimmer, adjustment with dimmer


| Technical specifications |  |  |
| :--- | :--- | :--- |
| Rated voltage | $230 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ | $110 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| Resistive load power | $100-500 \mathrm{~W}$ | $50-250 \mathrm{~W}$ |
| Inductive load power | $100-500 \mathrm{VA}$ | $50-250 \mathrm{VA}$ |
| Technology | TRIAC | TRIAC |
| Operating temperature | $-5^{\circ} \mathrm{C} \div+35^{\circ} \mathrm{C}$. |  |
| Adjustable load | Filament and halogen lamps |  |

Reference standards
CEI 23-9 (EN 60669-1)

## Gas detectors

| Description | Code |
| :---: | :---: |
| Electronic natural gas detector with acoustic and indicator signal, relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15) - 250V~. <br> Power supply 230V~ - 50Hz. <br> Equipped with dedicated frame for installation on type 503 box | 2CSK1210CH |
| Electronic LPG gas detector with acoustic and indicator signal, relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50Hz. <br> Equipped with dedicated frame for installation on type 503 box | 2CSK1211CH |

## Components




Yellow LED 2 - Replacement of the probe module (after the first 5 years) replacement of the entire product (after another 5 years) consisting
of the power supply module and the replaced probe module

Green LED - Socket without network
"Test/Reset" key: cancellation of the alarm memory, silencing the probe module or entire product replacement alarm, test to check the installation

Red LED Alarm tripping / alarm memory completed

Holder for the label specifying the probe module replacement date

The wiring accessories natural gas (CH4) or LPG gas detectors, flush-mounted with 3 modules ( 503 box embedded in the wall) contribute to guarantee the safety of civil environments where gas operated domestic appliances are installed, such as: boilers, cookers.
The equipment consists of a fixed power supply module and removable sensor module, which must be replaced after 5 years of continuous use. This allows a saving on the purchase and installation costs, with a lower impact on the environment due to the extension of the life time of the power supply/relay module for a further 5 years.

## Positioning of the detector

The installation of the gas detector does not exonerate users from observance of all current laws and standards in the country of installation regarding the specifications, installation and use gas powered equipment, the ventilation of rooms and the release of combustion products.


- Install the natural gas detector at a maximum of 30 cm from the ceiling
- Install the LPG detector at a maximum of 30 cm from the floor surface.
- Install the detectors between 1 m and 4 m from the gas appliances.
- Do not install the detectors outdoors or in places exposed to atmospheric agents
- Do not install the detectors close to: sinks, air intakes, heating and air conditioning devices, windows and ventilation devices; in addition, the detectors must not be installed in closed spaces, such as behind a curtain or inside a cabinet.


Illustrative example: installation with 3 gas detectors (natural gas) that command the solenoid valve for shutting off the gassupply.

## Chiara - Technical details Safety and comfort devices

Extraction of the probe module (for example: to replace it) CAUTION: always deactivate the line voltage 230V~

1. Remove the frame.
2. Delicately insert the flat blade of a small screwdriver and use it as a lever to uncouple the sensor module.
3. Rotate the sensor module upwards in order to uncouple it completely.

Replacement probe modules:
2CSY1220MC: Natural Gas replacement probe module 2CSY1223MC: LPG Gas replacement probe module


## Characteristics

- Devices equipped with a control circuit with microprocessor that performs self-diagnosis tasks to ensure the perfect efficiency of the sensor over time.
- Sensor equipped with a special selective filter in order to avoid alarms in response to the presence of gas vapours that are not meant to be detected, such as steam from cooking, vapours from cleaning fluids etc.
- Devices equipped with an operating time meter, in order to signal the necessary replacement of the sensor module after the firsts 5 years of use.
- Luminous (red LED) and acoustic alarm signal.
- TEST (to verify that the device is operating properly) and Reset system with a single pushbutton.
- The gas detectors are equipped with an output relay that can command a valve to shut off the distribution of gas.

| Key to signals |  |
| :---: | :---: |
| Luminous LED | Acoustic BUZZER |
| $\checkmark$ off | - off |
| flashing | 4))) intermittent |
| $\Longrightarrow$ on, fixed | - |

## Reference standards

LVD CEI 216-8 - EMC EN 50270

## Wiring diagrams

CAUTION: the power supply network must incorporate a device to guarantee omnipolar disconnection.
The detector must be powered by a voltage of $230 \mathrm{~V} \sim 50 \mathrm{~Hz}$ with continuity in order to guarantee maximum safety and correct signalling of replacement within the declared time limits.
For the electrical connections, bring cables with a maximum cross-section of $2.5 \mathrm{~mm}^{2}$ to the terminals of the detector.

The diagrams (illustrative examples) show the position of the relay contacts at rest (no alarm).

## Connection

 with solenoid valve normally closed

Connection with solenoid valve normally open


| Technical specifications |  |
| :---: | :---: |
| Power supply voltage | 230 V~ +/- 10\% 50 Hz |
| Solenoid valve command relay | 1 potential-free change-over contact |
| Capacity of relay contacts (max) | 6 (2) A 250 V ~ |
| Protection class | 1 P 40 |
| Type of insulation | Class II I |
| Area of application | Domestic - type A |
| Semiconductor sensor | Installed inside the probe module |
| Operating temperature limits | $-10^{\circ} \mathrm{C} \div+40^{\circ} \mathrm{C}$ |
| Operating humidity | 90\% UR (maximum) |
| Types of gas detected | Natural Gas - with model for natural gas LPG - with model for LPG gas |
| Alarm tripping | 10\% LIE (Lower Explosiveness Limit) For both models |
| Acoustic alarm | 85 dB at 1 m |
| Sensor warm-up time at switch-on | 1 minute |
| Storage temperature limits | $-15{ }^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |

## Emergency lighting

| Description | Code |
| :--- | :--- |
| LED light for emergency lighting or steplight. | 2CSK1303CH |
| Charge reserve up to 3 h and recharge time 12h. |  |
| Power supply 230V -50 Hz. |  |
| Equipped with dedicated frame for installation on type 503 box |  |

## Components



High efficiency LED-lit emergency device for embedded installation. Dimensions of 3 modules. Suitable for installation of frames of the Chiara wiring accessories' range.

## Instructions for installation and operation

The light provides 6 distinct operating modes, that can be set by programming.

| Mode | Description | Battery life | Terminals 1 and 2 |
| :---: | :---: | :---: | :---: |
| 1 | inhibition not activated | 1h | Switch-on / switch-off / adjustment |
| 2 | inhibition not activated | 2h | Switch-on / switch-off / adjustment |
| 3 | inhibition not activated | 3h | Switch-on / switch-off / adjustment |
| 4 | Inhibition activated | 1 h | Connection for inhibition switch |
| 5 | Inhibition activated | 2 h | Connection for inhibition switch |
| 6 | Inhibition activated | 3h | Connection for inhibition switch |

To access programming mode you need to connect the batteries using the appropriate connector: the yellow LED will light up and the green LED will flash a number of times equal to the mode set (for example, 2 flashes=mode 2). This sequence will be repeated 3 times.
If you wish to change the operating mode, press the transparent diffuser: the yellow LED will switch off for a fraction of a second to indicate that the key has been pressed and the green LED will indicate the value of the new mode by the number of flashes.

Each time the diffuser is pressed, it increases the operating mode by one unit. After three cycles of displaying the mode, the device will automatically complete the programming procedure, store the mode that has been set and the GREEN and YELLOW LEDs will switch off.
In modes 1-2-3 it is possible to adjust the lighting level (dimmering) by pressing the transparent diffuser.

## Functions

The device is equipped with 2 signalling LEDs:

| Green LED | Meaning |
| :--- | :--- |
| Flashing | Apparatus connected to the electrical network being |
| On | Apparatus connected to the electrical network being |
|  | recharged for maintenance |
| Off | Apparatus in emergency state. |
|  |  |
| Yellow LED | Meaning |
| On | (monthly test NOT passed) |
| Off | No malfunction |

## Wiring diagram

Modes 1, 2, 3

## Reference standards

EN 60598-2-22

## Chiara - Technical details Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Removable anti-blackout light, 230V~. Charge reserve 4.5 h and | $2 \mathrm{CSK1214CH}$ |
| recharge time 10-20h. To be combined with 230V~ plug sockets; |  |
| particularly recommended for codes 2CSK1108CH and 2CSK1109CH. |  |

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## Components



The anti-blackout light is an automatic removable, rechargeable electronic lamp that can be inserted in any Schuko socket or Italian P11 standard 10A bivalent socket. Socket outlets particularly recommended for holding the lamp are the sockets of the Chiara wiring accessories' range 2CSK1108CH and 2CSK1109CH, that allow the body of the lamp to be embedded in the socket outlet, thus minimizing the external dimensions.

The device was designed to light up automatically in the event of a blackout (no voltage warning), or to be used as a portable lighting device, useful in order to guarantee visibility and facilitate maintenance operations and/or searching for faults in unlit environments.

## Functions

A light source is activated automatically whenever the line voltage is missing (blackout) thanks to rechargeable backup batteries

- Possibility to extract it from the socket and use it as a normal pocket torch with an on/off button on the front.
- Long autonomy, 4.5 hours of continuous operation.
- Small dimensions - protrusion from the Schuko profile (only 8 mm ).
On the front part there are two LEDs (one red and one green) that indicate the state of the lamp when it is powered:
- Red LED on, recharging in progress. In the event of a blackout the lamp will remain off (battery saving condition, used in the case of prolonged absence).
- Green LED on, recharging in progress. In the event of a blackout the lamp will light up and will switch off automatically when the network is restored.
The pushbutton on the front part allows you to switch from one condition to another.


| Technical specifications |  |
| :---: | :---: |
| Plug | 2P 10A |
| Center distance of the pins | 19 mm |
| $\varnothing$ of the pins | 4 mm |
| Power supply | $230 \mathrm{~V} \sim 50-60 \mathrm{~Hz}$ |
| Recharge time | 10-20 hours |
| Useful battery life | 4.5 hours |

Reference standards
EN 60598-1, EN 60598-2

## Other devices

| Description | Code |
| :--- | :--- |
| IR motion detector with twilight sensor for control and adjustment of | 2 CSK1216CH |
| the operation time of lighting devices. |  |
| Relay output N0 5A (AC1)/2A (AC15) - 250V~. |  |
| Power supply 230V~-50/60Hz. |  |

## Components



Switch with infrared presence sensor in order to switch lights on through adjustable twilight sensor threshold and delay cycle.
It operates the load automatically when persons or animals pass through the field of action of the sensor.

## Sensor volumetric cover



Pyroelectric reading sensor and Fresnel lens with volumetric cover.


[^25]
## Instructions for installation

- for installation inside
- flush-mounted installation: 1.1-1.2 m from the walking surface

The apparatus cannot be installed in:

- environments with sudden changes in temperature.
- environments with high humidity.
- environments with presence of gas, corrosive fluids, sea air or dust.



## Schema di collegamento



## Examples of application



Technical specifications

| Power supply | 230V AC (L-N terminals) |
| :--- | :--- |

Power relay output (terminals 1-2)
Max load

| - resistive loads | 10A / 250V AC |
| :---: | :---: |
| - inductive loads | 2A / 250V AC |
| Tripping threshold | $0-300 \text { Lux }$ <br> Adjustable by means of a front trimmer |
| Time delay | From approximately 5 s to approximately 5 min <br> Adjustable by means of a front trimmer |
| Operating temperature | $-5 \mathrm{a}+35^{\circ} \mathrm{C}$. |

## Reference standards

LV Directive; EMC Directive; EN 60730

## Chiara - Technical details <br> Safety and comfort devices

| Description | Code |
| :--- | :--- |
| Universal badge switch with location light Relay output <br> with NO contact 10A (AC1). Power supply 230V $\sim 50 / 60 \mathrm{~Hz}$ | 2CSK1426CH |

## Components

## Operation

Load OFF


Load ON


Vertical badge electronic switch, relay output 16 A 250 V~, power supply $230 \mathrm{~V} \sim 50-60 \mathrm{~Hz}$, modules.
Supplied without ISO card (badge). The device is equipped with a courtesy LED for night-time location.

## Wiring diagram



Technical specifications

| Power supply | $230 \mathrm{~V} \sim \pm 10 \% 50-60 \mathrm{~Hz}$ |
| :--- | :--- |
| Output | relay with clean contact 10 A <br> $250 \mathrm{~V} \sim \cos \varnothing 1$ |
| Typical absorption | $230 \mathrm{~V} \sim 50-60 \mathrm{~Hz}: 30 \mathrm{~mA}$, with relay |
| Operating temperature | $-5^{\circ} \mathrm{C}+45^{\circ} \mathrm{C}$ |

## Reference standards

LV Directive; EMC Directive; Standard EN 60669-2-1

## Chiara - Technical details Wall-mounted enclosures

## IP40 and IP55 wall-mounted enclosures



## Area of application

The IP40 wall-mounted enclosures, pursuant to Standard CEI 64-8, extend the area of application of the devices of the Chiara series to environments such as boiler rooms, warehouses, mechanical workshop, basements etc., where protection class IP40 is prescribed, defined by Standard EN 60529 (CEI 70-1).
This is guaranteed through devices installed in the enclosures, if the installation is carried out according to the supported procedures, through the use of connections, cable grommets and pipe ducts.
For devices with an open front (e.g. socket outlets) the protection class is less than IP40 but never less than IP20.

IP55 watertight wall-mounted enclosures, on the other hand, allow the application of the equipment of the Chiara series in environments such as building sites, sports installations, marinas, industrial and agricultural establishments, gardens, camp sites etc. The protection class IP55, defined by the Standard EN 60529 (CEI 70-1), is guaranteed by devices installed in the enclosures, if the installation is carried out according to the supported procedures, through the use of the suitable accessories and with the cover closed.

Dimensions of IP40 and IP55 enclosures


| IP40 enclosure | no. modules | H | A | L | P |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2CSK2140CH | 1 | 38 | 80 | 65 | 55 |
| 2CSK2240CH | 2 | 38 | 80 | 65 | 55 |
| 2CSK2340CH | 3 | 38 | 80 | 104 | 55 |
| 2CSK2440CH | 4 | 38 | 80 | 130 | 55 |



| IP55 enclosure | no. modules | H | A | L | P |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2CSK2155CH | 1 | 40,5 | 80 | 65 | 63 |
| 2CSK2255CH | 2 | 40,5 | 80 | 65 | 63 |
| 2CSK2355CH | 3 | 40,5 | 80 | 104 | 63 |
| 2CSK2455CH | 4 | 40,5 | 80 | 130 | 63 |

## Chiara - Technical details Wall-mounted enclosures

Because of the maximum depth dimension H, the IP40 and IP55 wall-mounted enclosures of the Chiara series cannot house the following contact blocks:

| Code | Description | Code | Description |
| :---: | :---: | :---: | :---: |
| 2CSK1204CH | Electronic dimmer with rotary control and two-way switch | 2CSK1307CH | Automatic RCD 1P+N, C6-10 mA |
|  | for resistive loads 100-500W | 2CSK1308CH | Automatic RCD 1P+N, C10-10 mA |
| 2CSK1205CH | Electronic dimmer with rotary control for resistive loads | 2CSK1309CH | Automatic RCD 1P+N, C16-10 mA |
|  | 100-500W | 2 CSK 1328 CH | Automatic RCD 1P+N, C6-30 mA |
| 2CSK1207CH | Electronic dimmer with pushbutton control for resistive | 2CSK1329CH | Automatic RCD 1P+N, C10-30 mA |
|  | and inductive loads | 2CSK1330CH | Automatic RCD 1P+N, C16-30 mA |
| 2CSK1317CH | Electro-mechanical bell, 12V, 5VA, sound intensity 80 dB | 2CSK1324CH | Interlocked socket with MCB (2P+E 16A 230V P17/11) |
| 2CSK1318CH | Electro-mechanical bell, $230 \mathrm{~V}, 8 \mathrm{VA}$, sound intensity 80 dB | 2 CSK 1325 CH | Interlocked socket with MCB (2P+E 16A 230V) |
| 2CSK1321CH | Electro-mechanical buzzer, 12V, 5VA, sound intensity 70 dB | 2CSK1326CH | Interlocked socket with automatic RCD 10mA |
| 2CSK1322CH | Electro-mechanical buzzer, 230V, 8VA, sound intensity 70 dB |  | (2P+E 16A 230V P17/11) |
| 2CSK1304CH | Automatic MCB 1P+N, C6 | 2CSK1012CH | Single pole latching relay, 230V, 110 A output contact |
| 2CSK1305CH | Automatic MCB 1P+N, C10 | 2CSK1014CH | 4 sequence switch relay, 230V, 2 10A output contacts |
| 2CSK1306CH | Automatic MCB 1P+N, C16 |  |  |

The installation of similar devices in the form of a DIN rail in the distribution board is recommended where possible.

## Chiara - Technical details

## Other installation solutions

Support for DIN bar 1-2-3 modules

| Description | Code |
| :--- | :--- |
| Support for DIN bar for 1-2-3 modules, customisable | 2CSK1608CH |

Components


## Reference dimensions:

1 module version: 1,9 DIN modules
2 modules version: 3,4 DIN modules
3 modules version: 4,4 DIN modules

## Instruction for installation

3 modules: snap assemble the two halves.
1 or 2 modules: using a cutter, cut along lines 1 or 2 respectively and assemble the two halves.


## Chiara - Technical details <br> Frames

The frames of the Chiara series are made from technopolymer with natural/pastel colour shades or surface galvanic painting, and are characterised by their minimal protrusion from the wall, since they are not fitted with an under-plate.

## Reference standards

CEI 23-9 (EN 60669-1).

## Customization

Frames customized with a logo/text string can be supplied on request. They are produced by means of monochromatic pad printing on the areas highlighted below.

| 1 |  |
| ---: | ---: | ---: |


to all surfaces

Customization is possible with standard colours (black, Pantone cool gray 3C, Pantone 5425 C) or with a colour specified by the customer.
Minimum order batch: 36 pieces including various modularities.
For quotes and delivery times contact an ABB sales executive.

## Chiara - Coding <br> Order information



Example: single-pole switch

| 2 | $C$ | $S$ | $K$ | 1 | 0 | 0 | 1 | $C$ | $H$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Coding criteria of the frames


Example: technopolymer frame, 3 modules, sand colour

| 2 | $C$ | $S$ | $K$ | 0 | 3 | 0 | 2 | $C$ | $H$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Packaging

To enable automatic warehouse management using optical readers, the devices and frames of the Chiara wiring accessories' range are packaged in boxes that bear the EAN bar code and that protect the contents adequately against dust and shocks. For a better explanations of the installation methods, a specific instruction sheet is supplied. Individual packages are available for only for the codes with the lowest turnover.

## Chiara

## Overall dimensions

| Chiara code | Description | No. Modules | Depth mm |
| :---: | :---: | :---: | :---: |
| 2CSK1001CH | Single-pole switch, 16A - 250V~ | 1 | 30 |
| 2CSK1002CH | Double-pole switch, 16A - 250V~ | 1 | 30 |
| 2CSK1003CH | Single-pole two-way switch, 16A - 250V~ | 1 | 30 |
| 2CSK1004CH | Single-pole switch, 16A - 250V~, 2 modules | 2 | 30 |
| 2CSK1005CH | Single-pole push switch NO, 16A | 1 | 30 |
| 2CSK1006CH | Double-pole switch, 16A - 250V~, with key control | 1 | 25 |
| 2CSK1006CHU | Double-pole switch, 16A-250V , with universal key control | 1 | 25 |
| 2CSK1007CH | Single-pole two-way switch, 16A-250V~, 2 modules | 2 | 30 |
| 2CSK1008CH | Intermediate switch, 16A - 250V~, 2 modules | 2 | 30 |
| 2CSK1009CH | Double-polepush switch, NO, 16A-250V , with key control | 1 | 25 |
| 2CSK1009CHU | Double-pole push switch, NO, 16A - 250V~, with universal key control | 1 | 25 |
| 2CSK1010CH | Intermediate switch, 16A-250V~ | 1 | 30 |
| 2CSK1011CH | Change-over switch, 10A - 250V~, 3 positions | 1 | 31 |
| 2CSK1012CH | Single pole latching relay, 230V | 1 | 31 |
| 2CSK1014CH | 4 sequence switch relay, 230V, 2 10A output contacts | 1 | 31 |
| 2CSK1016CH | Single-pole push switch NC, 16A | 1 | 30 |
| 2CSK1017CH | Double single-pole push switch, NO+NO, 16A - 250V~ | 1 | 30 |
| 2CSK1018CH | Double single-pole push switch, NO+NO, 16A - 250V~, with interlock | 1 | 30 |
| 2CSK1022CH | Single-pole push switch 1 NO and 1 NC, 16A, with ON | 1 | 30 |
| 2CSK1023CH | Single-pole push switch 1 NO and $1 \mathrm{NC}, 16 \mathrm{~A}$, with OFF symbol | 1 | 30 |
| 2CSK1020CH | Single-pole push switch NC with cord pull, 16A | 1 | 30 |
| 2CSK1021CH | Single-pole push switch NC with cord pull, 16A | 1 | 30 |
| 2CSK1028CH | Single-pole push switch NO, 16A, with BELL | 1 | 30 |
| 2CSK1029CH | Single-pole push switch NO, 16A, with KEY | 1 | 30 |
| 2CSK1030CH | Single-pole push switch NO, 16A, with STAIR LIGHT | 1 | 30 |
| 2CSK1024CH | Single-pole push switch NO, 16A, with red diffuser | 1 | 30 |
| 2 CSK 1025 CH | Single-pole push switch NO, 16A, with green diffuser | 1 | 30 |
| 2CSK1026CH | Single-pole push switch NO, 16A, with orange diffuser | 1 | 30 |
| 2CSK1027CH | Single-pole push switch NO, 16A, with white diffuser | 1 | 30 |
| 2CSK1031CH | Single-pole pushbutton NO, 16A, with backlit label holder plate push switch | 2 | 30 |
| 2CSK1032CH | Single-pole push switch NO, 16A, with backlit label holder plate, 3 modules | 3 | 30 |
| 2CSK1101CH | 2P+E socket outlet, 10A - 250V~, P11 type | 1 | 22 |
| 2CSK1102CH | 2P+E socket outlet, 16A - 250V~, P17 type | 1 | 22 |
| 2CSK1103CH | $2 \mathrm{P}+$ E socket outlet, 10/16A - 250V~, P17/P11 type | 1 | 22 |
| 2CSK1104CH | 2P+E socket outlets, 10/16A, red | 1 | 22 |
| 2CSK1105CH | $2 \mathrm{P}+$ E socket outlets, 10/16A, green | 1 | 22 |
| 2CSK1106CH | $2 \mathrm{P}+$ E socket outlets, 10/16A, orange | 1 | 22 |
| 2CSK1108CH | 2P+E socket outlet, 16A - 250V~, P30 type | 2 | 31 |
| 2CSK1114CH | 2P+E socket outlets, 16A - 250V~, P30 type, red | 2 | 31 |
| 2CSK1115CH | $2 \mathrm{P}+$ E socket outlets, 16A - 250V~, P30 type, green | 2 | 31 |
| 2CSK1116CH | 2P+E socket outlets, 16A - 250V~, P30 type, orange | 2 | 31 |
| 2CSK1109CH | 2P+E socket outlet, 16A - 250V~, P30/17 type | 2 | 35 |
| 2CSK1110CH | $2 \mathrm{P}+$ E socket outlets, 16A - 250V~, P30/17 type, red | 2 | 35 |
| 2CSK1111CH | $2 \mathrm{P}+$ E socket outlets, 16A - 250V , P30/17 type, green | 2 | 35 |
| 2CSK1112CH | 2P+E socket outlets, 16A - 250V~, P30/17 type, orange | 2 | 35 |
| 2CSK1113CH | 2 P shaver socket with insulating transformer | 3 | 37,5 |

1 module


2 modules


3 modules


| Chiara code | Description | No. Modules | Depth mm |
| :---: | :---: | :---: | :---: |
| 2CSK1324CH | 2P+E socket outlet, 16A - 250V~, interlocked with MCB, P17/11 | 2 | 37,5 |
| 2CSK1325CH | 2P+E socket outlet, 16A - 250V~, interlocked with MCB, P30 | 3 | 37,5 |
| 2CSK1326CH | 2P+E socket outlet, 16A - 250V~, with RCD 10mA, P17/11 | 3 | 37,5 |
| 2CSK1117CH | TV coaxial socket, direct, male IEC connector ø 9.5 mm , insulated type | 1 | 21 |
| 2CSK1118CH | TV/SAT coaxial socket, direct, male IEC connector <br> $\varnothing 9.5 \mathrm{~mm}$, with feedthrough of direct current | 1 | 21 |
| 2CSK1132CH | TV/SAT coaxial socket, feedthrough, male IEC connector $\varnothing 9.5$ mm, attenuation 7dB | 1 | 21 |
| 2CSK1136CH | TV/SAT coaxial socket, feedthrough, male IEC connector ø 9.5 mm , attenuation 10dB | 1 | 21 |
| 2 CSK 1137 CH | TV/SAT coaxial socket, feedthrough, male IEC connector ø 9.5 mm, attenuation 14dB | 1 | 21 |
| 2CSK1138CH | TV/SAT coaxial socket, feedthrough, male IEC connector $\varnothing 9.5 \mathrm{~mm}$, attenuation 18dB | 1 | 21 |
| 2CSK1119CH | TV/SAT coaxial socket, direct, female F connector, with feedthrough of direct current | 1 | 21 |
| 2CSK1133CH | Double demixed TV/SAT coaxial socket, direct, male IEC connector $\varnothing 9.5 \mathrm{~mm}$ and female F connector | 1 | 21 |
| 2CSK1120CH | Double demixed TV/SAT coaxial socket, feedthrough, male IEC connector ø 9.5 mm and female F connector, attenuation 7 dB | 1 | 21 |
| 2CSK1130CH | Double demixed TV/SAT coaxial socket, feedthrough, male IEC connector ø 9.5 mm and female F connector, attenuation 10dB | 1 | 21 |
| 2CSK1131CH | Double demixed TV/SAT coaxial socket, feedthrough, male IEC connector ø 9.5 mm and female F connector, attenuation 14 dB | 1 | 21 |
| 2CSK1139CH | Double demixed TV/SAT coaxial socket, feedthrough, male IEC connector ø 9.5 mm and female F connector, attenuation 18dB | 1 | 21 |
| 2CSK1121CH | RJ11 telephone connector | 1 | 21 |
| 2CSK1122CH | RJ12 telephone connector | 1 | 21 |
| 2CSK1124CH | RJ45 connector, Cat. 5e, UTP (unshielded) | 1 | 21 |
| 2CSK1125CH | RJ45 connector, Cat. 5e, FTP (shielded) | 1 | 21 |
| 2CSK1127CH | RJ45 connector, Cat. 6, UTP (unshielded) | 1 | 21 |
| 2CSK1128CH | RJ45 connector, Cat. 6, FTP (shielded) | 1 | 21 |
| 2CSK1160CH | Flush-mounted USB charger 500-650mA | 1 | 35 |
| 2CSK1210CH | Electronic natural gas detector | 3 | 39 |
| 2CSK1211CH | Electronic LPG gas detector with acoustic and indicator signal | 3 | 39 |
| 2CSK1301CH | Fuse holder, for fuses $\varnothing 5 \times 20 / \varnothing 6.3 \times 32 \mathrm{~mm}$, max. 16A | 1 | 26 |
| 2CSK1303CH | LED light for emergency lighting or steplight | 3 | 50 |
| 2CSK1304CH | Automatic MCB, 1P+N, C6, breaking capacity 1.5 kA | 1 | 36 |
| 2CSK1305CH | Automatic MCB, 1P+N, C10, breaking capacity 3kA | 1 | 36 |
| 2CSK1306CH | Automatic MCB, 1P+N, C16, breaking capacity 3kA | 1 | 36 |
| 2CSK1307CH | Automatic RCD, 1P+N, C6-10 mA, breaking capacity 1.5 kA | 2 | 36 |
| 2CSK1308CH | Automatic RCD, 1P+N, C10-10 mA, breaking capacity 3kA | 2 | 36 |

## Chiara

## Overall dimensions

| Chiara code | Description | No. Modules | Depth mm |
| :---: | :---: | :---: | :---: |
| 2CSK1309CH | Automatic RCD, 1P+N, C16-10 mA, breaking capacity 3kA | 2 | 36 |
| 2CSK1315CH | Overvoltage limiter, 75J, 230V~ | 1 | 26 |
| 2CSK1328CH | Automatic RCD, 1P+N, C6-30 mA, breaking capacity 1.5 kA | 2 | 36 |
| 2CSK1329CH | Automatic RCD, 1P+N, C10-30 mA, breaking capacity 3 kA | 2 | 36 |
| 2CSK1330CH | Automatic RCD, 1P+N, C16-30 mA, breaking capacity 3kA | 2 | 36 |
| 2CSK1310CH | Warning light, ORANGE colour | 1 | 20 |
| 2CSK1311CH | Warning light, WHITE colour | 1 | 20 |
| 2CSK1312CH | Warning light, RED colour | 1 | 20 |
| 2CSK1313CH | Warning light, GREEN colour | 1 | 20 |
| 2CSK1317CH | Electro-mechanical bell, 12V | 1 | 37 |
| 2CSK1318CH | Electro-mechanical bell, 230V, | 1 | 37 |
| 2CSK1321CH | Electro-mechanical buzzer, 12V | 1 | 37 |
| 2CSK1322CH | Electro-mechanical buzzer, 230V | 1 | 37 |
| 2CSK1201CH | Summer/winter electronic time-programmed thermostat | 3 | 38 |
| 2CSK1202CH | Summer/winter electronic thermostat | 2 | 29,5 |
| 2CSK1205CH | Electronic dimmer with rotary control for resistive loads 100-500W | 1 | 39 |
| 2CSK1204CH | Electronic dimmer with rotary control and two-way switch for resistive loads 100-500W | 1 | 39 |
| 2CSK1207CH | Electronic dimmer with pushbutton control for resistive and inductive loads 60-500W | 1 | 39 |
| 2CSK1214CH | Removable anti-blackout light, 230V | see drawing |  |
| 2CSK1216CH | IR motion detector with twilight sensor for control and adjustment of the operation time of lighting devices | 1 | 32 |
| 2CSK1426CH | Universal badge switch with location light | 2 | 32 |

## Frames

## 2 modules



## 7 modules



3 modules


## 4 modules



## Self-supporting frames

## 2 modules



Screw distance: 60 mm

3 modules


Screw distance: 83.5 mm

## 4 modules



Screwr distance: 108 mm

## 4 modules



Screw distance of the box: 108 mm

## 7 moduli



Screw distance of the box: 100 mm

## Chiara

## Overall dimensions

Safety and comfort devices

Anti-blackout light


5 IP40 wall-mounted enclosures

2 modules


3 modules


4 modules


IP55 wall-mounted enclosures

2 modules


3 modules


4 modules



IP55 flush-mounted escutcheon plate


All measurements are in millimetres.

## Contact us

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[^0]:    Technical details from page 2/46.

[^1]:    Technical details from page 2/67.

[^2]:    Technical screw from page 2/33.

[^3]:    Technical details and customization from page 2/77.

[^4]:    Note: In general terms, no plug sockets of any standard for domestic use fall under the European low voltage directive, because there is no harmonized European standard for these types of sockets: in fact, each country has its own standard and therefore a single standard is impossible. For this reason the plug sockets do not bear the CE mark. All the sockets of the Mylos wiring accessories' range conforming to CEI 23-50 are however certified by $I M Q$ as a further guarantee of their quality and compliance with standards.

[^5]:    * Connected to an energy meter sold separately

[^6]:    nformation on the illumination of switches from page 4/47
    Technical details from page 4/48

[^7]:    Technical details on page 4/51

[^8]:    Technical details on page 4/51

[^9]:    ${ }^{(1)}$ Finishes with low stock levels: contact an ABB sales executive for information on the availability of the products.

[^10]:    Technical details and customization on page 4/90

[^11]:    Technical details and customization on page 4/90

[^12]:    Technical details and customization on page 4/90

[^13]:    Technical details and customization on page 4/90

[^14]:    Technical details and customization on page 4/90

[^15]:    Technical details and customization on page 4/90

[^16]:    Screw distance of the box: 163.5 mm

[^17]:    Technical details from page 5／32

[^18]:    Technical details from page 5/53

[^19]:    2CSK1625CH

[^20]:    Technical details and customization on page 5/62

[^21]:    Technical details and customization on page 5/62

[^22]:    Note: The watertight escutcheon plates provide a self-supporting solution that allows the rear.

[^23]:    ${ }^{(1)}$ Shaver socket, European/American standard with insulating transformer 230V~ - 50/60 Hz

[^24]:    Note: In general terms, no plug sockets of any standard for domestic use fall under the European low voltage directive, because there is no harmonized European standard for these types of sockets: in fact, each country has its own standard and therefore a single standard is impossible. For this reason the plug sockets do not bear the CE mark. All the sockets of the Chiara wiring accessories' range conforming to CEI 23-50 are however are certified by IMQ as a further guarantee of their quality and compliance with standards.

[^25]:    Front twilight sensor.

