
SMART BUILDINGS

Compact Home Catalog

Protection and comfort systems
for your home



ABB is the world-leading provider of smarter home, smarter building and intelligent community solutions with a pragmatic and innovative spirit as well as total contribution to social and environmental responsibility and sustainability. Through innovative protection, metering and command devices as well as distribution enclosures, we make greater energy efficiency and increased security easier than ever.

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Introduction

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Safety at home with ABB

Thanks to its expertise, ABB offers best-in-class solutions for your home. The comprehensive portfolio of miniature circuit breakers, residual current devices, surge protective devices, as well as control, signaling, measuring and smart accessories help you create buildings of the future, today.

By definition home is where you will find maximum comfort and protection because when we feel safe, we can relax. Therefore comfort is closely linked to protection, with regard to personal safety, energy savings, environmental sustainability and economic advantages.

Nowadays, new buildings are based on constantly developing building standards and regulations: state-of-the-art materials and products are designed, installed and operated to ensure once unimaginable levels of comfort, security,

design and energy efficiency. Within this rapid evolution, plants – whether electric, thermo-hydraulic, data transmission or any other kind – are the nerves and intelligence of all buildings.

They allow us to manage and optimise our use of energy, climate, sound, alarms, communications and to synchronise any device – electric, electronic, mechanical, hydraulic – based on time of day, use conditions and user expectations.



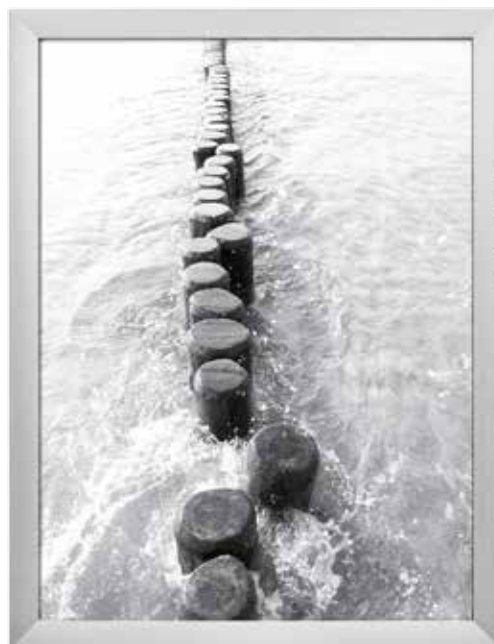
Through its Compact Home range, ABB makes a full product range available to residential building plant designers and installers. Reliable, easy-to-use and based on advanced technology these products are the result of continuous and intense research and know how of the world-leading provider of smarter home and smarter building solutions.

Today ABB offers all the products, systems and services needed to guarantee maximum domestic comfort and protection, in any environment or context.

ABB's Compact Home range includes devices and equipment used to reliably manage utilities: these solutions enable you to optimise, integrate and make

safety, protection and comfort systems inside and outside your home more efficient, from kitchen to bathroom, lounge to bedroom, garage to garden. Range integration and modularity are two of the basic concepts of ABB's Compact Home. All products are versatile and can be easily upgraded and extended with other solutions chosen from the vast ABB solution portfolio.

Devices installed in the control panel or switchboard are flanked by Compact Home range control and automation solutions based on the most modern aesthetic and design concepts, but also provided with analogical and digital functions and bus or wireless communications.



A technology that isn't to see, but is to live

The endless personalization and integration possibilities of ABB's residential solutions allow you to tailor systems exactly to your requirements, combining protection, safety, comfort and savings.

Protection

Protecting means safeguarding users, environments and equipment against risks and damage linked to faults or improper usage.

Surges, overloads, short circuits or earth leakage currents are dangerous situations which, with no adequate control and protective measures, can damage the plant and lead to bad accidents.

To protect installations and investments against these hazards, the Compact Home range provides miniature circuit breakers (MCBs), residual current devices (RCDs) and further protection devices. Additionally, the Compact Home range gives users peace-of-mind that their plants always satisfy parameters established by the most binding international standards.

Safety

Protecting one's personal, domestic environment against unauthorized access has always been one of our most important needs. ABB offers a number of safety solutions guaranteeing control over the surrounding environment to avoid intrusion and dangerous situations.

The Compact Home range includes integrated anti-intrusion, video control, video entry-phones and building automation systems.

Reliable, flexible and affordable, these products come in both the bus and wireless versions and allow you to control and interact with your environment, locally or from a distance, by mobile phone or through internet.

These systems are flanked by effective controls and modular alarms on DIN Rails, installable in any ABB switchboard or small control panel.



Comfort

Our home usually is the place where we expect greater comfort and well-being.

Modern technologies provide all the necessary features to make our home comfortable, smart, and efficient.

ABB's Compact Home products make the different plant components functionally adaptable to the user's comfort. All the functions that can be controlled such as blinds, lighting, heating, air-conditioning or door communication are designed to make life simpler and smarter.

Savings

Increasing energy costs and environmental sensitivity have stimulated users to pay greater attention to energy usage and efficiency.

Even at home, those small daily gestures – like using the cheapest tariff brackets appropriately – can have a fundamental impact on both your home budget and a more rational use of our planet's resources.

The ABB Compact Home catalogue offers several products with innovative functions, with efficiency and energy savings as their main target.



Smart protection for lasting comfort

Applications for an apartment



1. Protection of the stove and other kitchen equipment

There are many situations in which a short-circuit can occur, e.g. bad insulation of kitchen equipment and connection to water. Without suitable cable protection, not only the connection cable of the kitchen equipment would become charred, but also the cable installed in the wall behind the socket outlet. In worst case there also is a hazard for people. ABB's MCBs protect you and your installation in the best way – easy and safe installation is possible.



2. Separate protection of media and TV circuits

In newer installations, TV and media circuits are protected separately. Due to the electronics used in this kind of loads they could inject harmonics into the system and maybe it interferes with other electrical equipment. MCBs provide the best protection in cases of overload and short-circuit. ABB's MCBs protect you and your installation in the best way – easy and safe installation is possible.



3. Main residual current protection

In order to ensure safety and continuity of service, ABB offers selective type RCCB F200 S solution to perform selectivity with the RCDs protecting terminal circuits.



4. People and circuit protection

RCBOs permit continuity of service disconnecting only the circuit having a overcurrent or earth leakage issue, keeping the rest of the house operative.



5. Surge protection

Compact and easy to install, the DIN Rail OVR Type 2 range provides high overvoltage protection to your sensible equipment and to your apartment.



6. Prevention of overloads

Load management relay LCR prevents tripping of the main circuit breaker by sequentially switching off non-priority loads when preset threshold is exceeded. One red LED and an integrated buzzer indicate the OFF condition. At preset time intervals, the device automatically attempts to reconnect to the previously disabled load.



7. Safety for auxiliary circuits

Door entry and bathroom safety pushbuttons should always be supplied in SELV (safety extra low voltage) for safety reasons. TS transformers supply these auxiliary circuits; in case of short circuit TS are made to disconnect automatically the secondary winding and restore their feature automatically as soon as fault is repaired.



8. Bioarchitecture made real

E235 mains disconnection switch ensures no electricity in wiring accessories and electric devices on bedroom circuits when sleeping. Of course as soon as user switches on a load, electricity immediately flows again to supply it.



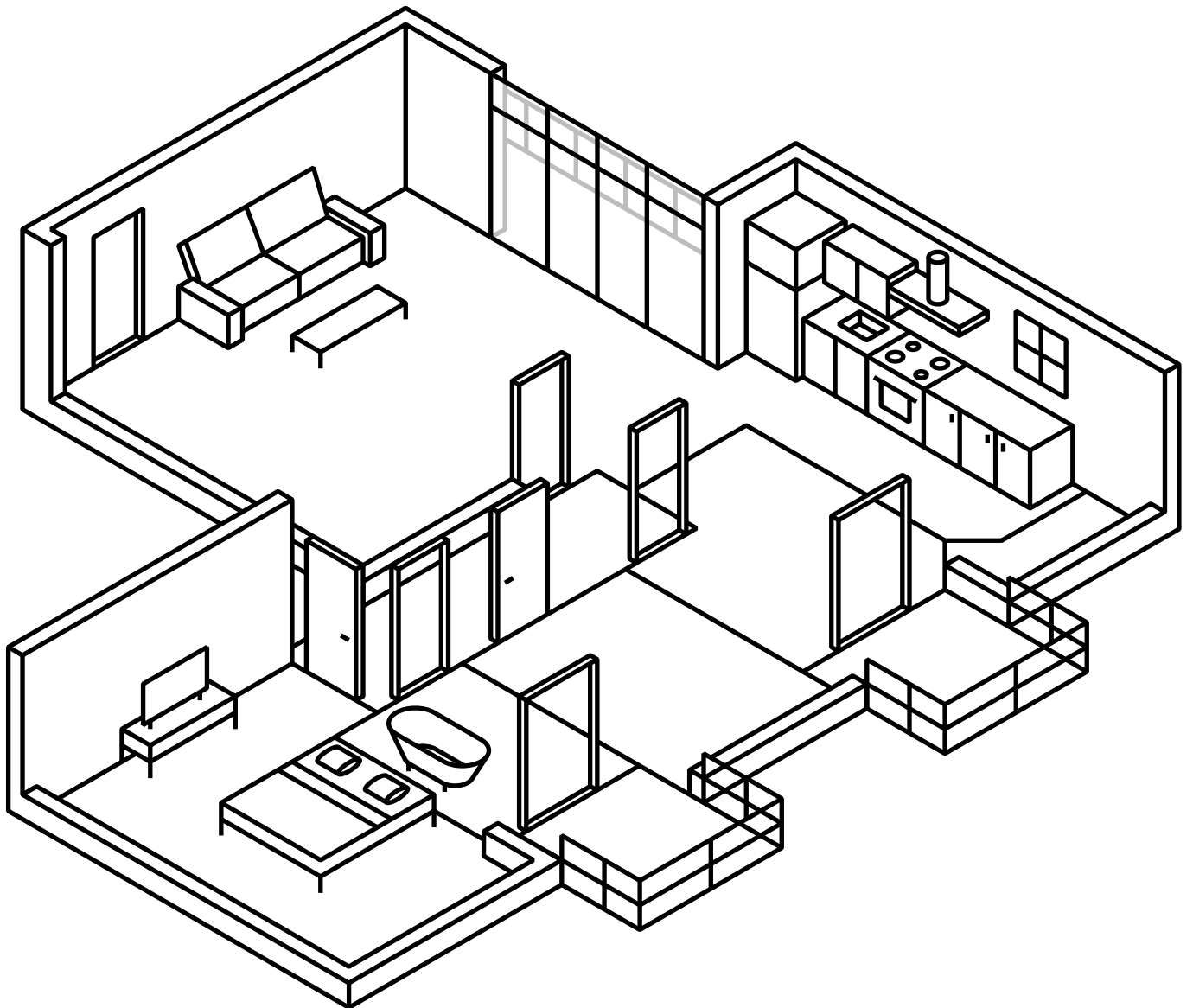
9. Object metering

Heating and ventilation pumps are obvious candidates for object metering in the home. Also electronic equipments such as washing machines and dishwashers are possible objects to measure.



10. UK600 – a smarter space for your installation ideas

The UK600 series offers new possibilities in terms of application areas, flexibility and design. Its product portfolio includes 3 kinds of enclosures: standard for DIN-Rail devices, Media for LAN routers etc. and the Combi enclosure, a combination of both.



Expertise that lets you think big

Residential applications



1. Common lighting circuits protection

In newer installations, lighting circuits are always protected separately from socket outlet circuits. Therefore, it is almost impossible for a danger to occur in lighting circuits in the home sector today, as the permanently connected consumers (lights and lamps) only permit their load-dependent current. However, cable protection must be provided to prevent overloading of the cable by short-circuits.



2. Common socket outlet protection

MCBs provide the best protection in cases of overload and short-circuit. For sure, you can also disconnect your circuits with MCBs if you need to make maintenance work. There is a limit to the current carrying capacity for all cables! It's not important whether the short-circuit is caused by a defect common appliance or whether a nail pounded into the wall hits the cable. In addition, similar consequences can result when too many appliances are connected to a circuit at the same time (e.g. several fan heaters) to one and the same circuit via a multiple socket-outlet (overload protection).



3. Residual current protection in the common areas

The FH200 RCCB range up to 63 A offers the solution for the protection against insulation fault of any kind of common circuits like the staircase, outside and garage lights, porter's lodge, automated gate and all the common sockets.



4. People and circuit protection

RCBOs permit continuity of service disconnecting only the circuit having a overcurrent or earth leakage issue, keeping the rest of the house operative.



5. Gate management

Thanks to ATT GSM module, all housemasters can open building gate with their mobile by just dialing a number. ATT recognises authorized users avoiding the use of hundreds of expensive and unsafe gate remote controls.



8. Surge protection

Compact and easy to install, the DIN Rail OVR Type 2 range provides high overvoltage protection to your sensible equipment and to your home.



7. Staircase lighting

E232 staircase light switches allow to switch on staircase lights only when needed, as user pushes a button. This way users can avoid energy waste, while ensuring full light availability when walking on stairways. E232 can be forced permanently on for staircase cleaning and maintenance purposes.



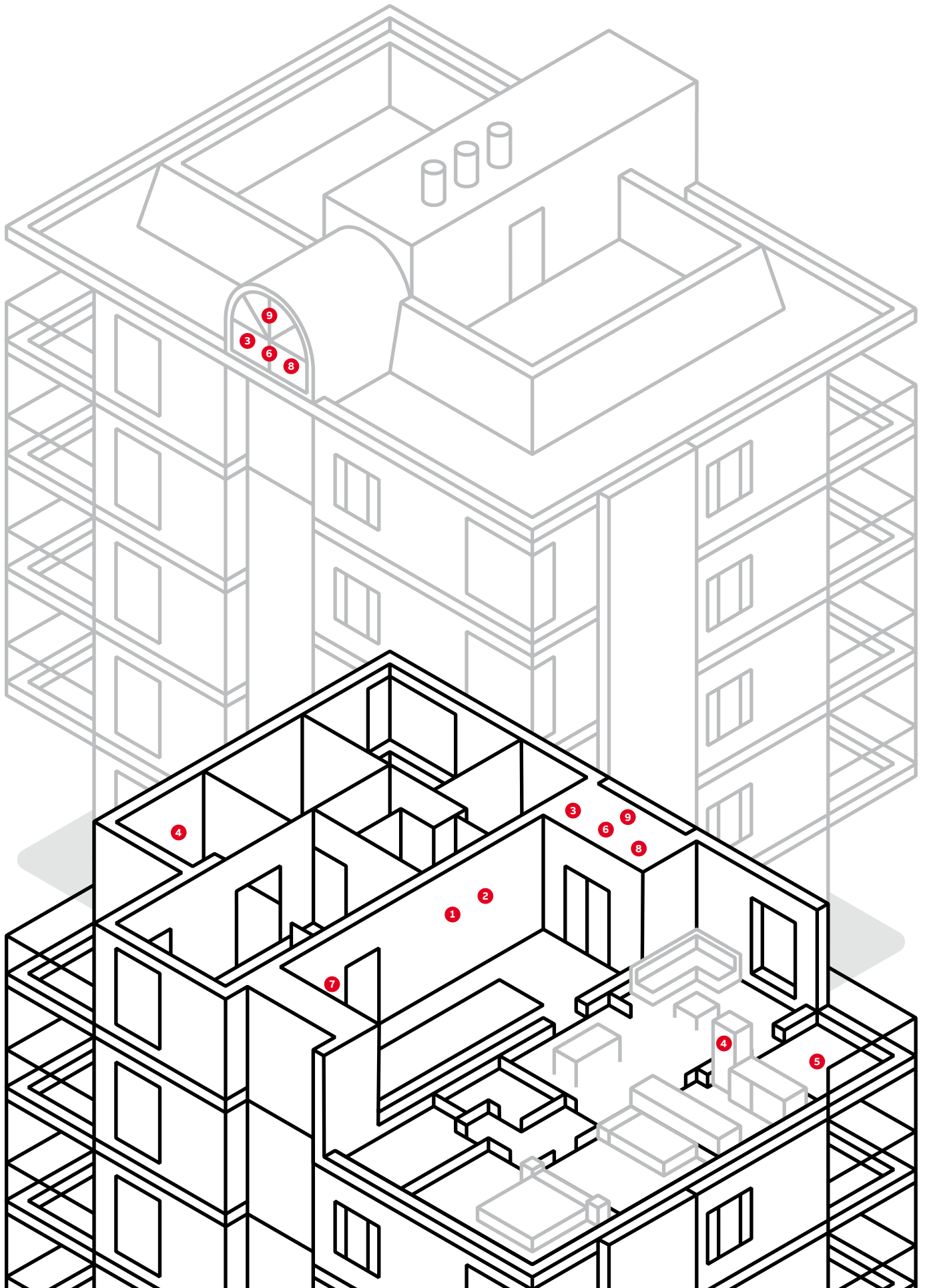
8. Joint residential sourcing

Unlike applications where a separate billing meter is installed in every apartment or residence for individual billing, joint residential sourcing involves having one central 'billing' meter. The housing association, condominium or equivalent then acts as a single electricity subscriber and redistributes its costs amongst its members according to their actual consumption measured by a meter in each apartment.



9. An attractive enclosure that can be discreetly integrated into your interior

The Unibox consumer units are distinguished by an advanced and elegant design. They integrate themselves easily in whichever decoration solution; for the door, it is possible to choose between the transparent smoked version and the opaque white version. Functionality of the Unibox Series and its safety of installation and safety of use guarantee high quality of construction characteristics.



Greater comfort, full protection

Applications for detached houses



1. Protection of the entry phone line and other telecommunication systems

In this kind of application normally different voltage level and/or different frequencies are used. To ensure the correct working of these circuits, cable protection must be provided to prevent overloading of the cable. There is a limit to the current carrying capacity for all cables! ABB MCBs protect you and your installation in the best way – easy and safe installation is possible. Make your choice.



2. Protection of security systems, bell circuits or electrical shutters

To ensure the correct working of these auxiliary circuits with maybe different voltage-level cable protection must be provided to prevent overloading of the cable by short-circuits or even an overload e.g. due to obstruction of the shutter. Without suitable cable protection the cable installed in the wall behind the loads becomes charred and maybe needs to be replaced or even the devices get damaged.



3. Sauna and swimming pool residual current protection

To ensure continuity of service and avoid nuisance tripping due to the natural earth leakage currents that are common in a wet environment, it's a best practice to protect individually the sauna and the swimming pool circuits with a dedicated DSH201 RCBO for each line.



4. Mains disconnection

SHD200 switch disconnecter is installed upstream whole electric distribution system ensuring and it is suitable for commanding loads.



5. Customize your energy consumption

Digital time switches allow operation of heating, lightening, irrigation system, etc. They enable to open and close circuits according to a daily, weekly or yearly program, controlling single load or group of loads even when they require different time controls with a common time reference.



6. External lighting only when needed

With twilight switch TL1 external lighting switches on automatically when getting dark, thanks to external light detection sensor. Threshold can be programmed on a wide lux range ensuring both optimal lighting and energy efficiency.



7. Safety of outdoor circuits

Care should always taken on outdoor lighting. Especially when close to pools or fountains, a safety extra low voltage transformer TS-C can supply continuously low voltage lighting devices preventing risks of indirect contacts.



8. Burner and venting control

ESB and EN contactors provide efficient load control, for single and three phase loads up to 63 A of rated current. Thanks to their endurance and high switching capacity ESB and EN are ideal in automation of frequently operating loads.



9. Object metering

Heating and ventilation pumps are obvious candidates for object metering in the home, and these can be joined by appliances such as electronic equipment, washing machines, dishwashers as well as sauna. And don't forget outdoors. Garden terrace heaters space and lighting plus the pond pump are all significant 'energy thieves'. The actual consumption is easy to measure with EQ meters. EQ meters A-series measures in two directions, so it is suitable for a residential PV application.



10. One complete solution for your home

Electrical enclosures for the residential applications coordinate between all technical elements that make up the interior essential in today's homes. The AT & U compact distribution boards from ABB response this trend about an ever increasing offer of products for home installations. ABB offers with AT & U cabinets one complete solution for all electrical installation requirements in your home.

An offering designed to meet present and future needs

The measure of an offering's worth is its completeness and integration. ABB offers solutions that meet and anticipate all the needs of contemporary life: from video entry phones and video surveillance to home automation and charger systems for electric vehicles.



1. Home series

The ABB residential series are the best available on the wiring accessories market. The materials, shapes and colours of plates and controls can be matched, with umpteen combinations, adding value to environments based on your taste, fantasy and needs.

Aesthetics must not sacrifice safety and comfort. The series have a complete energy and alarm functions line, from control devices to plugs, from safety and comfort devices to alarm units, from protectors to detectors, from limit switches to special systems, from domotic bus solutions to installation components.

The series are all integrated with ABB products portfolio, ensuring modular architecture that is always expandable.



2. Entry phone/ Video entry phones

ABB systems offer solutions which enable you to implement entry phone and video entry phone systems for single homes and large residential complexes really easily.

Integrating any internal or external architectural style, these products offer users the most advanced functions and are available in analogical, digital and even wireless versions.



3. Home automation and security systems

ABB home automation systems turn a house plant into an intelligent system, adaptable to the wellness, safety, protection and saving needs of whoever lives in it.

ABB domotic line modularity can be adapted to any type of building, giving us full, integrated management of safety and comfort functions.

From anti-intrusion control to managing lighting, to operating loads for greater energy efficiency, ABB domotic systems on bus are easy to install, program and use, with decided modular features guaranteeing the plant can grow based on a customer's evolving needs.



4. Comfort control, security system and radio video surveillance

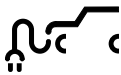
Available in wired or wireless versions, both analogical and fully digital, ABB solutions allow users to create an inviolable, customised safety barrier between the house and its outside area. Signalling effective danger or discomfort situations, they guarantee users full control over the perimeter.

Reliable and technologically advanced, the ABB burglar alarm and video entry phone lines are modular and integrated with a modern, valuable design meaning they can be used in any architectural context.



5. Components for solar PV plants

ABB has developed a complete range of photovoltaic application products. They satisfy any plant need, from photovoltaic fields to micro domestic installations. Switches, isolators, dischargers, trackers but also measuring and control parts, control panels, distribution units... everything needed to integrate, monitor and protect the energy generated by house panels, in a safe, protected way.



6. Charger systems for electric vehicles

Electric vehicles are the new mobility frontier.

E-mobility challenges are not just in the ability to generate energy but also in the possibility to integrate different sources, to accumulate excess production and dislocate safe, reliable charge points accessible for everyone, even in the home environment.

For really personal, sustainable mobility ABB offers a rich catalogue of electric vehicle charging products, from turnkey solutions to single components.



7. External lightning protection with the OPR range

The ABB OPR range makes the construction of a lightning protection system very easy to install. Designed to conduct the lightning current from the external rod to the earthing system, it will keep your home safe and protected against any damage. When you have external protection, you must add a surge protection device (OVR range) to protect your electrical installation and sensitive equipment.



8. Switchboards protecting and isolating photovoltaic plants

ABB offers the best solutions to protect, isolate and cut off photovoltaic sources.

In particular, string combiners – consolidating DC energy produced by the different strings making them available for inverters – allow to protect against overcurrents, lightnings and surges.

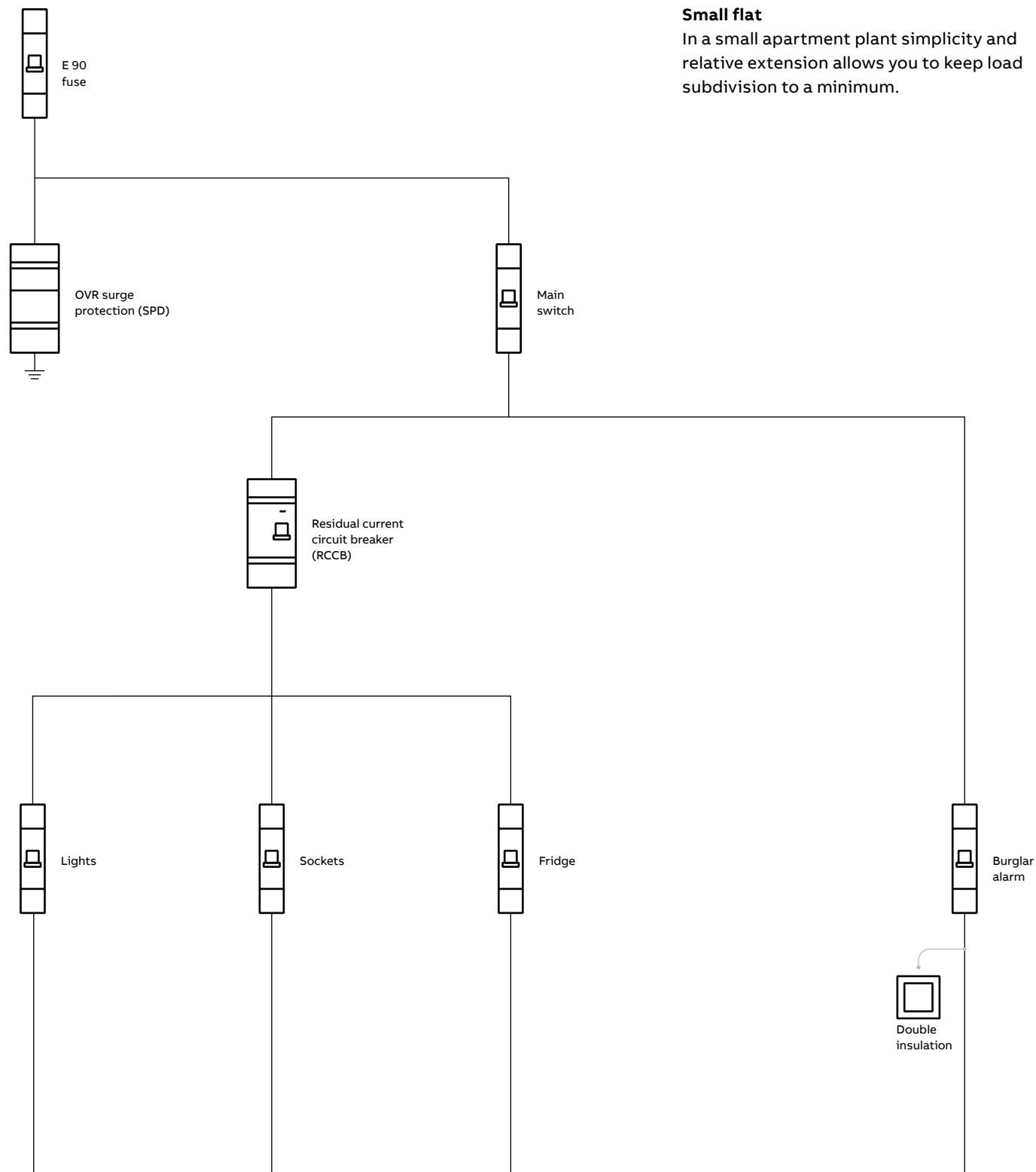


9. Selective device downstream from the meter

The S700 series products are selective main circuit breakers for DIN rail enabling you to protect electric installations from surges. They boast total selectivity towards MCBs downstream and considerable selectivity towards protection devices upstream. As they have been designed for the IV overvoltage category and integrate the isolation function they can be used in any distribution or control cabinet.

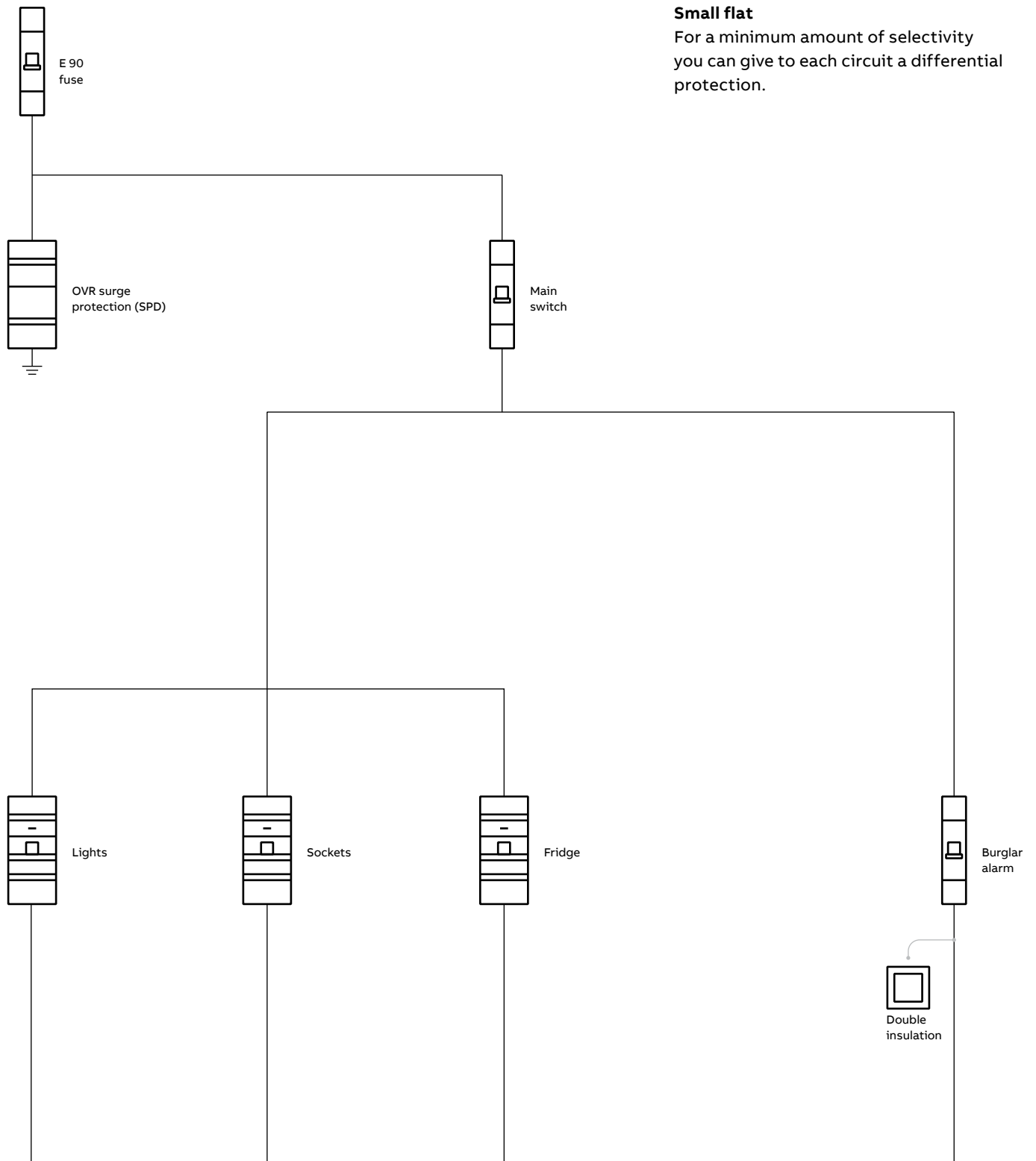
Efficiency, protection, comfort:

measuring a system's value



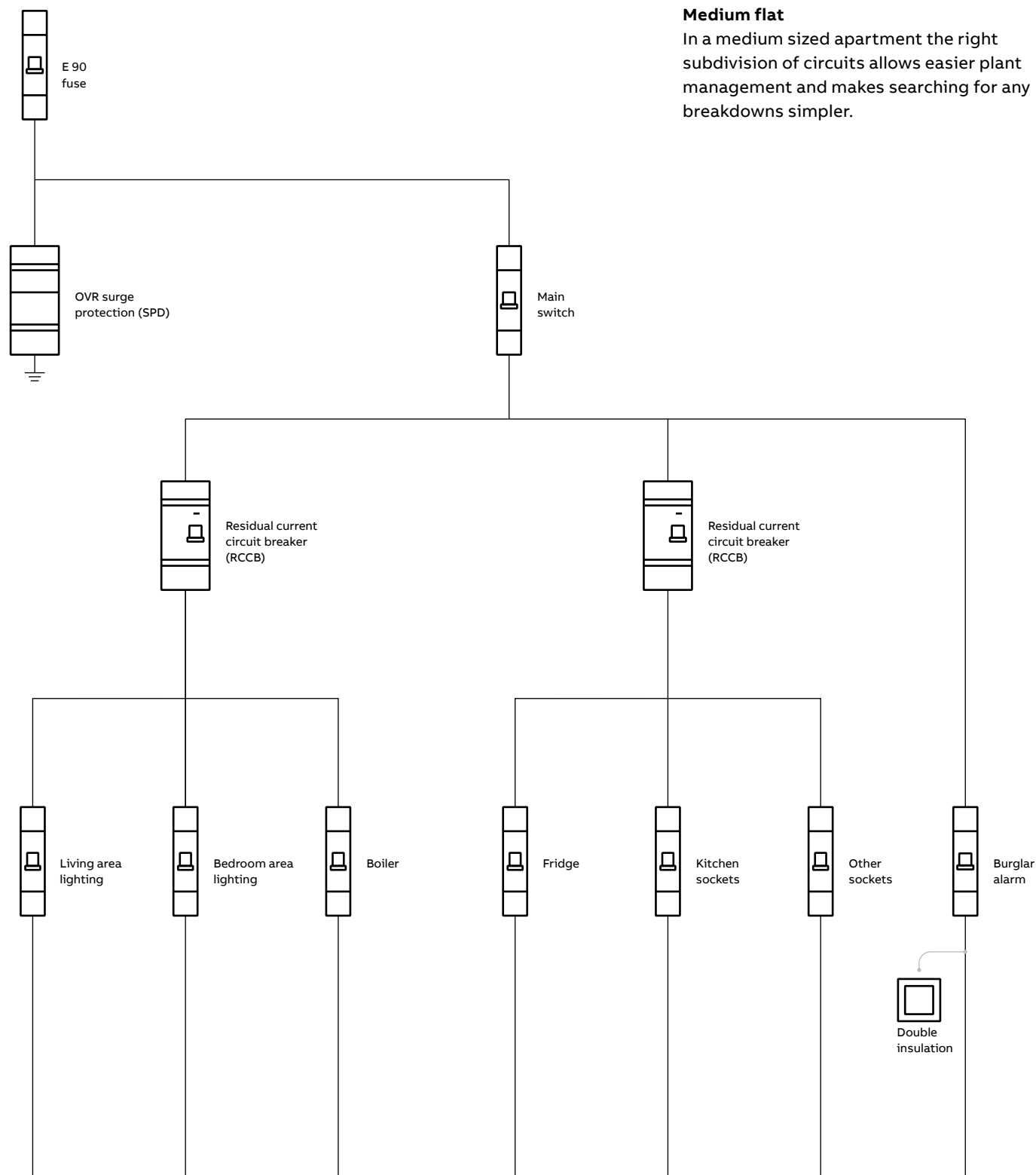
Small flat

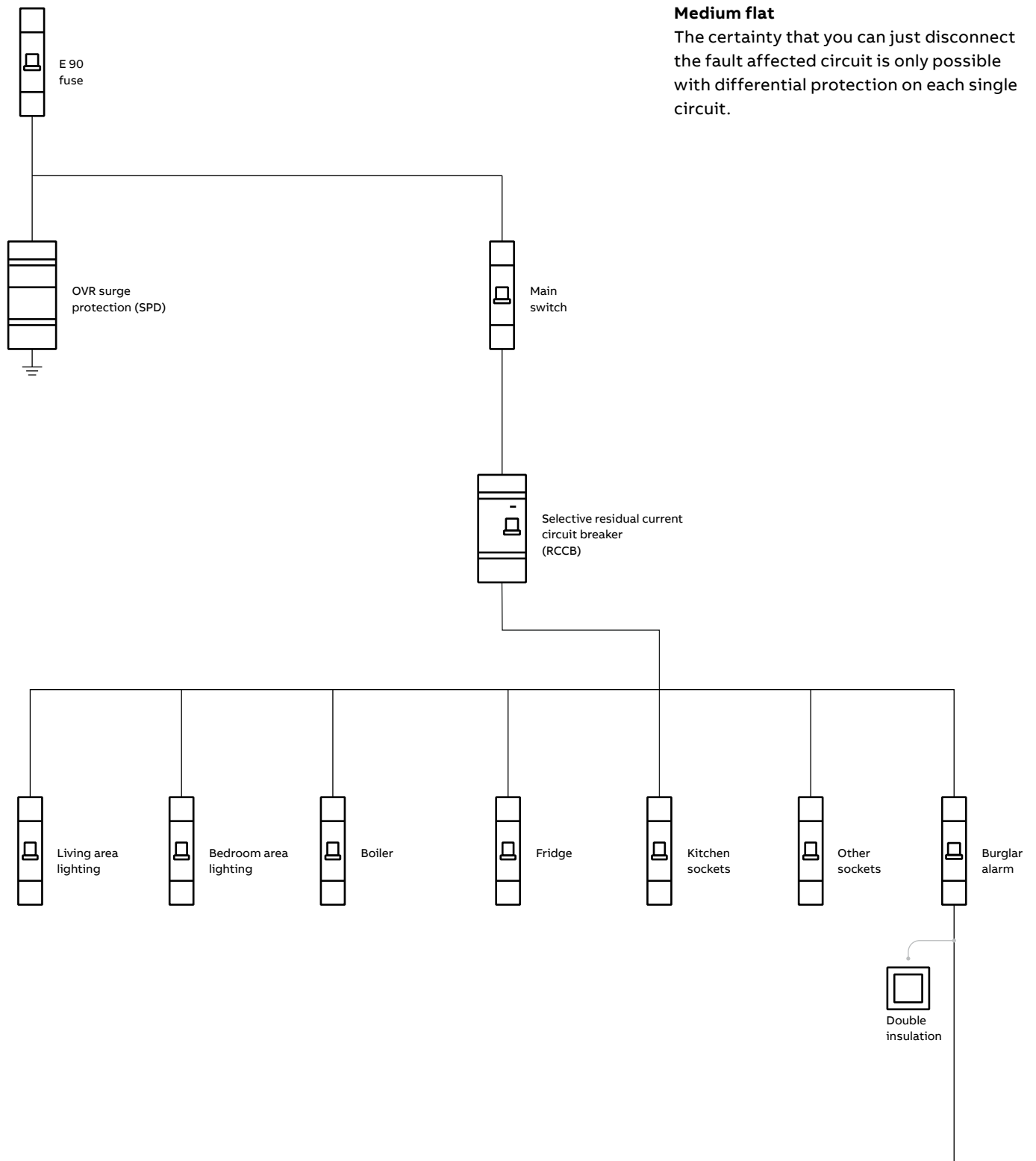
For a minimum amount of selectivity you can give to each circuit a differential protection.



Efficiency, protection, comfort:

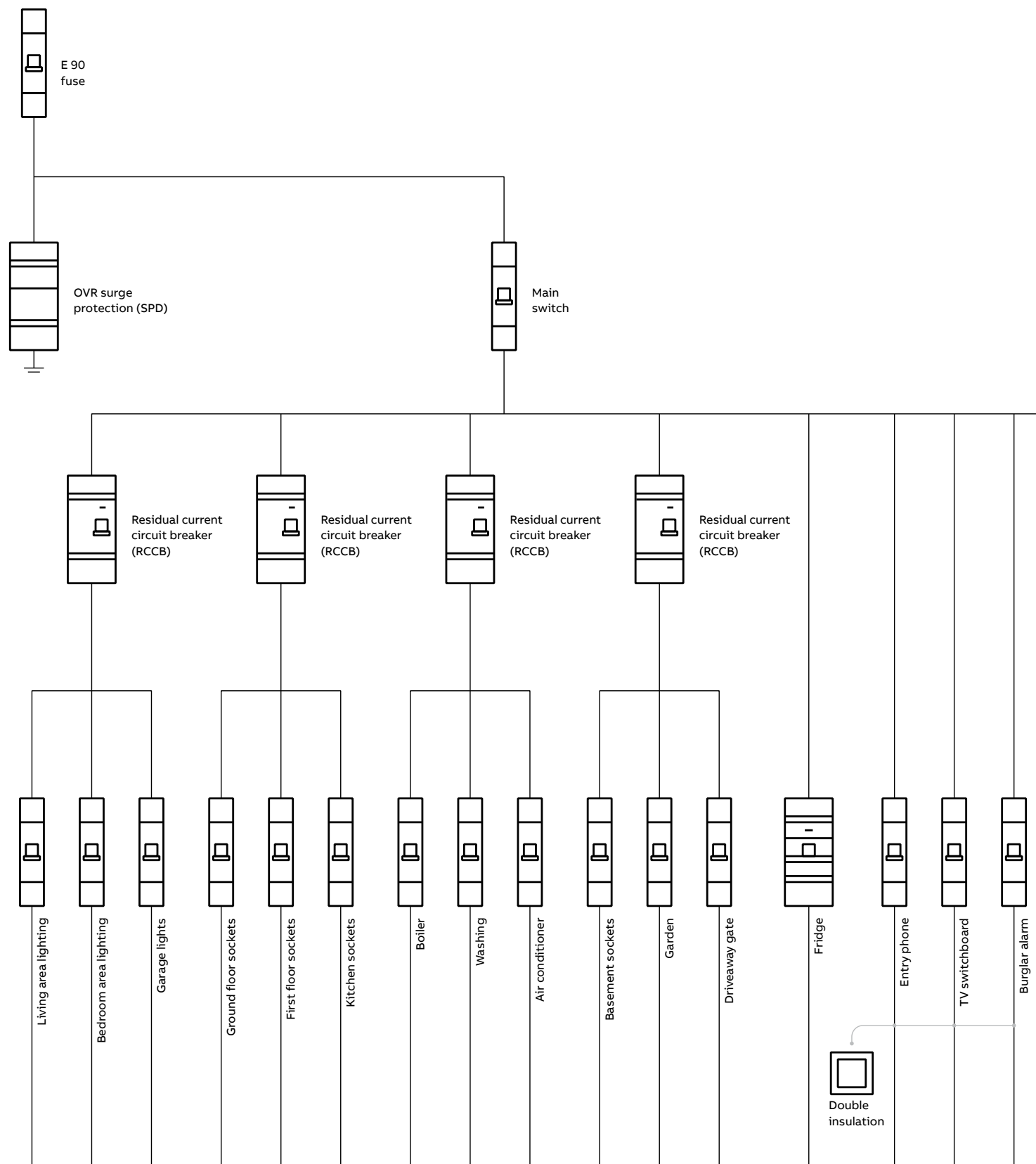
measuring a system's value





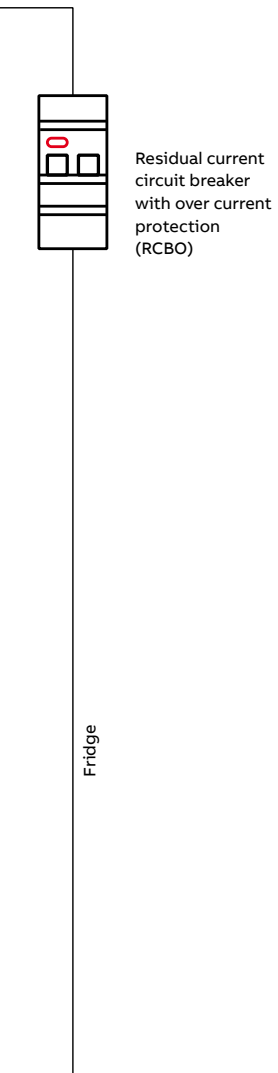
Efficiency, protection, comfort:

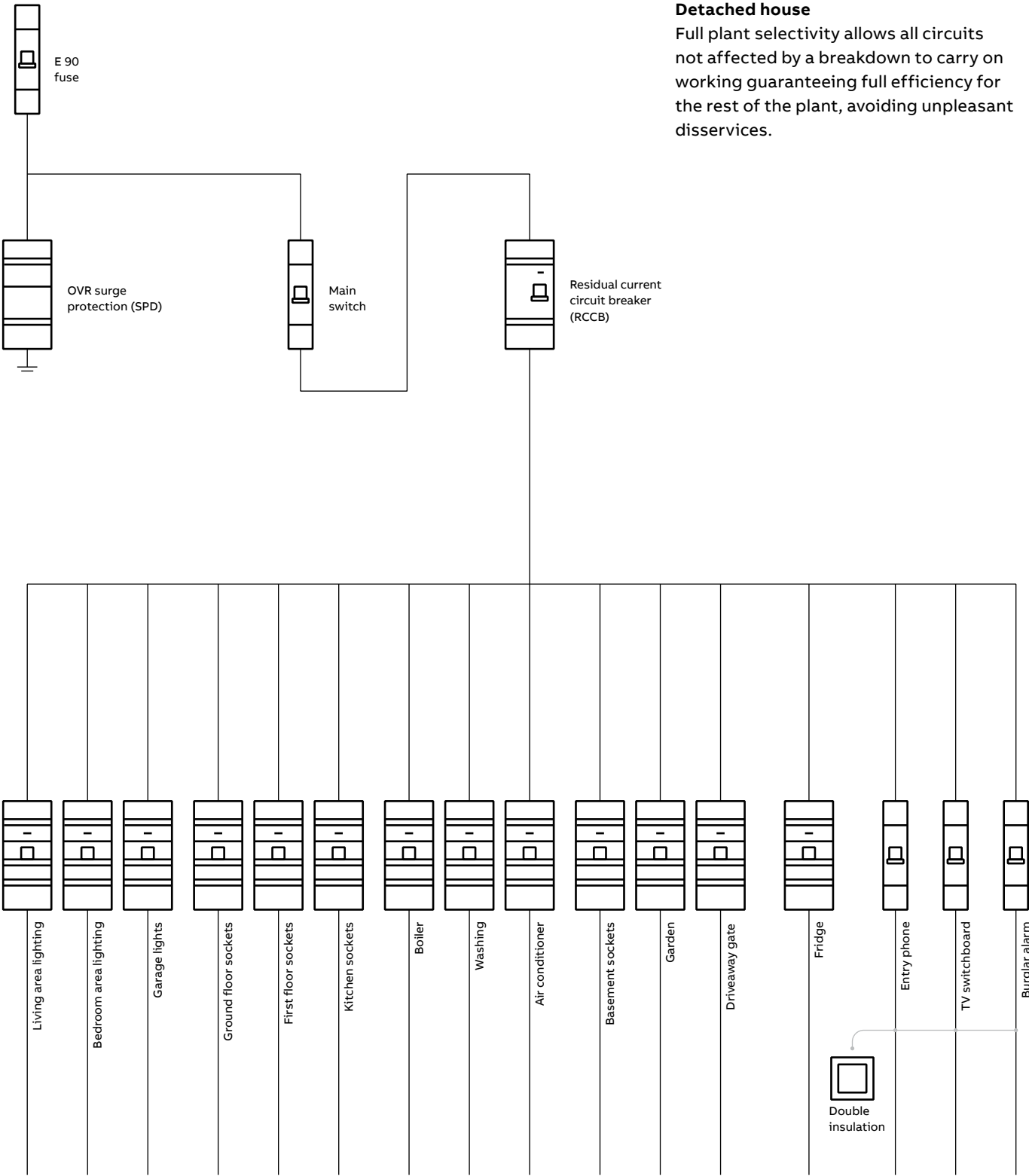
measuring a system's value



Detached house

In a detached house the right subdivision of circuits allows easier plant management and makes searching for any breakdowns simpler.





Detached house
Full plant selectivity allows all circuits not affected by a breakdown to carry on working guaranteeing full efficiency for the rest of the plant, avoiding unpleasant disservices.

Application examples

ABB EQ meters A-series

Electronic energy meter

Operating principle

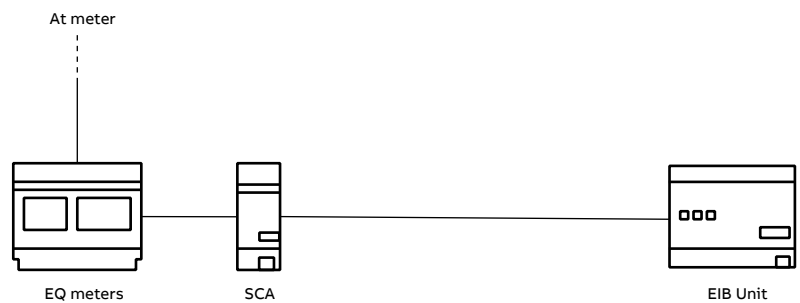
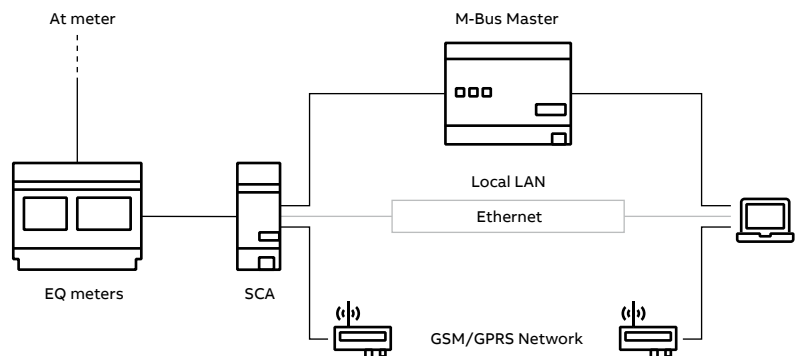
ABB EQ meters A-series are available for both single phase and three phase networks. They allow active energy or combined (active and reactive) energy to be measured. Energy meters A-series measures in two directions, both import and export of energy. The meters are prepared for external communication via their built-in communication interface or via a serial communication adapter (SCA).

Application environments

The EQ meters A-series meters offers an ideal solution in measuring applications for electrical energy produced in a photovoltaic installation.

Example of installation

ABB EQ meters A-series can be easily integrated into measured data collection systems via serial communication adapters. The devices are approved to the Measuring Instruments Directive (MID) European Directive 2014/32/UE.



Application examples

E297 installation relays

Operating principle

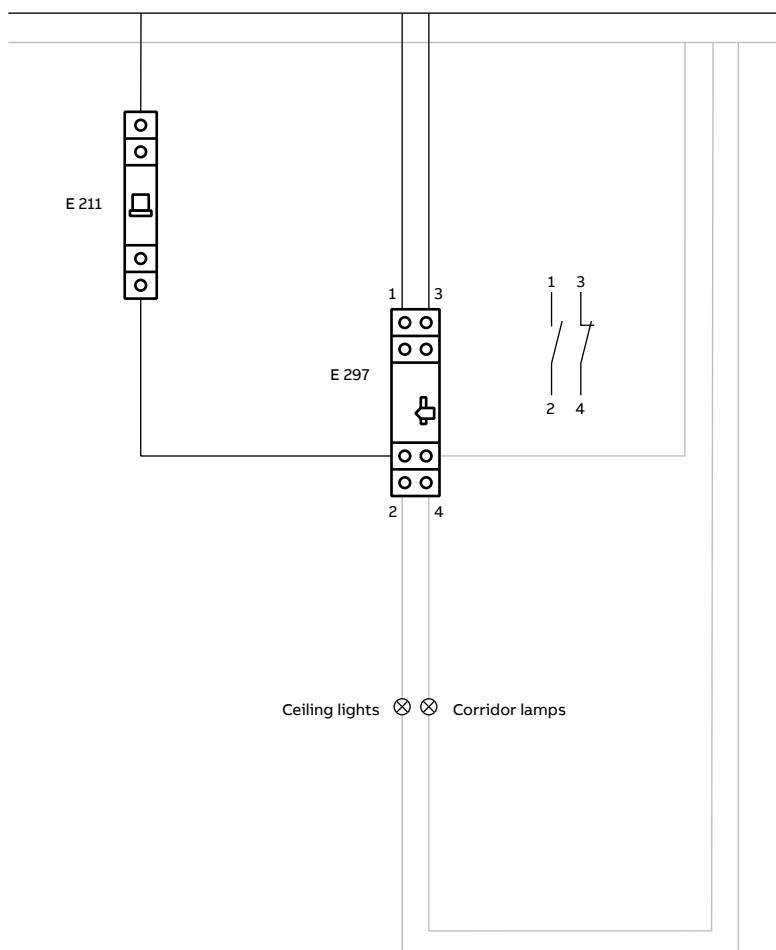
The E297 installation relays are 16 A contactors specifically engineered for residential and commercial applications and are available in a wide range of contact layouts and coil voltages.

Application environments

The E297 installation relays are particularly indicated in residential and commercial buildings for lighting control.

Example of installation

The E297-16-11 installation relay can be installed with a NO and a NC contact inside the lighting system of the common areas of a building. The first control sent through a switch to the command circuit of the relay will turn off the ceiling lights and turn on the corridor lamps, while the second command returns to the previous state.



Application examples

AG analog time switches

Operating principle

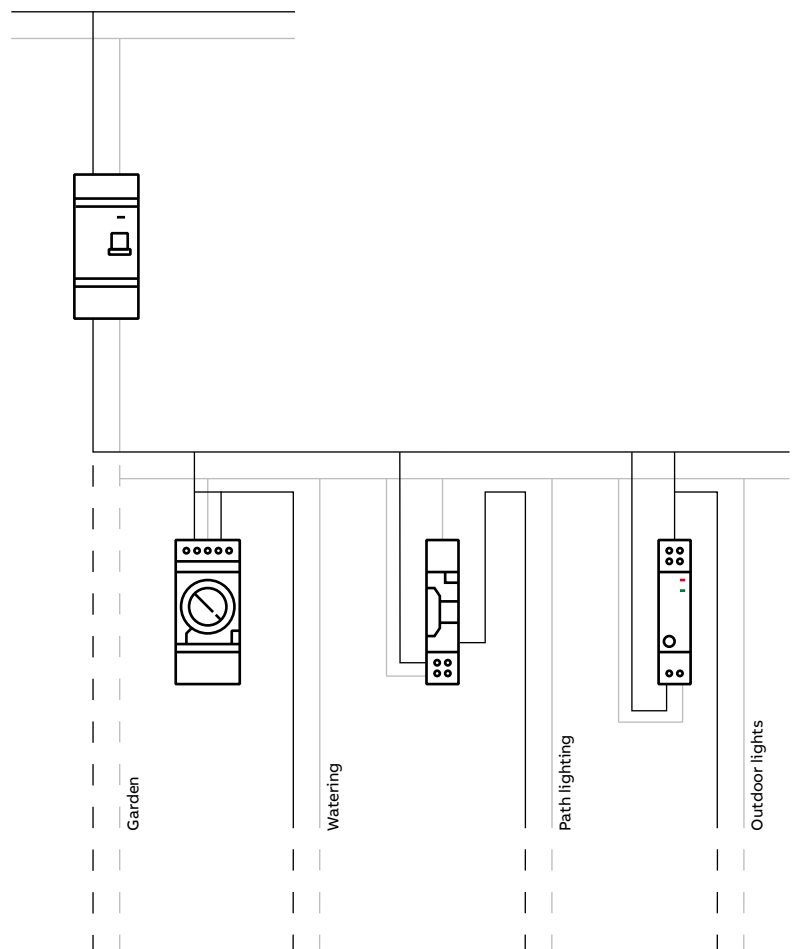
The analog time switches control the circuit opening and closing according to a daily or weekly program or to manually set permanent ON/OFF operation.

Application environments

The AG time switches particularly designed to control lighting systems of shops or commercial buildings, heating and ventilation systems as well as control of automatic irrigation systems of private or public gardens.

Example of installation

The AD1-R-15m-72 electromechanical time switch can be assembled inside the power supply circuit of the garden. In this case the device programming enables the daily activation of the irrigation system at a preset time.



Application examples

DBT digital time switches

Operating principle

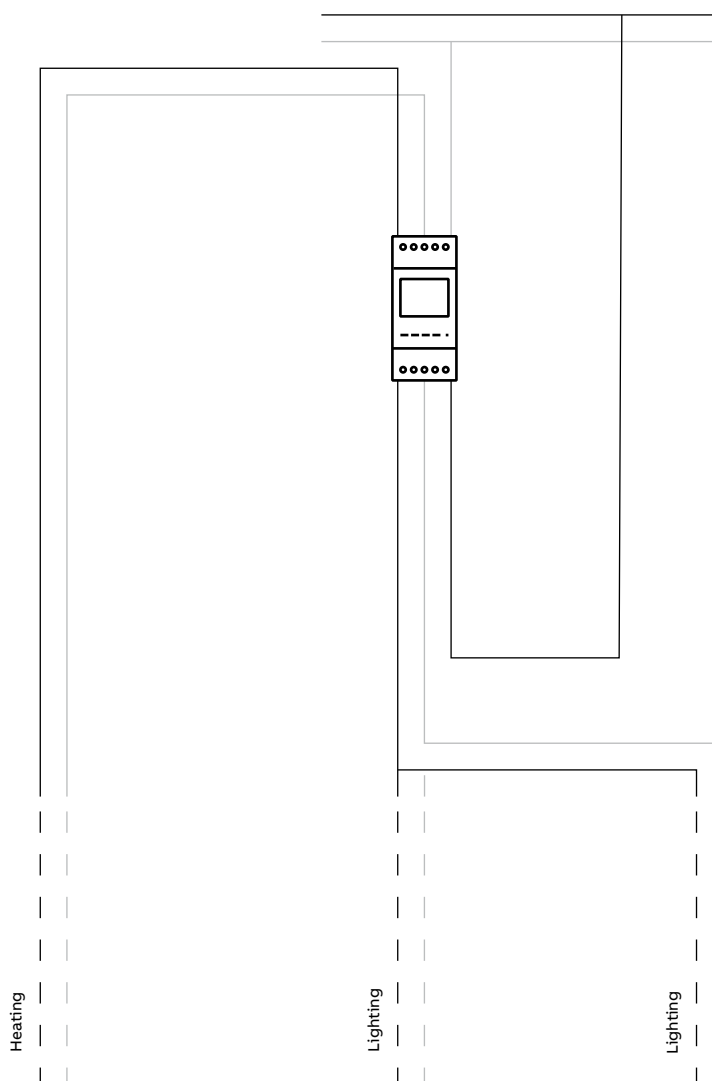
DBT digital time switches are ideal to automate installation functions such as are equipped with various functions such as impulse, cycle, random and holiday function.

Application environments

The digital time switches are particularly indicated in environments and situations requiring the management of multiple loads according to a time program flexible enough to include or exclude their application based on the day of the week (offices, schools, public areas, etc.).

Example of installation

In this example, the digital time switch allows the operation of heating as well as lighting systems of a small office; during weekend the device only controls the heating system (programmed on one of the two channels), while on the rest of the week the lighting system is also switched on (through a program on the second channel).



Application examples

E 232 staircase relays

Operating principle

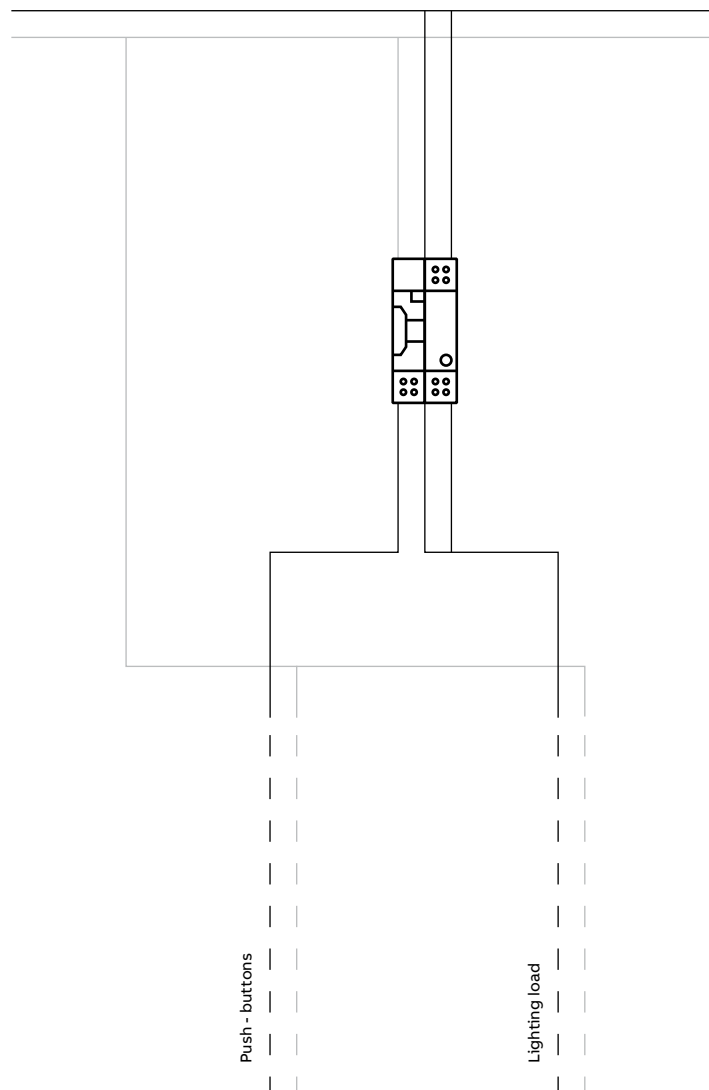
Activated by a pulse command of a push-button, the E 232 staircase switch turns on the plant's light for a T1 time that can be protracted, with a 50% dimming of the light intensity, by means of the parallel wiring of a HLM half-light module.

Application environments

Installation of E 232 staircase switch, coupled with the HLM half-light module, can be ideal wherever timing of the lighting is requested (staircase and pathways of public places, cellars, garage, etc.).

Example of installation

One of possible applications of the E 232 staircase switch, coupled to a HLM half-light module, in the staircase lighting plant of a multistory building. Pushing the push-button, the timer of the E 232 switch turns on the lights for a settable T1 time. At the end of T1 time, the HLM half-light module dims the light by a 50% for a T2 time in the while is possible turn on again the full lighting.



Application examples

TL Line twilight switches for pole mounting

Operating principle

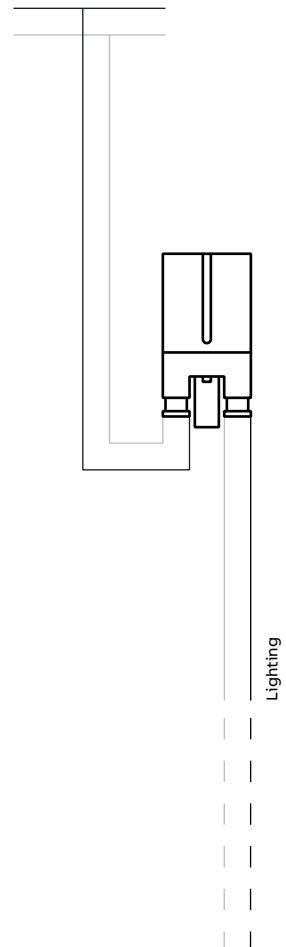
The TL1 pole version is designed for installation on pole/wall and is equipped with an integrated photo-sensor preset at 10 Lux. TL1 Pole is the ideal solution to manage the external light systems such as the public ones, more precisely, in cases where there is a need of controlling the lighting of public or private roads, gardens, courtyards at the decline of solar radiation during twilight.

Application environments

TL1 pole twilight switches can be ideal to light command in private parking areas thanks to its capability of installation in pole, lamppost, etc.

Example of installation

One of the possible applications concern the installation of a pole mounting twilight switch in lighting plant. When daylight dims below a set level (e.g. during twilight) the switch turns on the lighting devices, assuring the requested lighting. At dawn, when the light raise above the set threshold, the relays of TL1 Pole returns in open position.



Application examples

TL Line twilight switches

Operating principle

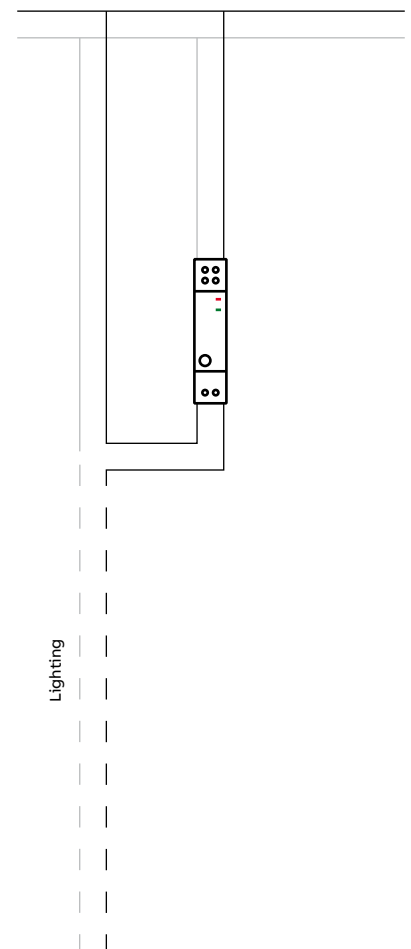
Installation of a twilight switch in a system is particularly useful in places and situations where light sources or other environmental conditions may cause changes in the Lux level. It is used in combination with an external sensor to detect if the ambient light is higher or lower than the set level. A switching delay prevents them from operating unnecessarily when the light intensity suddenly changes (e.g. lightning, moving vehicles, etc.).

Application environments

The TWA-1 and TWA-2 twilight astronomical switches are particularly suitable for use in applications where the operation of a twilight switch with external sensor is potentially subject to alteration or damage from external agents (e.g. smog, overexposure to light, vandalism etc.).

Example of installation

One cause of reductions in the level of ambient light is atmospheric smog. Particle deposits on the external sensor of a traditional twilight switch can over time compromise its operation, preventing the activation of the lighting systems controlled. As illustrated in the diagrams, it is possible to counter this type of problem by installing a TWA twilight astronomical switch, which controls the lighting based on the ambient light level calculated from the preset longitude and latitude parameters.



Application examples

ATT-22 GSM modules

Operating principle

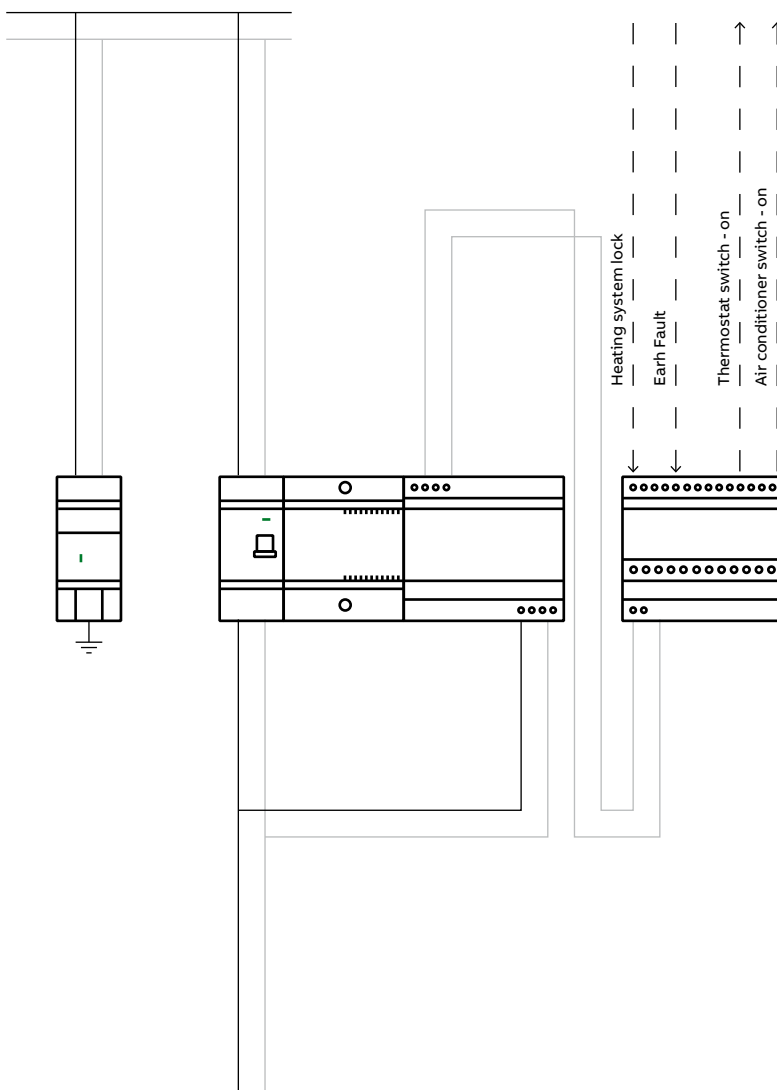
ATT-22 module is a GSM terminal with 2 outputs and 2 inputs for transmitting commands and alarms via SMS message, free phone call ring, fax or e-mail. Configuration is accomplished by means of SMS messages, or using the ATT-Tool software with ATT-22 connected to a PC.

Application environments

The ATT-22 module is especially suited for residential and services-sector installations in which loads need to be remotely monitored or controlled. ATT-22E version is equipped with a pre-wired external antenna, indispensable when the module is installed in places that do not guarantee adequate GSM coverage.

Example of installation

The figures illustrate an example application in which ATT-22 module is installed in the control panel of a second home in the mountains. With a cell phone call ring to ATT-22, it is possible to switch on the boiler just before arriving at the house, or to keep it continually in operation. In the event of a problem with the boiler, ATT-22 sends a notification SMS.



Application examples

F2C-ARH

Operating principle

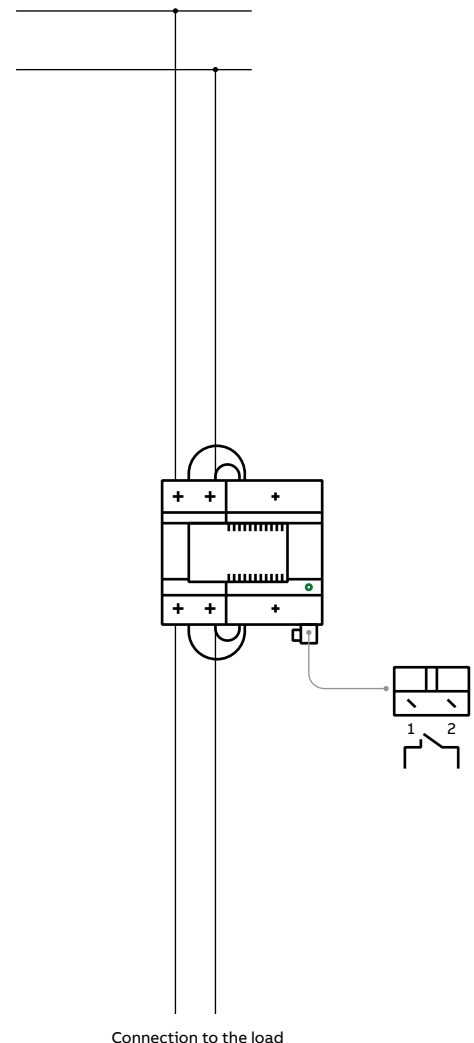
The GreenLight F2C-ARH automatically recloses the associated residual current device (2 poles RCCBs up to 63 A – 30 mA or 100 mA, depending on F2C-ARH version), after first checking that there isn't an insulation fault on the circuit protected by the RCCB.

Application environments

The GreenLight F2C-ARH is suitable for installation in any TT and TN distribution system and it has been designed to always maintain continuity of service in case of nuisance trippings caused by storms or electrical disturbances, restoring current to all connected utilities after verifying the correct state of the system.

Example of installation

An ideal application of auto-reclosing device F2C-ARH is related to home distribution systems. This is particularly useful to preserve the critical loads - for example to avoid alarm system wrong intervention, irrigation stops or defrost of the freezer – during holidays or when the home is not manned, even for short periods.



Application examples

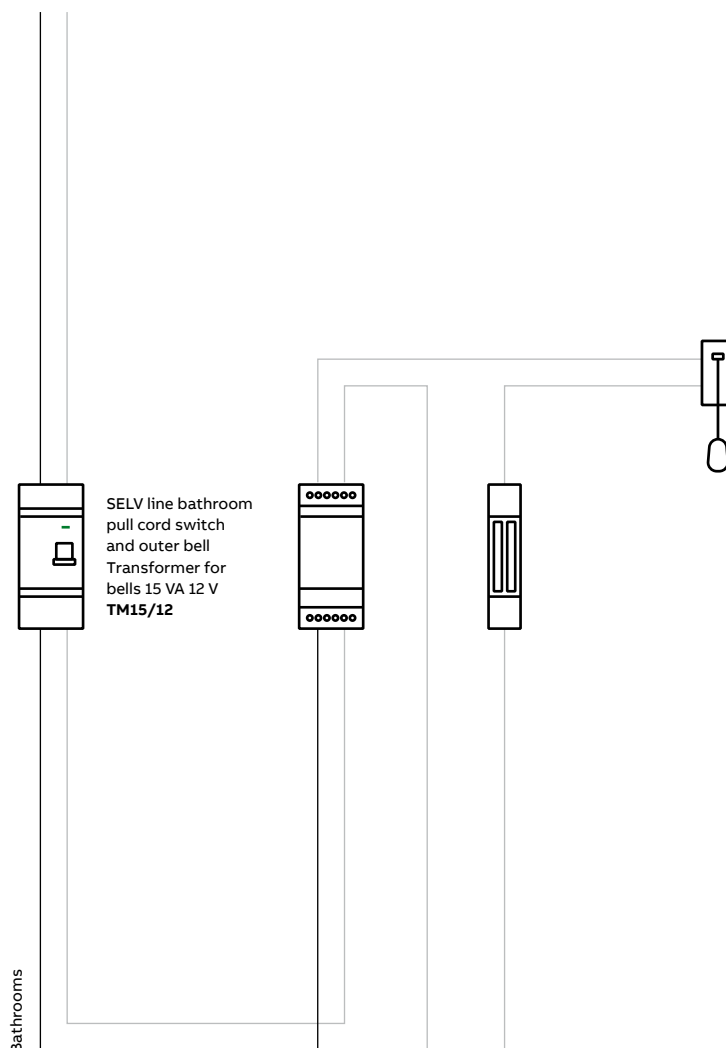
TM, SM

Operating principle

A residual current circuit breaker with I_{dn} equal to 10 mA installed on the bathroom circuits ensures better protection against indirect contacts. The residual current circuit breaker may be installed directly on the control board.

Application environments and example of installation

The SELV circuit guarantees safe power supply where the risk of accident is higher, such as near the bathtub.



Application examples

Load management relay LCR

Operating principle

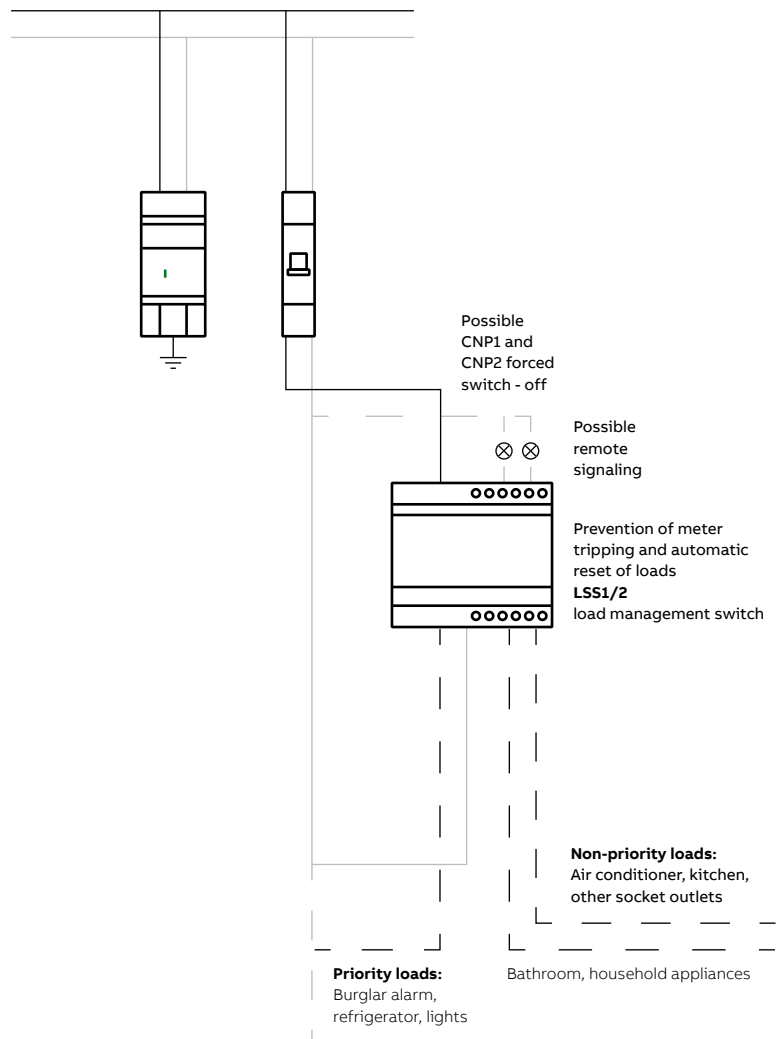
LCR load management relay prevents tripping of the main circuit-breaker by sequentially switching off one non-priorityload when the preset threshold is exceeded. At preset time intervals, the device automatically attempts to reconnect the previously disabled load.

Application environments

The installation of the LCR is suitable for any environment and situation where it is necessary to control electric energy consumption within consumption limits allowed in the system.

Example of installation

As shown in the diagrams, one of the possible applications is the installation of the LCR load management relay in a printing office system, where the conditioning switch-on causes the exceeding of the energy consumption threshold defined with the supplying company by contract. The LCR preserves printing machines operation by switching off one or two primary loads automatically (i.e. night conditioning and lighting), where ON red leds indicate temporary OFF. After a preset interval, the switch checks that current consumption values fall within the limits again trying to reset the previously disconnected loads.





Protection

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Continuous attention on protection, selectivity and savings

ABB's mission for your home

Protecting the electrical system is an essential step to ensure safety and comfort to its users, while providing the correct economical and functional operation of the devices it supplies.



Protection aims at minimizing risks for people and devices due to abnormal conditions or faults that impair the electrical parameters of the installation and of the loads.

In this context, an adequate coordination between the various protection devices (normally located on the sections of the system or on specific components) and an appropriate degree of selectivity help to provide total safety of the installation.

For the system to operate properly, protection has to allow quick identification and disconnection of the area affected by the problem, without hasty, inappropriate or untimely actions that may compromise the power supply to the unaffected areas.

In case a protection device trips, the maintenance personnel should have clear and essential information rapidly available in order to restore the service as quickly as possible.

A protection system must also provide adequate flexibility and reserve mechanisms, in case of malfunctioning of the main protection unit.

For a good compromise between reliability, simplicity and convenience, a protection system must be able to identify how and where the fault occurred, differentiating between abnormal but tolerable situations and actual hazards. It is imperative to act as quickly as possible to minimize risks and damage (destruction, accelerated aging, etc.), safeguarding the continuity and stability of power supply.

Along with the high quality and the easy installation the modular DIN rail products of the Compact Home range combine features that enable to reconcile two seemingly conflicting needs: accurate identification of the fault and effectiveness of action.

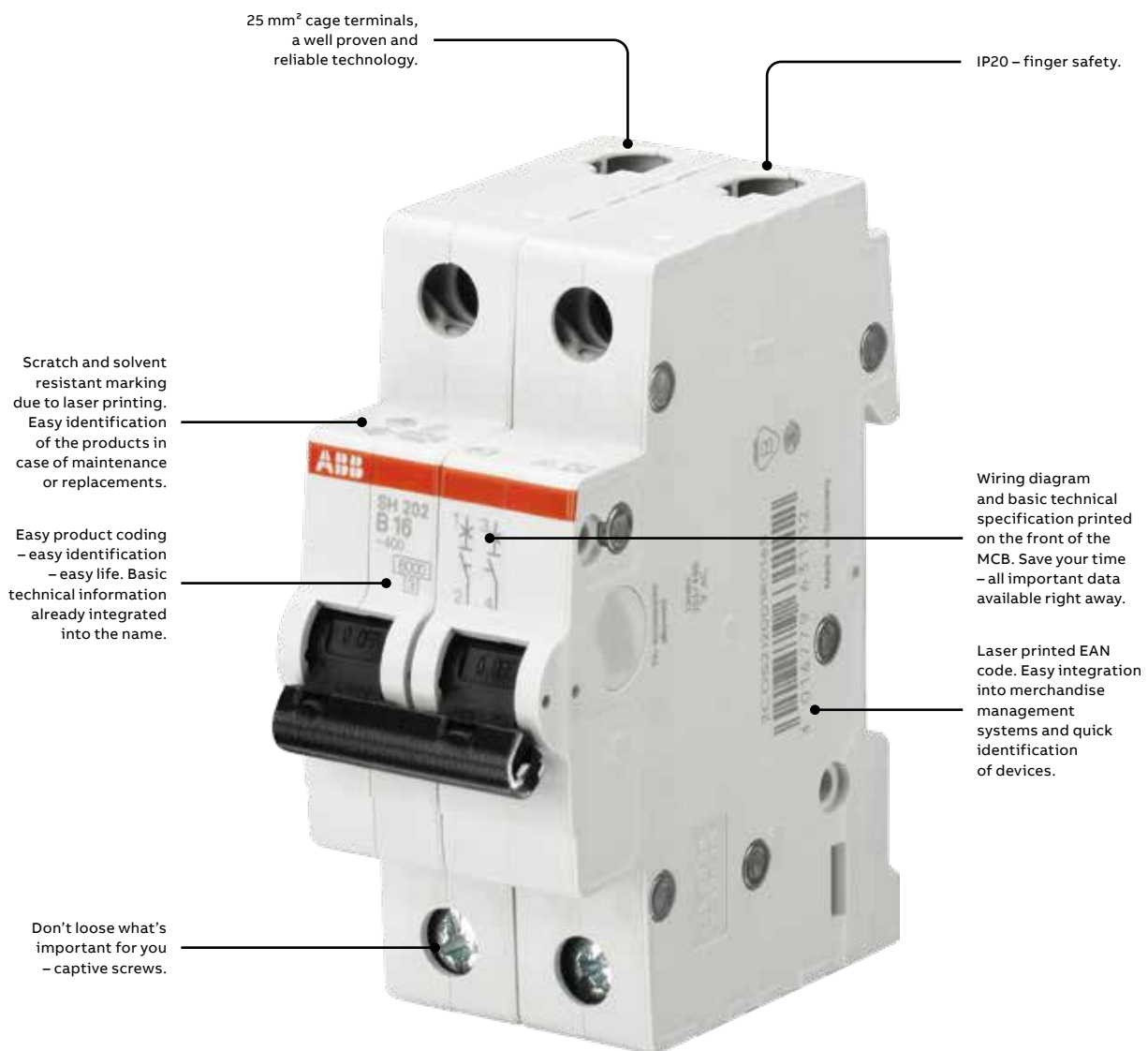
Although a marked selectivity of protective devices is rarely required by the applicable regulations and may seem unwarranted, designing a selective system means choosing a much more efficient, cost-effective solution, suited to the needs of the users and perfectly made, beyond the simple regulatory aspect.



Miniature circuitbreakers SH 200.

The details make the difference

A range designed to ensure efficiency and protection





CPI

All Compact Home MCBs are equipped with a contact position indication (CPI) on the toggle. You can easily identify, if the MCB is in ON or OFF position – easy and safe maintenance work is possible.



Approvals printed on the dome

SH 200 MCBs comply with IEC/EN 60898 and carry all relevant approval marks for each market they are destined to. The certification marks are also printed on the dome of the MCB. Thus make it possible to see the markings also in the mounted position. For control and acceptance procedure – certification marks visible on fitted devices on the side of mounting.



Housing material

By using the state-of-the-art housing material, ABB is taking care of the environment. With the latest generation of thermoplastics it's possible to recycle the MCBs – especially the thermoplastic housing-material can be re-used. By using the latest generation of thermoplastics the material stability of all Compact Home MCBs is improved. Residential MCBs are free of halogens – no environmental pollution.



Laser printing

All printings of the Compact Home MCBs, like the approvals on the dome, the product identification, are printed by a laser. The laser printing ensures a friction, scratch and solvent resistant marking on the MCBs.

Easy identification of the products in case of maintenance or replacements due to safe laser printing.



Connection of SH and S

Compatibility with System pro M compact® is given in all kind of variations like insertion of 1 System pro M compact® MCB (e.g. K-characteristic) into an Installation with Compact Home components and Compact Home busbars. Also the combination of 1 Compact Home MCB with System pro M compact® components and System pro M compact® busbars is not a problem.



Terminals

The Compact Home MCBs are equipped with 25 mm cage terminals, a well proven and reliable technology.

The cross wiring can easily be done by inserting the Compact Home busbars and then the incoming wires into one of the MCB's terminals. The terminals accept Compact Home busbars and conductors up to 16 mm² together.

Technical features table for miniature circuitbreakers SH 200 Series

| | |
|---|-----------------|
| Standards | |
| Poles | |
| Tripping characteristics | |
| Rated current I_n | A |
| Rated frequency f | Hz |
| Rated insulation voltage U_i acc. to IEC/EN 60664-1 | V |
| Overvoltage category | |
| Pollution degree | |
| Data acc. to IEC/EN 60898-1 | |
| Rated operational voltage U_n | V |
| Max. power frequency recovery voltage (U_{max}) | V |
| Min. operating voltage | V |
| Rated short-circuit capacity I_{cn} | kA |
| Energy limiting class (B, C up to 40 A) | |
| Rated impulse withstand voltage $U_{imp.}$ (1.2/50 μ s) | kV |
| Dielectric test voltage | kV |
| Reference temperature for tripping characteristics | °C |
| Electrical endurance | ops. |
| Mechanical Data | |
| Housing | |
| Toggle | |
| Contact position indication | |
| Protection degree acc. to EN 60529 | |
| Mechanical endurance | ops. |
| Shock resistance acc. to IEC/EN 60068-2-27 | |
| Vibration resistance acc. to IEC/EN 60068-2-6 | |
| Environmental conditions (damp heat cyclic) acc. to IEC/EN 60068-2-30 | °C/RH |
| Ambient temperature | °C |
| Storage temperature | °C |
| Installation | |
| Terminal | |
| Cross-section of conductors (top / bottom) | mm ² |
| Torque | Nm |
| Screwdriver | |
| Mounting | |
| Mounting position | |
| Supply | |
| Dimensions and weight | |
| Mounting dimensions acc. to DIN 43880 | |
| Pole dimensions (H × D × W) | mm |
| Pole weight | g |
| Combination with aux. elements | |
| Accessories mountable | |

* Also fulfilling the requirement acc. to the protection degree IPXXB

—
SH 200 M
2CDC021003S0016



—
SH 200
2CSC400030F0027



—
SH 200 L
2CSC400030F0015



—
SH 200 T
2CSC400030F0002



| SH 200 M | SH 200 | SH 200 L | SH 200 T |
|----------|--------|----------|---|
| | | | IEC/EN 60898-1 |
| | | | 1P, 2P, 3P, 4P, 1P+N, 3P+N |
| | | | B, C, D |
| | | | 0.5...63 A (C, D), 6...63 A(B) |
| | | | 50 / 60 Hz |
| | | | 250 V AC (phase to ground), 440 V AC (phase to phase) |
| | | | III |
| | | | 2 |
| | | | 1P: 230/400 V AC; 1P+N: 230 V AC; 2 ... 4P: 400 V AC; 3P+N: 400 V AC |
| | | | 1P: 253 V AC; 1P+N: 253 V AC; 2 ... 4P: 440 V AC; 3P+N: 440 V AC |
| | | | 12 V AC |
| 10 kA | 6 kA | 4.5 kA | 3 kA |
| | | | 3 |
| | | | 4 kV (test voltage 6.2 kV at sea level, 5 kV at 2,000 m) |
| | | | 2 kV (50 / 60 Hz, 1 min.) |
| | | | B, C, D: 30°C |
| | | | $I_n < 32$ A: 20,000 ops (AC), $I_n \geq 32$ A: 10,000 ops. (AC); 1,000 ops. (DC); 1 cycle (2 s – ON, 13 s – OFF, $I_n \leq 32$ A), 1 cycle (2 s – ON, 28 s – OFF, $I_n > 32$ A) |
| | | | Insulation group II, RAL 7035 |
| | | | Insulation group II, black, sealable |
| | | | Marking on toggle (I ON / 0 OFF) |
| | | | IP20*, IP40 in enclosure with cover |
| | | | 20,000 ops. |
| | | | 25 g – 3 shocks – 11 ms |
| | | | 5 g – 20 cycles at 5 ... 150 ... 5 Hz with load 0.8 I_n |
| | | | 28 cycles with 55°C/90-96% and 25°C/95-100% |
| | | | -25 ... +55°C |
| | | | -40 ... +70°C |
| | | | Cage Terminal |
| | | | 25 mm ² / 25 mm ² |
| | | | 2.0 Nm |
| | | | No. 2 Pozidrive |
| | | | On DIN rail 35 mm acc. to EN 60715 by fast clip |
| | | | any |
| | | | optional |
| | | | Mounting dimension 1 |
| | | | 85 × 69 × 17.5 mm |
| | | | ca. 115 g |
| | | | No |

Ordering data

MCB SH 200 T Series – B characteristic

The SH 200 miniature circuit breaker is perfectly suitable for protecting lighting and power socket circuits that can be frequently found in residential areas. ABB used its years of experience with miniature circuit breaker to create this product by combining the optimum features for residential use alone.

The Compact Home range is versatile to provide the customer with the perfect solution for residential over current protection. It is available in tripping characteristics B and C type; with breaking capacities between 3 and 6 kA. As usual for ABB miniature circuit breaker, SH 200 is available from one to four poles and additional in one & three pole plus Neutral. The rated currents are limited to 6 A up to 40 A as it is common in residential applications.



SH201T-B
2CSC400030F0002



SH201T-B...NA
2CSC400030F0004



SH202T-B
2CSC400030F0005

| N. of poles | Rated current In A | N° module [17.5 mm] | Bbn 4016779 EAN | Type code | Order details Order code | Price | Weight 1 piece kg | Pack unit |
|-------------|-----------------------|------------------------|-----------------------|--------------|-----------------------------|-------|-------------------------|--------------|
| 1 | 6 | 1 | 631921 | SH201T-B6 | 2CDS231001R0065 | | 0.125 | 10 |
| | 10 | 1 | 631952 | SH201T-B10 | 2CDS231001R0105 | | 0.125 | 10 |
| | 13 | 1 | 631976 | SH201T-B13 | 2CDS231001R0135 | | 0.125 | 10 |
| | 16 | 1 | 631990 | SH201T-B16 | 2CDS231001R0165 | | 0.125 | 10 |
| | 20 | 1 | 632010 | SH201T-B20 | 2CDS231001R0205 | | 0.125 | 10 |
| | 25 | 1 | 632034 | SH201T-B25 | 2CDS231001R0255 | | 0.125 | 10 |
| | 32 | 1 | 632058 | SH201T-B32 | 2CDS231001R0325 | | 0.125 | 10 |
| | 40 | 1 | 632072 | SH201T-B40 | 2CDS231001R0405 | | 0.125 | 10 |
| | 50 | 1 | 943116 | SH201T-B50 | 2CDS231001R0505 | | 0.125 | 10 |
| | 63 | 1 | 943147 | SH201T-B63 | 2CDS231001R0635 | | 0.125 | 10 |
| 1+N | 6 | 2 | 632096 | SH201T-B6NA | 2CDS231103R0065 | | 0.25 | 5 |
| | 10 | 2 | 632126 | SH201T-B10NA | 2CDS231103R0105 | | 0.25 | 5 |
| | 13 | 2 | 632140 | SH201T-B13NA | 2CDS231103R0135 | | 0.25 | 5 |
| | 16 | 2 | 632164 | SH201T-B16NA | 2CDS231103R0165 | | 0.25 | 5 |
| | 20 | 2 | 632188 | SH201T-B20NA | 2CDS231103R0205 | | 0.25 | 5 |
| | 25 | 2 | 632201 | SH201T-B25NA | 2CDS231103R0255 | | 0.25 | 5 |
| | 32 | 2 | 632225 | SH201T-B32NA | 2CDS231103R0325 | | 0.25 | 5 |
| | 40 | 2 | 632249 | SH201T-B40NA | 2CDS231103R0405 | | 0.25 | 5 |
| | 50 | 2 | 943321 | SH201T-B50NA | 2CDS231103R0505 | | 0.25 | 5 |
| | 63 | 2 | 943352 | SH201T-B63NA | 2CDS231103R0635 | | 0.25 | 5 |
| 2 | 6 | 2 | 632263 | SH202T-B6 | 2CDS232001R0065 | | 0.25 | 5 |
| | 10 | 2 | 632294 | SH202T-B10 | 2CDS232001R0105 | | 0.25 | 5 |
| | 13 | 2 | 632317 | SH202T-B13 | 2CDS232001R0135 | | 0.25 | 5 |
| | 16 | 2 | 632331 | SH202T-B16 | 2CDS232001R0165 | | 0.25 | 5 |
| | 20 | 2 | 632355 | SH202T-B20 | 2CDS232001R0205 | | 0.25 | 5 |
| | 25 | 2 | 632379 | SH202T-B25 | 2CDS232001R0255 | | 0.25 | 5 |
| | 32 | 2 | 632393 | SH202T-B32 | 2CDS232001R0325 | | 0.25 | 5 |
| | 40 | 2 | 632416 | SH202T-B40 | 2CDS232001R0405 | | 0.25 | 5 |
| | 50 | 2 | 943536 | SH202T-B50 | 2CDS232001R0505 | | 0.25 | 5 |
| | 63 | 2 | 943567 | SH202T-B63 | 2CDS232001R0635 | | 0.25 | 5 |



—
SH203T-B
2CSC400030F0006



—
SH203T-B...NA
2CSC400030F0007



—
SH204T-B
2CSC400030F0008

| N. of poles | Rated current | N° module | Bbn | Order details | | | Weight | Pack |
|-------------|---------------|-----------|--------|---------------|-----------------|-------|---------|------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | 1 piece | unit |
| 3 | 6 | 3 | 632430 | SH203T-B6 | 2CDS233001R0065 | | 0.375 | 1 |
| | 10 | 3 | 632461 | SH203T-B10 | 2CDS233001R0105 | | 0.375 | 1 |
| | 13 | 3 | 632485 | SH203T-B13 | 2CDS233001R0135 | | 0.375 | 1 |
| | 16 | 3 | 632508 | SH203T-B16 | 2CDS233001R0165 | | 0.375 | 1 |
| | 20 | 3 | 632522 | SH203T-B20 | 2CDS233001R0205 | | 0.375 | 1 |
| | 25 | 3 | 632546 | SH203T-B25 | 2CDS233001R0255 | | 0.375 | 1 |
| | 32 | 3 | 632560 | SH203T-B32 | 2CDS233001R0325 | | 0.375 | 1 |
| | 40 | 3 | 632584 | SH203T-B40 | 2CDS233001R0405 | | 0.375 | 1 |
| | 50 | 3 | 943741 | SH203T-B50 | 2CDS233001R0505 | | 0.375 | 1 |
| | 63 | 3 | 943772 | SH203T-B63 | 2CDS233001R0635 | | 0.375 | 1 |
| 3+N | 6 | 4 | 632607 | SH203T-B6NA | 2CDS233103R0065 | | 0.5 | 1 |
| | 10 | 4 | 632638 | SH203T-B10NA | 2CDS233103R0105 | | 0.5 | 1 |
| | 13 | 4 | 632652 | SH203T-B13NA | 2CDS233103R0135 | | 0.5 | 1 |
| | 16 | 4 | 632676 | SH203T-B16NA | 2CDS233103R0165 | | 0.5 | 1 |
| | 20 | 4 | 632690 | SH203T-B20NA | 2CDS233103R0205 | | 0.5 | 1 |
| | 25 | 4 | 632713 | SH203T-B25NA | 2CDS233103R0255 | | 0.5 | 1 |
| | 32 | 4 | 632737 | SH203T-B32NA | 2CDS233103R0325 | | 0.5 | 1 |
| | 40 | 4 | 632751 | SH203T-B40NA | 2CDS233103R0405 | | 0.5 | 1 |
| | 50 | | 943956 | SH203T-B50NA | 2CDS233103R0505 | | 0.5 | 1 |
| | 63 | | 943987 | SH203T-B63NA | 2CDS233103R0635 | | 0.5 | 1 |
| 4 | 6 | 4 | 632775 | SH204T-B6 | 2CDS234001R0065 | | 0.5 | 1 |
| | 10 | 4 | 632805 | SH204T-B10 | 2CDS234001R0105 | | 0.5 | 1 |
| | 13 | 4 | 632829 | SH204T-B13 | 2CDS234001R0135 | | 0.5 | 1 |
| | 16 | 4 | 632843 | SH204T-B16 | 2CDS234001R0165 | | 0.5 | 1 |
| | 20 | 4 | 632867 | SH204T-B20 | 2CDS234001R0205 | | 0.5 | 1 |
| | 25 | 4 | 632881 | SH204T-B25 | 2CDS234001R0255 | | 0.5 | 1 |
| | 32 | 4 | 632904 | SH204T-B32 | 2CDS234001R0325 | | 0.5 | 1 |
| | 40 | 4 | 944168 | SH204T-B50 | 2CDS234001R0505 | | 0.5 | 1 |
| | 50 | 4 | 944199 | SH204T-B63 | 2CDS234001R0635 | | 0.5 | 1 |
| | 63 | 4 | 632928 | SH204T-B40 | 2CDS234001R0405 | | 0.5 | 1 |

Ordering data

MCB SH 200 T Series – C characteristic



—
SH201T-C
2CSC400030F0009



—
SH201T-C...NA
2CSC400030F0010

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit | |
|-------------|---------------|-----------|-------------|---------------|-----------------|----------------|-----------|----|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 | 0.5 | 1 | 699242 | SH201T-C0,5 | 2CDS231001R0984 | | 0.125 | 10 |
| | 1 | 1 | 699259 | SH201T-C1 | 2CDS231001R0014 | | 0.125 | 10 |
| | 1.6 | 1 | 699266 | SH201T-C1,6 | 2CDS231001R0974 | | 0.125 | 10 |
| | 2 | 1 | 699273 | SH201T-C2 | 2CDS231001R0024 | | 0.125 | 10 |
| | 3 | 1 | 699280 | SH201T-C3 | 2CDS231001R0034 | | 0.125 | 10 |
| | 4 | 1 | 699297 | SH201T-C4 | 2CDS231001R0044 | | 0.125 | 10 |
| | 6 | 1 | 631914 | SH201T-C6 | 2CDS231001R0064 | | 0.125 | 10 |
| | 8 | 1 | 631938 | SH201T-C8 | 2CDS231001R0084 | | 0.125 | 10 |
| | 10 | 1 | 631945 | SH201T-C10 | 2CDS231001R0104 | | 0.125 | 10 |
| | 13 | 1 | 631969 | SH201T-C13 | 2CDS231001R0134 | | 0.125 | 10 |
| | 16 | 1 | 631983 | SH201T-C16 | 2CDS231001R0164 | | 0.125 | 10 |
| | 20 | 1 | 632003 | SH201T-C20 | 2CDS231001R0204 | | 0.125 | 10 |
| | 25 | 1 | 632027 | SH201T-C25 | 2CDS231001R0254 | | 0.125 | 10 |
| | 32 | 1 | 632041 | SH201T-C32 | 2CDS231001R0324 | | 0.125 | 10 |
| | 40 | 1 | 632065 | SH201T-C40 | 2CDS231001R0404 | | 0.125 | 10 |
| | 50 | 1 | 943109 | SH201T-C50 | 2CDS231001R0504 | | 0.125 | 10 |
| | 63 | 1 | 943130 | SH201T-C63 | 2CDS231001R0634 | | 0.125 | 10 |
| 1+N | 0.5 | 2 | 700344 | SH201T-C0,5NA | 2CDS231103R0984 | | 0.25 | 5 |
| | 1 | 2 | 700351 | SH201T-C1NA | 2CDS231103R0014 | | 0.25 | 5 |
| | 1.6 | 2 | 700368 | SH201T-C1,6NA | 2CDS231103R0974 | | 0.25 | 5 |
| | 2 | 2 | 700375 | H201T-C2NA | 2CDS231103R0024 | | 0.25 | 5 |
| | 3 | 2 | 700382 | H201T-C3NA | 2CDS231103R0034 | | 0.25 | 5 |
| | 4 | 2 | 700399 | H201T-C4NA | 2CDS231103R0044 | | 0.25 | 5 |
| | 6 | 2 | 632089 | SH201T-C6NA | 2CDS231103R0064 | | 0.25 | 5 |
| | 8 | 2 | 632102 | SH201T-C8NA | 2CDS231103R0084 | | 0.25 | 5 |
| | 10 | 2 | 632119 | SH201T-C10NA | 2CDS231103R0104 | | 0.25 | 5 |
| | 13 | 2 | 632133 | SH201T-C13NA | 2CDS231103R0134 | | 0.25 | 5 |
| | 16 | 2 | 632157 | SH201T-C16NA | 2CDS231103R0164 | | 0.25 | 5 |
| | 20 | 2 | 632171 | SH201T-C20NA | 2CDS231103R0204 | | 0.25 | 5 |
| | 25 | 2 | 632195 | SH201T-C25NA | 2CDS231103R0254 | | 0.25 | 5 |
| | 32 | 2 | 632218 | SH201T-C32NA | 2CDS231103R0324 | | 0.25 | 5 |
| | 40 | 2 | 632232 | SH201T-C40NA | 2CDS231103R0404 | | 0.25 | 5 |
| | 50 | 2 | 943314 | SH201T-C50NA | 2CDS231103R0504 | | 0.25 | 5 |
| | 63 | 2 | 943345 | SH201T-C63NA | 2CDS231103R0634 | | 0.25 | 5 |



—
SH202T-C
2CSC400030F0011



—
SH203T-C
2CSC400030F0012

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit | |
|-------------|---------------|-----------|-------------|-------------|-----------------|----------------|-----------|---|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 2 | 0.5 | 2 | 700283 | SH202T-C0,5 | 2CDS232001R0984 | | 0.25 | 5 |
| | 1 | 2 | 700290 | SH202T-C1 | 2CDS232001R0014 | | 0.25 | 5 |
| | 1.6 | 2 | 700306 | SH202T-C1,6 | 2CDS232001R0974 | | 0.25 | 5 |
| | 2 | 2 | 700313 | SH202T-C2 | 2CDS232001R0024 | | 0.25 | 5 |
| | 3 | 2 | 700320 | SH202T-C3 | 2CDS232001R0034 | | 0.25 | 5 |
| | 4 | 2 | 700337 | SH202T-C4 | 2CDS232001R0044 | | 0.25 | 5 |
| | 6 | 2 | 632256 | SH202T-C6 | 2CDS232001R0064 | | 0.25 | 5 |
| | 8 | 2 | 632270 | SH202T-C8 | 2CDS232001R0084 | | 0.25 | 5 |
| | 10 | 2 | 632287 | SH202T-C10 | 2CDS232001R0104 | | 0.25 | 5 |
| | 13 | 2 | 632300 | SH202T-C13 | 2CDS232001R0134 | | 0.25 | 5 |
| | 16 | 2 | 632324 | SH202T-C16 | 2CDS232001R0164 | | 0.25 | 5 |
| | 20 | 2 | 632348 | SH202T-C20 | 2CDS232001R0204 | | 0.25 | 5 |
| | 25 | 2 | 632362 | SH202T-C25 | 2CDS232001R0254 | | 0.25 | 5 |
| | 32 | 2 | 632386 | SH202T-C32 | 2CDS232001R0324 | | 0.25 | 5 |
| | 40 | 2 | 632409 | SH202T-C40 | 2CDS232001R0404 | | 0.25 | 5 |
| | 50 | 2 | 943765 | SH202T-C50 | 2CDS232001R0504 | | 0.25 | 5 |
| | 63 | 2 | 943550 | SH202T-C63 | 2CDS232001R0634 | | 0.25 | 5 |
| 3 | 0.5 | 3 | 701556 | SH203T-C0,5 | 2CDS233001R0984 | | 0.375 | 1 |
| | 1 | 3 | 701563 | SH203T-C1 | 2CDS233001R0014 | | 0.375 | 1 |
| | 1.6 | 3 | 701570 | SH203T-C1,6 | 2CDS233001R0974 | | 0.375 | 1 |
| | 2 | 3 | 701587 | SH203T-C2 | 2CDS233001R0024 | | 0.375 | 1 |
| | 3 | 3 | 701594 | SH203T-C3 | 2CDS233001R0034 | | 0.375 | 1 |
| | 4 | 3 | 701600 | SH203T-C4 | 2CDS233001R0044 | | 0.375 | 1 |
| | 6 | 3 | 632423 | SH203T-C6 | 2CDS233001R0064 | | 0.375 | 1 |
| | 8 | 3 | 632447 | SH203T-C8 | 2CDS233001R0084 | | 0.375 | 1 |
| | 10 | 3 | 632454 | SH203T-C10 | 2CDS233001R0104 | | 0.375 | 1 |
| | 13 | 3 | 632478 | SH203T-C13 | 2CDS233001R0134 | | 0.375 | 1 |
| | 16 | 3 | 632492 | SH203T-C16 | 2CDS233001R0164 | | 0.375 | 1 |
| | 20 | 3 | 632515 | SH203T-C20 | 2CDS233001R0204 | | 0.375 | 1 |
| | 25 | 3 | 632539 | SH203T-C25 | 2CDS233001R0254 | | 0.375 | 1 |
| | 32 | 3 | 632553 | SH203T-C32 | 2CDS233001R0324 | | 0.375 | 1 |
| | 40 | 3 | 632577 | SH203T-C40 | 2CDS233001R0404 | | 0.375 | 1 |
| | 50 | 3 | 943734 | SH203T-C50 | 2CDS233001R0504 | | 0.375 | 1 |
| | 63 | 3 | 943765 | SH203T-C63 | 2CDS233001R0634 | | 0.375 | 1 |

Ordering data

MCB SH 200 T Series – C characteristic



—
SH203T-C...NA
2CSC400030F0007



—
SH204T-C
2CSC400030F0008

| N. of poles | Rated current | N° module | Bbn 4016779 | Order details | | | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 3+N | 0.5 | 4 | 702652 | SH203T-C0,5NA | 2CDS233103R0984 | | 0.5 | 1 |
| | 1 | 4 | 702669 | SH203T-C1NA | 2CDS233103R0014 | | 0.5 | 1 |
| | 1.6 | 4 | 702676 | SH203T-C1,6NA | 2CDS233103R0974 | | 0.5 | 1 |
| | 2 | 4 | 702683 | SH203T-C2NA | 2CDS233103R0024 | | 0.5 | 1 |
| | 3 | 4 | 702690 | SH203T-C3NA | 2CDS233103R0034 | | 0.5 | 1 |
| | 4 | 4 | 702706 | SH203T-C4NA | 2CDS233103R0044 | | 0.5 | 1 |
| | 6 | 4 | 632591 | SH203T-C6NA | 2CDS233103R0064 | | 0.5 | 1 |
| | 8 | 4 | 632614 | SH203T-C8NA | 2CDS233103R0084 | | 0.5 | 1 |
| | 10 | 4 | 632621 | SH203T-C10NA | 2CDS233103R0104 | | 0.5 | 1 |
| | 13 | 4 | 632645 | SH203T-C13NA | 2CDS233103R0134 | | 0.5 | 1 |
| | 16 | 4 | 632669 | SH203T-C16NA | 2CDS233103R0164 | | 0.5 | 1 |
| | 20 | 4 | 632683 | SH203T-C20NA | 2CDS233103R0204 | | 0.5 | 1 |
| | 25 | 4 | 632706 | SH203T-C25NA | 2CDS233103R0254 | | 0.5 | 1 |
| | 32 | 4 | 632720 | SH203T-C32NA | 2CDS233103R0324 | | 0.5 | 1 |
| | 40 | 4 | 632744 | SH203T-C40NA | 2CDS233103R0404 | | 0.5 | 1 |
| | 50 | 4 | 943949 | SH203T-C50NA | 2CDS233103R0504 | | 0.5 | 1 |
| | 63 | 4 | 943970 | SH203T-C63NA | 2CDS233103R0634 | | 0.5 | 1 |
| 4 | 0.5 | 4 | 702591 | SH204T-C0,5A | 2CDS234001R0984 | | 0.5 | 1 |
| | 1 | 4 | 702607 | SH204T-C1 | 2CDS234001R0014 | | 0.5 | 1 |
| | 1.6 | 4 | 702614 | SH204T-C1,6 | 2CDS234001R0974 | | 0.5 | 1 |
| | 2 | 4 | 702621 | SH204T-C2 | 2CDS234001R0024 | | 0.5 | 1 |
| | 3 | 4 | 702638 | SH204T-C3 | 2CDS234001R0034 | | 0.5 | 1 |
| | 4 | 4 | 702645 | SH204T-C4 | 2CDS234001R0044 | | 0.5 | 1 |
| | 6 | 4 | 632768 | SH204T-C6 | 2CDS234001R0064 | | 0.5 | 1 |
| | 8 | 4 | 632782 | SH204T-C8 | 2CDS234001R0084 | | 0.5 | 1 |
| | 10 | 4 | 632799 | SH204T-C10 | 2CDS234001R0104 | | 0.5 | 1 |
| | 13 | 4 | 632812 | SH204T-C13 | 2CDS234001R0134 | | 0.5 | 1 |
| | 16 | 4 | 632836 | SH204T-C16 | 2CDS234001R0164 | | 0.5 | 1 |
| | 20 | 4 | 632850 | SH204T-C20 | 2CDS234001R0204 | | 0.5 | 1 |
| | 25 | 4 | 632874 | SH204T-C25 | 2CDS234001R0254 | | 0.5 | 1 |
| | 32 | 4 | 632898 | SH204T-C32 | 2CDS234001R0324 | | 0.5 | 1 |
| | 40 | 4 | 632911 | SH204T-C40 | 2CDS234001R0404 | | 0.5 | 1 |
| | 50 | 4 | 944151 | SH204T-C50 | 2CDS234001R0504 | | 0.5 | 1 |
| | 63 | 4 | 944182 | SH204T-C63 | 2CDS234001R0634 | | 0.5 | 1 |

Ordering data

MCB SH 200 L Series – B characteristic



—
SH201L-B
2CSC400030F0015



—
SH201L-B...NA
2CSC400030F0016



—
SH202L-B
2CSC400030F0017

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit | |
|-------------|---------------|-----------|-------------|--------------|-----------------|----------------|-----------|----|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 | 6 | 1 | 632942 | SH201L-B6 | 2CDS241001R0065 | | 0.125 | 10 |
| | 10 | 1 | 632973 | SH201L-B10 | 2CDS241001R0105 | | 0.125 | 10 |
| | 13 | 1 | 632997 | SH201L-B13 | 2CDS241001R0135 | | 0.125 | 10 |
| | 16 | 1 | 633017 | SH201L-B16 | 2CDS241001R0165 | | 0.125 | 10 |
| | 20 | 1 | 633031 | SH201L-B20 | 2CDS241001R0205 | | 0.125 | 10 |
| | 25 | 1 | 633055 | SH201L-B25 | 2CDS241001R0255 | | 0.125 | 10 |
| | 32 | 1 | 633079 | SH201L-B32 | 2CDS241001R0325 | | 0.125 | 10 |
| | 40 | 1 | 633093 | SH201L-B40 | 2CDS241001R0405 | | 0.125 | 10 |
| | 50 | 1 | 944373 | SH201L-B50 | 2CDS241001R0505 | | 0.125 | 10 |
| | 63 | 1 | 944403 | SH201L-B63 | 2CDS241001R0635 | | 0.125 | 10 |
| 1+N | 6 | 2 | 633116 | SH201L-B6NA | 2CDS241103R0065 | | 0.25 | 5 |
| | 10 | 2 | 633147 | SH201L-B10NA | 2CDS241103R0105 | | 0.25 | 5 |
| | 13 | 2 | 633161 | SH201L-B13NA | 2CDS241103R0135 | | 0.25 | 5 |
| | 16 | 2 | 633185 | SH201L-B16NA | 2CDS241103R0165 | | 0.25 | 5 |
| | 20 | 2 | 633208 | SH201L-B20NA | 2CDS241103R0205 | | 0.25 | 5 |
| | 25 | 2 | 633222 | SH201L-B25NA | 2CDS241103R0255 | | 0.25 | 5 |
| | 32 | 2 | 633246 | SH201L-B32NA | 2CDS241103R0325 | | 0.25 | 5 |
| | 40 | 2 | 633260 | SH201L-B40NA | 2CDS241103R0405 | | 0.25 | 5 |
| | 50 | 2 | 944588 | SH201L-B50NA | 2CDS241103R0505 | | 0.25 | 5 |
| | 63 | 2 | 944618 | SH201L-B63NA | 2CDS241103R0635 | | 0.25 | 5 |
| 2 | 6 | 2 | 633284 | SH202L-B6 | 2CDS242001R0065 | | 0.25 | 5 |
| | 10 | 2 | 633314 | SH202L-B10 | 2CDS242001R0105 | | 0.25 | 5 |
| | 13 | 2 | 633338 | SH202L-B13 | 2CDS242001R0135 | | 0.25 | 5 |
| | 16 | 2 | 633352 | SH202L-B16 | 2CDS242001R0165 | | 0.25 | 5 |
| | 20 | 2 | 633376 | SH202L-B20 | 2CDS242001R0205 | | 0.25 | 5 |
| | 25 | 2 | 633390 | SH202L-B25 | 2CDS242001R0255 | | 0.25 | 5 |
| | 32 | 2 | 633413 | SH202L-B32 | 2CDS242001R0325 | | 0.25 | 5 |
| | 40 | 2 | 633437 | SH202L-B40 | 2CDS242001R0405 | | 0.25 | 5 |
| | 50 | 2 | 944793 | SH202L-B50 | 2CDS242001R0505 | | 0.25 | 5 |
| | 63 | 2 | 944823 | SH202L-B63 | 2CDS242001R0635 | | 0.25 | 5 |



—
SH203L-B
2CSC400030F0018



—
SH203L-B...NA
2CSC400030F0019



—
SH204L-B
2CSC400030F0020

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|--------------|-----------------|-------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 3 | 6 | 3 | 633451 | SH203L-B6 | 2CDS243001R0065 | | 0.375 | 1 |
| | 10 | 3 | 633482 | SH203L-B10 | 2CDS243001R0105 | | 0.375 | 1 |
| | 13 | 3 | 633505 | SH203L-B13 | 2CDS243001R0135 | | 0.375 | 1 |
| | 16 | 3 | 633529 | SH203L-B16 | 2CDS243001R0165 | | 0.375 | 1 |
| | 20 | 3 | 633543 | SH203L-B20 | 2CDS243001R0205 | | 0.375 | 1 |
| | 25 | 3 | 633567 | SH203L-B25 | 2CDS243001R0255 | | 0.375 | 1 |
| | 32 | 3 | 633581 | SH203L-B32 | 2CDS243001R0325 | | 0.375 | 1 |
| | 40 | 3 | 633604 | SH203L-B40 | 2CDS243001R0405 | | 0.375 | 1 |
| | 50 | 3 | 945004 | SH203L-B50 | 2CDS243001R0505 | | 0.375 | 1 |
| | 63 | 3 | 945035 | SH203L-B63 | 2CDS243001R0635 | | 0.375 | 1 |
| 3+N | 6 | 4 | 633628 | SH203L-B6NA | 2CDS243103R0065 | | 0.5 | 1 |
| | 10 | 4 | 633659 | SH203L-B10NA | 2CDS243103R0105 | | 0.5 | 1 |
| | 13 | 4 | 633673 | SH203L-B13NA | 2CDS243103R0135 | | 0.5 | 1 |
| | 16 | 4 | 633697 | SH203L-B16NA | 2CDS243103R0165 | | 0.5 | 1 |
| | 20 | 4 | 633710 | SH203L-B20NA | 2CDS243103R0205 | | 0.5 | 1 |
| | 25 | 4 | 633734 | SH203L-B25NA | 2CDS243103R0255 | | 0.5 | 1 |
| | 32 | 4 | 633758 | SH203L-B32NA | 2CDS243103R0325 | | 0.5 | 1 |
| | 40 | 4 | 633772 | SH203L-B40NA | 2CDS243103R0405 | | 0.5 | 1 |
| | 50 | 4 | 945219 | SH203L-B50NA | 2CDS243103R0505 | | 0.5 | 1 |
| | 63 | 4 | 945240 | SH203L-B63NA | 2CDS243103R0635 | | 0.5 | 1 |
| 4 | 6 | 4 | 633796 | SH204L-B6 | 2CDS244001R0065 | | 0.5 | 1 |
| | 10 | 4 | 633826 | SH204L-B10 | 2CDS244001R0105 | | 0.5 | 1 |
| | 13 | 4 | 633840 | SH204L-B13 | 2CDS244001R0135 | | 0.5 | 1 |
| | 16 | 4 | 633864 | SH204L-B16 | 2CDS244001R0165 | | 0.5 | 1 |
| | 20 | 4 | 633888 | SH204L-B20 | 2CDS244001R0205 | | 0.5 | 1 |
| | 25 | 4 | 633901 | SH204L-B25 | 2CDS244001R0255 | | 0.5 | 1 |
| | 32 | 4 | 633925 | SH204L-B32 | 2CDS244001R0325 | | 0.5 | 1 |
| | 40 | 4 | 633949 | SH204L-B40 | 2CDS244001R0405 | | 0.5 | 1 |
| | 50 | 4 | 945424 | SH204L-B50 | 2CDS244001R0505 | | 0.5 | 1 |
| | 63 | 4 | 945455 | SH204L-B63 | 2CDS244001R0635 | | 0.5 | 1 |

Ordering data

MCB SH 200 L Series – C characteristic



—
SH201L-C
2CSC400030F0021



—
SH201L-C...NA
2CSC400030F0022

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit | |
|-------------|---------------|-----------|-------------|---------------|-----------------|----------------|-----------|----|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 | 0.5 | 1 | 699181 | SH201L-C0,5 | 2CDS241001R0984 | | 0.125 | 10 |
| | 1 | 1 | 699198 | SH201L-C1 | 2CDS241001R0014 | | 0.125 | 10 |
| | 1.6 | 1 | 699204 | SH201L-C1,6 | 2CDS241001R0974 | | 0.125 | 10 |
| | 2 | 1 | 699211 | SH201L-C2 | 2CDS241001R0024 | | 0.125 | 10 |
| | 3 | 1 | 699228 | SH201L-C3 | 2CDS241001R0034 | | 0.125 | 10 |
| | 4 | 1 | 699235 | SH201L-C4 | 2CDS241001R0044 | | 0.125 | 10 |
| | 6 | 1 | 632935 | SH201L-C6 | 2CDS241001R0064 | | 0.125 | 10 |
| | 8 | 1 | 632959 | SH201L-C8 | 2CDS241001R0084 | | 0.125 | 10 |
| | 10 | 1 | 632966 | SH201L-C10 | 2CDS241001R0104 | | 0.125 | 10 |
| | 13 | 1 | 632980 | SH201L-C13 | 2CDS241001R0134 | | 0.125 | 10 |
| | 16 | 1 | 633000 | SH201L-C16 | 2CDS241001R0164 | | 0.125 | 10 |
| | 20 | 1 | 633024 | SH201L-C20 | 2CDS241001R0204 | | 0.125 | 10 |
| | 25 | 1 | 633048 | SH201L-C25 | 2CDS241001R0254 | | 0.125 | 10 |
| | 32 | 1 | 633062 | SH201L-C32 | 2CDS241001R0324 | | 0.125 | 10 |
| | 40 | 1 | 633086 | SH201L-C40 | 2CDS241001R0404 | | 0.125 | 10 |
| | 50 | 1 | 944366 | SH201L-C50 | 2CDS241001R0504 | | 0.125 | 10 |
| | 63 | 1 | 944397 | SH201L-C63 | 2CDS241001R0634 | | 0.125 | 10 |
| 1+N | 0.5 | 2 | 700221 | SH201L-C0,5NA | 2CDS241103R0984 | | 0.25 | 5 |
| | 1 | 2 | 700238 | SH201L-C1NA | 2CDS241103R0014 | | 0.25 | 5 |
| | 1.6 | 2 | 700245 | SH201L-C1,6NA | 2CDS241103R0974 | | 0.25 | 5 |
| | 2 | 2 | 700252 | SH201L-C2NA | 2CDS241103R0024 | | 0.25 | 5 |
| | 3 | 2 | 700269 | SH201L-C3NA | 2CDS241103R0034 | | 0.25 | 5 |
| | 4 | 2 | 700276 | SH201L-C4NA | 2CDS241103R0044 | | 0.25 | 5 |
| | 6 | 2 | 633109 | SH201L-C6NA | 2CDS241103R0064 | | 0.25 | 5 |
| | 8 | 2 | 633123 | SH201L-C8NA | 2CDS241103R0084 | | 0.25 | 5 |
| | 10 | 2 | 633130 | SH201L-C10NA | 2CDS241103R0104 | | 0.25 | 5 |
| | 13 | 2 | 633154 | SH201L-C13NA | 2CDS241103R0134 | | 0.25 | 5 |
| | 16 | 2 | 633178 | SH201L-C16NA | 2CDS241103R0164 | | 0.25 | 5 |
| | 20 | 2 | 633192 | SH201L-C20NA | 2CDS241103R0204 | | 0.25 | 5 |
| | 25 | 2 | 633215 | SH201L-C25NA | 2CDS241103R0254 | | 0.25 | 5 |
| | 32 | 2 | 633239 | SH201L-C32NA | 2CDS241103R0324 | | 0.25 | 5 |
| | 40 | 2 | 633253 | SH201L-C40NA | 2CDS241103R0404 | | 0.25 | 5 |
| | 50 | 2 | 944571 | SH201L-C50NA | 2CDS241103R0504 | | 0.25 | 5 |
| | 63 | 2 | 943345 | SH201L-C63NA | 2CDS241103R0634 | | 0.25 | 5 |



—
SH202L-C
2CSC400030F0023



—
SH203L-C
2CSC400030F0024

| N. of poles | Rated current | N° module | Bbn | Order details | | | Weight | Pack |
|-------------|---------------|-----------|--------|---------------|-----------------|-------|---------|------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | 1 piece | unit |
| 2 | 0.5 | 2 | 700160 | SH202L-C0,5 | 2CDS242001R0984 | | 0.25 | 5 |
| | 1 | 2 | 700177 | SH202L-C1 | 2CDS242001R0014 | | 0.25 | 5 |
| | 1.6 | 2 | 700184 | SH202L-C1,6 | 2CDS242001R0974 | | 0.25 | 5 |
| | 2 | 2 | 700191 | SH202L-C2 | 2CDS242001R0024 | | 0.25 | 5 |
| | 3 | 2 | 700207 | SH202L-C3 | 2CDS242001R0034 | | 0.25 | 5 |
| | 4 | 2 | 700214 | SH202L-C4 | 2CDS242001R0044 | | 0.25 | 5 |
| | 6 | 2 | 633277 | SH202L-C6 | 2CDS242001R0064 | | 0.25 | 5 |
| | 8 | 2 | 633291 | SH202L-C8 | 2CDS242001R0084 | | 0.25 | 5 |
| | 10 | 2 | 633307 | SH202L-C10 | 2CDS242001R0104 | | 0.25 | 5 |
| | 13 | 2 | 633321 | SH202L-C13 | 2CDS242001R0134 | | 0.25 | 5 |
| | 16 | 2 | 633345 | SH202L-C16 | 2CDS242001R0164 | | 0.25 | 5 |
| | 20 | 2 | 633369 | SH202L-C20 | 2CDS242001R0204 | | 0.25 | 5 |
| | 25 | 2 | 633383 | SH202L-C25 | 2CDS242001R0254 | | 0.25 | 5 |
| | 32 | 2 | 633406 | SH202L-C32 | 2CDS242001R0324 | | 0.25 | 5 |
| | 40 | 2 | 633420 | SH202L-C40 | 2CDS242001R0404 | | 0.25 | 5 |
| | 50 | 2 | 944786 | SH202L-C50 | 2CDS242001R0504 | | 0.25 | 5 |
| | 63 | 2 | 944816 | SH202L-C63 | 2CDS242001R0634 | | 0.25 | 5 |
| 3 | 0.5 | 3 | 701495 | SH203L-C0,5 | 2CDS243001R0984 | | 0.375 | 1 |
| | 1 | 3 | 701501 | SH203L-C1 | 2CDS243001R0014 | | 0.375 | 1 |
| | 1.6 | 3 | 701518 | SH203L-C1,6 | 2CDS243001R0974 | | 0.375 | 1 |
| | 2 | 3 | 701525 | SH203L-C2 | 2CDS243001R0024 | | 0.375 | 1 |
| | 3 | 3 | 701532 | SH203L-C3 | 2CDS243001R0034 | | 0.375 | 1 |
| | 4 | 3 | 701549 | SH203L-C4 | 2CDS243001R0044 | | 0.375 | 1 |
| | 6 | 3 | 633444 | SH203L-C6 | 2CDS243001R0064 | | 0.375 | 1 |
| | 8 | 3 | 633468 | SH203L-C8 | 2CDS243001R0084 | | 0.375 | 1 |
| | 10 | 3 | 633475 | SH203L-C10 | 2CDS243001R0104 | | 0.375 | 1 |
| | 13 | 3 | 633499 | SH203L-C13 | 2CDS243001R0134 | | 0.375 | 1 |
| | 16 | 3 | 633512 | SH203L-C16 | 2CDS243001R0164 | | 0.375 | 1 |
| | 20 | 3 | 633536 | SH203L-C20 | 2CDS243001R0204 | | 0.375 | 1 |
| | 25 | 3 | 633550 | SH203L-C25 | 2CDS243001R0254 | | 0.375 | 1 |
| | 32 | 3 | 633574 | SH203L-C32 | 2CDS243001R0324 | | 0.375 | 1 |
| | 40 | 3 | 633598 | SH203L-C40 | 2CDS243001R0404 | | 0.375 | 1 |
| | 50 | 3 | 944991 | SH203L-C50 | 2CDS243001R0504 | | 0.375 | 1 |
| | 63 | 3 | 945028 | SH203L-C63 | 2CDS243001R0634 | | 0.375 | 1 |

Ordering data

MCB SH 200 L Series – C characteristic



SH203L-C...NA
2CSC400030F0025



SH204L-C
2CSC400030F0026

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit | |
|-------------|---------------|-----------|-------------|---------------|------------------|----------------|-----------|---|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 3+N | 0.5 | 4 | 702539 | SH203L-C0,5NA | 2CDS243103R0984 | | 0.5 | 1 |
| | 1 | 4 | 702546 | SH203L-C1NA | 2CDS243103R0014 | | 0.5 | 1 |
| | 1.6 | 4 | 702553 | SH203L-C1,6NA | 2CDS243103R09744 | | 0.5 | 1 |
| | 2 | 4 | 702560 | SH203L-C2NA | 2CDS243103R0024 | | 0.5 | 1 |
| | 3 | 4 | 702577 | SH203L-C3NA | 2CDS243103R0034 | | 0.5 | 1 |
| | 4 | 4 | 702584 | SH203L-C4NA | 2CDS243103R0044 | | 0.5 | 1 |
| | 6 | 4 | 633611 | SH203L-C6NA | 2CDS243103R0064 | | 0.5 | 1 |
| | 8 | 4 | 633635 | SH203L-C8NA | 2CDS243103R0084 | | 0.5 | 1 |
| | 10 | 4 | 633642 | SH203L-C10NA | 2CDS243103R0104 | | 0.5 | 1 |
| | 13 | 4 | 633666 | SH203L-C13NA | 2CDS243103R0134 | | 0.5 | 1 |
| | 16 | 4 | 633680 | SH203L-C16NA | 2CDS243103R0164 | | 0.5 | 1 |
| | 20 | 4 | 633703 | SH203L-C20NA | 2CDS243103R0204 | | 0.5 | 1 |
| | 25 | 4 | 633727 | SH203L-C25NA | 2CDS243103R0254 | | 0.5 | 1 |
| | 32 | 4 | 633741 | SH203L-C32NA | 2CDS243103R0324 | | 0.5 | 1 |
| | 40 | 4 | 633765 | SH203L-C40NA | 2CDS243103R0404 | | 0.5 | 1 |
| | 50 | 4 | 945202 | SH203L-C50NA | 2CDS243103R0504 | | 0.5 | 1 |
| | 63 | 4 | 945233 | SH203L-C63NA | 2CDS243103R0634 | | 0.5 | 1 |
| 4 | 0.5 | 4 | 702478 | SH204L-C0,5A | 2CDS244001R0984 | | 0.5 | 1 |
| | 1 | 4 | 702485 | SH204L-C1 | 2CDS244001R0014 | | 0.5 | 1 |
| | 1.6 | 4 | 702492 | SH204L-C1,6A | 2CDS244001R0974 | | 0.5 | 1 |
| | 2 | 4 | 702508 | SH204L-C2 | 2CDS244001R0024 | | 0.5 | 1 |
| | 3 | 4 | 702515 | SH204L-C3 | 2CDS244001R0034 | | 0.5 | 1 |
| | 4 | 4 | 702522 | SH204L-C4 | 2CDS244001R0044 | | 0.5 | 1 |
| | 6 | 4 | 633789 | SH204L-C6 | 2CDS244001R0064 | | 0.5 | 1 |
| | 8 | 4 | 633802 | SH204L-C8 | 2CDS244001R0084 | | 0.5 | 1 |
| | 10 | 4 | 633819 | SH204L-C10 | 2CDS244001R0104 | | 0.5 | 1 |
| | 13 | 4 | 633833 | SH204L-C13 | 2CDS244001R0134 | | 0.5 | 1 |
| | 16 | 4 | 633857 | SH204L-C16 | 2CDS244001R0164 | | 0.5 | 1 |
| | 20 | 4 | 633871 | SH204L-C20 | 2CDS244001R0204 | | 0.5 | 1 |
| | 25 | 4 | 633895 | SH204L-C25 | 2CDS244001R0254 | | 0.5 | 1 |
| | 32 | 4 | 633918 | SH204L-C32 | 2CDS244001R0324 | | 0.5 | 1 |
| | 40 | 4 | 633932 | SH204L-C40 | 2CDS244001R0404 | | 0.5 | 1 |
| | 50 | 4 | 945417 | SH204L-C50 | 2CDS244001R0504 | | 0.5 | 1 |
| | 63 | 4 | 945448 | SH204L-C63 | 2CDS244001R0634 | | 0.5 | 1 |

Ordering data

MCB SH 200 Series – B characteristic



—
SH201-B
2CSC400030F0027



—
SH201-B...NA
2CSC400030F0028



—
SH202-B
2CSC400030F0029

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit | |
|-------------|---------------|-----------|-------------|-------------|-----------------|----------------|-----------|----|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 | 6 | 1 | 630580 | SH201-B6 | 2CDS211001R0065 | | 0.125 | 10 |
| | 10 | 1 | 630610 | SH201-B10 | 2CDS211001R0105 | | 0.125 | 10 |
| | 13 | 1 | 630634 | SH201-B13 | 2CDS211001R0135 | | 0.125 | 10 |
| | 16 | 1 | 630658 | SH201-B16 | 2CDS211001R0165 | | 0.125 | 10 |
| | 20 | 1 | 630672 | SH201-B20 | 2CDS211001R0205 | | 0.125 | 10 |
| | 25 | 1 | 630696 | SH201-B25 | 2CDS211001R0255 | | 0.125 | 10 |
| | 32 | 1 | 630719 | SH201-B32 | 2CDS211001R0325 | | 0.125 | 10 |
| | 40 | 1 | 630733 | SH201-B40 | 2CDS211001R0405 | | 0.125 | 10 |
| | 50 | 1 | 698979 | SH201-B50 | 2CDS211001R0505 | | 0.125 | 10 |
| | 63 | 1 | 698986 | SH201-B63 | 2CDS211001R0635 | | 0.125 | 10 |
| 1+N | 6 | 2 | 630818 | SH201-B6NA | 2CDS211103R0065 | | 0.25 | 5 |
| | 10 | 2 | 630849 | SH201-B10NA | 2CDS211103R0105 | | 0.25 | 5 |
| | 13 | 2 | 630863 | SH201-B13NA | 2CDS211103R0135 | | 0.25 | 5 |
| | 16 | 2 | 630887 | SH201-B16NA | 2CDS211103R0165 | | 0.25 | 5 |
| | 20 | 2 | 630900 | SH201-B20NA | 2CDS211103R0205 | | 0.25 | 5 |
| | 25 | 2 | 630924 | SH201-B25NA | 2CDS211103R0255 | | 0.25 | 5 |
| | 32 | 2 | 630948 | SH201-B32NA | 2CDS211103R0325 | | 0.25 | 5 |
| | 40 | 2 | 630962 | SH201-B40NA | 2CDS211103R0405 | | 0.25 | 5 |
| | 50 | 2 | 699761 | SH201-B50NA | 2CDS211103R0505 | | 0.25 | 5 |
| | 63 | 2 | 699778 | SH201-B63NA | 2CDS211103R0635 | | 0.25 | 5 |
| 2 | 6 | 2 | 631044 | SH202-B6 | 2CDS212001R0065 | | 0.25 | 5 |
| | 10 | 2 | 631075 | SH202-B10 | 2CDS212001R0105 | | 0.25 | 5 |
| | 13 | 2 | 631099 | SH202-B13 | 2CDS212001R0135 | | 0.25 | 5 |
| | 16 | 2 | 631112 | SH202-B16 | 2CDS212001R0165 | | 0.25 | 5 |
| | 20 | 2 | 631136 | SH202-B20 | 2CDS212001R0205 | | 0.25 | 5 |
| | 25 | 2 | 631150 | SH202-B25 | 2CDS212001R0255 | | 0.25 | 5 |
| | 32 | 2 | 631174 | SH202-B32 | 2CDS212001R0325 | | 0.25 | 5 |
| | 40 | 2 | 631198 | SH202-B40 | 2CDS212001R0405 | | 0.25 | 5 |
| | 50 | 2 | 699747 | SH202-B50 | 2CDS212001R0505 | | 0.25 | 5 |
| | 63 | 2 | 699754 | SH202-B63 | 2CDS212001R0635 | | 0.25 | 5 |



—
SH203-B
2CSC400030F0030



—
SH203-B...NA
2CSC400030F0031



—
SH204-B
2CSC400030F0032

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|-------------|-----------------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg |
| 3 | 6 | 3 | 631273 | SH203-B6 | 2CDS213001R0065 | | 0.375 |
| | 10 | 3 | 631303 | SH203-B10 | 2CDS213001R0105 | | 0.375 |
| | 13 | 3 | 631327 | SH203-B13 | 2CDS213001R0135 | | 0.375 |
| | 16 | 3 | 631341 | SH203-B16 | 2CDS213001R0165 | | 0.375 |
| | 20 | 3 | 631365 | SH203-B20 | 2CDS213001R0205 | | 0.375 |
| | 25 | 3 | 631389 | SH203-B25 | 2CDS213001R0255 | | 0.375 |
| | 32 | 3 | 631402 | SH203-B32 | 2CDS213001R0325 | | 0.375 |
| | 40 | 3 | 631426 | SH203-B40 | 2CDS213001R0405 | | 0.375 |
| | 50 | 3 | 701280 | SH203-B50 | 2CDS213001R0505 | | 0.375 |
| 3+N | 63 | 3 | 701297 | SH203-B63 | 2CDS213001R0635 | | 0.375 |
| | 6 | 4 | 631501 | SH203-B6NA | 2CDS213103R0065 | | 0.5 |
| | 10 | 4 | 631532 | SH203-B10NA | 2CDS213103R0105 | | 0.5 |
| | 13 | 4 | 631556 | SH203-B13NA | 2CDS213103R0135 | | 0.5 |
| | 16 | 4 | 631570 | SH203-B16NA | 2CDS213103R0165 | | 0.5 |
| | 20 | 4 | 631594 | SH203-B20NA | 2CDS213103R0205 | | 0.5 |
| | 25 | 4 | 631617 | SH203-B25NA | 2CDS213103R0255 | | 0.5 |
| | 32 | 4 | 631631 | SH203-B32NA | 2CDS213103R0325 | | 0.5 |
| | 40 | 4 | 631655 | SH203-B40NA | 2CDS213103R0405 | | 0.5 |
| 4 | 50 | 4 | 702072 | SH203-B50NA | 2CDS213103R0505 | | 0.5 |
| | 63 | 4 | 702089 | SH203-B63NA | 2CDS213103R0635 | | 0.5 |
| | 6 | 4 | 631730 | SH204-B6 | 2CDS214001R0065 | | 0.5 |
| | 10 | 4 | 631761 | SH204-B10 | 2CDS214001R0105 | | 0.5 |
| | 13 | 4 | 631785 | SH204-B13 | 2CDS214001R0135 | | 0.5 |
| | 16 | 4 | 631808 | SH204-B16 | 2CDS214001R0165 | | 0.5 |
| | 20 | 4 | 631822 | SH204-B20 | 2CDS214001R0205 | | 0.5 |
| | 25 | 4 | 631846 | SH204-B25 | 2CDS214001R0255 | | 0.5 |
| | 32 | 4 | 631860 | SH204-B32 | 2CDS214001R0325 | | 0.5 |
| | 40 | 4 | 631884 | SH204-B40 | 2CDS214001R0405 | | 0.5 |
| | 50 | 4 | 702058 | SH204-B50 | 2CDS214001R0505 | | 0.5 |
| | 63 | 4 | 702065 | SH204-B63 | 2CDS214001R0635 | | 0.5 |

Ordering data

MCB SH 200 Series – C characteristic



—
SH201-C
2CSC400030F0033



—
SH201-C...NA
2CSC400030F0034

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit | |
|-------------|---------------|-----------|-------------|--------------|-----------------|----------------|-----------|----|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 | 0.5 | 1 | 630757 | SH201-C0,5 | 2CDS211001R0984 | | 0.125 | 10 |
| | 1 | 1 | 630535 | SH201-C1 | 2CDS211001R0014 | | 0.125 | 10 |
| | 1.6 | 1 | 630740 | SH201-C1,6 | 2CDS211001R0974 | | 0.125 | 10 |
| | 2 | 1 | 630542 | SH201-C2 | 2CDS211001R0024 | | 0.125 | 10 |
| | 3 | 1 | 630559 | SH201-C3 | 2CDS211001R0034 | | 0.125 | 10 |
| | 4 | 1 | 630566 | SH201-C4 | 2CDS211001R0044 | | 0.125 | 10 |
| | 6 | 1 | 630573 | SH201-C6 | 2CDS211001R0064 | | 0.125 | 10 |
| | 8 | 1 | 630597 | SH201-C8 | 2CDS211001R0084 | | 0.125 | 10 |
| | 10 | 1 | 630603 | SH201-C10 | 2CDS211001R0104 | | 0.125 | 10 |
| | 13 | 1 | 630627 | SH201-C13 | 2CDS211001R0134 | | 0.125 | 10 |
| | 16 | 1 | 630641 | SH201-C16 | 2CDS211001R0164 | | 0.125 | 10 |
| | 20 | 1 | 630665 | SH201-C20 | 2CDS211001R0204 | | 0.125 | 10 |
| | 25 | 1 | 630689 | SH201-C25 | 2CDS211001R0254 | | 0.125 | 10 |
| | 32 | 1 | 630702 | SH201-C32 | 2CDS211001R0324 | | 0.125 | 10 |
| | 40 | 1 | 630726 | SH201-C40 | 2CDS211001R0404 | | 0.125 | 10 |
| | 50 | 1 | 698993 | SH201-C50 | 2CDS211001R0504 | | 0.125 | 10 |
| | 63 | 1 | 699006 | SH201-C63 | 2CDS211001R0634 | | 0.125 | 10 |
| 1+N | 0.5 | 2 | 630986 | SH201-C0,5NA | 2CDS211103R0984 | | 0.25 | 5 |
| | 1 | 2 | 630764 | SH201-C1NA | 2CDS211103R0014 | | 0.25 | 5 |
| | 1.6 | 2 | 630979 | SH201-C1,6NA | 2CDS211103R0974 | | 0.25 | 5 |
| | 2 | 2 | 630771 | SH201-C2NA | 2CDS211103R0024 | | 0.25 | 5 |
| | 3 | 2 | 630788 | SH201-C3NA | 2CDS211103R0034 | | 0.25 | 5 |
| | 4 | 2 | 630795 | SH201-C4NA | 2CDS211103R0044 | | 0.25 | 5 |
| | 6 | 2 | 630801 | SH201-C6NA | 2CDS211103R0064 | | 0.25 | 5 |
| | 8 | 2 | 630825 | SH201-C8NA | 2CDS211103R0084 | | 0.25 | 5 |
| | 10 | 2 | 630832 | SH201-C10NA | 2CDS211103R0104 | | 0.25 | 5 |
| | 13 | 2 | 630856 | SH201-C13NA | 2CDS211103R0134 | | 0.25 | 5 |
| | 16 | 2 | 630870 | SH201-C16NA | 2CDS211103R0164 | | 0.25 | 5 |
| | 20 | 2 | 630894 | SH201-C20NA | 2CDS211103R0204 | | 0.25 | 5 |
| | 25 | 2 | 630917 | SH201-C25NA | 2CDS211103R0254 | | 0.25 | 5 |
| | 32 | 2 | 630931 | SH201-C32NA | 2CDS211103R0324 | | 0.25 | 5 |
| | 40 | 2 | 630955 | SH201-C40NA | 2CDS211103R0404 | | 0.25 | 5 |
| | 50 | 2 | 699808 | SH201-C50NA | 2CDS211103R0504 | | 0.25 | 5 |
| | 63 | 2 | 699815 | SH201-C63NA | 2CDS211103R0634 | | 0.25 | 5 |



—
SH202-C
2CSC400030F0035



—
SH203-C
2CSC400030F0036

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|------------|-----------------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg |
| 2 | 0.5 | 2 | 631211 | SH202-C0,5 | 2CDS212001R0984 | | 0.25 5 |
| | 1 | 2 | 630993 | SH202-C1 | 2CDS212001R0014 | | 0.25 5 |
| | 1.6 | 2 | 631204 | SH202-C1,6 | 2CDS212001R0974 | | 0.25 5 |
| | 2 | 2 | 631006 | SH202-C2 | 2CDS212001R0024 | | 0.25 5 |
| | 3 | 2 | 631013 | SH202-C3 | 2CDS212001R0034 | | 0.25 5 |
| | 4 | 2 | 631020 | SH202-C4 | 2CDS212001R0044 | | 0.25 5 |
| | 6 | 2 | 631037 | SH202-C6 | 2CDS212001R0064 | | 0.25 5 |
| | 8 | 2 | 631051 | SH202-C8 | 2CDS212001R0084 | | 0.25 5 |
| | 10 | 2 | 631068 | SH202-C10 | 2CDS212001R0104 | | 0.25 5 |
| | 13 | 2 | 631082 | SH202-C13 | 2CDS212001R0134 | | 0.25 5 |
| | 16 | 2 | 631105 | SH202-C16 | 2CDS212001R0164 | | 0.25 5 |
| | 20 | 2 | 631129 | SH202-C20 | 2CDS212001R0204 | | 0.25 5 |
| | 25 | 2 | 631143 | SH202-C25 | 2CDS212001R0254 | | 0.25 5 |
| | 32 | 2 | 631167 | SH202-C32 | 2CDS212001R0324 | | 0.25 5 |
| | 40 | 2 | 631181 | SH202-C40 | 2CDS212001R0404 | | 0.25 5 |
| | 50 | 2 | 699785 | SH202-C50 | 2CDS212001R0504 | | 0.25 5 |
| | 63 | 2 | 699792 | SH202-C63 | 2CDS212001R0634 | | 0.25 5 |
| 3 | 0.5 | 3 | 631440 | SH203-C0,5 | 2CDS213001R0984 | | 0.375 1 |
| | 1 | 3 | 631228 | SH203-C1 | 2CDS213001R0014 | | 0.375 1 |
| | 1.6 | 3 | 631433 | SH203-C1,6 | 2CDS213001R0974 | | 0.375 1 |
| | 2 | 3 | 631235 | SH203-C2 | 2CDS213001R0024 | | 0.375 1 |
| | 3 | 3 | 631242 | SH203-C3 | 2CDS213001R0034 | | 0.375 1 |
| | 4 | 3 | 631259 | SH203-C4 | 2CDS213001R0044 | | 0.375 1 |
| | 6 | 3 | 631266 | SH203-C6 | 2CDS213001R0064 | | 0.375 1 |
| | 8 | 3 | 631280 | SH203-C8 | 2CDS213001R0084 | | 0.375 1 |
| | 10 | 3 | 631297 | SH203-C10 | 2CDS213001R0104 | | 0.375 1 |
| | 13 | 3 | 631310 | SH203-C13 | 2CDS213001R0134 | | 0.375 1 |
| | 16 | 3 | 631334 | SH203-C16 | 2CDS213001R0164 | | 0.375 1 |
| | 20 | 3 | 631358 | SH203-C20 | 2CDS213001R0204 | | 0.375 1 |
| | 25 | 3 | 631372 | SH203-C25 | 2CDS213001R0254 | | 0.375 1 |
| | 32 | 3 | 631396 | SH203-C32 | 2CDS213001R0324 | | 0.375 1 |
| | 40 | 3 | 631419 | SH203-C40 | 2CDS213001R0404 | | 0.375 1 |
| | 50 | 3 | 701303 | SH203-C50 | 2CDS213001R0504 | | 0.375 1 |
| | 63 | 3 | 701310 | SH203-C63 | 2CDS213001R0634 | | 0.375 1 |

Ordering data

MCB SH 200 Series – C characteristic



—
SH203-C...NA
2CSC400030F0037



—
SH204-C
2CSC400030F0038

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit | |
|-------------|---------------|-----------|-------------|--------------|-----------------|----------------|-----------|---|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 3+N | 0.5 | 4 | 631679 | SH203-C0,5NA | 2CDS213103R0984 | | 0.5 | 1 |
| | 1 | 4 | 631457 | SH203-C1NA | 2CDS213103R0014 | | 0.5 | 1 |
| | 1.6 | 4 | 631662 | SH203-C1,6NA | 2CDS213103R0974 | | 0.5 | 1 |
| | 2 | 4 | 631464 | SH203-C2NA | 2CDS213103R0024 | | 0.5 | 1 |
| | 3 | 4 | 631471 | SH203-C3NA | 2CDS213103R0034 | | 0.5 | 1 |
| | 4 | 4 | 631488 | SH203-C4NA | 2CDS213103R0044 | | 0.5 | 1 |
| | 6 | 4 | 631495 | SH203-C6NA | 2CDS213103R0064 | | 0.5 | 1 |
| | 8 | 4 | 631518 | SH203-C8NA | 2CDS213103R0084 | | 0.5 | 1 |
| | 10 | 4 | 631525 | SH203-C10NA | 2CDS213103R0104 | | 0.5 | 1 |
| | 13 | 4 | 631549 | SH203-C13NA | 2CDS213103R0134 | | 0.5 | 1 |
| | 16 | 4 | 631563 | SH203-C16NA | 2CDS213103R0164 | | 0.5 | 1 |
| | 20 | 4 | 631587 | SH203-C20NA | 2CDS213103R0204 | | 0.5 | 1 |
| | 25 | 4 | 631600 | SH203-C25NA | 2CDS213103R0254 | | 0.5 | 1 |
| | 32 | 4 | 631624 | SH203-C32NA | 2CDS213103R0324 | | 0.5 | 1 |
| | 40 | 4 | 631648 | SH203-C40NA | 2CDS213103R0404 | | 0.5 | 1 |
| | 50 | 4 | 702119 | SH203-C50NA | 2CDS213103R0504 | | 0.5 | 1 |
| | 63 | 4 | 702126 | SH203-C63NA | 2CDS213103R0634 | | 0.5 | 1 |
| 4 | 0.5 | 4 | 631907 | SH204-C0,5 | 2CDS214001R0984 | | 0.5 | 1 |
| | 1 | 4 | 631686 | SH204-C1 | 2CDS214001R0974 | | 0.5 | 1 |
| | 1.6 | 4 | 631891 | SH204-C1,6 | 2CDS214001R0974 | | 0.5 | 1 |
| | 2 | 4 | 631693 | SH204-C2 | 2CDS214001R0024 | | 0.5 | 1 |
| | 3 | 4 | 631709 | SH204-C3 | 2CDS214001R0034 | | 0.5 | 1 |
| | 4 | 4 | 631716 | SH204-C4 | 2CDS214001R0044 | | 0.5 | 1 |
| | 6 | 4 | 631723 | SH204-C6 | 2CDS214001R0064 | | 0.5 | 1 |
| | 8 | 4 | 631747 | SH204-C8 | 2CDS214001R0084 | | 0.5 | 1 |
| | 10 | 4 | 631754 | SH204-C10 | 2CDS214001R0104 | | 0.5 | 1 |
| | 13 | 4 | 631778 | SH204-C13 | 2CDS214001R0134 | | 0.5 | 1 |
| | 16 | 4 | 631792 | SH204-C16 | 2CDS214001R0164 | | 0.5 | 1 |
| | 20 | 4 | 631815 | SH204-C20 | 2CDS214001R0204 | | 0.5 | 1 |
| | 25 | 4 | 631839 | SH204-C25 | 2CDS214001R0254 | | 0.5 | 1 |
| | 32 | 4 | 631853 | SH204-C32 | 2CDS214001R0324 | | 0.5 | 1 |
| | 40 | 4 | 631877 | SH204-C40 | 2CDS214001R0404 | | 0.5 | 1 |
| | 50 | 4 | 702096 | SH204-C50 | 2CDS214001R0504 | | 0.5 | 1 |
| | 63 | 4 | 702102 | SH204-C63 | 2CDS214001R0634 | | 0.5 | 1 |

Ordering data

MCB SH 200 Series – D characteristic



—
product name
order code



—
product name
order code

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|--------------|-----------------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg |
| 1 | 0.5 | 1 | 699013 | SH201-D0,5 | 2CDS211001R0981 | | 0.125 10 |
| | 1 | 1 | 699020 | SH201-D1 | 2CDS211001R0011 | | 0.125 10 |
| | 1.6 | 1 | 699037 | SH201-D1,6 | 2CDS211001R0971 | | 0.125 10 |
| | 2 | 1 | 699044 | SH201-D2 | 2CDS211001R0021 | | 0.125 10 |
| | 3 | 1 | 699051 | SH201-D3 | 2CDS211001R0031 | | 0.125 10 |
| | 4 | 1 | 699068 | SH201-D4 | 2CDS211001R0041 | | 0.125 10 |
| | 6 | 1 | 699075 | SH201-D6 | 2CDS211001R0061 | | 0.125 10 |
| | 8 | 1 | 699082 | SH201-D8 | 2CDS211001R0081 | | 0.125 10 |
| | 10 | 1 | 699099 | SH201-D10 | 2CDS211001R0101 | | 0.125 10 |
| | 13 | 1 | 699105 | SH201-D13 | 2CDS211001R0131 | | 0.125 10 |
| | 16 | 1 | 699112 | SH201-D16 | 2CDS211001R0161 | | 0.125 10 |
| | 20 | 1 | 699129 | SH201-D20 | 2CDS211001R0201 | | 0.125 10 |
| | 25 | 1 | 699136 | SH201-D25 | 2CDS211001R0251 | | 0.125 10 |
| | 32 | 1 | 699143 | SH201-D32 | 2CDS211001R0321 | | 0.125 10 |
| | 40 | 1 | 699150 | SH201-D40 | 2CDS211001R0401 | | 0.125 10 |
| | 50 | 1 | 699167 | SH201-D50 | 2CDS211001R0501 | | 0.125 10 |
| | 63 | 1 | 699174 | SH201-D63 | 2CDS211001R0631 | | 0.125 10 |
| 1+N | 0.5 | 2 | 699990 | SH201-D0,5NA | 2CDS211103R0981 | | 0.250 5 |
| | 1 | 2 | 700009 | SH201-D1NA | 2CDS211103R0011 | | 0.250 5 |
| | 1.6 | 2 | 700016 | SH201-D1,6NA | 2CDS211103R0971 | | 0.250 5 |
| | 2 | 2 | 700023 | SH201-D2NA | 2CDS211103R0021 | | 0.250 5 |
| | 3 | 2 | 700030 | SH201-D3NA | 2CDS211103R0031 | | 0.250 5 |
| | 4 | 2 | 700047 | SH201-D4NA | 2CDS211103R0041 | | 0.250 5 |
| | 6 | 2 | 700054 | SH201-D6NA | 2CDS211103R0061 | | 0.250 5 |
| | 8 | 2 | 700061 | SH201-D8NA | 2CDS211103R0081 | | 0.250 5 |
| | 10 | 2 | 700078 | SH201-D10NA | 2CDS211103R0101 | | 0.250 5 |
| | 13 | 2 | 700085 | SH201-D13NA | 2CDS211103R0131 | | 0.250 5 |
| | 16 | 2 | 700092 | SH201-D16NA | 2CDS211103R0161 | | 0.250 5 |
| | 20 | 2 | 700108 | SH201-D20NA | 2CDS211103R0201 | | 0.250 5 |
| | 25 | 2 | 700115 | SH201-D25NA | 2CDS211103R0251 | | 0.250 5 |
| | 32 | 2 | 700122 | SH201-D32NA | 2CDS211103R0321 | | 0.250 5 |
| | 40 | 2 | 700139 | SH201-D40NA | 2CDS211103R0401 | | 0.250 5 |
| | 50 | 2 | 700146 | SH201-D50NA | 2CDS211103R0501 | | 0.250 5 |
| | 63 | 2 | 700153 | SH201-D63NA | 2CDS211103R0631 | | 0.250 5 |



—
product name
order code



—
product name
order code

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|------------|-----------------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg |
| 2 | 0.5 | 2 | 699822 | SH202-D0,5 | 2CDS212001R0981 | | 0.250 5 |
| | 1 | 2 | 699839 | SH202-D1 | 2CDS212001R0011 | | 0.250 5 |
| | 1.6 | 2 | 699846 | SH202-D1,6 | 2CDS212001R0971 | | 0.250 5 |
| | 2 | 2 | 699853 | SH202-D2 | 2CDS212001R0021 | | 0.250 5 |
| | 3 | 2 | 699860 | SH202-D3 | 2CDS212001R0031 | | 0.250 5 |
| | 4 | 2 | 699877 | SH202-D4 | 2CDS212001R0041 | | 0.250 5 |
| | 6 | 2 | 699884 | SH202-D6 | 2CDS212001R0061 | | 0.250 5 |
| | 8 | 2 | 699891 | SH202-D8 | 2CDS212001R0081 | | 0.250 5 |
| | 10 | 2 | 699907 | SH202-D10 | 2CDS212001R0101 | | 0.250 5 |
| | 13 | 2 | 699914 | SH202-D13 | 2CDS212001R0131 | | 0.250 5 |
| | 16 | 2 | 699921 | SH202-D16 | 2CDS212001R0161 | | 0.250 5 |
| | 20 | 2 | 699938 | SH202-D20 | 2CDS212001R0201 | | 0.250 5 |
| | 25 | 2 | 699945 | SH202-D25 | 2CDS212001R0251 | | 0.250 5 |
| | 32 | 2 | 699952 | SH202-D32 | 2CDS212001R0321 | | 0.250 5 |
| | 40 | 2 | 699969 | SH202-D40 | 2CDS212001R0401 | | 0.250 5 |
| | 50 | 2 | 699976 | SH202-D50 | 2CDS212001R0501 | | 0.250 5 |
| | 63 | 2 | 699983 | SH202-D63 | 2CDS212001R0631 | | 0.250 5 |
| 3 | 0.5 | 3 | 701327 | SH203-D0,5 | 2CDS213001R0981 | | 0.375 1 |
| | 1 | 3 | 701334 | SH203-D1 | 2CDS213001R0011 | | 0.375 1 |
| | 1.6 | 3 | 701341 | SH203-D1,6 | 2CDS213001R0971 | | 0.375 1 |
| | 2 | 3 | 701358 | SH203-D2 | 2CDS213001R0021 | | 0.375 1 |
| | 3 | 3 | 701365 | SH203-D3 | 2CDS213001R0031 | | 0.375 1 |
| | 4 | 3 | 701372 | SH203-D4 | 2CDS213001R0041 | | 0.375 1 |
| | 6 | 3 | 701389 | SH203-D6 | 2CDS213001R0061 | | 0.375 1 |
| | 8 | 3 | 701396 | SH203-D8 | 2CDS213001R0081 | | 0.375 1 |
| | 10 | 3 | 701402 | SH203-D10 | 2CDS213001R0101 | | 0.375 1 |
| | 13 | 3 | 701419 | SH203-D13 | 2CDS213001R0131 | | 0.375 1 |
| | 16 | 3 | 701426 | SH203-D16 | 2CDS213001R0161 | | 0.375 1 |
| | 20 | 3 | 701433 | SH203-D20 | 2CDS213001R0201 | | 0.375 1 |
| | 25 | 3 | 701440 | SH203-D25 | 2CDS213001R0251 | | 0.375 1 |
| | 32 | 3 | 701457 | SH203-D32 | 2CDS213001R0321 | | 0.375 1 |
| | 40 | 3 | 701464 | SH203-D40 | 2CDS213001R0401 | | 0.375 1 |
| | 50 | 3 | 701471 | SH203-D50 | 2CDS213001R0501 | | 0.375 1 |
| | 63 | 3 | 701488 | SH203-D63 | 2CDS213001R0631 | | 0.375 1 |

Ordering data

MCB SH 200 Series – D characteristic



— product name
order code



— product name
order code

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|--------------|-----------------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg |
| 3+N | 0.5 | 4 | 702300 | SH203-D0,5NA | 2CDS213103R0981 | | 0.5 |
| | 1 | 4 | 702317 | SH203-D1NA | 2CDS213103R0011 | | 0.5 |
| | 1.6 | 4 | 702324 | SH203-D1,6NA | 2CDS213103R0971 | | 0.5 |
| | 2 | 4 | 702331 | SH203-D2NA | 2CDS213103R0021 | | 0.5 |
| | 3 | 4 | 702348 | SH203-D3NA | 2CDS213103R0031 | | 0.5 |
| | 4 | 4 | 702355 | SH203-D4NA | 2CDS213103R0041 | | 0.5 |
| | 6 | 4 | 702362 | SH203-D6NA | 2CDS213103R0061 | | 0.5 |
| | 8 | 4 | 702379 | SH203-D8NA | 2CDS213103R0081 | | 0.5 |
| | 10 | 4 | 702386 | SH203-D10NA | 2CDS213103R0101 | | 0.5 |
| | 13 | 4 | 702393 | SH203-D13NA | 2CDS213103R0131 | | 0.5 |
| | 16 | 4 | 702409 | SH203-D16NA | 2CDS213103R0161 | | 0.5 |
| | 20 | 4 | 702416 | SH203-D20NA | 2CDS213103R0201 | | 0.5 |
| | 25 | 4 | 702423 | SH203-D25NA | 2CDS213103R0251 | | 0.5 |
| | 32 | 4 | 702430 | SH203-D32NA | 2CDS213103R0321 | | 0.5 |
| | 40 | 4 | 702447 | SH203-D40NA | 2CDS213103R0401 | | 0.5 |
| | 50 | 4 | 702454 | SH203-D50NA | 2CDS213103R0501 | | 0.5 |
| | 63 | 4 | 702461 | SH203-D63NA | 2CDS213103R0631 | | 0.5 |
| 4 | 0.5 | 4 | 702133 | SH204-D0,5 | 2CDS214001R0981 | | 0.5 |
| | 1 | 4 | 702140 | SH204-D1 | 2CDS214001R0011 | | 0.5 |
| | 1.6 | 4 | 702157 | SH204-D1,6 | 2CDS214001R0971 | | 0.5 |
| | 2 | 4 | 702164 | SH204-D2 | 2CDS214001R0021 | | 0.5 |
| | 3 | 4 | 702171 | SH204-D3 | 2CDS214001R0031 | | 0.5 |
| | 4 | 4 | 702188 | SH204-D4 | 2CDS214001R0041 | | 0.5 |
| | 6 | 4 | 702195 | SH204-D6 | 2CDS214001R0061 | | 0.5 |
| | 8 | 4 | 702201 | SH204-D8 | 2CDS214001R0081 | | 0.5 |
| | 10 | 4 | 702218 | SH204-D10 | 2CDS214001R0101 | | 0.5 |
| | 13 | 4 | 702225 | SH204-D13 | 2CDS214001R0131 | | 0.5 |
| | 16 | 4 | 702232 | SH204-D16 | 2CDS214001R0161 | | 0.5 |
| | 20 | 4 | 702249 | SH204-D20 | 2CDS214001R0201 | | 0.5 |
| | 25 | 4 | 702256 | SH204-D25 | 2CDS214001R0251 | | 0.5 |
| | 32 | 4 | 702263 | SH204-D32 | 2CDS214001R0321 | | 0.5 |
| | 40 | 4 | 702270 | SH204-D40 | 2CDS214001R0401 | | 0.5 |
| | 50 | 4 | 702287 | SH204-D50 | 2CDS214001R0501 | | 0.5 |
| | 63 | 4 | 702294 | SH204-D63 | 2CDS214001R0631 | | 0.5 |

Ordering data

MCB SH 200 M Series – C characteristic



— product name
order code



— product name
order code

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|---------------|-----------------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg |
| 1 | 0.5 | 1 | 699402 | SH201M-C0,5 | 2CDS271011R0984 | | 0.125 10 |
| | 1 | 1 | 942287 | SH201M-C1 | 2CDS271011R0014 | | 0.125 10 |
| | 1.6 | 1 | 699426 | SH201M-C1,6 | 2CDS271011R0974 | | 0.125 10 |
| | 2 | 1 | 699433 | SH201M-C2 | 2CDS271011R0024 | | 0.125 10 |
| | 3 | 1 | 699440 | SH201M-C3 | 2CDS271011R0034 | | 0.125 10 |
| | 4 | 1 | 699457 | SH201M-C4 | 2CDS271011R0044 | | 0.125 10 |
| | 6 | 1 | 699464 | SH201M-C6 | 2CDS271011R0064 | | 0.125 10 |
| | 8 | 1 | 699471 | SH201M-C8 | 2CDS271011R0084 | | 0.125 10 |
| | 10 | 1 | 699488 | SH201M-C10 | 2CDS271011R0104 | | 0.125 10 |
| | 13 | 1 | 699495 | SH201M-C13 | 2CDS271011R0134 | | 0.125 10 |
| | 16 | 1 | 699501 | SH201M-C16 | 2CDS271011R0164 | | 0.125 10 |
| | 20 | 1 | 699518 | SH201M-C20 | 2CDS271011R0204 | | 0.125 10 |
| | 25 | 1 | 699525 | SH201M-C25 | 2CDS271011R0254 | | 0.125 10 |
| | 32 | 1 | 699532 | SH201M-C32 | 2CDS271011R0324 | | 0.125 10 |
| | 40 | 1 | 699549 | SH201M-C40 | 2CDS271011R0404 | | 0.125 10 |
| | 50 | 1 | 699556 | SH201M-C50 | 2CDS271011R0504 | | 0.125 10 |
| | 63 | 1 | 699563 | SH201M-C63 | 2CDS271011R0634 | | 0.125 10 |
| 1+N | 0.5 | 2 | 700771 | SH201M-C0,5NA | 2CDS271113R0984 | | 0.250 5 |
| | 1 | 2 | 700788 | SH201M-C1NA | 2CDS271113R0014 | | 0.250 5 |
| | 1.6 | 2 | 700795 | SH201M-C1,6NA | 2CDS271113R0974 | | 0.250 5 |
| | 2 | 2 | 700801 | SH201M-C2NA | 2CDS271113R0024 | | 0.250 5 |
| | 3 | 2 | 700818 | SH201M-C3NA | 2CDS271113R0034 | | 0.250 5 |
| | 4 | 2 | 700825 | SH201M-C4NA | 2CDS271113R0044 | | 0.250 5 |
| | 6 | 2 | 700832 | SH201M-C6NA | 2CDS271113R0064 | | 0.250 5 |
| | 8 | 2 | 700849 | SH201M-C8NA | 2CDS271113R0084 | | 0.250 5 |
| | 10 | 2 | 700856 | SH201M-C10NA | 2CDS271113R0104 | | 0.250 5 |
| | 13 | 2 | 700863 | SH201M-C13NA | 2CDS271113R0134 | | 0.250 5 |
| | 16 | 2 | 700870 | SH201M-C16NA | 2CDS271113R0164 | | 0.250 5 |
| | 20 | 2 | 700887 | SH201M-C20NA | 2CDS271113R0204 | | 0.250 5 |
| | 25 | 2 | 700894 | SH201M-C25NA | 2CDS271113R0254 | | 0.250 5 |
| | 32 | 2 | 700900 | SH201M-C32NA | 2CDS271113R0324 | | 0.250 5 |
| | 40 | 2 | 700917 | SH201M-C40NA | 2CDS271113R0404 | | 0.250 5 |
| | 50 | 2 | 700924 | SH201M-C50NA | 2CDS271113R0504 | | 0.250 5 |
| | 63 | 2 | 700931 | SH201M-C63NA | 2CDS271113R0634 | | 0.250 5 |



—
product name
order code



—
product name
order code

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit | |
|-------------|---------------|-----------|-------------|-----------------|-----------------|----------------|-----------|---|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 2 | 0.5 | 2 | 700603 | SH202M-C0,5 | 2CDS272011R0984 | | 0.250 | 5 |
| | 1 | 2 | 942294 | SH202M-C1 | 2CDS272011R0014 | | 0.250 | 5 |
| | 1.6 | 2 | 700627 | SH202M-C1,6 | 2CDS272011R0974 | | 0.250 | 5 |
| | 2 | 2 | 700634 | SH202M-C2 | 2CDS272011R0024 | | 0.250 | 5 |
| | 3 | 2 | 700641 | SH202M-C3 | 2CDS272011R0034 | | 0.250 | 5 |
| | 4 | 2 | 700658 | SH202M-C4 | 2CDS272011R0044 | | 0.250 | 5 |
| | 6 | 2 | 700665 | SH202M-C6 | 2CDS272011R0064 | | 0.250 | 5 |
| | 8 | 2 | 700672 | SH202M-C8 | 2CDS272011R0084 | | 0.250 | 5 |
| | 10 | 2 | 700689 | SH202M-C10 | 2CDS272011R0104 | | 0.250 | 5 |
| | 13 | 2 | 700696 | SH202M-C13 | 2CDS272011R0134 | | 0.250 | 5 |
| | 16 | 2 | 700702 | SH202M-C16 | 2CDS272011R0164 | | 0.250 | 5 |
| | 20 | 2 | 700719 | SH202M-C20 | 2CDS272011R0204 | | 0.250 | 5 |
| | 25 | 2 | 700726 | SH202M-C25 | 2CDS272011R0254 | | 0.250 | 5 |
| | 32 | 2 | 700733 | SH202M-C32 | 2CDS272011R0324 | | 0.250 | 5 |
| | 40 | 2 | 700740 | SH202M-C40 | 2CDS272011R0404 | | 0.250 | 5 |
| | 50 | 2 | 700757 | SH202M-C50 | 2CDS272011R0504 | | 0.250 | 5 |
| 63 | 2 | 700764 | SH202M-C63 | 2CDS272011R0634 | | 0.250 | 5 | |
| 3 | 0.5 | 3 | 701716 | SH203M-C0,5 | 2CDS273011R0984 | | 0.375 | 1 |
| | 1 | 3 | 942300 | SH203M-C1 | 2CDS273011R0014 | | 0.375 | 1 |
| | 1.6 | 3 | 701730 | SH203M-C1,6 | 2CDS273011R0974 | | 0.375 | 1 |
| | 2 | 3 | 701747 | SH203M-C2 | 2CDS273011R0024 | | 0.375 | 1 |
| | 3 | 3 | 701754 | SH203M-C3 | 2CDS273011R0034 | | 0.375 | 1 |
| | 4 | 3 | 701761 | SH203M-C4 | 2CDS273011R0044 | | 0.375 | 1 |
| | 6 | 3 | 701778 | SH203M-C6 | 2CDS273011R0064 | | 0.375 | 1 |
| | 8 | 3 | 701785 | SH203M-C8 | 2CDS273011R0084 | | 0.375 | 1 |
| | 10 | 3 | 701792 | SH203M-C10 | 2CDS273011R0104 | | 0.375 | 1 |
| | 13 | 3 | 701808 | SH203M-C13 | 2CDS273011R0134 | | 0.375 | 1 |
| | 16 | 3 | 701815 | SH203M-C16 | 2CDS273011R0164 | | 0.375 | 1 |
| | 20 | 3 | 701822 | SH203M-C20 | 2CDS273011R0204 | | 0.375 | 1 |
| | 25 | 3 | 701839 | SH203M-C25 | 2CDS273011R0254 | | 0.375 | 1 |
| | 32 | 3 | 701846 | SH203M-C32 | 2CDS273011R0324 | | 0.375 | 1 |
| | 40 | 3 | 701853 | SH203M-C40 | 2CDS273011R0404 | | 0.375 | 1 |
| | 50 | 3 | 701860 | SH203M-C50 | 2CDS273011R0504 | | 0.375 | 1 |
| 63 | 3 | 701877 | SH203M-C63 | 2CDS273011R0634 | | 0.375 | 1 | |

Ordering data

MCB SH 200 M Series – C characteristic



—
product name
order code



—
product name
order code

| N. of poles | Rated current | N° module | Bbn 4016779 | Order details | | | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 3+N | 0.5 | 4 | 703086 | SH203M-C0,5NA | 2CDS273113R0984 | | 0.5 | 1 |
| | 1 | 4 | 703093 | SH203M-C1NA | 2CDS273113R0014 | | 0.5 | 1 |
| | 1.6 | 4 | 703109 | SH203M-C1,6NA | 2CDS273113R0974 | | 0.5 | 1 |
| | 2 | 4 | 703116 | SH203M-C2NA | 2CDS273113R0024 | | 0.5 | 1 |
| | 3 | 4 | 703123 | SH203M-C3NA | 2CDS273113R0034 | | 0.5 | 1 |
| | 4 | 4 | 703130 | SH203M-C4NA | 2CDS273113R0044 | | 0.5 | 1 |
| | 6 | 4 | 703147 | SH203M-C6NA | 2CDS273113R0064 | | 0.5 | 1 |
| | 8 | 4 | 703154 | SH203M-C8NA | 2CDS273113R0084 | | 0.5 | 1 |
| | 10 | 4 | 703161 | SH203M-C10NA | 2CDS273113R0104 | | 0.5 | 1 |
| | 13 | 4 | 703178 | SH203M-C13NA | 2CDS273113R0134 | | 0.5 | 1 |
| | 16 | 4 | 703185 | SH203M-C16NA | 2CDS273113R0164 | | 0.5 | 1 |
| | 20 | 4 | 703192 | SH203M-C20NA | 2CDS273113R0204 | | 0.5 | 1 |
| | 25 | 4 | 703208 | SH203M-C25NA | 2CDS273113R0254 | | 0.5 | 1 |
| | 32 | 4 | 703215 | SH203M-C32NA | 2CDS273113R0324 | | 0.5 | 1 |
| | 40 | 4 | 703222 | SH203M-C40NA | 2CDS273113R0404 | | 0.5 | 1 |
| | 50 | 4 | 703239 | SH203M-C50NA | 2CDS273113R0504 | | 0.5 | 1 |
| | 63 | 4 | 703246 | SH203M-C63NA | 2CDS273113R0634 | | 0.5 | 1 |
| 4 | 0.5 | 4 | 702911 | SH204M-C0,5 | 2CDS274011R0984 | | 0.5 | 1 |
| | 1 | 4 | 942317 | SH204M-C1 | 2CDS274011R0014 | | 0.5 | 1 |
| | 1.6 | 4 | 702935 | SH204M-C1,6 | 2CDS274011R0974 | | 0.5 | 1 |
| | 2 | 4 | 702942 | SH204M-C2 | 2CDS274011R0024 | | 0.5 | 1 |
| | 3 | 4 | 702959 | SH204M-C3 | 2CDS274011R0034 | | 0.5 | 1 |
| | 4 | 4 | 702966 | SH204M-C4 | 2CDS274011R0044 | | 0.5 | 1 |
| | 6 | 4 | 702973 | SH204M-C6 | 2CDS274011R0064 | | 0.5 | 1 |
| | 8 | 4 | 702980 | SH204M-C8 | 2CDS274011R0084 | | 0.5 | 1 |
| | 10 | 4 | 702997 | SH204M-C10 | 2CDS274011R0104 | | 0.5 | 1 |
| | 13 | 4 | 703000 | SH204M-C13 | 2CDS274011R0134 | | 0.5 | 1 |
| | 16 | 4 | 703017 | SH204M-C16 | 2CDS274011R0164 | | 0.5 | 1 |
| | 20 | 4 | 703024 | SH204M-C20 | 2CDS274011R0204 | | 0.5 | 1 |
| | 25 | 4 | 703031 | SH204M-C25 | 2CDS274011R0254 | | 0.5 | 1 |
| | 32 | 4 | 703048 | SH204M-C32 | 2CDS274011R0324 | | 0.5 | 1 |
| | 40 | 4 | 703055 | SH204M-C40 | 2CDS274011R0404 | | 0.5 | 1 |
| | 50 | 4 | 703062 | SH204M-C50 | 2CDS274011R0504 | | 0.5 | 1 |
| | 63 | 4 | 703079 | SH204M-C63 | 2CDS274011R0634 | | 0.5 | 1 |

Ordering data

MCB SH 200 M Series – D characteristic



— product name
order code



— product name
order code

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|---------------|-----------------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg |
| 1 | 0.5 | 1 | 699570 | SH201M-D0,5 | 2CDS271011R0981 | | 0.125 10 |
| | 1 | 1 | 942324 | SH201M-D1 | 2CDS271011R0011 | | 0.125 10 |
| | 1.6 | 1 | 699594 | SH201M-D1,6 | 2CDS271011R0971 | | 0.125 10 |
| | 2 | 1 | 699600 | SH201M-D2 | 2CDS271011R0021 | | 0.125 10 |
| | 3 | 1 | 699617 | SH201M-D3 | 2CDS271011R0031 | | 0.125 10 |
| | 4 | 1 | 699624 | SH201M-D4 | 2CDS271011R0041 | | 0.125 10 |
| | 6 | 1 | 699631 | SH201M-D6 | 2CDS271011R0061 | | 0.125 10 |
| | 8 | 1 | 699648 | SH201M-D8 | 2CDS271011R0081 | | 0.125 10 |
| | 10 | 1 | 699655 | SH201M-D10 | 2CDS271011R0101 | | 0.125 10 |
| | 13 | 1 | 699662 | SH201M-D13 | 2CDS271011R0131 | | 0.125 10 |
| | 16 | 1 | 699679 | SH201M-D16 | 2CDS271011R0161 | | 0.125 10 |
| | 20 | 1 | 699686 | SH201M-D20 | 2CDS271011R0201 | | 0.125 10 |
| | 25 | 1 | 699693 | SH201M-D25 | 2CDS271011R0251 | | 0.125 10 |
| | 32 | 1 | 699709 | SH201M-D32 | 2CDS271011R0321 | | 0.125 10 |
| | 40 | 1 | 699716 | SH201M-D40 | 2CDS271011R0401 | | 0.125 10 |
| | 50 | 1 | 699723 | SH201M-D50 | 2CDS271011R0501 | | 0.125 10 |
| | 63 | 1 | 699730 | SH201M-D63 | 2CDS271011R0631 | | 0.125 10 |
| 1+N | 0.5 | 2 | 701112 | SH201M-D0,5NA | 2CDS271113R0981 | | 0.250 5 |
| | 1 | 2 | 701129 | SH201M-D1NA | 2CDS271113R0011 | | 0.250 5 |
| | 1.6 | 2 | 701136 | SH201M-D1,6NA | 2CDS271113R0971 | | 0.250 5 |
| | 2 | 2 | 701143 | SH201M-D2NA | 2CDS271113R0021 | | 0.250 5 |
| | 3 | 2 | 701150 | SH201M-D3NA | 2CDS271113R0031 | | 0.250 5 |
| | 4 | 2 | 701167 | SH201M-D4NA | 2CDS271113R0041 | | 0.250 5 |
| | 6 | 2 | 701174 | SH201M-D6NA | 2CDS271113R0061 | | 0.250 5 |
| | 8 | 2 | 701181 | SH201M-D8NA | 2CDS271113R0081 | | 0.250 5 |
| | 10 | 2 | 701198 | SH201M-D10NA | 2CDS271113R0101 | | 0.250 5 |
| | 13 | 2 | 701204 | SH201M-D13NA | 2CDS271113R0131 | | 0.250 5 |
| | 16 | 2 | 701211 | SH201M-D16NA | 2CDS271113R0161 | | 0.250 5 |
| | 20 | 2 | 701228 | SH201M-D20NA | 2CDS271113R0201 | | 0.250 5 |
| | 25 | 2 | 701235 | SH201M-D25NA | 2CDS271113R0251 | | 0.250 5 |
| | 32 | 2 | 701242 | SH201M-D32NA | 2CDS271113R0321 | | 0.250 5 |
| | 40 | 2 | 701259 | SH201M-D40NA | 2CDS271113R0401 | | 0.250 5 |
| | 50 | 2 | 701266 | SH201M-D50NA | 2CDS271113R0501 | | 0.250 5 |
| | 63 | 2 | 701273 | SH201M-D63NA | 2CDS271113R0631 | | 0.250 5 |



—
product name
order code



—
product name
order code

| N. of poles | Rated current | N° module | Bbn 4016779 | Order details | | | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 2 | 0.5 | 2 | 700948 | SH202M-D0,5 | 2CDS272011R0981 | | 0.250 | 5 |
| | 1 | 2 | 942331 | SH202M-D1 | 2CDS272011R0011 | | 0.250 | 5 |
| | 1.6 | 2 | 700962 | SH202M-D1,6 | 2CDS272011R0971 | | 0.250 | 5 |
| | 2 | 2 | 700979 | SH202M-D2 | 2CDS272011R0021 | | 0.250 | 5 |
| | 3 | 2 | 700986 | SH202M-D3 | 2CDS272011R0031 | | 0.250 | 5 |
| | 4 | 2 | 700993 | SH202M-D4 | 2CDS272011R0041 | | 0.250 | 5 |
| | 6 | 2 | 701006 | SH202M-D6 | 2CDS272011R0061 | | 0.250 | 5 |
| | 8 | 2 | 701013 | SH202M-D8 | 2CDS272011R0081 | | 0.250 | 5 |
| | 10 | 2 | 701020 | SH202M-D10 | 2CDS272011R0101 | | 0.250 | 5 |
| | 13 | 2 | 701037 | SH202M-D13 | 2CDS272011R0131 | | 0.250 | 5 |
| | 16 | 2 | 701044 | SH202M-D16 | 2CDS272011R0161 | | 0.250 | 5 |
| | 20 | 2 | 701051 | SH202M-D20 | 2CDS272011R0201 | | 0.250 | 5 |
| | 25 | 2 | 701068 | SH202M-D25 | 2CDS272011R0251 | | 0.250 | 5 |
| | 32 | 2 | 701075 | SH202M-D32 | 2CDS272011R0321 | | 0.250 | 5 |
| | 40 | 2 | 701082 | SH202M-D40 | 2CDS272011R0401 | | 0.250 | 5 |
| | 50 | 2 | 701099 | SH202M-D50 | 2CDS272011R0501 | | 0.250 | 5 |
| 3 | 63 | 2 | 701105 | SH202M-D63 | 2CDS272011R0631 | | 0.250 | 5 |
| | 0.5 | 3 | 701884 | SH203M-D0,5 | 2CDS273011R0981 | | 0.375 | 1 |
| | 1 | 3 | 942348 | SH203M-D1 | 2CDS273011R0011 | | 0.375 | 1 |
| | 1.6 | 3 | 701907 | SH203M-D1,6 | 2CDS273011R0971 | | 0.375 | 1 |
| | 2 | 3 | 701914 | SH203M-D2 | 2CDS273011R0021 | | 0.375 | 1 |
| | 3 | 3 | 701921 | SH203M-D3 | 2CDS273011R0031 | | 0.375 | 1 |
| | 4 | 3 | 701938 | SH203M-D4 | 2CDS273011R0041 | | 0.375 | 1 |
| | 6 | 3 | 701945 | SH203M-D6 | 2CDS273011R0061 | | 0.375 | 1 |
| | 8 | 3 | 701952 | SH203M-D8 | 2CDS273011R0081 | | 0.375 | 1 |
| | 10 | 3 | 701969 | SH203M-D10 | 2CDS273011R0101 | | 0.375 | 1 |
| | 13 | 3 | 701976 | SH203M-D13 | 2CDS273011R0131 | | 0.375 | 1 |
| | 16 | 3 | 701983 | SH203M-D16 | 2CDS273011R0161 | | 0.375 | 1 |
| | 20 | 3 | 701990 | SH203M-D20 | 2CDS273011R0201 | | 0.375 | 1 |
| | 25 | 3 | 702003 | SH203M-D25 | 2CDS273011R0251 | | 0.375 | 1 |
| | 32 | 3 | 702010 | SH203M-D32 | 2CDS273011R0321 | | 0.375 | 1 |
| | 40 | 3 | 702027 | SH203M-D40 | 2CDS273011R0401 | | 0.375 | 1 |
| | 50 | 3 | 702034 | SH203M-D50 | 2CDS273011R0501 | | 0.375 | 1 |
| | 63 | 3 | 702041 | SH203M-D63 | 2CDS273011R0631 | | 0.375 | 1 |

Ordering data

MCB SH 200 M Series – D characteristic



—
product name
order code



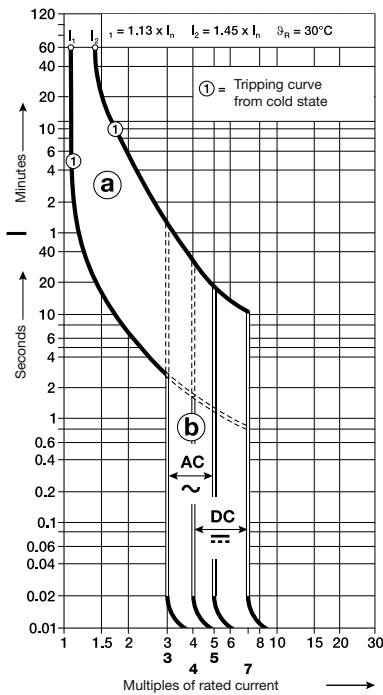
—
product name
order code

| N. of poles | Rated current | N° module | Bbn 4016779 | | Order details | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|---------------|-----------------|----------------|-----------|
| | In A | [17.5 mm] | EAN | Type code | Order code | Price | kg |
| 3+N | 0.5 | 4 | 703420 | SH203M-D0,5NA | 2CDS273113R0981 | | 0.5 |
| | 1 | 4 | 703437 | SH203M-D1NA | 2CDS273113R0011 | | 0.5 |
| | 1.6 | 4 | 703444 | SH203M-D1,6NA | 2CDS273113R0971 | | 0.5 |
| | 2 | 4 | 703451 | SH203M-D2NA | 2CDS273113R0021 | | 0.5 |
| | 3 | 4 | 703468 | SH203M-D3NA | 2CDS273113R0031 | | 0.5 |
| | 4 | 4 | 703475 | SH203M-D4NA | 2CDS273113R0041 | | 0.5 |
| | 6 | 4 | 703482 | SH203M-D6NA | 2CDS273113R0061 | | 0.5 |
| | 8 | 4 | 703499 | SH203M-D8NA | 2CDS273113R0081 | | 0.5 |
| | 10 | 4 | 703505 | SH203M-D10NA | 2CDS273113R0101 | | 0.5 |
| | 13 | 4 | 703512 | SH203M-D13NA | 2CDS273113R0131 | | 0.5 |
| | 16 | 4 | 703529 | SH203M-D16NA | 2CDS273113R0161 | | 0.5 |
| | 20 | 4 | 703536 | SH203M-D20NA | 2CDS273113R0201 | | 0.5 |
| | 25 | 4 | 703543 | SH203M-D25NA | 2CDS273113R0251 | | 0.5 |
| | 32 | 4 | 703550 | SH203M-D32NA | 2CDS273113R0321 | | 0.5 |
| | 40 | 4 | 703567 | SH203M-D40NA | 2CDS273113R0401 | | 0.5 |
| | 50 | 4 | 703574 | SH203M-D50NA | 2CDS273113R0501 | | 0.5 |
| | 63 | 4 | 703581 | SH203M-D63NA | 2CDS273113R0631 | | 0.5 |
| 4 | 0.5 | 4 | 703253 | SH204M-D0,5 | 2CDS274011R0981 | | 0.5 |
| | 1 | 4 | 942355 | SH204M-D1 | 2CDS274011R0011 | | 0.5 |
| | 1.6 | 4 | 703277 | SH204M-D1,6 | 2CDS274011R0971 | | 0.5 |
| | 2 | 4 | 703284 | SH204M-D2 | 2CDS274011R0021 | | 0.5 |
| | 3 | 4 | 703291 | SH204M-D3 | 2CDS274011R0031 | | 0.5 |
| | 4 | 4 | 703307 | SH204M-D4 | 2CDS274011R0041 | | 0.5 |
| | 6 | 4 | 703314 | SH204M-D6 | 2CDS274011R0061 | | 0.5 |
| | 8 | 4 | 703321 | SH204M-D8 | 2CDS274011R0081 | | 0.5 |
| | 10 | 4 | 703338 | SH204M-D10 | 2CDS274011R0101 | | 0.5 |
| | 13 | 4 | 703345 | SH204M-D13 | 2CDS274011R0131 | | 0.5 |
| | 16 | 4 | 703352 | SH204M-D16 | 2CDS274011R0161 | | 0.5 |
| | 20 | 4 | 703369 | SH204M-D20 | 2CDS274011R0201 | | 0.5 |
| | 25 | 4 | 703376 | SH204M-D25 | 2CDS274011R0251 | | 0.5 |
| | 32 | 4 | 703383 | SH204M-D32 | 2CDS274011R0321 | | 0.5 |
| | 40 | 4 | 703390 | SH204M-D40 | 2CDS274011R0401 | | 0.5 |
| | 50 | 4 | 703406 | SH204M-D50 | 2CDS274011R0501 | | 0.5 |
| | 63 | 4 | 703413 | SH204M-D63 | 2CDS274011R0631 | | 0.5 |

Technical details

Tripping diagrams

B characteristic

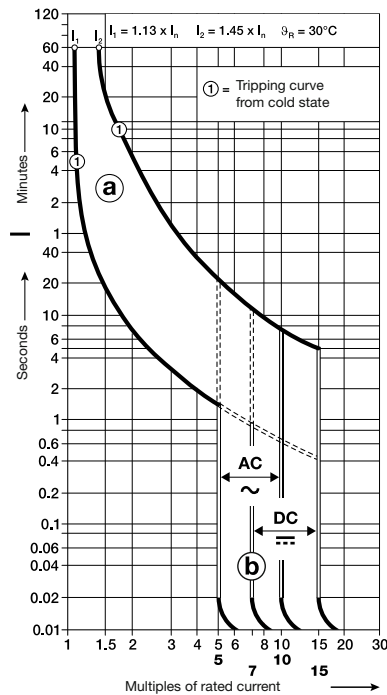


acc. to IEC/EN 60898-1

$I_n = 6 \dots 63 \text{ A}$

SH 200 T / SH 200 L / SH 200 M

C characteristic

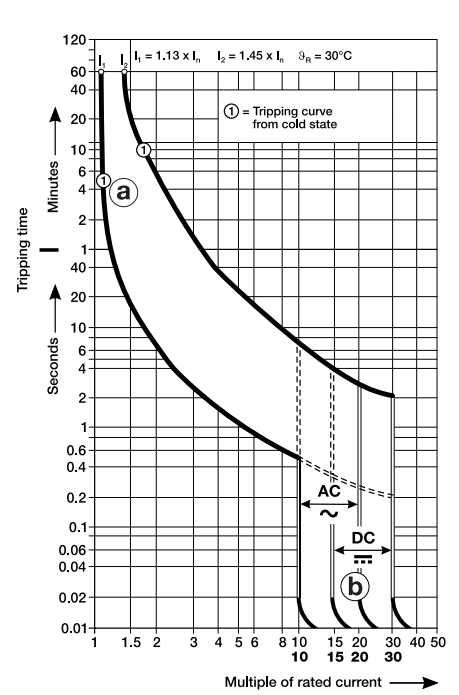


acc. to IEC/EN 60898-1

$I_n = 0.5 \dots 63 \text{ A}$

SH 200 T / SH 200 L / SH 200 M

D characteristic



acc. to IEC/EN 60898-1

$I_n = 0.5 \dots 63 \text{ A}$

SH 200 / SH 200 M

Internal resistances and power losses of the Miniature Circuit Breakers

| Rated current | Range SH 200 T B, C | | Range SH 200 L B, C | | Range SH 200 B, C | | Range SH 200 D | | Range SH 200 M C | | Range SH 200 M D | |
|---------------|---------------------|------|---------------------|------|-------------------|------|----------------|------|------------------|------|------------------|------|
| A | mΩ | W | mΩ | W | mΩ | W | mΩ | W | mΩ | W | mΩ | W |
| 0.5 | 5500 | 1.4 | 5500 | 1.4 | 5500 | 1.4 | 4300 | 1.1 | 5500 | 1.4 | 4300 | 1.1 |
| 1 | 1140 | 1.4 | 1140 | 1.4 | 1140 | 1.4 | 1250 | 1.25 | 1140 | 1.4 | 1250 | 1.25 |
| 1.6 | 630 | 1.6 | 630 | 1.6 | 630 | 1.6 | 600 | 1.5 | 630 | 1.6 | 600 | 1.5 |
| 2 | 460 | 1.8 | 460 | 1.8 | 460 | 1.8 | 410 | 1.65 | 460 | 1.8 | 410 | 1.65 |
| 3 | 150 | 1.3 | 150 | 1.3 | 150 | 1.3 | 430 | 1.2 | 150 | 1.3 | 430 | 1.2 |
| 4 | 110 | 1.8 | 110 | 1.8 | 110 | 1.8 | 105 | 1.7 | 110 | 1.8 | 105 | 1.7 |
| 6 | 55 | 2.0 | 55 | 2.0 | 55 | 2.0 | 52 | 1.9 | 55 | 2.0 | 52 | 1.9 |
| 8 | 15 | 1.0 | 15 | 1.0 | 15 | 1.0 | 24 | 1.5 | 15 | 1.0 | 24 | 1.5 |
| 10 | 13.3 | 1.3 | 13.3 | 1.3 | 13.3 | 1.3 | 16 | 1.6 | 13.3 | 1.3 | 16 | 1.6 |
| 13 | 13.3 | 2.3 | 13.3 | 2.3 | 13.3 | 2.3 | 14 | 2.2 | 13.3 | 2.3 | 14 | 2.2 |
| 16 | 7.0 | 1.8 | 7.0 | 1.8 | 7.0 | 1.8 | 8.5 | 2.5 | 7.0 | 1.8 | 8.5 | 2.5 |
| 20 | 6.25 | 2.5 | 6.25 | 2.5 | 6.25 | 2.5 | 8.1 | 2.3 | 6.25 | 2.5 | 8.1 | 2.3 |
| 25 | 5.0 | 3.2 | 5.0 | 3.2 | 5.0 | 3.2 | 4.3 | 3.1 | 5.0 | 3.2 | 4.3 | 3.1 |
| 32 | 3.6 | 3.7 | 3.6 | 3.7 | 3.6 | 3.7 | 3.5 | 3.6 | 3.6 | 3.7 | 3.5 | 3.6 |
| 40 | 3.0 | 4.8 | 3.0 | 4.8 | 3.0 | 4.8 | 2.2 | 4.2 | 3.0 | 4.8 | 2.2 | 4.2 |
| 50 | 1.3 | 3.25 | 1.3 | 3.25 | 1.3 | 3.25 | 1.25 | 2.9 | 1.3 | 3.25 | 1.25 | 2.9 |
| 63 | 1.2 | 4.8 | 1.2 | 4.8 | 1.2 | 4.8 | 1.25 | 2.9 | 1.2 | 4.8 | 1.25 | 2.9 |

Internal resistances per pole in mΩ

Power losses per pole in W

Internal resistances are subject to application-specific and environment-specific conditions and are therefore to be considered as typical values.

Tripping characteristics

| acc. to | Tripping characteristic and rated current | | Thermal release currents | | Tripping time | Electromagnetic release currents | | Tripping time |
|----------------|---|-------------|-----------------------------------|-------------------------------|----------------|----------------------------------|------------------|--------------------|
| | | | conventional non-tripping current | conventional tripping current | | hold current surges | trip at least at | |
| IEC/EN 60898-1 | B | 6 to 63 A | $1.13 \cdot I_n$ | $1.45 \cdot I_n$ | > 1 h < 1 h | $3 \cdot I_n$ | $5 \cdot I_n$ | > 0.1 s < 0.1 s |
| | C | 0.5 to 63 A | $1.13 \cdot I_n$ | $1.45 \cdot I_n$ | > 1 h < 1 h | $5 \cdot I_n$ | $10 \cdot I_n$ | > 0.1 s < 0.1 s |
| | D | 0.5 to 63 A | $1.13 \cdot I_n$ | $1.45 \cdot I_n$ | > 1 h < 1 h | $10 \cdot I_n$ | $20 \cdot I_n$ | > 0.1 s < 0.1 s |

⁽¹⁾ Influence of ambient temperature see below.

⁽²⁾ Electromagnetic tripping valid for AC 50 ... 60 Hz.

⁽³⁾ From warm operating condition (immediately after $I_t > 1h$).

Influence of ambient temperature

The thermal releases are calibrated to a nominal reference temperature of 30°C for B and C characteristic.

The electromagnetic tripping is independent of the ambient temperature.

In the case of ambient temperatures deviating from these values the trip values:

- are reduced in case of higher temperatures;
- are increased in case of lower temperatures.

Technical details

Current-carrying capacity of the MCBs as a function of the ambient temperature

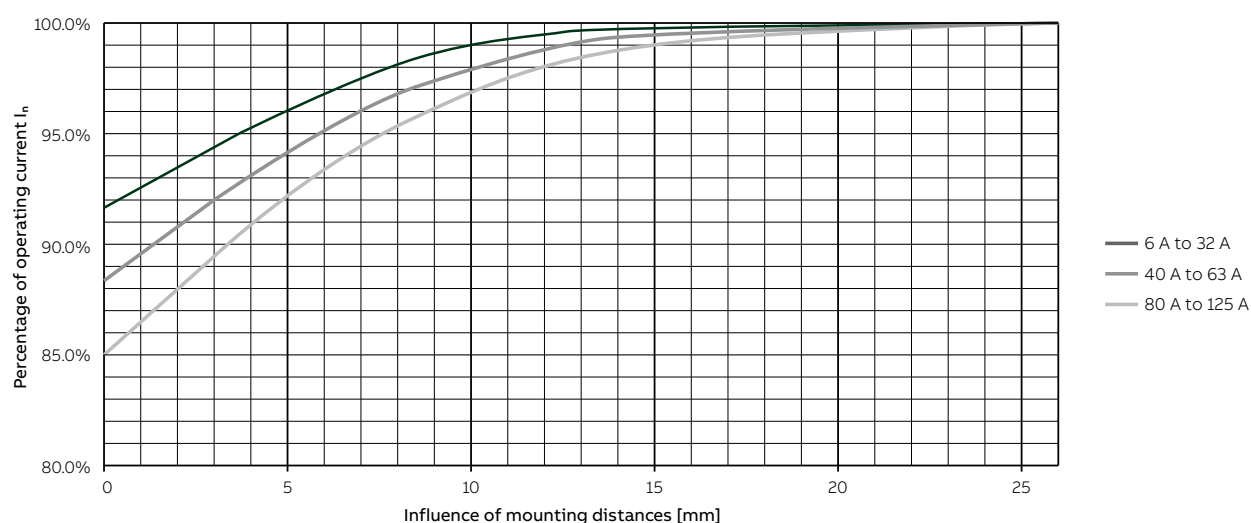
Max. operating current depending on the ambient temperature of a circuit-breaker in load circuit of characteristics type B and C.

| B, C, D | Ambient temperature T (°C) | | | | | | | | | |
|--------------------|----------------------------|------|------|------|------|------|------|------|------|------|
| I _n (A) | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 |
| 0.5 | 0.59 | 0.58 | 0.56 | 0.55 | 0.53 | 0.52 | 0.50 | 0.49 | 0.47 | 0.46 |
| 1.0 | 1.18 | 1.15 | 1.12 | 1.09 | 1.16 | 1.03 | 1.00 | 0.97 | 0.94 | 0.91 |
| 1.6 | 1.89 | 1.84 | 1.79 | 1.74 | 1.70 | 1.65 | 1.60 | 1.55 | 1.50 | 1.46 |
| 2.0 | 2.36 | 2.30 | 2.24 | 2.18 | 2.12 | 2.06 | 2.00 | 1.94 | 1.88 | 1.82 |
| 3.0 | 3.54 | 3.45 | 3.36 | 3.27 | 3.18 | 3.09 | 3.00 | 2.91 | 2.82 | 2.73 |
| 4.0 | 4.72 | 4.60 | 4.48 | 4.36 | 4.24 | 4.12 | 4.00 | 3.88 | 3.76 | 3.64 |
| 6.0 | 7.7 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6.0 | 5.7 | 5.3 | 4.9 |
| 8.0 | 10.3 | 10.0 | 9.6 | 9.2 | 8.8 | 8.4 | 8.0 | 7.5 | 7.1 | 6.5 |
| 10.0 | 12.9 | 12.5 | 12.0 | 11.5 | 11.1 | 10.5 | 10.0 | 9.4 | 8.8 | 8.2 |
| 13.0 | 16.8 | 16.2 | 15.6 | 15.0 | 14.4 | 13.7 | 13.0 | 12.3 | 11.5 | 10.6 |
| 16.0 | 20.7 | 20.0 | 19.2 | 18.5 | 17.7 | 16.9 | 16.0 | 15.1 | 14.1 | 13.1 |
| 20.0 | 25.8 | 24.9 | 24.0 | 23.1 | 22.1 | 21.1 | 20.0 | 18.9 | 17.6 | 16.3 |
| 25.0 | 32.3 | 31.2 | 30.0 | 28.9 | 27.6 | 26.4 | 25.0 | 23.6 | 22.0 | 20.4 |
| 32.0 | 41.3 | 39.9 | 38.5 | 37.0 | 35.4 | 33.7 | 32.0 | 30.2 | 28.2 | 26.1 |
| 40.0 | 51.6 | 49.9 | 48.1 | 46.2 | 44.2 | 42.2 | 40.0 | 37.7 | 35.3 | 32.7 |
| 50.0 | 59.0 | 57.5 | 56.0 | 54.5 | 53.0 | 51.5 | 50.0 | 48.5 | 47.0 | 45.5 |
| 63.0 | 74.3 | 72.5 | 70.6 | 68.7 | 66.8 | 64.9 | 63.0 | 61.1 | 59.2 | 57.3 |

Influence of mounting distances between the devices

Multiply the rated current referring to your max. occurrent temperature with the factor of “influence of mounting distances”.

Example: 2 x S802B-B125 at T = 40 °C with distance I_n = 120.4 A x 92.1 % = 110.9 A



Further influencing factors, which can lead to a reduction of the maximum operating current, are:

- Shortening the cable lenght compared to IEC 60947-1/2
- Reducing the cable cross section compared to IEC 60947-1/2
- Accumulation of cables

| Characteristic | from diagram | Calculation | Example |
|--|--------------|-----------------------------|---|
| Rated current and characteristics of MCB | | $I_n / B, C, D$ | 16 A – B |
| Continuous load | | ϑ_R | 40°C |
| Number of MCB's / Mounting distance | | N / X | 8 pieces / 0 and 8 mm |
| | | | $I_n=16A$ |
| | | | incl. derating due to temp. 40°C: $I_n=15.1A$ |
| Continuous load > 1 h | | $I = I_n \cdot K_\vartheta$ | $16 \cdot 0.77 = 12.23 A$ |
| Continuous load, N MCB, Distance 0 | 1 | $I = K_\vartheta \cdot K_N$ | $15.1A \cdot 0.77 = 11.6A$ |
| Continuous load, N MCB, Distance X | 2 | $I = K_\vartheta \cdot K_X$ | $15.1A \cdot 0.98 = 14.8A$ |

Max. Back-up protection

| SH 200 T / SH 200 L / SH 200 | B/C | Max. Back-up protection |
|------------------------------------|--------------|----------------------------|
| Rated current | fuse | Main Circuit Breaker S 700 |
| 0.5 ... 2 | not required | not required |
| 3 ... 4 | 20 A | 20 A |
| 6/8 | 63 A | 100 A |
| 10 ... 32 | 100 A | 100 A |
| 40 ... 63 | 125 A | 100 A |

Maximum permissible earth-fault loop impedance Z_s

Impedance Z_s at $U_0 = 230 V AC$ to ensure compliance with the operation conditions in accordance to IEC 60 364-4-41.

Operating time < 0.4 s; at 400 V AC < 0.2 s and at > 400 V AC < 0.1 s.

The instantaneous tripping of the MCB ensures an operating time of $\leq 0.1 s$ (TN system).

Determined according to DIN VDE 0100-520, supplement 2, 2002-11 (source impedance = 300 Ω , $c = 0.95$ and conductor temperature 70°C = factor 0.8). The internal resistance of the MCB is already included.

—
SH 200, SH 200 L, SH 200 T, SH 200 M

| Rated current $I_n A$ | B max. Z_s Ω | C max. Z_s Ω | D max. Z_s Ω |
|-----------------------|-----------------------------|-----------------------------|-----------------------------|
| 0.5 | — | 46 | 13.0 |
| 1 | — | 23 | 16.5 |
| 1.6 | — | 14.4 | 10.3 |
| 2 | — | 11.5 | 8.2 |
| 3 | — | 7.7 | 5.5 |
| 4 | — | 5.8 | 4.1 |
| 6 | 7.7 | 3.8 | 2.7 |
| 8 | — | 2.8 | 2.1 |
| 10 | 4.6 | 2.2 | 1.6 |
| 13 | 3.5 | 1.7 | 1.2 |
| 16 | 2.9 | 1.4 | 1.0 |
| 20 | 2.3 | 1.2 | 0.8 |
| 25 | 1.8 | 0.9 | 0.7 |
| 32 | 1.4 | 0.7 | 0.5 |
| 40 | 1.1 | 0.6 | 0.4 |
| 50 | 0.9 | 0.5 | 0.3 |
| 63 | 0.7 | 0.4 | 0.3 |

⁽¹⁾ U_0 = rated voltage against earthed conductor;
for $U_0 = 240 V$ is $Z_s \cdot 1.04$; for $U_0 = 127 V$ is $Z_s \cdot 0.55$

Take into account the voltage drop:

e.g. in the case of a 1.5 mm² conductor, protected by a B 16 circuit breaker, the maximum cable length is 82 m.

If the voltage is below 3%, this would result in a maximum cable length (2 wire) of 17 m.

For more details on this topic, get your own copy of the technical information leaflet "Maximum cable lengths".

Maximum cable length in case of different voltages and cross sections on request.

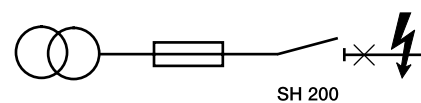
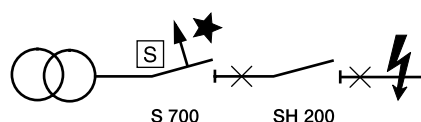
Technical details

Short circuit selectivity

In the case of a short circuit, selectivity exists up to the values indicated.

MCBs

short circuit discrimination in kA

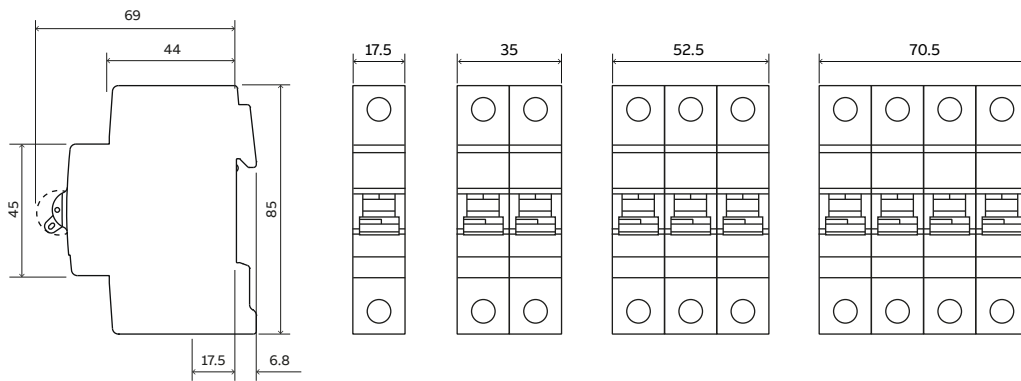


| | | to main circuit breaker S 700 | | | | | | | | | | to fuse gL/gG (IEC 60 269-1) | | | | | | | | | | |
|-----------------|--------------------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| series | I _n (A) | 16 | 20 | 25 | 35 | 40 | 50 | 63 | 80 | 100 | 16 | 20 | 25 | 35 | 50 | 63 | 80 | 100 | 125 | 160 | | |
| SH 200 T – B, C | 0.5 ... 5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 0.2 | 0.4 | 0.6 | 1.5 | 2.5 | 2.8 | 3 | 3 | 3 | 3 | | |
| | 6 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 0.2 | 0.4 | 0.6 | 1.5 | 2.5 | 2.8 | 3 | 3 | 3 | 3 | | |
| | 8 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | 0.3 | 0.6 | 1.4 | 2.4 | 2.6 | 3 | 3 | 3 | 3 | | |
| | 10 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | 0.5 | 1.2 | 2.1 | 2.5 | 2.8 | 3 | 3 | 3 | | |
| | 13 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | 0.4 | 1.0 | 1.8 | 2.4 | 2.8 | 3 | 3 | 3 | | |
| | 16 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | 0.8 | 1.6 | 2.3 | 2.8 | 3 | 3 | 3 | | |
| | 20 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 1.5 | 2.1 | 2.5 | 2.5 | 3 | 3 | | |
| | 25 | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | | 1.0 | 2.0 | 2.5 | 2.5 | 3 | 3 | | |
| | 32 | | ** | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | no selectivity | | | | | 1.9 | 2.5 | 2.5 | 3 | 3 | |
| | 40 | | | | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | | | 1.5 | 2 | 2 | 2 | 2 | | |
| 50/63 | | | | | | | | | 4.5 | 4.5 | | | | | | | 2 | 2 | 2 | 2 | | |
| SH 200 L – B, C | 0.5 ... 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0.2 | 0.4 | 0.7 | 1.8 | 3 | 5 | 4.5 | 4.5 | 4.5 | 4.5 | | |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0.2 | 0.4 | 0.7 | 1.8 | 3 | 5 | 4.5 | 4.5 | 4.5 | 4.5 | | |
| | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0.2 | 0.3 | 0.6 | 0.6 | 2.5 | 4 | 4.5 | 4.5 | 4.5 | 4.5 | | |
| | 10 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 0.3 | 0.6 | 1.4 | 2.3 | 3 | 4 | 4.5 | 4.5 | 4.5 | | |
| | 13 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | | 0.5 | 1.3 | 2 | 3 | 4 | 4.5 | 4.5 | 4.5 | | |
| | 16 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | | | 1 | 1.8 | 2.5 | 3.5 | 4.5 | 4.5 | 4.5 | | |
| | 20 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | | | | 1.6 | 2.2 | 3 | 4 | 4.5 | 4.5 | | |
| | 25 | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | | | | 1.5 | 2.2 | 3 | 4 | 4.5 | 4.5 | | |
| | 32 | | ** | | 6 | 6 | 6 | 6 | 6 | 6 | | no selectivity | | | | | 2 | 2.8 | 3.5 | 4.5 | 4.5 | |
| | 40 | | | | | 6 | 6 | 6 | 6 | 6 | | | | | | 2 | 2.5 | 3 | 4.5 | 4.5 | | |
| 50/63 | | | | | | | | | 6 | 6 | | | | | | | 4.5 | 4.5 | 4.5 | 4.5 | | |
| SH 200 – B, C | 0.5 ... 5 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 8 | 8 | 0.2 | 0.5 | 0.8 | 2 | 3.3 | 5.5 | 6 | 6 | 6 | 6 | | |
| | 6 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 8 | 8 | 0.2 | 0.5 | 0.8 | 2 | 3.3 | 5.5 | 6 | 6 | 6 | 6 | | |
| | 8 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 8 | 8 | 0.2 | 0.4 | 0.7 | 1.7 | 2.8 | 4.5 | 6 | 6 | 6 | 6 | | |
| | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 8 | 8 | 0.2 | 0.4 | 0.7 | 1.5 | 2.5 | 3.5 | 5 | 6 | 6 | 6 | | |
| | 16 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 8 | 8 | | | 0.7 | 1.5 | 2.5 | 3.5 | 5 | 6 | 6 | 6 | | |
| | 20 | | 10 | 10 | 10 | 10 | 10 | 10 | 8 | 8 | | | | 1.3 | 2 | 2.9 | 4.1 | 6 | 6 | 6 | | |
| | 25 | | | 10 | 10 | 10 | 15 | 10 | 8 | 8 | | | | | 1.8 | 2.6 | 3.5 | 5 | 6 | 6 | | |
| | 32 | | ** | | 10 | 10 | 10 | 10 | 8 | 8 | | no selectivity | | | | | 1.8 | 2.6 | 3.5 | 5 | 6 | 6 |
| | 40 | | | | | 10 | 10 | 10 | 8 | 8 | | | | | | 2.2 | 3 | 4 | 6 | 6 | | |
| | 50/63 | | | | | | | | 8 | 8 | | | | | | | | 6 | 6 | 6 | 6 | |

** Limited or no selectivity at all possible in the overload range (thermal tripping)

Overall dimensions

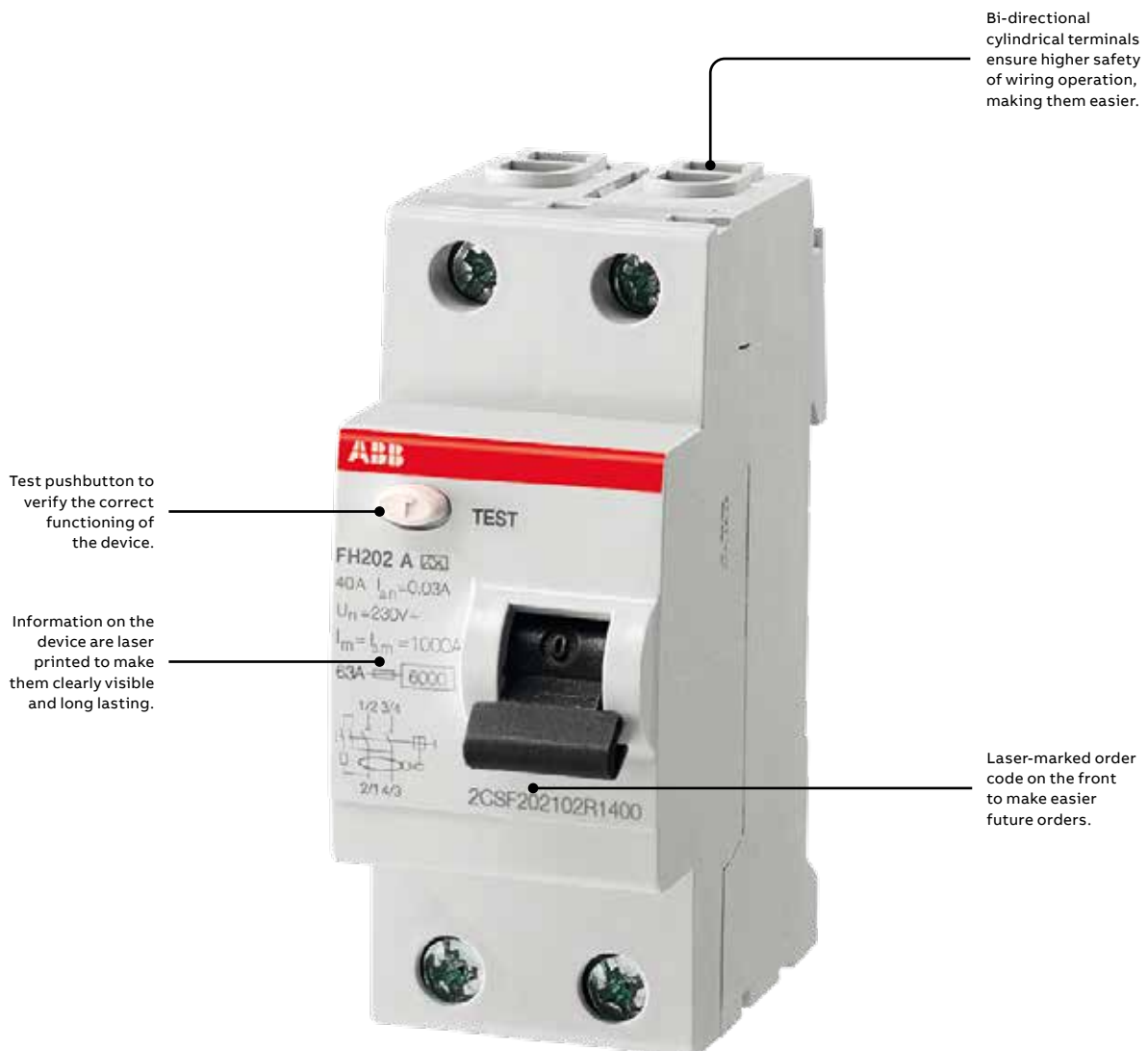
SH200M, SH 200, SH 200 L, SH 200 T



RCCB FH200

The details make the difference

A range designed to ensure efficiency and protection





Two terminals are available, the front one for cables up to 25 mm², the back one for cables up to 10 mm² or for busbars.



FH200: a wide range of RCCBs with 2P and 4P configuration, rated currents from 25 to 63 A, available in AC and A type with rated sensitivity from 30 mA up to 300 mA.



Two terminal offer different connection solutions thanks to the possibility to connect two independent cables in the same device: the second terminal can be used for an auxiliary circuit or for the supply of devices with small section cables without connecting them together with the main circuit.



Safety ensured by the international marks: approvals' marking in a visible area, even if RCDs is installed and panel-door is closed.



High performances:

- rated breaking capacity and rated residual breaking capacity laser printed on the device:
 $I_m = I_{\Delta m} = 1000 \text{ A}$
- coordination with a 63 A rated current SCPD (short-circuit protective device) = 6000 A.



The FH202 can be coupled with the autoreclosing unit F2C-ARH in order to ensure continuity of service for the whole installation of your home avoiding lack of supply.

Technical features table for residual current circuit breakers (RCCBs)

FH200 Series

Standards

Electrical features

Type (wave form of the earth leakage sensed)

Poles

| | |
|---|----|
| Rated current I_n | A |
| Rated sensitivity $I_{\Delta n}$ | mA |
| Rated voltage U_e | V |
| Insulation voltage U_i | V |
| Max. operating voltage of circuit test | V |
| Min. operating voltage of circuit test | V |
| Rated frequency | Hz |
| Rated conditional short-circuit current $I_{nc}=I_{\Delta c}$ | kA |
| Rated residual breaking capacity $I_{\Delta m}=I_m$ | kA |
| Rated impulse withstand voltage (1.2/50) U_{imp} | kV |
| Dielectric test voltage at ind. freq. for 1 min. | kV |
| Surge current resistance (wave 8/20) | A |

Mechanical features

Toggle

Contact position indicator (CPI)

Electrical life

Mechanical life

| | | |
|--|------------------------------|-------|
| Protection degree | housing | |
| | terminals | |
| | humid heat | °C/RH |
| | constant climatic conditions | °C/RH |
| | variable climatic conditions | °C/RH |
| Tropicalization acc. to IEC/EN 60068-2 | | |
| Ambient temperature (with daily average $\leq +35^\circ\text{C}$) | | °C |
| Storage temperature | | °C |

Installation

Terminal type

| | |
|-------------------------------------|-----------------|
| Terminal size top/bottom for cable | mm ² |
| Terminal size top/bottom for busbar | mm ² |
| Tightening torque | N*m |
| Tool | |

Mounting

Connection

Dimensions and weight

| | | |
|------------------------|----|----|
| Dimensions (H × D × W) | 2P | mm |
| | 4P | mm |
| Weight | 2P | g |
| | 4P | g |

Combination with auxiliary elements

Combinable with: F2C-ARH autoreclosing unit

FH200
2CSC400030F0039



F200
2CSC400030F0044



| FH200 | | F200 |
|---|----|---|
| IEC/EN 61008 (IEC 61008 only for overseas IEC versions) | | IEC/EN 61008 |
| AC | A | A S |
| 2P, 4P | | 2P, 4P |
| 25, 40, 63 | | 40, 63 |
| 30, 100, 300 | 30 | 300 |
| 230/400 – 240/415 | | 230/400 – 240/415 |
| 500 | | 500 |
| 254 | | 254 |
| 110 (170 for 30 mA) /110 for all overseas IEC versions | | 110 |
| 50 | | 50 ... 60 |
| 6 (with a SCPD-fuse gG 63A) | | 10 (with a SCPD-fuse gG 100A) |
| 1 | | 1 |
| 4 | | 4 |
| 2.5 | | 2.5 |
| 250 | | 5000 |
| BLACK sealable in ON-OFF position | | BLUE sealable in ON-OFF position |
| not available | | yes |
| 10.000 | | 10.000 |
| 20.000 | | 20.000 |
| IP4X | | IP4X |
| IP2X | | IP2X |
| 28 cycles with 55/95 ... 100 | | 28 cycles with 55/95 ... 100 |
| 23/83 – 40/93 – 55/20 | | 23/83 – 40/93 – 55/20 |
| 25/95 – 40/95 | | 25/95 – 40/95 |
| -5 ... +40 | | -25 ... +55 |
| -40 ... +70 | | -40 ... +70 |
| failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected) | | failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected) |
| 25/25 | | 25/25 |
| 10/10 | | 10/10 |
| 2.8 | | 2.8 |
| Nr. 2 Pozidriv | | Nr. 2 Pozidriv |
| on DIN rail EN 60715 (35 mm) by means of fast clip device | | on DIN rail EN 60715 (35 mm) by means of fast clip device |
| from top and bottom | | from top and bottom |
| 85 × 69 × 35 | | 85 × 69 × 35 |
| 85 × 69 × 70 | | 85 × 69 × 70 |
| 200 | | 200 |
| 350 | | 350 |
| yes (the 2 poles version 30mA and 100mA) | | no |

Ordering data

FH200 – AC type

Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct (with $I_{\Delta n}=30$ mA) contacts.

Standard: IEC/ EN 61008

Marking: according to EN 61008



FH202 AC
2CSC400030F0039



FH204 AC
2CSC400030F0041

| N. of poles | Rated | | N° module | Bbn | | Order details | | | Weight 1 piece | Pack unit |
|-------------|-------------------|---------------|-----------|---------|------------------|-----------------|-------|-------|----------------|-----------|
| | residual current | Rated current | | 8012542 | | | | | | |
| | $I_{\Delta n}$ mA | I_n A | [17.5 mm] | EAN | Type code | Order code | Price | kg | | |
| 2 | 30 | 25 | 2 | 891802 | FH202 AC-25/0.03 | 2CSF202002R1250 | | 0.225 | 1/6 | |
| | | 40 | 2 | 891901 | FH202 AC-40/0.03 | 2CSF202002R1400 | | 0.225 | 1/6 | |
| | | 63 | 2 | 892007 | FH202 AC-63/0.03 | 2CSF202002R1630 | | 0.225 | 1/6 | |
| | 300 | 25 | 2 | 893004 | FH202 AC-25/0.3 | 2CSF202003R3250 | | 0.225 | 1/6 | |
| | | 40 | 2 | 893103 | FH202 AC-40/0.3 | 2CSF202003R3400 | | 0.225 | 1/6 | |
| | | 63 | 2 | 893202 | FH202 AC-63/0.3 | 2CSF202003R3630 | | 0.225 | 1/6 | |
| 4 | 30 | 25 | 4 | 892106 | FH204 AC-25/0.03 | 2CSF204002R1250 | | 0.375 | 1/3 | |
| | | 40 | 4 | 892205 | FH204 AC-40/0.03 | 2CSF204002R1400 | | 0.375 | 1/3 | |
| | | 63 | 4 | 892304 | FH204 AC-63/0.03 | 2CSF204002R1630 | | 0.375 | 1/3 | |
| | 300 | 25 | 4 | 893301 | FH204 AC-25/0.3 | 2CSF204003R3250 | | 0.375 | 1/3 | |
| | | 40 | 4 | 893400 | FH204 AC-40/0.3 | 2CSF204003R3400 | | 0.375 | 1/3 | |
| | | 63 | 4 | 893509 | FH204 AC-63/0.3 | 2CSF204003R3630 | | 0.375 | 1/3 | |

Ordering data

FH200 – AC type (for overseas markets)

Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct (with $I_{\Delta n}=30$ mA) contacts.

Standard: IEC61008

Marking: according to IEC 61008



FH202 AC
2CSC400030F0039



FH204 AC
2CSC400030F0041

| N. of poles | Rated | | N° module | Bbn | | Order details | | | Weight 1 piece | Pack unit |
|-------------|-------------------|---------------|-----------|---------|------------------|-----------------|-------|-------|----------------|-----------|
| | residual current | Rated current | | 8012542 | | | | | | |
| | $I_{\Delta n}$ mA | I_n A | [17.5 mm] | EAN | Type code | Order code | Price | kg | | |
| 2 | 30 | 25 | 2 | 894209 | FH202 AC-25/0.03 | 2CSF202006R1250 | | 0.225 | 1/6 | |
| | | 40 | 2 | 894308 | FH202 AC-40/0.03 | 2CSF202006R1400 | | 0.225 | 1/6 | |
| | | 63 | 2 | 894407 | FH202 AC-63/0.03 | 2CSF202006R1630 | | 0.225 | 1/6 | |
| | 100 | 25 | 2 | 894506 | FH202 AC-25/0.1 | 2CSF202006R2250 | | 0.225 | 1/6 | |
| | | 40 | 2 | 894605 | FH202 AC-40/0.1 | 2CSF202006R2400 | | 0.225 | 1/6 | |
| | | 63 | 2 | 894704 | FH202 AC-63/0.1 | 2CSF202006R2630 | | 0.225 | 1/6 | |
| | 300 | 25 | 2 | 894803 | FH202 AC-25/0.3 | 2CSF202006R3250 | | 0.225 | 1/6 | |
| | | 40 | 2 | 894902 | FH202 AC-40/0.3 | 2CSF202006R3400 | | 0.225 | 1/6 | |
| | | 63 | 2 | 895008 | FH202 AC-63/0.3 | 2CSF202006R3630 | | 0.225 | 1/6 | |
| 4 | 30 | 25 | 4 | 895107 | FH204 AC-25/0.03 | 2CSF204006R1250 | | 0.375 | 1/3 | |
| | | 40 | 4 | 895206 | FH204 AC-40/0.03 | 2CSF204006R1400 | | 0.375 | 1/3 | |
| | | 63 | 4 | 895305 | FH204 AC-63/0.03 | 2CSF204006R1630 | | 0.375 | 1/3 | |
| | 100 | 25 | 4 | 895404 | FH204 AC-25/0.1 | 2CSF204006R2250 | | 0.375 | 1/3 | |
| | | 40 | 4 | 895503 | FH204 AC-40/0.1 | 2CSF204006R2400 | | 0.375 | 1/3 | |
| | | 63 | 4 | 895602 | FH204 AC-63/0.1 | 2CSF204006R2630 | | 0.375 | 1/3 | |
| | 300 | 25 | 4 | 895701 | FH204 AC-25/0.3 | 2CSF204006R3250 | | 0.375 | 1/3 | |
| | | 40 | 4 | 895800 | FH204 AC-40/0.3 | 2CSF204006R3400 | | 0.375 | 1/3 | |
| | | 63 | 4 | 895909 | FH204 AC-63/0.3 | 2CSF204006R3630 | | 0.375 | 1/3 | |

Ordering data

FH200 A type – F200 A S type



FH202 A
2CSC400030F0042



FH204 A
2CSC400030F0043

FH200 A type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct (with $I_{\Delta n} = 30$ mA) contacts.

Standard: IEC/ EN 61008

Marking: according to EN 61008

| N. of poles | Rated residual current | Rated current | N° module [17.5 mm] | Bbn 8012542 EAN | Order details | | | Weight 1 piece | Pack unit |
|-------------|------------------------|---------------|---------------------|-----------------|-----------------|-----------------|-------|----------------|-----------|
| | $I_{\Delta n}$ mA | I_n A | | | Type code | Order code | Price | kg | |
| 2 | 30 | 25 | 2 | 892403 | FH202 A-25/0.03 | 2CSF202102R1250 | | 0.225 | 1/6 |
| | | 40 | 2 | 892502 | FH202 A-40/0.03 | 2CSF202102R1400 | | 0.225 | 1/6 |
| | | 63 | 2 | 892601 | FH202 A-63/0.03 | 2CSF202102R1630 | | 0.225 | 1/6 |
| 4 | 30 | 25 | 4 | 892700 | FH204 A-25/0.03 | 2CSF204102R1250 | | 0.375 | 1/3 |
| | | 40 | 4 | 892809 | FH204 A-40/0.03 | 2CSF204102R1400 | | 0.375 | 1/3 |
| | | 63 | 4 | 892908 | FH204 A-63/0.03 | 2CSF204102R1630 | | 0.375 | 1/3 |



F202 A S
2CSC400030F0044



F204 A S
2CSC400030F0045

F200 A S type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents with an intentional tripping delay, which permits to realize the selectivity with downstream instantaneous devices; protection against indirect contacts.

Standard: IEC/EN 61008

Marking: according to EN 61008

| N. of poles | Rated residual current | Rated current | N° module [17.5 mm] | Bbn 8012542 EAN | Order details | | | Weight 1 piece | Pack unit |
|-------------|------------------------|---------------|---------------------|-----------------|-----------------|-----------------|-------|----------------|-----------|
| | $I_{\Delta n}$ mA | I_n A | | | Type code | Order code | Price | kg | |
| 2 | 300 | 40 | 2 | 784302 | F202 A S-40/0.3 | 2CSF202201R3400 | | 0.225 | 1/6 |
| | | 63 | 2 | 784401 | F202 A S-63/0.3 | 2CSF202201R3630 | | 0.225 | 1/6 |
| 4 | 300 | 40 | 4 | 784708 | F204 A S-40/0.3 | 2CSF204201R3400 | | 0.375 | 1/3 |
| | | 63 | 4 | 784807 | F204 A S-63/0.3 | 2CSF204201R3630 | | 0.375 | 1/3 |

Technical details

Coordination tables

FH202

| | Single-phases 230-240 V circuit | | |
|--------------------------------|---------------------------------|------|------|
| | 25 A | 40 A | 63 A |
| SH201 T – SH201 T NA – SH202 T | 3 | 3 | 3 |
| SH201 L – SH201 L NA – SH202 L | 4.5 | 4.5 | 4.5 |
| SH201 – SH201 NA – SH202 | 6 | 6 | 6 |

FH204

| | Three-phases circuits with neutral (y/□) 230-240 V/400-415 V | | |
|---|--|------|------|
| | 25 A | 40 A | 63 A |
| SH201 T ⁽¹⁾ – SH201 T NA ⁽¹⁾ – SH202 T ⁽¹⁾ | 3 | 3 | 3 |
| SH201 L ⁽¹⁾ – SH201 L NA ⁽¹⁾ – SH202 L ⁽¹⁾ | 4.5 | 4.5 | 4.5 |
| SH201 ⁽¹⁾ – SH201 NA ⁽¹⁾ – SH202 ⁽¹⁾ | 6 | 6 | 6 |

⁽¹⁾ The switches are considered between phase and neutral (230/240V)

FH204

| | Three-phases circuits with neutral (y/□) 230-240 V/400-415 V | | |
|--------------------------------|--|------|------|
| | 25 A | 40 A | 63 A |
| SH203 T – SH203 T NA – SH204 T | 3 | 3 | 3 |
| SH203 L – SH203 L NA – SH204 L | 4.5 | 4.5 | 4.5 |
| SH203 – SH203 NA – SH204 | 6 | 6 | 6 |

Power loss

| Rated current In [A] | Power loss W [W] | |
|-------------------------|---------------------|-----|
| | 2P | 4P |
| 25 | 1.0 | 1.3 |
| 40 | 2.4 | 3.2 |
| 63 | 3.2 | 4.4 |

RCBO DSH201

Compact solutions for a complete protection in residential applications

Easy to install

Supply possible either from top or bottom side with 25 mm² cage terminals with fail safe feature to avoid improper installation

Laser printed information

Information on the device are laser printed to ensure readability over time

Anti counterfeiting

DSH201 is equipped with a tag RFid in order to authenticate the product

Test pushbutton

Test pushbutton to verify the correct functioning of the device

Earth fault indicator

Blue flag on the toggle to identify earth fault trips.

I ON – 0 OFF indication molded on the toggle.

Dedicated space for label

Dedicated space to insert labels in order to clearly identify the protected lines



RCBOs DSH201

Better Look & Feel with ABB's Compact Home range



25 mm² cage terminals with fail safe feature to avoid improper installation. Supply possible either from top or bottom side, with cables and busbars (from PSH series).

Stable fixing on DIN rail, easy and fast mounting and dismounting operations thanks to the standard mounting clip.



Main technical information and product code are laser printed on the front side, visible also when the device is installed.

Range of temperatures from -25 °C (as indicated by the snowflake) up to +55 °C.



Product Made in Italy, with the indication molded on the side.

RFid tag on the product side containing a unique serial number assigned to ABB according to the standard ISO/IEC FCD 15693-3 in order to authenticate the product. Tightening torque and stripping length of the cable molded directly on the product side.



Additional information are laser printed on the lateral side of the device, including also the wiring diagram and the EAN code.



Any earth fault can be immediately identified through the blue indicator, that signals the differential tripping and which cannot be activated in case of manual operation on the toggle. Easy troubleshooting and reduced downtime for maintenance operations.

RCBOs DSH201

Technical features



DSH201

| DSH201 | | | |
|-----------------------|---|---------------------------------|---|
| Electrical features | Standards | | IEC/EN 61009-1; IEC/EN 61009-2-1 |
| | Type (wave form of the earth leakage sensed) | | AC, A |
| | Number of poles | | 1P + N |
| | Rated current I_n | A | $6 \leq I_n \leq 40$ |
| | Rated sensitivity $I_{\Delta n}$ | A | 0.03 |
| | Rated voltage U_e | V | 230 |
| | Insulation voltage U_i | V | 500 V AC |
| | Overvoltage category | | III |
| | Pollution degree | | 2 |
| | Operating voltage of circuit test U_t | V | 170 - 254 |
| | Rated frequency | Hz | 50 |
| | Rated breaking capacity acc. to IEC/EN 61009-1 | I_{cn} A | 6000 |
| | Rated breaking capacity acc. to IEC/EN 60947-2 (only referring to short circuit test) | ultimate I_{cu} | kA 10 |
| | | service I_{cs} | kA 6 |
| | Rated residual breaking capacity $I_{\Delta m}$ according to EN/IEC 61009-1 | A | 3000 |
| | Rated impulse withstand voltage (1.2/50) U_{imp} | kV | 4 kV |
| | Dielectric test voltage at ind. freq. for 1 min. | kV | 2.5 kV (50 / 60Hz, 1 min.) |
| | Thermomagnetic release characteristic | B: $3 I_n \leq I_n \leq 5 I_n$ | ■ |
| | | C: $5 I_n \leq I_n \leq 10 I_n$ | ■ |
| | Energy limiting class acc. to EN 61009-1 | | 3 |
| Mechanical features | Housing | | Insulation group I - II, RAL 7035 |
| | Toggle | | Insulation group II, Black RAL 9005, sealable in ON-OFF positions |
| | Earth fault trip indication | | Blue flag on toggle |
| | Electrical life | operations | 10000 |
| | Mechanical life | operations | 20000 |
| | Protection degree acc. to EN 60529 | housing | IP4X |
| | | terminals | IP2X |
| | Shock resistance acc. to IEC/EN 60068-2-27 | | 25 g - 2 shocks - 13 ms |
| | Vibration resistance acc. to IEC/EN 60068-2-6 | | 0.1 mm or 1 g - 20 cycles at 5...150...5 Hz |
| | Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30 | °C/RH | 28 cycles with 55 °C/90-96% and 25 °C/95-100% |
| | Reference temperature for setting of thermal element | °C | 30 |
| | Ambient temperature (with daily average $\leq +35$ °C) | °C | -25...+55 |
| | Storage temperature | °C | -40...+70 |
| Installation | Terminal type | top / bottom | cage terminal with integrated failsafe |
| | Terminal size for cables | top / bottom | mm ² 25/25 |
| | Tightening torque | top / bottom | Nm 2 |
| | Stripping length of the cable | mm | 12.5 |
| | Mounting | | on DIN rail EN 60715 (35 mm) by means of mounting clip |
| | Mounting position | | Any |
| | Supply from | | Top/Bottom terminals |
| Dimensions and weight | Dimensions (H x D x W) | mm | 85 x 69 x 35 |
| | Weight | g | 182 |

RCBOs DSH201

Ordering codes



DSH201

DSH201 6000 AC w type and A y type, C and B characteristic

Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating (only for A type) earth fault currents; protection against indirect contact and additional protection against direct contact

($I_{\Delta n}$ = 30 mA).

Application: residential

Standard: IEC/EN 61009-1; IEC/EN 61009-2-1

I_{cn} = 6000 A

| N. poles | Type | Rated residual current I _{Δn} mA | Tripping char. | Rated current I _n A | Bbn 8012542 EAN | Order details | | Price 1 piece | Weight 1 piece | Pack unit |
|----------|------|---|----------------|--------------------------------|-----------------|-----------------|-----------------|---------------|----------------|-----------|
| | | | | | | Type code | Order code | | kg | pc. |
| 1+N | AC | 30 | B | 6 | 344018 | DSH201 B6 AC30 | 2CSR255070R1065 | | 0.182 | 1 |
| | | | | 10 | 354215 | DSH201 B10 AC30 | 2CSR255070R1105 | | 0.182 | 1 |
| | | | | 16 | 343912 | DSH201 B16 AC30 | 2CSR255070R1165 | | 0.182 | 1 |
| | | | | 20 | 354116 | DSH201 B20 AC30 | 2CSR255070R1205 | | 0.182 | 1 |
| | | | | 25 | 343813 | DSH201 B25 AC30 | 2CSR255070R1255 | | 0.182 | 1 |
| | | | | 32 | 354017 | DSH201 B32 AC30 | 2CSR255070R1325 | | 0.182 | 1 |
| | | | | 40 | 343714 | DSH201 B40 AC30 | 2CSR255070R1405 | | 0.182 | 1 |
| | | | C | 6 | 353911 | DSH201 C6 AC30 | 2CSR255070R1064 | | 0.182 | 1 |
| | | | | 10 | 343615 | DSH201 C10 AC30 | 2CSR255070R1104 | | 0.182 | 1 |
| | | | | 13 | 244035 | DSH201 C13 AC30 | 2CSR255070R1134 | | 0.182 | 1 |
| | | | | 16 | 353812 | DSH201 C16 AC30 | 2CSR255070R1164 | | 0.182 | 1 |
| | | | | 20 | 343516 | DSH201 C20 AC30 | 2CSR255070R1204 | | 0.182 | 1 |
| | | | | 25 | 353713 | DSH201 C25 AC30 | 2CSR255070R1254 | | 0.182 | 1 |
| | | | | 32 | 343417 | DSH201 C32 AC30 | 2CSR255070R1324 | | 0.182 | 1 |
| | | | | 40 | 353614 | DSH201 C40 AC30 | 2CSR255070R1404 | | 0.182 | 1 |
| 1+N | A | 30 | B | 6 | 237532 | DSH201 B6 A30 | 2CSR255170R1065 | | 0.182 | 1 |
| | | | | 10 | 237433 | DSH201 B10 A30 | 2CSR255170R1105 | | 0.182 | 1 |
| | | | | 16 | 237334 | DSH201 B16 A30 | 2CSR255170R1165 | | 0.182 | 1 |
| | | | | 20 | 237235 | DSH201 B20 A30 | 2CSR255170R1205 | | 0.182 | 1 |
| | | | | 25 | 237236 | DSH201 B25 A30 | 2CSR255170R1255 | | 0.182 | 1 |
| | | | | 32 | 237037 | DSH201 B32 A30 | 2CSR255170R1325 | | 0.182 | 1 |
| | | | | 40 | 236931 | DSH201 B40 A30 | 2CSR255170R1405 | | 0.182 | 1 |
| | | | C | 6 | 269236 | DSH201 C6 AC30 | 2CSR255170R1064 | | 0.182 | 1 |
| | | | | 10 | 236832 | DSH201 C10 AC30 | 2CSR255170R1104 | | 0.182 | 1 |
| | | | | 13 | 236733 | DSH201 C13 AC30 | 2CSR255170R1134 | | 0.182 | 1 |
| | | | | 16 | 236634 | DSH201 C16 AC30 | 2CSR255170R1164 | | 0.182 | 1 |
| | | | | 20 | 236535 | DSH201 C20 AC30 | 2CSR255170R1204 | | 0.182 | 1 |
| | | | | 25 | 236436 | DSH201 C25 AC30 | 2CSR255170R1254 | | 0.182 | 1 |
| | | | | 32 | 236337 | DSH201 C32 AC30 | 2CSR255170R1324 | | 0.182 | 1 |
| | | | | 40 | 236238 | DSH201 C40 AC30 | 2CSR255170R1404 | | 0.182 | 1 |

Connection with busbars

Cage terminals are designed for installation with PSH busbars.

Details of the most common 12-pins versions.

| No. of pins | Phases | mm ² | Cu-No. Kg | Bbn 4016779 EAN | Order details | | Price 1 piece | Weight 1 piece | Pack unit |
|-------------|--------|-----------------|-----------|-----------------|---------------|-----------------|---------------|----------------|-----------|
| | | | | | Type code | Order code | | Kg | pc. |
| 12 | 2 | 10 | 0.07 | 651882 | PSH 2/12 1) | 2CDL120001R1012 | | 0.08 | 50 |

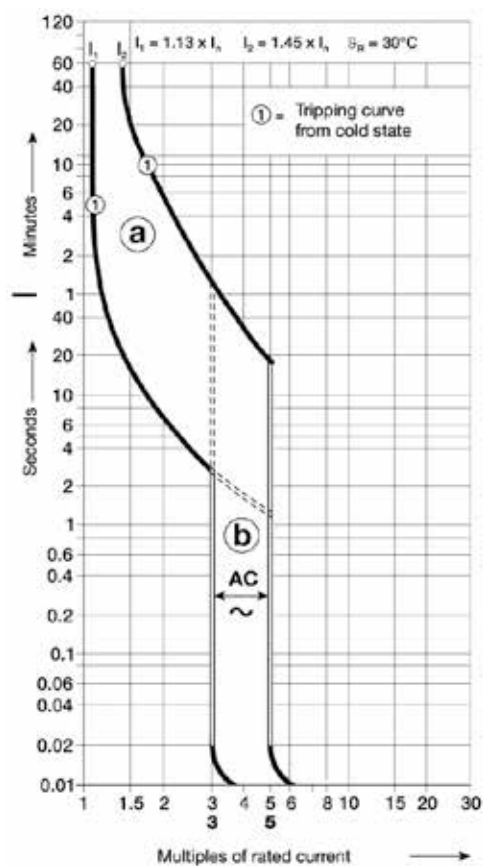
1) inclusive of end caps

RCBO DSH201

Technical data

Tripping characteristics B

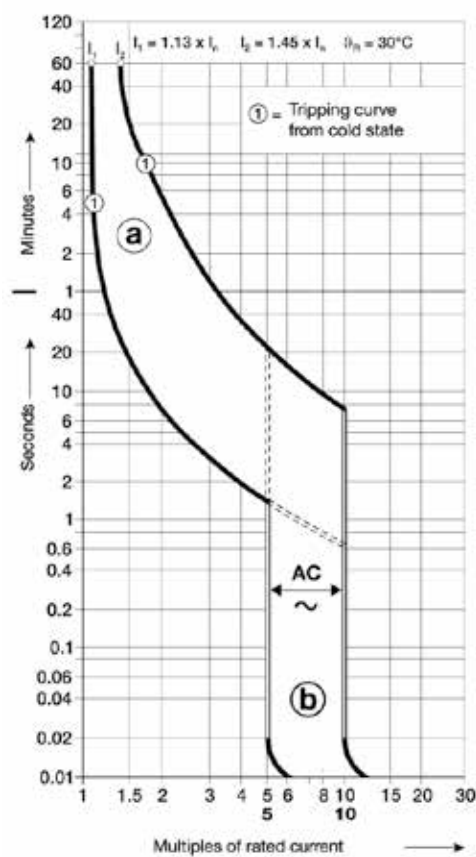
IEC/EN 61009-1



a: thermal trip
b: electromagnetic trip

Tripping characteristics C

IEC/EN 61009-1

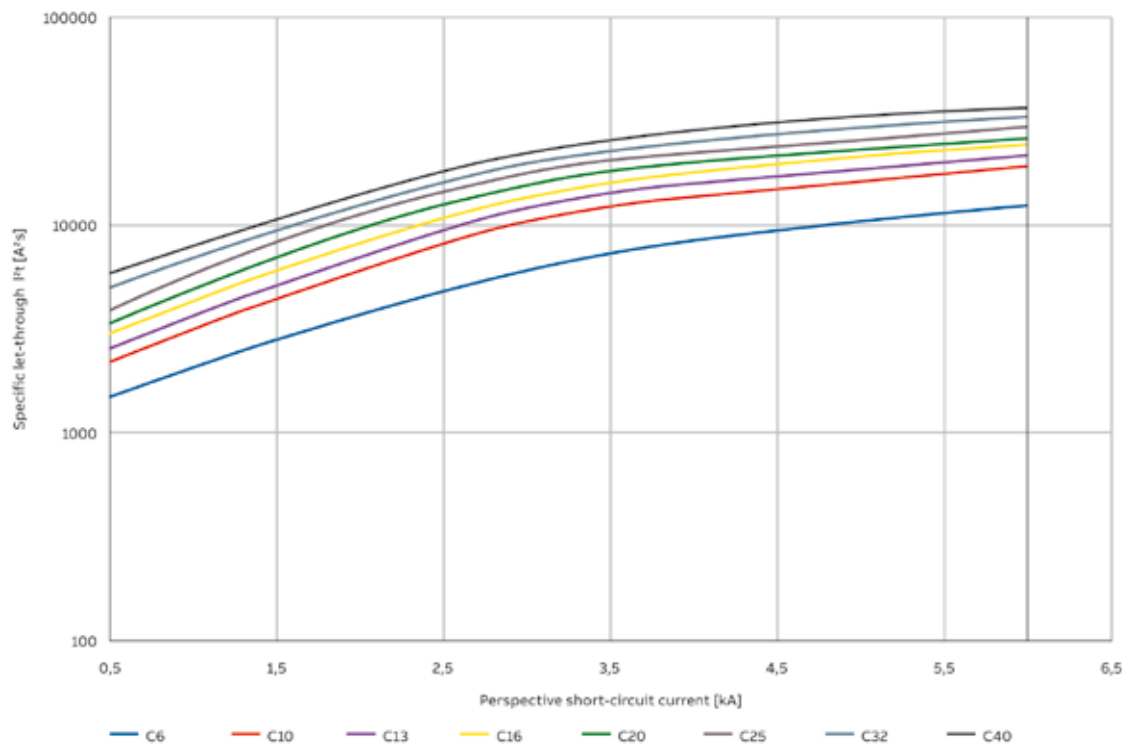


a: thermal trip
b: electromagnetic trip

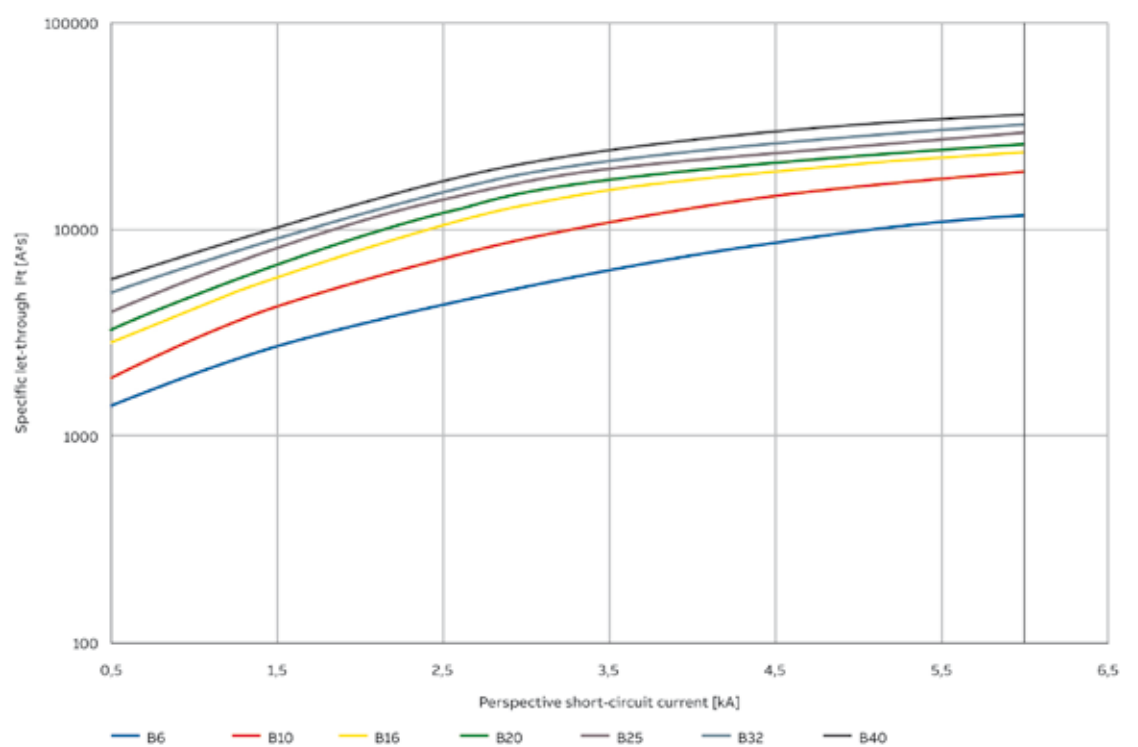
RCBO DSH201

Technical data

Specific let-through energy I^2t DSH201 - Characteristic C



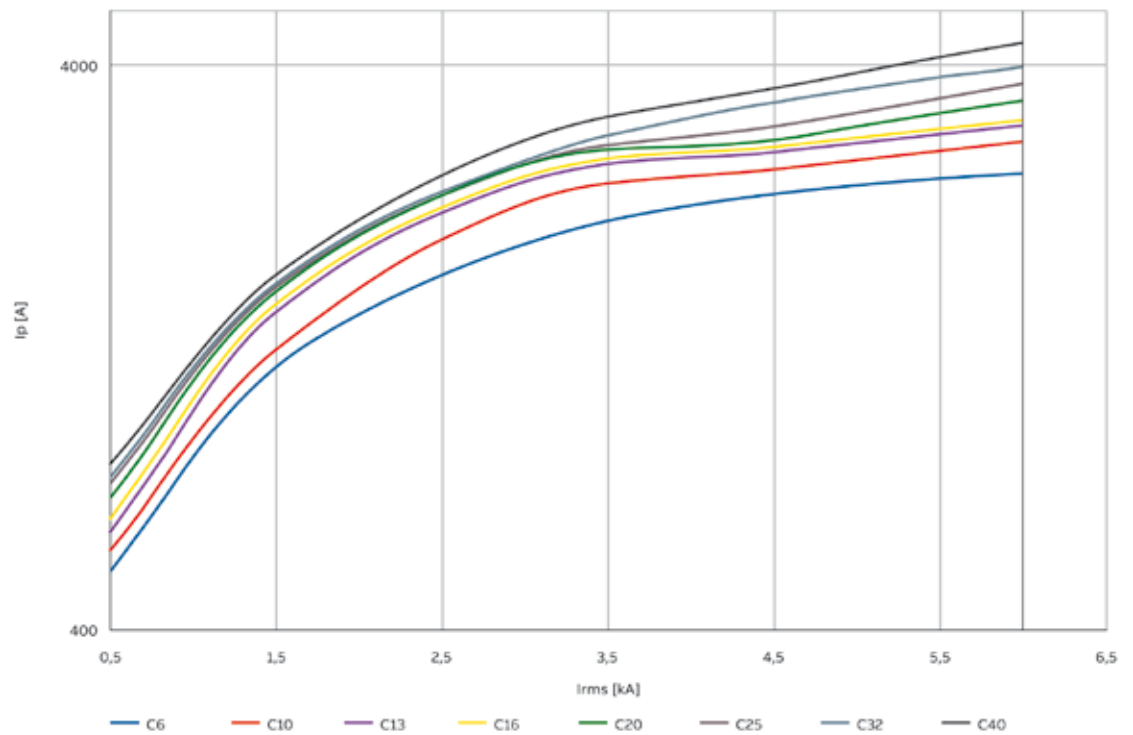
Specific let-through energy I^2t DSH201 - Characteristic B



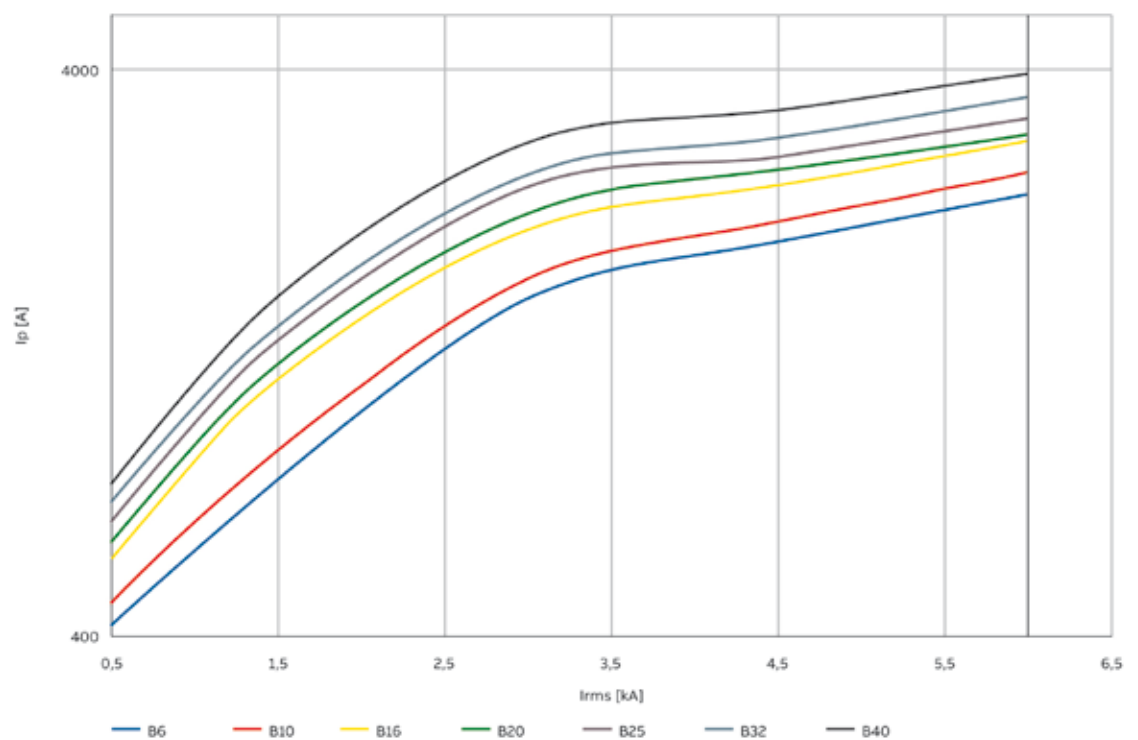
RCBO DSH201

Technical data

I_{peak} DSH201 - Characteristic C



I_{peak} DSH201 - Characteristic B



RCBO DSH201

Technical data

Performance in altitude

| Elevation [m] | 2000 | 3000 | 4000 | 5000 | 6000 |
|----------------------|--------------------|------------------------|------------------------|------------------------|------------------------|
| Rated Current [A] | 1 x I _n | 0.96 x I _n | 0.94 x I _n | 0.92 x I _n | 0.90 x I _n |
| Rated Voltage [V] | 1 x U _n | 0.877 x U _n | 0.775 x U _n | 0.676 x U _n | 0.588 x U _n |

Derating in temperature

Max operating current depending on the ambient temperature (daily average $\leq +35\text{ °C}$) of characteristics type B and C.

| In (A) | Temperature (°C) | | | | | | | | | |
|-----------|---------------------|------|------|------|------|------|------|------|------|------|
| | -25 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 55 |
| 6 | 8.8 | 8.4 | 7.7 | 7.3 | 7.0 | 6.4 | 6.0 | 5.5 | 5.3 | 5.1 |
| 10 | 13.5 | 13.0 | 12.1 | 11.5 | 11.0 | 10.6 | 10.0 | 9.4 | 9.0 | 8.8 |
| 13 | 16.0 | 15.6 | 14.9 | 14.5 | 14.0 | 13.4 | 13.0 | 12.4 | 11.7 | 11.4 |
| 16 | 19.0 | 18.6 | 18.1 | 17.5 | 17.0 | 16.4 | 16.0 | 15.3 | 14.8 | 14.5 |
| 20 | 24.0 | 23.5 | 22.7 | 22.0 | 21.4 | 20.7 | 20.0 | 19.1 | 18.5 | 18.3 |
| 25 | 27.9 | 27.5 | 27.1 | 26.6 | 26.0 | 25.3 | 25.0 | 24.3 | 23.6 | 23.4 |
| 32 | 36.8 | 36.2 | 35.4 | 34.8 | 34.0 | 32.9 | 32.0 | 31.3 | 30.5 | 30.0 |
| 40 | 44.8 | 44.6 | 44.0 | 43.4 | 42.1 | 41.0 | 40.0 | 39.0 | 38.1 | 37.9 |

Influence of adjacent devices

| | | | | | |
|----------------------|---|-----|------|------|-----|
| Number of devices | 1 | 3 | 5 | 7 | 9 |
| Correction factor | 1 | 0.9 | 0.85 | 0.81 | 0.8 |

Voltage Drop, power loss, internal resistance, own consumption

| In (A) | Voltage drop (mV) | Power loss (W) | Int. res. (mΩ) |
|-----------|----------------------|-------------------|-------------------|
| 6 | 400 | 2.4 | 67 |
| 10 | 180 | 1.8 | 18 |
| 13 | 200 | 2.5 | 15 |
| 16 | 205 | 3.3 | 13 |
| 20 | 180 | 3.6 | 9 |
| 25 | 220 | 5.5 | 9 |
| 32 | 200 | 6.4 | 6 |
| 40 | 125 | 5.0 | 3 |

RCBO DSH201

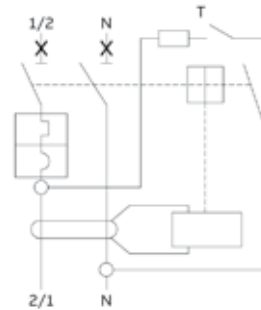
Dimensions and connections

Overall dimensions DSH201

All measurements in mm



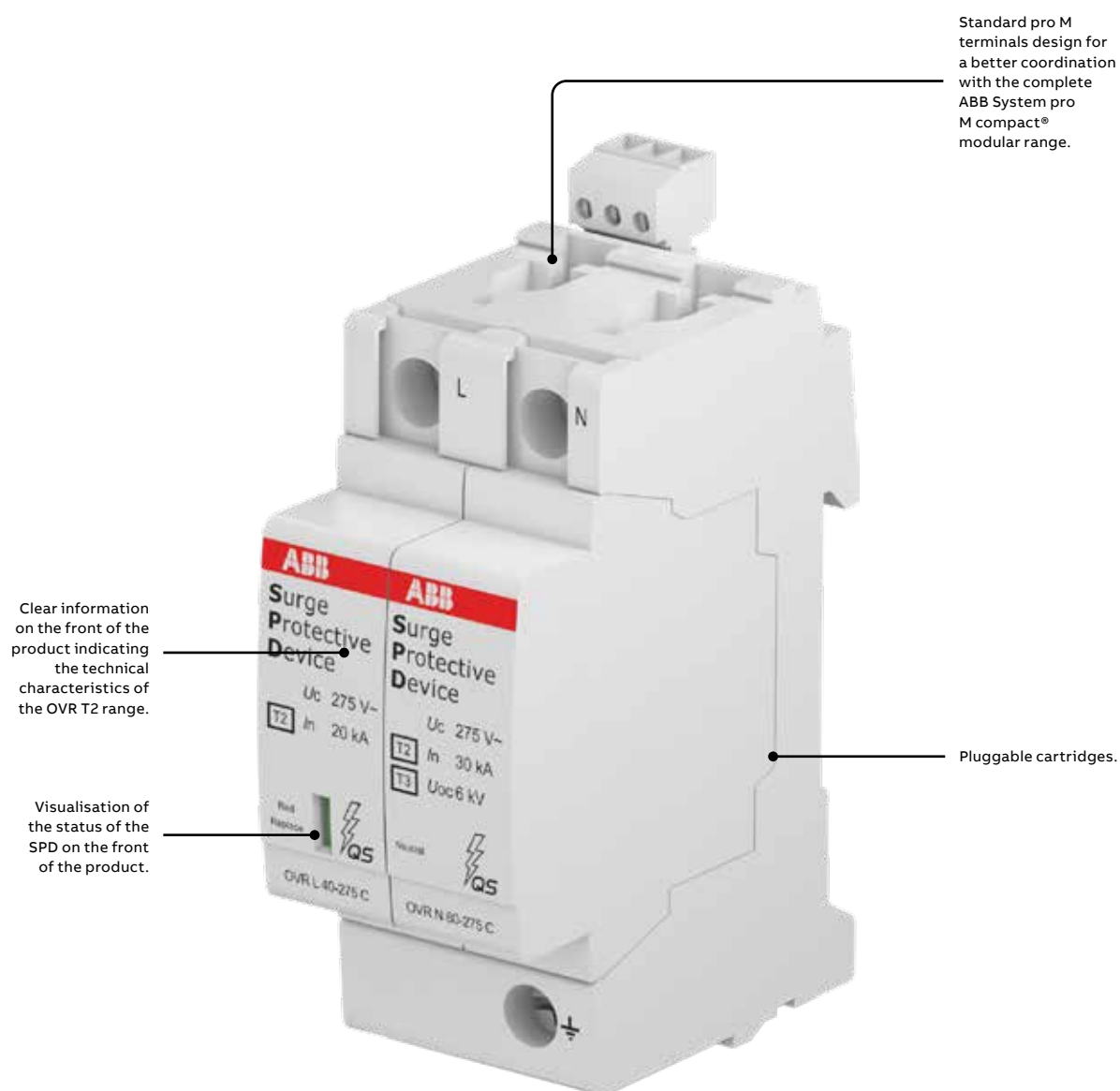
Main connection



OVR T1-T2, T2, T2-T3 range.

The details make the difference

A complete range for your surge protection





The bidirectional cylindrical terminal block of the OVR T2 range allows a complete coordination with the ABB range with considerable time savings in wiring operations. All the devices allow connection through busbars, both from above and from below.



The pluggable feature of ABB surge arresters facilitates maintenance. Should one or more worn cartridges need to be replaced, the electrical circuit does not have to be isolated nor do the wires have to be removed.



The end-of-service-life indicator of the surge protective device signals the status of the device. A mechanical indicator turns from green to red when the SPD reaches the end of its service life.

Technical features table surge arresters

OVR Series

OVR T1-T2 xx 12.5-275s P S
2CSC400030F0069



| OVR T1-T2 xx 12.5-275s P QS | | | MOVs |
|--|-------------------------|---|---------------------------|
| Technology | | | MOVs |
| Electrical features | | | |
| Standard | | | EN 61643-11, IEC 61643-11 |
| Type / test class | | | T1-T2 / I-II |
| Poles | | | -/1N/3L/3N/4L |
| Types of networks | | | TNC-TNS-TT |
| Type of current | V | | AC |
| Nominal voltage Un (L-N/L-L) | V | | 230/400 |
| Max. cont. operating voltage Uc | V | | 275 |
| Impulse current Iimp (10/350) per pole | kA | | 12.5 |
| Maximum discharge current I _{max} (8/20) per pole | kA | | 80 |
| Nominal discharge current I _n (8/20) per pole | kA | | 20 |
| Voltage protection level Up (L-N / N-PE / L-PE) | kV | | < 1.5 |
| Follow current interrupting rating I _{fi} | kA | | na |
| TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms) | V | | 337 |
| Short-circuit withstand capability | kA | | 100 |
| | gG -gL fuse | A | ≤ 160 |
| Disconnecter | curve C circuit breaker | A | ≤ 125 |
| Pluggable cartridge | | | Yes |
| Integrated thermal disconnecter | | | Yes |
| State indicator | | | Yes |
| TS auxiliary contact | | | Optional |
| Mechanical features | | | |
| Stocking temperature | °C | | -40 to +80 |
| Operating temperature | | | -40 to +80 |
| Degree of protection | | | IP 20 |
| Fire resistance according to UL 94 | | | V0 |
| Installation | | | |
| Wire range (L, N) | | | |
| solid wire | mm ² | | 2.5 ... 35 |
| stranded wire | mm ² | | 2.5 ... 25 |
| Stripping length (L, N) | mm | | 12.5 |
| Tightening torque (L, N) | Nm | | 2.8 |
| Technical features of the integrated auxiliary contact (TS) | | | |
| Electrical features | | | |
| Contact complement | | | 1 NO-1NC |
| Min. load | | | 12 VDC-10 mA |
| Max. load | | | 250 VAC-1A |
| Installation | | | |
| Connection cross-section | mm ² | | 1.5 |

—
OVR T2-T3 xx 20-275 P QS
 2CSC400030F0070



—
OVR T2 xx 40-275 P QS
 2CSC400030F0071



| OVR T2-T3 xx 20-275 P QS | OVR T2 xx 40-275 P QS |
|---------------------------|---------------------------|
| MOVs | MOVs |
| EN 61643-11, IEC 61643-11 | EN 61643-11, IEC 61643-11 |
| T2-T3 / II-III | T2 / II |
| -/1N/3L/3N/4L | -/1N/3L/3N/4L |
| TNC-TNS-TT | TNC-TNS-TT |
| AC | AC |
| 230/400 | 230/400 |
| 275 | 275 |
| - | - |
| 20 | 40 |
| 5 | 20 |
| na | na |
| 337 | 337 |
| 100 | 100 |
| ≤ 125 | ≤ 125 |
| ≤ 125 | ≤ 125 |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Optional | Optional |
| -40 to +80 | -40 to +80 |
| -40 to +80 | -40 to +80 |
| IP 20 | IP 20 |
| V0 | V0 |
| 2.5 ... 25 | 2.5 ... 25 |
| 2.5 ... 16 | 2.5 ... 16 |
| 12.5 | 12.5 |
| 2.8 | 2.8 |
| 1 NO – 1 NC | 1 NO – 1 NC |
| 12 VDC – 10mA | 12 VDC – 10mA |
| 250 VAC – 1A | 250 VAC – 1A |
| 1.5 | 1.5 |

Ordering data

OVR Series

Type 1-2, Type 2 and Type 2-3

Surge Protective Devices, Type 1-2, Type 2, Type 2-3, to protect sensible equipment and the installation from indirect surges.

| N. of poles | Nominal voltage / Service voltage Un V | Impulse current Iimp kA | Maximal discharge current (8/20) Imax kA | N° module 17,5m | EAN | Type code | Order code | Weight 1 piece kg | Pack unit |
|-------------|--|-------------------------------|---|--------------------|-------------------|-----------------------------|-----------------|-------------------------|--------------|
| 1 | 230 | 12.5 | 80 | 1 | 3 660 308 52488 1 | OVR T1-T2 12.5-275s P TS QS | 2CTB815710R0000 | 0,150 | 1 |
| 1 | 230 | 2 | 20 | 1 | 3 660 308 519 566 | OVR T2-T3 20-275 P QS | 2CTB803871R2400 | 0,120 | 1 |
| 1 | 230 | 2 | 40 | 1 | 3 660 308 519 580 | OVR T2 40-275 P QS | 2CTB803871R2300 | 0,120 | 1 |
| N | 230 | 2 | 80 | 1 | 3 660 308 519 641 | OVR T2-T3 N 80-275 P QS | 2CTB803973R1900 | 0,120 | 1 |
| N | 230 | 2 | 50 | 1 | 3 660 308 525 024 | OVR T1-T2 N 50-275s P QS | 2CTB815710R2400 | 0,165 | 1 |
| 1+N | 230 | 2 | 20 | 2 | 3 660 308 519 689 | OVR T2-T3 1N 20-275 P QS | 2CTB803972R1200 | 0,240 | 1 |
| 1+N | 230 | 2 | 40 | 2 | 3 660 308 519 696 | OVR T2 1N 40-275 P QS | 2CTB803972R1100 | 0,240 | 1 |
| 3 | 230 | 2 | 20 | 3 | 3 660 308 519 818 | OVR T2-T3 3L 20-275 P QS | 2CTB803873R3400 | 0,360 | 1 |
| 3 | 230 | 2 | 40 | 3 | 3 660 308 519 825 | OVR T2 3L 40-275 P QS | 2CTB803873R2400 | 0,360 | 1 |
| 3 | 230 | 12.5 | 80 | 3 | 3 660 308 52498 0 | OVR T1-T2 3L 12.5-275s P QS | 2CTB815710R1800 | 0,450 | 1 |
| 3+N | 230 | 2 | 20 | 4 | 3 660 308 519 924 | OVR T2-T3 3N 20-275 P QS | 2CTB803973R1200 | 0,480 | 1 |
| 3+N | 230 | 2 | 40 | 4 | 3 660 308 519 931 | OVR T2 3N 40-275 P QS | 2CTB803973R1100 | 0,480 | 1 |
| 3+N | 230 | 12.5 | 80 | 4 | 3 660 308 52499 7 | OVR T1-T2 3N 12.5-275s P QS | 2CTB815710R1900 | 0,600 | 1 |
| 4 | 230 | 2 | 40 | 4 | 3 660 308 520 548 | OVR T2 4L 40-275 P QS | 2CTB803873R5600 | 0,480 | 1 |
| 4 | 230 | 12.5 | 80 | 4 | 3 660 308 52501 7 | OVR T1-T2 4L 12.5-275s P QS | 2CTB815710R2300 | 0,600 | 1 |



OVR T2-T3 3L 20-275 P QS
2CSC400030F0070



OVR T2-T3 3L 20-275 P QS
2CSC400030F0071



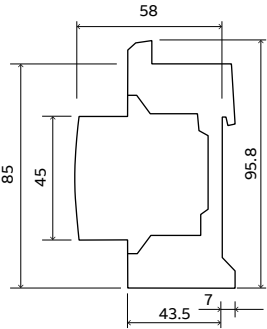
OVR T2 3N 40-275 P QS
2CSC400030F0076



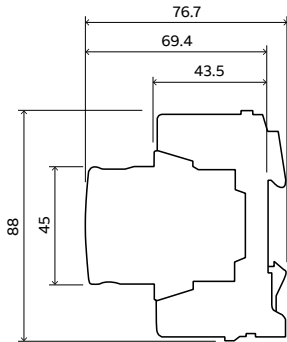
OVR T2 4L 40-275 P QS
2CSC400030F0077

Overall dimensions

OVR T2, T2-T3 with TS



OVR T1-T2

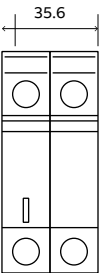


1 - pole



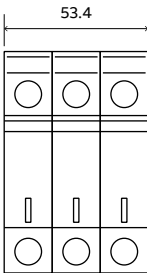
OVR T1-T2 12.5 QS
OVR T2-T3 20 QS
OVR T2 40 QS

2 - poles (1P + N)



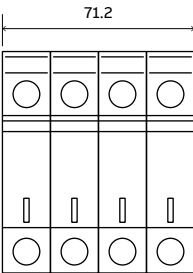
OVR T2-T3 1N 20 QS
OVR T2 1N 40 QS

3 - poles



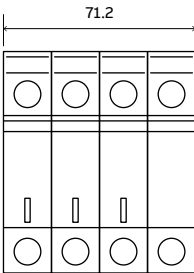
OVR T1-T2 3L 12.5 QS
OVR T2-T3 3L 20 QS
OVR T2 3L 40 QS

4- poles (4P + 0)



OVR T1-T2 4L 12.5 QS
OVR T2 4L 40 QS

3 - poles (3P + N)



OVR T1-T2 3N 12.5 QS
OVR T2-T3 3N 20 QS
OVR T2 3N 40 QS

Ordering data

E 90 fuseholders for 10.3x38 mm fuses

E 90 and E 90h fuseholders are suitable for protection against overloads and short circuits. Available in a single module (1P or 1P + N) version and in a three-module (3P + N) version, they are designed for use with gG and aM cylindrical fuse links. The body is made from self-extinguishing material resistant to high temperatures, while the contact clips are in silver-plated copper.

E 90h fuseholders can be sealed or padlocked to assure operator safety during maintenance. Versions with blown fuse indicator allow to check whether the fuse is still working correctly or not.



E 91/32
2CSC400030F0057

| N. of poles | Rated current | N° module | Bbn 8012542 | Order details | | | Weight 1 piece | Pack unit |
|-------------|---------------|-----------|-------------|---------------|-----------|-----------------|----------------|-----------|
| | | | | In A | Type code | Order code | | |
| 1 | 32 | 1 | 009238 | 32 | E 91/32 | 2CSM200923R1801 | 0.061 | 6 |
| 1+N | 32 | 1 | 009139 | 32 | E 91HN/32 | 2CSM200913R1801 | 0.070 | 6 |
| 3+N | 32 | 3 | 047438 | 32 | E 93HN/32 | 2CSM204743R1801 | 0.192 | 2 |



E 91HN/32
2CSC400030F0058



E 93HN/32
2CSC400030F0059

Ordering data

TM fail safe bell transformers

These transformers, with safety extremely-low voltage secondary (SELV), are suitable for loads that require a discontinuous supply, in particular doorbells and chimes. Fail safe operation and excellent safety are assured thanks

to the perfect isolation and separation between the primary and secondary circuits. In addition, the energy-saving TM-ES version allows reducing power losses by 50%.



TM15/12
2CSC400030F0060



TM40/12
2CSC400595F0201

| Max. rated power (disc.) | Second voltage rating | Bbn 8012542 | Order details | | | Weight 1 piece | Pack unit |
|--------------------------|-----------------------|-------------|---------------|-----------------|-------|----------------|-----------|
| VA | V AC | EAN | Type code | Order code | Price | kg | |
| 10 | 4-8-12 | 287155 | TM10/12 | 2CSM228715R0802 | | 0.30 | 6 |
| 10 | 12-24 | 287254 | TM10/24 | 2CSM228725R0802 | | 0.30 | 6 |
| 15 | 4-8-12 | 287353 | TM15/12 | 2CSM228735R0802 | | 0.30 | 6 |
| 15 | 12-24 | 287452 | TM15/24 | 2CSM228745R0802 | | 0.30 | 6 |
| 15 | 4-8-12 | 285854 | TM15/12 ES | 2CSM228585R0802 | | 0.30 | 1 |
| 30 | 4-8-12 | 287551 | TM30/12 | 2CSM228755R0802 | | 0.45 | 4 |
| 30 | 12-24 | 287650 | TM30/24 | 2CSM228765R0802 | | 0.45 | 4 |
| 40 | 4-8-12 | 287759 | TM40/12 | 2CSM228775R0802 | | 0.45 | 4 |
| 40 | 12-24 | 287858 | TM40/24 | 2CSM228785R0802 | | 0.45 | 4 |

Ordering data

TS non-inherently short-circuit proof bell transformers

These transformers, with safety extremely-low voltage secondary (SELV), are suitable for driving loads that call for a discontinuous supply, and in particular doorbells and chimes. In addition to perfect isolation and separation between the primary and secondary circuits, the TS transformers have a thermal protection device integrated into the secondary

circuit that makes them resistant to short circuit currents (non-inherently short-circuit proof).

The TS range is extended with the energy-saving TS-ES series, which allows reducing power losses by 50%, and the TS8/SW series, that is equipped with a switch for controlling loads connected to the secondary circuit.



TS8/8
2CSC400030F0061



TS8/12 SW
2CSC400030F0062



TS24/8-12-24
2CSC400030F0063

| Maxim. rated power (disc.) | Second. voltage rating | Switch 0-1 | Bbn 8012542 | Order details | Price | Weight 1 piece | Pack unit |
|-------------------------------------|------------------------------|---------------|----------------|---------------|-----------------|-------------------|--------------|
| VA | V c.a. | | EAN | Type code | Order code | kg | |
| 8 | 8 | | 285953 | TS8/8 ES | 2CSM228595R0812 | 0.35 | 1 |
| 8 | 8 | | 286653 | TS8/8 | 2CSM228665R0812 | 0.35 | 6 |
| 8 | 12 | | 286851 | TS8/12 | 2CSM228685R0812 | 0.35 | 6 |
| 8 | 24 | | 286752 | TS8/24 | 2CSM228675R0812 | 0.35 | 6 |
| 8 | 8 | ■ | 368304 | TS8/8 SW | 2CSM081302R0811 | 0.35 | 6 |
| 8 | 12 | ■ | 368403 | TS8/12 SW | 2CSM081402R0811 | 0.35 | 6 |
| 8 | 4-6-8 | ■ | 368601 | TS8/4-6-8 SW | 2CSM081012R0811 | 0.35 | 6 |
| 8 | 4-8-12 | ■ | 368700 | TS8/4-8-12 SW | 2CSM081022R0811 | 0.35 | 6 |
| 16 | 8-12 | | 286059 | TS16/8-12 ES | 2CSM228605R0812 | 0.35 | 1 |
| 16 | 8 | | 286455 | TS16/8 | 2CSM228645R0812 | 0.35 | 6 |
| 16 | 12 | | 286356 | TS16/12 | 2CSM228635R0812 | 0.35 | 6 |
| 16 | 24 | | 286158 | TS16/24 | 2CSM228615R0812 | 0.35 | 6 |
| 16 | 4-6-8 | | 286554 | TS16/4-6-8 | 2CSM228655R0812 | 0.35 | 6 |
| 16 | 4-8-12 | | 286257 | TS16/4-8-12 | 2CSM228625R0812 | 0.35 | 6 |
| 24 | 4-8-12 | | 287056 | TS24/4-8-12 | 2CSM228705R0812 | 0.45 | 4 |
| 24 | 8-12-24 | | 286950 | TS24/8-12-24 | 2CSM228695R0812 | 0.45 | 4 |

Ordering data

TS-C safety isolating transformers for general use

These transformers are non-inherently short-circuit proof. In fact, they are equipped with a thermal protective device which automatically restores the power when the transformer is sufficiently cooled down. So even during an overload or a short-circuit they maintain their temperature below the specified limits and continue functioning after the fault's removal.

They are ideal for supplying permanent power to meters, auxiliary electronic devices (e.g. measurement, video-entry phone systems, BUS communication) and circuits with safety extremely-low voltage (SELV) for bathrooms and showers, lighting, fountains, electro-medical devices and such alike. These devices take up very little space, from 2-module size for the 10 VA version up to 6-module size for the 100 VA version.



TS 25 C



TS 100 C

| Rated power (cont.) | Second. rated voltage | Bbn 8012542 | | Order details | Price | Weight 1 piece | Pack unit |
|------------------------|-----------------------------|----------------|----------------|-----------------|-------|-------------------|--------------|
| VA | V | EAN | Type code | Order code | | kg | |
| 10 | 12 - 24 | 285557 | TS 10/12-24 C | 2CSM228555R0812 | | 0.35 | 1 |
| 16 | 12 - 24 | 285656 | TS 16/12-24 C | 2CSM228565R0812 | | 0.45 | 1 |
| 25 | 12 - 24 | 928508 | TS 25/12-24 C | 2CSM251043R0811 | | 0.92 | 1 |
| 40 | 12 - 24 | 928607 | TS 40/12-24 C | 2CSM401043R0811 | | 1.1 | 1 |
| 63 | 12 - 24 | 928706 | TS 63/12-24 C | 2CSM631043R0811 | | 1.15 | 1 |
| 100 | 12 - 24 | 285755 | TS 100/12-24 C | 2CSM228575R0812 | | 1.45 | 1 |

Ordering data

Bells and buzzers

Bell transformers (TM and TS) are suitable for loads that require discontinuous supply at extremely safety low voltage and are therefore mainly used in residential application in combination with bells and buzzers for public and tertiary acoustic signaling. The ABB range of bells and buzzers includes modular versions for discontinuous use (RI, BR) and modular transformers that combine in a unique solution both the signaling and

transformer functionalities (TSM, TSR). Bell transformers guarantee a high level of safety thanks to perfect isolation and separation between primary and secondary circuits. In addition, the TS transformers adopt a thermal protection device integrated into the secondary that makes them resistant to short circuit currents (non-inherently short-circuit proof).



BR230



TSM

RI electro-mechanical modular bells

| Rated voltage | Use | Bbn 8012542 | Order details | | Price 1 piece | Weight 1 piece | Pack unit |
|---------------|---------------|----------------|---------------|-----------------|------------------|-------------------|--------------|
| V AC | | EAN | Type code | Order code | | kg | pc. |
| 12 | Discontinuous | 258810 | RI12 | 2CSM232345R0821 | | 0.081 | 10 |
| 230 | Discontinuous | 258919 | RI230 | 2CSM232335R0821 | | 0.083 | 10 |

BR electro-mechanical modular buzzers

| Rated voltage | Use | Bbn 8012542 | Order details | | Price 1 piece | Weight 1 piece | Pack unit |
|---------------|---------------|----------------|---------------|-----------------|------------------|-------------------|--------------|
| V AC | | EAN | Type code | Order code | | kg | pc. |
| 12 | Discontinuous | 273813 | BR12 | 2CSM236545R0821 | | 0.075 | 10 |
| 230 | Discontinuous | 258711 | BR230 | 2CSM232355R0821 | | 0.077 | 10 |

TSM modular electronic bell /(two-tones) + transformer included

| Rated voltage | Use | Bbn 8012542 | Order details | | Price 1 piece | Weight 1 piece | Pack unit |
|---------------|---------------|----------------|---------------|-----------------|------------------|-------------------|--------------|
| V AC | | EAN | Type code | Order code | | kg | pc. |
| 230 | Discontinuous | 007005 | TSM | 2CSM100000R0841 | | 0.300 | 6 |

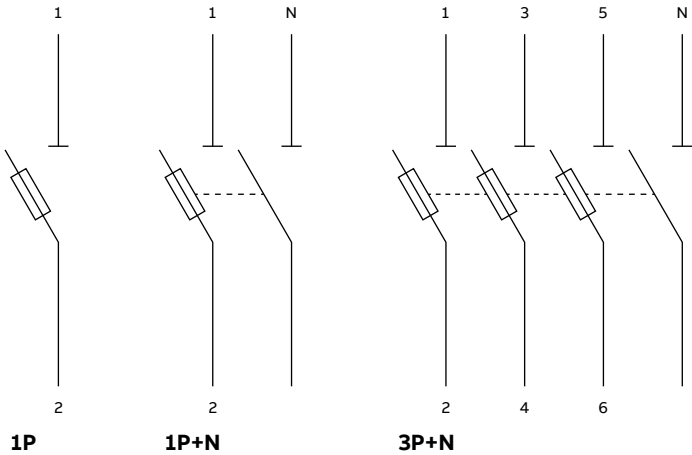
TSR bell + buzzer + transformer included

| Rated voltage | Use | Bbn 8012542 | Order details | | Price 1 piece | Weight 1 piece | Pack unit |
|---------------|---------------|----------------|---------------|-----------------|------------------|-------------------|--------------|
| V AC | | EAN | Type code | Order code | | kg | pc. |
| 230 | Discontinuous | 369608 | TSR | 2CSM100000R0831 | | 0.300 | 1 |

Technical details

E 90

| | | E 90/32 | | E 90hN/32 |
|-------------------------|-----|-----------|-----------------|-------------|
| Fuse | mm | | | 10 × 38 |
| Current type | | | | AC / DC |
| Rated frequency | Hz | | | 50/60 |
| Rated current | A | | | 32 |
| Max power dissipation | W | 3 | | 3.2 |
| Tightening torque | Nm | PZ2 2-2.5 | | PZ2 0.8-1.2 |
| Terminal cross section | mm² | 25 | | 16 |
| Protection degree | | | | IP20 |
| Can be padlocked (open) | | | | n |
| Can be sealed (closed) | | | | n |
| IEC 60947-3 | | | | |
| Rated operating voltage | V | 400 | 690 | - |
| Utilization category | | AC-22B | AC-20B / DC-20B | - |
| IEC 60269-2 | | | | |
| Rated operating voltage | V | | | 400 |
| IMQ | | x | | x |
| NF | | x | | |
| CCC - China | | x | | x |
| RINA | | x | | x |
| LLOYD | | x | | x |
| BV | | x | | x |
| EAC | | x | | x |
| GOST - Ukraine | | x | | x |
| cURus | | x | | x |





Technical Data

Modular transformers





TM 15/12

| TM | | |
|--|------------------------|---|
| Primary rated voltage Un | [V] | 230 a.c. |
| Secondary rated voltage Un | [V] | 4, 8, 12, 24 |
| Tolerance on secondary voltage (with load) | [%] | +/- 15% (according to standards) |
| Rated frequency | [Hz] | 50/60 |
| Rated power (discontinuous use) | [VA] | 10, 15, 30, 40 |
| Power loss (off load) | [W] | <2.5 (TM4, TM8), <3 (TM30, TM40), <1.25 (TM15 ES) |
| Modules | [No.] | 2 (TM10, TM15), 3 (TM30, TM40) |
| Cable section | [mm ² -AWG] | 2.5 - 14 |
| Tightening torque | [Nm] | 0.5 |
| Protection degree | | IP 20 |
| Standards | | IEC/EN 61558-2-8 |
| Approvals | |   |



TS24/8-12-24

| TS | | |
|--|------------------------|---|
| Primary rated voltage Un | [V] | 230 a.c. |
| Secondary rated voltage Un | [V] | 4, 8, 12, 24 |
| Tolerance on secondary voltage (with load) | [%] | +/- 15% (according to standards) |
| Rated frequency | [Hz] | 50/60 |
| Rated power (discontinuous use) | [VA] | 8, 16, 24 |
| Power loss (off load) | [W] | <2.5 (TS8, TS16), <3 (TS24), <0.8 (TS8/8 ES), <1.2 (TS16/8-12 ES) |
| Modules | [No.] | 2 (TS8, TS16), 3 (TS24) |
| Cable section | [mm ² -AWG] | 2.5 - 14 |
| Tightening torque | [Nm] | 0.5 |
| Protection degree | | IP 20 |
| Standards | | IEC/EN 61558-2-8 |
| Approvals | |   |

Technical Data

Modular transformers, bells and buzzers




— TS100/12-24 C



— RI230



— TSR bell + buzzer + transformer included

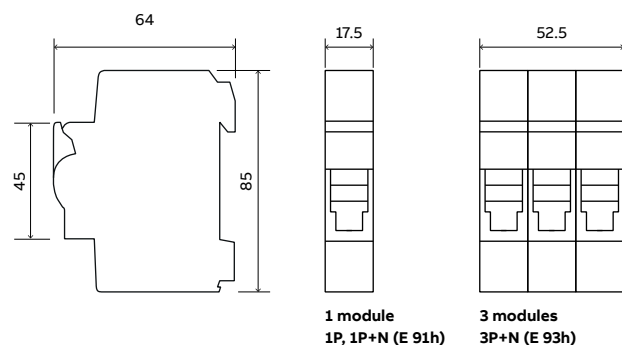
| TS-C | | TS 10 C | TS 16 C | TS 25 C | TS 40 C | TS 63 C | TS 100 C |
|--|------------------------|--|----------------|----------------|----------------|----------------|----------------|
| Primary rated voltage Un | [V] | 230 a.c. | 230 a.c. | 230 a.c. | 230 a.c. | 230 a.c. | 230 a.c. |
| Secondary rated voltage Un | [V] | 12 - 24 V a.c. | 12 - 24 V a.c. | 12 - 24 V a.c. | 12 - 24 V a.c. | 12 - 24 V a.c. | 12 - 24 V a.c. |
| Tolerance on secondary voltage (with load) | [%] | < +/- 5% (according to standards) | | | | | |
| Tolerance on secondary voltage (full load) | [%] | <100% rated secondary voltage (according to standards) | | | | | |
| Rated frequency | [Hz] | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 |
| Rated power (continuous use) | [VA] | 10 | 16 | 25 | 40 | 63 | 100 |
| Maximum output current (at 24 V) | [A] | 0.42 | 0.67 | 1.04 | 1.67 | 2.63 | 4.17 |
| Power loss (off load) | [W] | < 2.5 | < 3 | < 4 | < 4.5 | < 4.5 | < 1 |
| Power loss (full load) | [W] | < 5 | < 5 | < 5 | < 10 | < 15 | < 20 |
| Modules | [No.] | 2 | 3 | 4 | 4 | 5 | 6 |
| Cable section | [mm ² -AWG] | 2.5 | | | | | |
| Tightening torque | [Nm] | 0.5 | | | | | |
| Protection degree | | IP 20 | | | | | |
| Standards | | IEC/EN 61558-2-6 | | | | | |
| Approvals | |  | | | | | |
| Temperature class resistance | | B (corresponding to maximum 120°C) | | | | | |

| RI, BR, TSM, TSR | | RI12, BR12 | RI230, BR230 | TSM, TSR |
|-----------------------------|--------------------|--|--------------|----------|
| Rated voltage Un | [Vac] | 12 | 230 | 230 |
| Rated frequency | [Hz] | 50/60 | | |
| Power consumption | [VA] | 4 | | |
| Sound level | Bell [dB] | 80 (1) | 80 (1) | 80 (2) |
| | Buzzer [dB] | 70 (1) | 70 (1) | 70 (2) |
| | Three-tones [dB] | | | 84 (2) |
| Max. permanent working time | | max. 15 sec., after a rest time of 60 sec. | | |
| Type of sound signal | | D | | |
| Duration of operation | | discontinuous | | |
| Max. cable cross-section | [mm ²] | 4 | | |
| Mounting position | | vertical only | | |
| Protection degree | | IP20 | | |
| Modules (18 mm) | [No.] | 1 | | |
| Standard | | EN62080 | | |

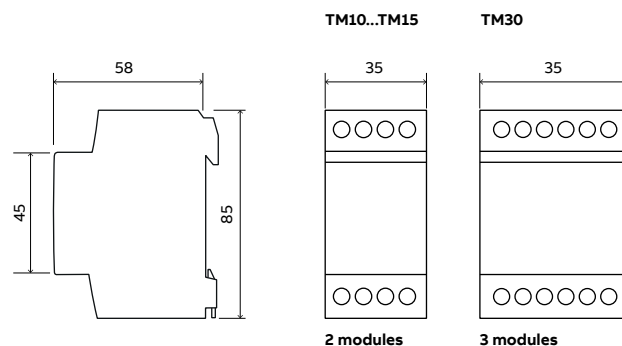
(1) at 0.6 meters distance
(2) at 1 meter distance

Overall dimensions

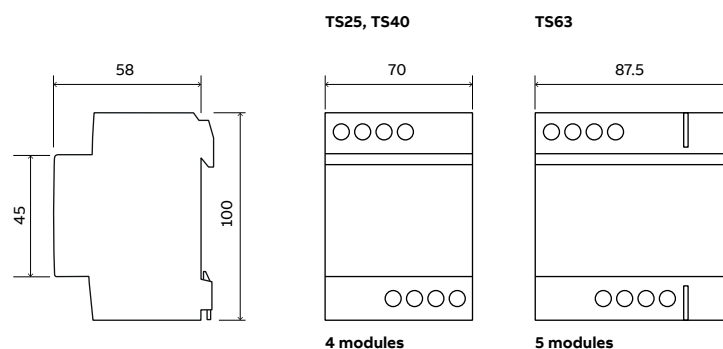
E 90 fuse disconnectors and E 90h fuse holders



TM/TS bell transformers



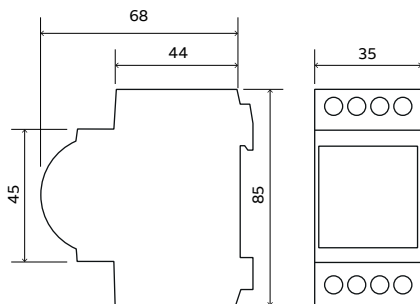
TS-C safety isolating transformers for general use



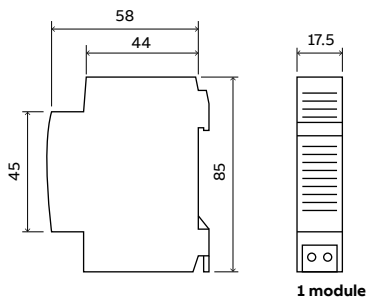
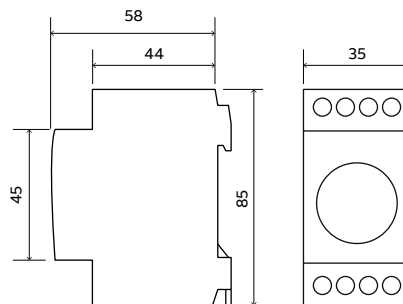
Overall dimensions

Bells and buzzers

TSR

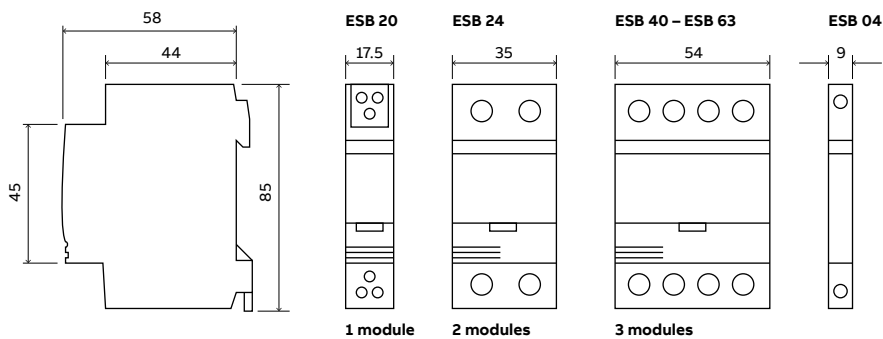


TSM



1 module

ESB/EN contactors



Ordering data

| Busbars PSH | | | |
|------------------------|---|--------------------------|--|
| Suitable for | | MCB: SH200 RCD: FH200 | |
| Electrical data | Standards | | for IEC applications IEC/EN 60947-1 |
| | Approvals | | – |
| | Rated voltage U_e | | 1P, 2P, 3P, 4P: 690 V AC, 690 V DC |
| | Rated frequency | Hz | 50/60 Hz, DC |
| | Current carrying capacity/ Phase (35 °C ambient temperature) | A | 10 mm ² |
| | | | End feeding ① 63 A |
| | | | Non-end feeding ① 100 A |
| Mechanical data | Short-circuit withstand capacity | kA | 25 kA in series with fuse NH3 355 A gG 500 V |
| | Housing | | light grey, RAL 7035 |
| | Environmental conditions acc. to | | DIN EN 60068 |
| | Overvoltage category | | III |
| Installation | Pollution degree | | 2 |
| | Cross-section busbar | | 10 mm ² |
| | Mounting position | | optional |
| Accessories | Supply | | Feed on terminal of the device |
| | Shock-protection caps | | BSK, SZ-BSK |
| | Feeder terminals | | range AST, SZ-ESK |
| | End caps | | range PSH-END |



PSH3/12
2CSC400030F0068

| Phase sequence | | Bbn 4016779 | | Order details | | Pack unit |
|--------------------|-------------|----------------|-------------|-----------------|-------|--------------|
| End cap | | EAN | Type code | Order code | Price | |
| Busbar | | | | | | |
| L1-L1-... | PSH-END 1.1 | - | PSH 1/6 | 2CDL110001R1006 | | 50 |
| L1-L1-... | PSH-END 1.1 | - | PSH 1/7 | 2CDL110001R1007 | | 50 |
| L1-L1-... | PSH-END 1.1 | 651868 | PSH 1/12 | 2CDL110001R1012 | | 50 |
| L1-L1-... | PSH-END 1.1 | 651875 | PSH 1/60 | 2CDL110001R1060 | | 20 |
| L1-L2-L1-... | incl. | 651882 | PSH 2/12 | 2CDL120001R1012 | | 50 |
| L1-L2-L1-... | PSH-END | 651899 | PSH 2/58 | 2CDL120001R1058 | | 10 |
| L1-L2-L3-L1-... | incl. | 651905 | PSH 3/12 | 2CDL130001R1012 | | 50 |
| L1-L2-L3-L1-... | PSH-END | 651912 | PSH 3/60 | 2CDL130001R1060 | | 10 |
| L1-L2-L3-N-L1-... | incl. | 651929 | PSH 4/12 | 2CDL140001R1012 | | 30 |
| L1-L2-L3-N-L1-... | PSH-END 1 | 651936 | PSH 4/60 | 2CDL140001R1060 | | 10 |
| L1-N-L2-N-L3-N-... | PSH-END 1 | - | PSH 4/58N | 2CDL140001R1058 | | 10 |
| End cap | | | | | | |
| - | - | 653169 | PSH-END 1.1 | 2CDL100011R0011 | | 50 |
| - | - | 514729 | PSH-END | 2CDL100001R0001 | | 50 |
| - | - | 653183 | PSH-END 1 | 2CDL100001R0002 | | 50 |



Command and signaling

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Simplicity of control makes life easier

Command and signaling devices

Using modular DIN-rail mounted devices such as on-off switches, pushbuttons, indicator lights, disconnectors, relays, contactors, bells and buzzers makes it possible to switch and control electric loads from a central location. Thanks to signalling, operating states can be recognized easily and user always has the complete control of the situation.

The range is completed by a complete range of accessories and auxiliary elements such as auxiliary contact blocks, sealing cover and distance pieces.





ABB offers a complete range of modular DIN-rail mounted devices that makes it possible to switch and control electric loads from a central location. Thanks to the new narrow width of only 9 mm (0.5 modular width) place is saved in the distribution board. Integration of modular installation devices in the distribution boards affords the additional advantage of intelligible signalling of electric loads operating states. Easy operation or interpretation of devices is ensured by the clearly recognizable switching position (toggle lever) and/or a status display by means of an LED light. Depending on the system requirements, further signalling or control functionality for reliable operation can be used in the subdistribution board in the form of pushbuttons or indicator lights. Switch are available for different functions: on-off, change over, group control.

Commands can be coupled with electro-magnetic and electronic latching relays which allow contact switching for each impulse sent using single or parallel pushbutton. Ideal for load controlling from different positions, they are available in various versions according to pick-up voltage,

contact position, installation options. They also allow manual operation on the product and contact position indicator (visual on the product).

Also important in command portfolio of product is the range of bells and buzzers, which includes modular versions for discontinuous use RI and BR, suitable for acoustic signalling in residential and commercial sectors.

Finally ESB and EN series of contactors, suitable for loads to be automatically controller through high number of operations. Contactors are used mainly in buildings for switching and controlling lighting, heating, ventilation and pumps. The ESB 24, 40, 63 contactors are used for the control of loads up to 24, 40, 63 A. Due to their DC solenoid actuator, the ESB 24 can be connected to AC or DC voltages. The EN contactors have a built-in toggle switch to select between three function modes: Off position, automatic run (normal contactor function), manual override with a return to Auto the next time the coil is energized.

Ordering data

E 210 switches

These devices are specifically made for commanding loads and signalling electrical conditions in any low-voltage switchboard.

They are available in half module or 1 module, depending on the contact-layout. The devices with indicator lights are equipped with a LED, which grants an optimal illumination with very low consumption.

The functions of these devices are particularly switching, pushing and signalling electrical conditions in any installations (low-voltage area).

General new features:

- Space-saving through 9 mm modules
- All terminals equipped with Pozidrive 1 screws
- Safe connection due to cage-clamp
- LED with bright colours and available in three different voltage ranges
- Different lens and button colours
- Compliance to international standards

—
E211
2CSC400030F0101



E 211-... ON-OFF switches

For example, such devices are used to switch indicators or other electrical components (like fan's, air-conditions, e.g.). The new On-Off switches distinguish themselves through simple handling, easy mounting and optimal functionality.

- Rated current = 16 A

| Cont. | Rated voltage | Power loss | Width | N° module | Bbn 7612270 | Order details | | | Weight 1 piece | Pack unit |
|-------|---------------|------------|-------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| | V AC | W | mm | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 NO | 250 | 0.32 | 9 | 0.5 | 938575 | E211-16-10 | 2CCA703000R0001 | | 0.035 | 10 |
| 2 NO | 230/400 | 0.82 | 9 | 0.5 | 938582 | E211-16-20 | 2CCA703005R0001 | | 0.045 | 10 |

—
E211X
2CSC400030F0102



E 211X-... ON-OFF switches with yellow LED for contact indication

- Rated current = 16 A
- LED voltage 115-250 V AC
- LED colour yellow

| Cont. | Rated voltage | Power loss | Width | N° module | Bbn 7612270 | Order details | | | Weight 1 piece | Pack unit |
|-------|---------------|------------|-------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| | V AC | W | mm | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 NO | 250 | 0.50 | 9 | 0.5 | 938872 | E211X-16-10 | 2CCA703100R0001 | | 0.040 | 10 |
| 2 NO | 230/400 | 1.00 | 18 | 0.5 | 938889 | E211X-16-20 | 2CCA703110R0001 | | 0.050 | 10 |

—
E214-16-101
2CSC400030F0103



—
E214-16-202
2CSC400030F0104



E 214-... Group switches (I-0-II, manual-OFF-automatic)

The new Group switches can be used to control the main installation of an emergency supply. Such devices distinguish themselves through simple handling, easy mounting and optimal functionality.

- Rated current = 16 A

| Cont. | Rated voltage | Power loss | Width | N° module | Bbn 7612270 | Order details | | | Weight 1 piece | Pack unit |
|-------|---------------|------------|-------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| | V AC | W | mm | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 CO | 250 | 0.32 | 9 | 0.5 | 938735 | E214-16-101 | 2CCA703025R0001 | | 0.032 | 10 |
| 2 CO | 250 | 0.82 | 18 | 1.0 | 938742 | E214-16-202 | 2CCA703030R0001 | | 0.064 | 10 |

Technical details

| | | |
|----------------------------------|---------|---|
| Switching capacity | | according to EN 60669-1 |
| Isolating properties | | according to EN 60669-2-4; IEC/EN 60947-3 |
| Utilization category | | AC-22 A; DC-22 A acc. IEC/EN60947-3 |
| Short-circuit withstand capacity | [kA] | 3 |
| Rated voltage Un | [V] | 250/400 in accordance with EN 240 in accordance UL 508 |
| Lowest operat. voltage | | 24 V; 25 mA |
| Rated current In | [A] | 16, 25, 32 |
| LED current | [mA] | 5 |
| Rated frequency | [Hz] | 50/60 |
| Modules | [No] | 0.5 or 1 |
| Sealable | | in ON and OFF position |
| Climatic resistance | | according to IEC 60068-2-2 (Dry heat) IEC 60068-2-30 (Damp heat) IEC 60068-2-1 (Cold) |
| Ambient temperature | [°C/°F] | -25°C/-13°F to +55°C/+131°F |
| Storage temperature | [°C] | -40°C to +70°C |
| Connection capacity | [mm²] | rom 1 × 1 mm² to 1 × 6 mm² or 2 × 2.5 mm² massive; lexible up 1 × 0.75 mm² to 2 × 1.5 mm² with connector leve or pin-endconnector |
| Tightening torque | [Nm] | 1.2 – 1.5 |
| Positive opening | | according to EN 60204-1 |
| Standards | | DIN EN 60669-1 *VDE 0632-1 DIN EN 60669-2-4 *VDE 0632-2-4 UL 508 |
| Approvals | | VDE, UL, GOST, CCC |

Ordering data

E 210 pushbuttons with and without LEDs

The new products are available in 9 mm widths
(= 0.5 modules).

The devices can be used in distribution boards and are all distinguished by their simple handling, ease of mounting and optimal functionality. The pushbuttons are used for remote control in all kinds of electrical installation (e.g. public, industrial). The range offers three different voltages.

(Ranges: 12-48 V AC/DC; 115-250 V AC and 110-220 V DC).

—
E215
2CSC400030F0105



E 215-... Pushbuttons

- Rated current = 16 A
- Contacts: 1NO+1NC
- Rated voltage: 250 V AC

| Power loss | LED colour | Width | N° module | Bbn 7612270 | Order details | | | Weight 1 piece | Pack unit |
|------------|------------|-------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| W | | mm | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 0.50 | grey | 9 | 0.5 | 938810 | E215-16-11B | 2CCA703150R0001 | | 0.042 | 10 |
| 0.50 | red | 9 | 0.5 | 938827 | E215-16-11C | 2CCA703151R0001 | | 0.042 | 10 |
| 0.50 | green | 9 | 0.5 | 938834 | E215-16-11D | 2CCA703152R0001 | | 0.042 | 10 |

—
E217
2CSC400030F0106



E 217-... Luminous Pushbuttons (3 different LED colours)

- Rated current = 16 A
- Contacts: 1NO
- Rated voltage: 250 V AC
- LED Voltage range = 115-250 V AC

| Power loss | LED colour | Width | N° module | Bbn 7612270 | Order details | | | Weight 1 piece | Pack unit |
|------------|------------|-------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| W | | mm | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1.10 | white | 9 | 0.5 | 938988 | E217-16-10B | 2CCA703160R0001 | | 0.050 | 10 |
| 1.10 | red | 9 | 0.5 | 938995 | E217-16-10C | 2CCA703161R0001 | | 0.050 | 10 |
| 1.10 | green | 9 | 0.5 | 939008 | E217-16-10D | 2CCA703162R0001 | | 0.050 | 10 |

Ordering data

E 210 indicator Lights with LEDs

The new products are available in 9 mm width (= 0.5 modules) and can be used for indicating any operational condition such as signalling loss of a phase.

The range offers three different voltages.

(Ranges: 12-48 V AC/DC; 115-250 V AC and 110-220 V DC).

E219
2CSC400030F0107



E 219

- Rated current = 16 A
- LED Voltage range = 115-250 V AC

| Power loss | LED colour | Width | N° module | Bbn 7612270 | Order details | | | Weight 1 piece | Pack unit |
|------------|------------|-------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| W | | mm | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 0.47 | white | 9 | 0.5 | 939282 | E219-B | 2CCA703400R0001 | | 0.040 | 10 |
| 0.47 | red | 9 | 0.5 | 939299 | E219-C | 2CCA703401R0001 | | 0.040 | 10 |
| 0.47 | green | 9 | 0.5 | 939305 | E219-D | 2CCA703402R0001 | | 0.040 | 10 |
| 0.47 | yellow | 9 | 0.5 | 939312 | E219-E | 2CCA703403R0001 | | 0.040 | 10 |
| 0.47 | blue | 9 | 0.5 | 939329 | E219-G | 2CCA703404R0001 | | 0.040 | 10 |

Pushbuttons and Indicator lights

| | | |
|------------------------------|------|---|
| Rated Voltage U _n | [V] | 250/400 |
| Lowest operat. voltage | | 24 V; 25 mA |
| Rated current I _n | [A] | 16 |
| LED current | [mA] | 5 |
| Rated frequency | [Hz] | 50/60 |
| Modules | [No] | 0.5 |
| Tightening torque | [Nm] | 1.2 – 1.5 |
| Standards | | EN 60669-1; EN 62094-1; UL 508 |
| Approvals | | Pushbuttons: VDE, UL, GOST, CCC Indicator lights: VDE, UL, GOST ⁽¹⁾ |

⁽¹⁾ CCC approval for these Indicator lights not required

Command and signaling

SHD 200 switch disconnecter



SHD 201

Technical data

| Electrical data | |
|---|---|
| Standards | IEC/EN 60947-3 |
| Poles | 1P, 2P, 3P, 4P |
| Rated current I_e | 16 A, 25 A, 32 A, 40 A, 50 A, 63 A |
| Utilization category | AC-22A, DC-21A |
| Rated voltage U_e | 1P: 240 V AC, 60 V DC 2P: 415 V AC, 125 V DC 3...4P: 415 V AC |
| Insulation voltage U_i | 440 V AC |
| Max. power frequency recovery voltage U_{max} | 1P: 252 V AC, 63 V DC 2P: 436 V AC, 131 V DC 3...4P: 436 V AC |
| Min. operating voltage $U_{bmin.}$ | 12 V AC |
| Rated frequency f | 50/60 Hz, DC |
| Suitable for isolation | Yes |
| Rated conditional short-circuit current | 10 kA in series with NH 00 ≤ 63 A gG |
| Overvoltage category | III |
| Pollution degree | 3 |
| Rated impulse withstand voltage $U_{imp.}$ (1.2/50 μs) | 4 kV (test voltage 6.2 kV at sea level; 5 kV at 2,000 m) |
| Dielectric test voltage | 2 kV (50/60 Hz, 1 min.) |
| Mechanical data | |
| Housing | Insulation group II, RAL 7035 |
| Toggle | Insulation group II, red, sealable |
| Contact position indication | Marking on toggle, I ON / 0 OFF |
| Protection degree acc. to EN 60529 | IP20 / IP40 in enclosure with cover |
| Electrical endurance | $I_e < 32$ A: 20,000 ops. (AC), 1,500 ops. (DC) $I_e \geq 32$ A: 10,000 ops. (AC), 1,500 ops. (DC) |
| Mechanical endurance | 20,000 ops. |
| Shock resistance acc. to IEC/EN 60068-2-27 | 25g, 2 shocks, 13 ms |
| Vibration resistance acc. to IEC/EN 60068-2-6 | 5g, 20 cycles at 5...150...5 Hz with load 0.8 I_n |
| Environmental conditions (damp heat cyclic) acc. to IEC/EN 60068-2-30 | 28 cycles with 55 °C/90-96% and 25 °C/95-100% [°C/RH] |
| Ambient temperature | -25 ... +55 °C |
| Storage temperature | -40 ... +70 °C |
| Installation | |
| Terminal | Cage terminal |
| Safety wire guard | No |
| Two terminal openings for conductor and busbar | No |
| Cross-section of conductors | 25 mm ² |
| Torque | 2.0 Nm |
| Screwdriver | No. 2 Pozidriv |
| Mounting | On DIN rail 35 mm acc. to EN 60715 by fast clip |
| Mounting position | Optional |
| Removal without disassembling of the busbar | No |
| Supply | Optional |

| | |
|--|----------------------|
| Dimensions and weight | |
| Mounting dimensions acc. to DIN 43880 | Mounting dimension 1 |
| Pole dimensions (H x D x W) | 85 x 69 x 17.5 mm |
| Pole weight | Approx. 75 g |
| Combination with auxiliary elements | |
| Auxiliary contact | No |
| Signal/auxiliary contact | No |
| Shunt trip | No |
| Undervoltage release | No |
| Motor operating device | No |
| Padlock | Yes |
| Approvals | |
| CE and RoHS conform | |
| Approvals: VDE/CCC/EAC/KEMA | |

Command and signaling

SHD 200 switch disconnecter



SHD 201

SHD 200

Switch disconnecter acc. to IEC/EN 60947-3 for panel installation onto DIN rail (35 mm)

Mounting depth: 69 mm

Mounting width: per pole = 17.5 mm = 1 module

Colour: grey, RAL 7035

Colour of switch lever: red RAL 3000



SHD 202

Special features

- Isolating characteristics acc. to IEC/EN 60947-3
- Protection degree IP20 = finger safe
- 25 mm² cage terminal
- Consistent design to all other System pro M DIN rail products
- Cross wiring with MCBs or RCDs using busbars PS
- Durable device identification due to laser labeling
- Captive screws
- Locking device as accessory for unauthorized ON/OFF switching
- Approved acc. to IEC/EN 60947-3 for international use



SHD 203



SHD 204

Ordering details

| Rated current: 16 A | | | | | | |
|---------------------|---------------|-------------|---------------|-----------------|---------|-----------|
| Poles | Rated voltage | Bbn 4016779 | Order details | | Price 1 | Pack unit |
| | V AC | EAN | Type code | Order code | piece | kg pc. |
| 1 | 240 | 904308 | SHD201/16 | 2CDD271111R0016 | 0.075 | 10 |
| 2 | 415 | 904360 | SHD202/16 | 2CDD272111R0016 | 0.150 | 5 |
| 3 | 415 | 904421 | SHD203/16 | 2CDD273111R0016 | 0.225 | 1 |
| 4 | 415 | 904483 | SHD204/16 | 2CDD274111R0016 | 0.300 | 1 |

| Rated current: 25 A | | | | | | |
|---------------------|---------------|-------------|---------------|-----------------|---------|-----------|
| Poles | Rated voltage | Bbn 4016779 | Order details | | Price 1 | Pack unit |
| | V AC | EAN | Type code | Order code | piece | kg pc. |
| 1 | 240 | 904315 | SHD201/25 | 2CDD271111R0025 | 0.075 | 10 |
| 2 | 415 | 904377 | SHD202/25 | 2CDD272111R0025 | 0.150 | 5 |
| 3 | 415 | 904438 | SHD203/25 | 2CDD273111R0025 | 0.225 | 1 |
| 4 | 415 | 904490 | SHD204/25 | 2CDD274111R0025 | 0.300 | 1 |

| Rated current: 32 A | | | | | | |
|---------------------|---------------|-------------|---------------|-----------------|---------|-----------|
| Poles | Rated voltage | Bbn 4016779 | Order details | | Price 1 | Pack unit |
| | V AC | EAN | Type code | Order code | piece | kg pc. |
| 1 | 240 | 904322 | SHD201/32 | 2CDD271111R0032 | 0.075 | 10 |
| 2 | 415 | 904384 | SHD202/32 | 2CDD272111R0032 | 0.150 | 5 |
| 3 | 415 | 904445 | SHD203/32 | 2CDD273111R0032 | 0.225 | 1 |
| 4 | 415 | 904506 | SHD204/32 | 2CDD274111R0032 | 0.300 | 1 |



SHD 201



SHD 202



SHD 203



SHD 204

Ordering details

| Rated current: 40 A | | | | | | |
|---------------------|---------------|-------------|---------------|-----------------|---------|-----------|
| Poles | Rated voltage | Bbn 4016779 | Order details | | Price 1 | Pack unit |
| | V AC | EAN | Type code | Order code | piece | kg |
| 1 | 240 | 904339 | SHD201/40 | 2CDD271111R0040 | | 0.075 |
| 2 | 415 | 904391 | SHD202/40 | 2CDD272111R0040 | | 0.150 |
| 3 | 415 | 904452 | SHD203/40 | 2CDD273111R0040 | | 0.225 |
| 4 | 415 | 904513 | SHD204/40 | 2CDD274111R0040 | | 0.300 |

| Rated current: 50 A | | | | | | |
|---------------------|---------------|-------------|---------------|-----------------|---------|-----------|
| Poles | Rated voltage | Bbn 4016779 | Order details | | Price 1 | Pack unit |
| | V AC | EAN | Type code | Order code | piece | kg |
| 1 | 240 | 904346 | SHD201/50 | 2CDD271111R0050 | | 0.075 |
| 2 | 415 | 904407 | SHD202/50 | 2CDD272111R0050 | | 0.150 |
| 3 | 415 | 904469 | SHD203/50 | 2CDD273111R0050 | | 0.225 |
| 4 | 415 | 904520 | SHD204/50 | 2CDD274111R0050 | | 0.300 |

| Rated current: 63 A | | | | | | |
|---------------------|---------------|-------------|---------------|-----------------|---------|-----------|
| Poles | Rated voltage | Bbn 4016779 | Order details | | Price 1 | Pack unit |
| | V AC | EAN | Type code | Order code | piece | kg |
| 1 | 240 | 904353 | SHD201/63 | 2CDD271111R0063 | | 0.075 |
| 2 | 415 | 904414 | SHD202/63 | 2CDD272111R0063 | | 0.150 |
| 3 | 415 | 904476 | SHD203/63 | 2CDD273111R0063 | | 0.225 |
| 4 | 415 | 904537 | SHD204/63 | 2CDD274111R0063 | | 0.300 |

Ordering data

E 290 latching relays

This 18 mm wide DIN rail mounted device is designed for direct installation in main distribution or sub-distribution systems (mounted on 35 mm DIN mounting rails). The devices are activated by means of control pulses and guarantee energy-optimized lighting control. As a rule, installations with latching relays are used where the lighting control system can be operated from at least three points in different locations. Those latching relays are designed for a rated current of 16 A or 32 A.

Standard number of contacts:

1 NO contact, 2 NO contacts or 1 NO contact + 1 NC contact. The number of switching contacts can be increased by a maximum of two main contacts using a snap-on main module (E292-...-...). As a result, up to four lighting sets can be switched by a single device.

A signaling and/or indicating facility can be created using the additional snap-on auxiliary contact module (E299-11).

The various standard AC/DC coil voltages complete the comprehensive and interesting product range. The additional devices can be snapped onto the latching relay on the left or right side.

E290



| Rated current = 16 A Contact config. | Power loss | Width | Coil control voltage | Bbn 7612270 | Order details | | Weight | Pack unit |
|---|---------------|-------|-------------------------|----------------|----------------|-----------------|--------|-----------|
| | [W] | [mm] | [VAC/VDC] | EAN | Type code | Order code | kg | |
| 1 NO | 0.32 | 18 | 230VAC/110VDC | 939602 | E290-16-10/230 | 2TAZ312000R2011 | 0.114 | 10 |
| | 0.64 | 18 | 230VAC/110VDC | 939725 | E290-16-20/230 | 2TAZ312000R2012 | 0.122 | 10 |

| E290 Latching relays | | | |
|---|-----------------|----------------------------------|-----------|
| General | | | |
| Overall depth | | 68 mm | |
| Overall width | | 1 module (18 mm) | |
| Colour | | grey, RAL 7035 | |
| Climate resistance in accordance with | | IEC 60068-2-2 (dry heat) | |
| | | IEC 60068-2-30 (humid heat) | |
| | | IEC 60068-2-1 (low temperatures) | |
| Ambient temperature | | -25°C to +55°C Storage | |
| Temperature | | -40°C to +70°C Contact | |
| System | | Double interruption | |
| Tightening torque | | 1.2 - 1.5 Nm | |
| Weight | | 0.122 kg | |
| Standards | | EN 60669-1; EN 60669-2-2 | |
| Approval | | VDE; EAC | |
| Power circuit | | | |
| Rated current I _n | E290-16-.../... | 16 A | ---- |
| | E290-32-.../... | ---- | 32 A |
| Rated voltage U _n | | 250 VAC | 250 VAC |
| Frequency | | 50 Hz | 50 Hz |
| Short circuit withstand capacity I _{nc} | | 3 kA | 3 kA |
| Back-up fuses (gL) | | max. 16 A | max. 32 A |
| Latching relay contact configurations for 16 A and 32 A | | 1NO; 2NO; 1NO + 1NC | |
| Additional Power contacts 16A (attachable) (not for 32 A version) | | 1CO; 2NO; 1NO + 1NC | |
| Max. DC current per contact with 24 VDC | | 5 A | 8 A |
| Min. switching load | | 24 V; 10 mA* | |
| Bounce time | | < 3 ms | |
| Power loss in W per contact | | 0.32 W | 1.2 W |
| Rated impulse withstand voltage U _{imp} | | 4 kV | |
| Max. lamp load | | | |
| Glow lamps (20 W - 200 W) | | 3000 W | 4000 W |
| Fluorescent lamps, uncorrected power factor (cos. 0.5) | | 1800 W | 2200 W |
| | serial | 3000 W | 4000 W |
| | parallel | 2500 W | 3200 W |
| | single | 1800 W | 2200 W |
| Fluorescent lamps, corrected power factor (cos. 0.9) | double | 2500 W | 3200 W |
| (see also lamp load table) | | | |

| E290 Latching relays | |
|--|--|
| Lifetime (switching cycles) | |
| Electrical (AC1 rated current load) | 150,000 |
| Mechanical | 250,000 |
| Connector cross-sections | |
| Connecting terminals | solid from 1 × 1 mm ² to 1 × 10 mm ² or 2 × 2.5 mm ² flexible from 1 × 0.75 mm ² to 1 × 6 mm ² (Cu) with end ferrule or pin cable lug |
| Control circuit | |
| Rated control voltages Un | AC: 8 V; 12 V; 24 V; 48 V; 115 V; 230 V DC: –; –; 12 V; 24 V; 60 V; 110 V |
| AC/DC ratio 1) | 1: 0.5 (not available for 8 VAC and 12 VAC coils) |
| Operation limits | +/- 10% = 0.9 - 1.1 × Un |
| Minimum command duration | 50 ms |
| Max. switching operations | 15 × per min. at In 16 A; 8 × per min. at In 32 A |
| Switching noise | 60 dB (A) (distance 1 m) |
| Max. number of illuminated buttons (0.6 mA) | (see table on page 3/6) |
| Max. glow lamp current parallel to the 230 V control buttons | 5 mA |

Switching components for E290
E292-16... Contact Module (attachable only to 16 A In version)

| | |
|---|--|
| Rated current In per E292 contact | 16 A |
| Rated voltage Un | 250 VAC |
| Frequency | 50 Hz |
| Max. no. attachable 2) (additional main contacts) | 1 unit (attachable on the right side of the main module) |
| Contact configurations | 1CO; 2NO; 1NO+1NC |
| Max. DC current per contact with 24 VDC | 8 A |
| Min. switching load | 24 V; 10 mA |

E299-11/-20 Auxiliary Contacts

| | |
|--|--|
| Max. no. attachable 2) (signaling or control contacts) | 1 unit (attachable on the right side of the main module) |
| Number of contacts | 1 NO + 1 NC; 2NO |
| Max. current per contact with AC | 5.0 A |
| Max. current per contact with 24 VDC | 5.0 A |

Control components for E290
E294 Central On-Off Control Module (different control voltage potential)

| | |
|------------------------|---|
| Max. no. attachable 2) | 1 unit (attachable on the left side of the main module) |
| Rated current In max. | 1 A Rated |
| voltage Un | 250 VAC |

E295-PS Permanent Signal Module

| | |
|------------------------|---|
| Max. no. attachable 2) | 1 unit (attachable on the left side of the main module) |
| Rated current In max. | 1 A Rated |
| voltage Un | 250 VAC |

E295-GM Group Module

| | |
|--------------------------------|--------------------------|
| Use of group switching modules | 1 unit per defined group |
| Rated current In max. | 1 A Rated |
| voltage Un | 250 VAC |

E296-CP Compensator

| | |
|---|------------------------------------|
| Compensation when using illuminated buttons | Wiring parallel to the main module |
| Compensation | 2.2 μ F |
| Rated voltage Un | 250 VAC |

Ordering data

E 260 electronic latching relays

The electronic version of latching relays guarantees maximum reliability, life, and noiseless operation. The E 260 C version also allows centralized reset function (ON/OFF).

—
E262
2CSC400030F0113



Latching relays with control electronics
Coil voltage $U_c = 230 \text{ V AC}$

| Contacts | Power loss | N° module | Bbn 4016779 | Order details | | | Weight 1 piece | Pack unit |
|-----------|------------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| | W* | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 NO | 1.5 (2.0) | 1 | 575966 | E261-230 | 2CDE141000R0301 | | 0.085 | 1 |
| 2 NO | 1.7 (3.6) | 1 | 575973 | E262-230 | 2CDE142000R0301 | | 0.096 | 1 |
| 1 NO+1 NC | 1.7 (3.6) | 1 | 575980 | E266-230 | 2CDE144000R0301 | | 0.096 | 1 |

—
E262C
2CSC400030F0114



Latching relays with control electronics for central ON/OFF switch

The central commands have always priority and reliably switch on/off any given number of devices connected in parallel, irrespective of their previous switching position. Local control inputs are blocked when a central command is received. Same potential at central / local control input.

| Contacts | Power loss | N° module | Bbn 4016779 | Order details | | | Weight 1 piece | Pack unit |
|-----------|------------------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| | W ⁽¹⁾ | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1 NO | 1.5 (2.0) | 1 | 576024 | E261C-230 | 2CDE141000R0311 | | 0.085 | 1 |
| 2 NO | 1.7 (3.0) | 1 | 576031 | E262C-230 | 2CDE142000R0311 | | 0.096 | 1 |
| 1 NO+1 NC | 1.7 (3.0) | 1 | 576048 | E266C-230 | 2CDE144000R0311 | | 0.096 | 1 |

⁽¹⁾ Values in brackets indicate power loss when permanently excited, rated voltage and rated contact loading.

| E 260/E 260 C | |
|--|---|
| Technical details | |
| Rated load at 250 V AC | 8 A |
| Incandescent lamp load | 1000 W |
| Fluorescent lamp load in twin-lamp circuit | 1000 W |
| Fluorescent lamp load shunt compensated | 350 W ⁽¹⁾ |
| Fluorescent lamp load inductive or capacitive | 500 W |
| Electronic ballast | I _{on} m 70 A/10 ms ⁽²⁾ |
| Inductive load, cosφ = 0.6/230 V ~ | 5 A |
| Contact rating at DC | 100 W |
| Minimum contact rating | 4 V AC/10 mA |
| Contact gap/contact material | 0.5 mm/Ag SnO ₂ |
| Service life mechanical switchover at 103/h | > 10 ⁴ |
| Service life at rated load cosφ = 1 and 103/h | > 10 ⁴ |
| Service life with filament lamps at 103/h | 800 W > 10 ⁴ , 1,000 W > 0.8 × 10 ⁴ |
| Service life at rated load cosφ = 0.6 and 103/h | > 10 ⁴ |
| Max. switching rate | 10 ³ /h |
| Bounce time | 3 ms |
| Connection capacity | 2 × 1.5 mm ² with connector sleeve 2 × 2.5 mm ² without connector sleeve |
| Tightening torque | 0.5 ... 0.8 Nm |
| ON duration at rated voltage | 100 % |
| Coil voltage range | 0.9 to 1.1 U _n |
| Minimum command time/interval between commands | 50/1000 ms |
| Ambient temperature | -20°C / -4°F to 50°C / 122°F |
| Control current when controlled locally | 230 V AC 115 mA, after 10 s 8 mA ± 20 % 24 V UC 140 mA, after 10 s 80 mA ± 20 % |
| Control current when controlled centrally | 230 V AC 8 mA, after 10 s 3 mA ± 20 % 24 V UC 17 mA ± 20 % |
| Max. parallel capacity of individual control wire at 230 V ~ | 0.7 μF (ca. 2000 m) |
| Max. parallel capacity of central control wire at 230 V ~ | 0.2 μF (ca. 700 m) |
| Max. glow lamp current – parallel to 230 V control buttons | 10 mA |
| Max. induced voltage at 230 V control inputs | 0.2 U _n |

Latching relays for lamp installations on request.

⁽¹⁾ E 260 C can not be used with fluorescent lamp load shunt compensated.

⁽²⁾ In the case of electronic control gear, take into account a 40-fold inrush current.

Ordering data

E 297 installation relays

E 297 Installation relays are 16 A contactors specifically engineered for residential and commercial applications. Their high performance in the control of lamps makes them ideal for lighting circuit applications.



E297

The front control lever indicates the position of the contacts and allows the relay to be commanded, for example for local testing of the circuit.

In installations that require several E 297 relays side by side, it is advisable to use E 259 DIS half-module width spacer elements every second relay for heat dissipation.

| Rated current = 16 A Contact config. | Power loss [W] | Width [mm] | Coil control voltage [VAC/VDC] | Bbn 7612270 EAN | Type code | Order code | Weight kg | Pack unit |
|---|-------------------|---------------|-----------------------------------|-----------------------|----------------|-----------------|--------------|-----------|
| 1 NO | 0.50 | 18 | 230VAC | 940042 | E297-16-10/230 | 2TAZ311000R2011 | 0.113 | 10 |
| 2 NO | 1.00 | 18 | 230VAC | 940172 | E297-16-20/230 | 2TAZ311000R2012 | 0.121 | 10 |
| 1 NO+1NC | 0.50 | 18 | 230VAC | 940110 | E297-16-11/230 | 2TAZ311000R2013 | 0.121 | 10 |

E297 Installation Relays

Application categories

| | | |
|---------------------------------------|---------------------------|------|
| | AC-1 (based on EN 60947) | 16 A |
| | AC-5b (based on EN 60947) | 5 A |
| | AC-7a (based on EN 61095) | 16 A |
| Switching capacity in accordance with | AC-7c (based on EN 61095) | 5 A |

Connector cross-sections

| | |
|--|---|
| | solid from 1 × 1 mm ² to 1 × 10 mm ² or 2 × 2.5 mm ² |
| | flexible from 1 × 0.75 mm ² up to 1 × 6 mm ² (Cu) with end ferrule or pin cable lug |

Main connecting terminals

Control circuit

| | |
|------------------------------|--|
| | 8 VAC; 12 VAC; 24 VAC/24 VDC; 48 VAC/48 VDC; |
| Coil rated voltages Un AC/DC | 115 VAC/110 VDC; 230 VAC |
| AC/DC ratio 3) | 1 : 1 |
| Operation limits | +/- 10 % = 0.9 - 1.1 × Un |
| Switching noise | 60 dB (A) (distance 1 m) |
| Max. switching operations | 15 × per min. at In 16 A |

Coil power loss

| | AC | DC |
|---------|----------|---------|
| Pick up | < 2.8 VA | < 2.0 W |
| Holding | < 2.6 VA | < 1.8 W |

| E297 Installation Relays | | |
|--|----------|----------------------------------|
| General | | |
| Overall depth | | 68 mm |
| Overall width | | 1 module (18 mm) |
| Colour | | grey, RAL 7035 |
| | | IEC 60068-2-2 (dry heat) |
| | | IEC 60068-2-30 (humid heat) |
| Climate resistance in accordance with | | IEC 60068-2-1 (low temperatures) |
| Ambient temperature | | -25°C to +55°C |
| Storage temperature | | -40°C to +70°C |
| Tightening torque | | 1.2 - 1.5 Nm |
| Weight | | 0.122 kg |
| Standards | | EN 60669-1; EN 60669-2-2 |
| Approval | | VDE; EAC |
| Power circuit | | |
| Rated current I_n | | 16 A Rated |
| Voltage U_n | | 250 VAC |
| Frequency | | 50-60 Hz |
| Short circuit withstand capacity I_{nc} | | 3 kA |
| Back-up fuses (gL) | | max. 16 A Installation |
| Relay contact configurations | | 1NO; 2NO; 1NO + 1NC |
| Additional Power contacts 16A (attachable) | | 1CO; 2NO; 1NO + 1NC |
| Max. DC current per contact with 24 VDC | | 8 A |
| Min. switching load | | 24 V; 10 mA* |
| Bounce time | | < 3 ms Power |
| Loss in W per contact | | 0.50 W Rated |
| Impulse withstand voltage U_{imp} | | 4 kV |
| Max. lamp load | | |
| Glow lamps (20 W - 200 W) | | 3000 W |
| Fluorescent lamps, uncorrected power factor (cos. 0.5) | | 1800 W |
| | serial | 3000 W |
| | parallel | 2500 W |
| | single | 1800 W |
| Fluorescent lamps, corrected power factor (cos. 0.9) | double | 2500 W |
| (see also lamp load table) | | |
| Lifetime (switching cycles) | | |
| Electrical (AC1 rated current load) | | 150,000 |
| Mechanical | | 250,000 |

| Switching components for E297 | |
|--|--|
| E298 Contact Module | |
| Max. no. attachable 2) (additional main contacts) | 1 unit (attachable on the right side of the main module) Rated |
| Current In per E298 contact | 16 A |
| Rated voltage Un | 250 VAC |
| Frequency | 50 Hz |
| Number of contacts | 1CO; 2NO; 1NO+1NC |
| Max. DC current per contact with 24 VDC | 5 A |
| Min. switching load | 24 V; 10 mA |
| E299-11 Auxiliary Contacts | |
| Max. no. attachable 2) (signaling or control contacts) | 1 unit (attachable on the right side of the main module) |
| Number of contacts | 1 NO+1 NC |
| Max. current per contact with AC | 5.0 A |
| Max. current per contact with 24 VDC | 5.0 A |

Ordering data

RI/BR bells and buzzers

The range of bells and buzzers includes modular versions for discontinuous use RI12, RI230, BR12 and BR230 are suitable for acoustic signalling in residential and commercial sectors to fulfill functionalities such as

alarms notification, supervision and intensive use in schools, factories, etc. Both bells and buzzers are available with rated voltage of 12 VAC and 230 VAC and rated frequency of 50/60Hz.



RI230

| RI electro-mechanical modular bells | | | | | | |
|-------------------------------------|---------------|----------------|---------------|-----------------|------------------|-------------------|
| Rated voltage | Use | Bbn 8012542 | Order details | | Price 1 piece | Weight 1 piece |
| V AC | | EAN | Type code | Order code | kg | Pack pc. |
| 12 | Discontinuous | 258810 | RI12 | 2CSM232345R0821 | 0.081 | 10 |
| 230 | Discontinuous | 258919 | RI230 | 2CSM232335R0821 | 0.083 | 10 |

| BR electro-mechanical modular buzzers | | | | | | |
|---------------------------------------|---------------|----------------|---------------|-----------------|------------------|-------------------|
| Rated voltage | Use | Bbn 8012542 | Order details | | Price 1 piece | Weight 1 piece |
| V AC | | EAN | Type code | Order code | kg | Pack pc. |
| 12 | Discontinuous | 273813 | BR12 | 2CSM236545R0821 | 0.075 | 10 |
| 230 | Discontinuous | 258711 | BR230 | 2CSM232335R0821 | 0.077 | 10 |



BR230

| RI, BR, TSM, TSR | | | |
|-----------------------------|--|------------|--------------|
| | | RI12, BR12 | RI230, BR230 |
| Rated voltage Un | [Vac] | 12 | 230 |
| Rated frequency | [Hz] | 50/60 | |
| Power consumption | [VA] | 4 | |
| Sound level | Bell [dB] | 80 (1) | 80 (1) |
| | Buzzer [dB] | 70 (1) | 70 (1) |
| | Three-tones [dB] | | |
| Max. permanent working time | max. 15 sec., after a rest time of 60 sec. | | |
| Type of sound signal | D | | |
| Duration of operation | discontinuous | | |
| Max. cable cross-section | [mm²] | 4 | |
| Mounting position | vertical only | | |
| Protection degree | IP20 | | |
| Modules (18 mm) | [No.] | 1 | |
| Standard | EN62080 | | |

(1) at 0.6 meters distance

(2) at 1 meter distance

Ordering data

ESB installation contactors

Application: the ESB contactors are used mainly in buildings for switching and controlling lighting, heating, ventilation and pumps. They are part of the complete range of Din rail products and can be integrated easily in dedicated panels.

ESB20 are AC coil operated. The ESB 24, 40, 63 contactors are used for the control of loads up to 24, 40, 63 A.

Due to their DC solenoid actuator, the ESB 24 can be connected to AC or DC voltages. This provides the following benefits: Hum-free operating system, no vibration, silent in operation, low power consumption, integrated high overvoltage protection 5 kV. You can choose between a various N.O. and N.C. contacts combination. Main accessories for ESB 24, 40, 63: auxiliary contact blocks EH04.

ESB 20-20
2CSC400030F0118



ESB 24-40
2CSC400030F0119



ESB 63-40
2CSC400030F0120



| Main poles | Control coil voltage | | N° module | Bbn 3471520 | | Order details | | Weight 1 piece | Pack unit |
|---------------|----------------------|-------|-----------|-------------|-----------|--------------------|-------|----------------|-----------|
| | 50 Hz | 60 Hz | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| ESB 20 | | | | | | | | | |
| 2 NO | 230 V | 264 V | 1 | 263263 | ESB 20-20 | GHE 321 1102 R0006 | | 0.140 | 10 |
| 2 NC | 230 V | 264 V | 1 | 263867 | ESB 20-02 | GHE 321 1202 R0006 | | 0.140 | 10 |
| 1 NO+1 NC | 230 V | 264 V | 1 | 263560 | ESB 20-11 | GHE 321 1302 R0006 | | 0.140 | 10 |

| Main poles | Control coil voltage | | N° module | Bbn 4013614 | | Order details | | Weight 1 piece | Pack unit |
|---------------|----------------------|---------------|-----------|-------------|-----------|--------------------|-------|----------------|-----------|
| | 40 ... 450 Hz | DC | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| ESB 24 | | | | | | | | | |
| 2 NO | 230 ... 240 V | 230 ... 240 V | 2 | 146756 | ESB 24-20 | GHE 329 1402 R0006 | | 0.280 | 5 |
| 4 NO | 230 ... 240 V | 230 ... 240 V | 2 | 084454 | ESB 24-40 | GHE 329 1102 R0006 | | 0.280 | 5 |
| 4 NC | 230 ... 240 V | 230 ... 240 V | 2 | 084546 | ESB 24-04 | GHE 329 1202 R0006 | | 0.280 | 5 |
| ESB 40 | | | | | | | | | |
| 4 NO | 230 ... 240 V | 230 ... 240 V | 3 | 084867 | ESB 40-40 | GHE 349 1102 R0006 | | 0.400 | 3 |
| ESB 63 | | | | | | | | | |
| 4 NO | 230 ... 240 V | 230 ... 240 V | 3 | 084973 | ESB 63-40 | GHE 369 1102 R0006 | | 0.420 | 3 |

| | | ESB20 (AC operated) | ESB24 (AC/DC operated) | ESB40 (AC/DC operated) | ESB63 (AC/DC operated) |
|---|------------------------|------------------------|---------------------------|--|---------------------------|
| Technical details | | | | | |
| Main Pole – Utilization Characteristics according to IEC | | | | | |
| Rated operational voltage U_e max. | V | 250 | | | 400 |
| Rated frequency limits | Hz | 50/60 | | | 40 ... 450 |
| Utilization category AC-1 / AC-7a | | | | | |
| for air temperature close to contactor < 55°C (NO) | A | 20 | 24 | 40 | 63 |
| Max. rated operational current I_e AC-1 / AC-7a (NC) | A | 20 | 24 | 30 | 30 |
| Rated operational power AC-1 | | | | | |
| 230 V – 1 phase | kW | 4 | 5.3 | 8.8 | 13.8 |
| 400 V – 3 phases | kW | - | 16 | 26 | 41 |
| Utilization category AC-3 / AC-7b for air temperature close to contactor < 55°C | | | | | |
| Max. rated operational current I_e AC-3/AC-7b | | | | | |
| 230 V – 1 phase | A | 9 | 9 | 22 | 30 |
| 400 V – 3 phases | A | - | 9 | 22 | 30 |
| Rated operational power AC-3 | | | | | |
| 230 V – 1 phase | kW | 1.1 | 2.2 | 5.5 | 8 |
| 400 V – 3 phases | kW | - | 4 | 11 | 15 |
| Rated making capacity AC-3 | | | | | $10 \times I_e$ / AC-3 |
| Rated breaking capacity AC-3 | | | | | $8 \times I_e$ / AC-3 |
| Short-circuit protection for contactors gG type fuse | A | 20 | 35 | 63 | 80 |
| Rated short-time withstand current I_{cw} at 40°C ambient temp., in free air, from a cold state 10 s | A | | 72 | 176 | 240 |
| Heat dissipation per pole I_e / AC-1/AC-7a | W | 1 | 1.5 | 3 | 6 |
| Max. electrical switching frequency | | | | | |
| - for AC-1 / AC-7a | cycles/h | | | | 300 |
| - for AC-3 / AC-7b | cycles/h | | | | 600 |
| Electrical durability | | | | | |
| - for AC-1 / AC-7a | cycles | 150000 | 150000 | 150000 | 150000 |
| - for AC-3 / AC-7b | cycles | 150000 | 500000 | 170000 | 240000 |
| Mechanical durability | | | | | |
| - millions of operating cycles | | | | | 1.000.000 |
| Magnet System Characteristics | | | | | |
| Coil operating limits acc. to IEC 60947-4-1 | | | | 0.85 ... $1.1 \times U_c$ (at θ_m 55°C) | |
| Drop-out voltage in % of U_c | | approx. 20 ... 75 % | | approx. 20 ... 70 % | |
| Frequency range | Hz | 50/60 | | | 40 ... 450 |
| Coil consumption | | | | | |
| Average pull-in value | VA / W | 8 / 5 | 4 / 4 | 5 / 5 | 65 / 65 |
| Average holding value | VA / W | 3.2 / 1.2 | 4 / 4 | 5 / 5 | 4.2 / 4.2 |
| Connecting Characteristics | | | | | |
| Connecting capacity (min. ... max.) | | | | | |
| Main pole terminals | | | | | |
| Rigid | $1 \times \text{mm}^2$ | 1.5 ... 10 | - | 1.5 ... 25 | - |
| | $2 \times \text{mm}^2$ | 1.5 ... 4 | - | 1.5 ... 10 | - |
| Degree of protection | | | | | |
| acc. to IEC 60947-1 / EN 60947-1 and IEC 60529 / EN 60529 | | | | | |
| Protection against direct contact in acc. with EN 50274 | | | | | |
| All terminals | | IP20 | - | IP20 | - |

Ordering data

EN series contactors

Application: the EN contactors are used mainly in buildings for switching and controlling lighting, heating, ventilation and pumps. They are part of the complete range of Din rail products and can be integrated easily in dedicated panels.

Description: EN contactors have a built-in toggle switch to select between three function modes: Off position, automatic run (normal contactor function), manual override with a return to Auto the next time the coil is energized.

This offers many advantages as: You can make functional test before installation start-up. It can be used for maintenance operation, to change lamps and test it. It provides higher safety and drop out as you can switch the application manually.

The toggle switch is also used for household application like water heating where double tariff of kWh is used.

—
EN 20-20
2CSC400030F0121



—
EN 24-40
2CSC400030F0122



—
EN 40-40
2CSC400030F0123



| Main poles | Control coil voltage | | N° module | Bbn 3471520 | | Order details | | Weight 1 piece | Pack unit |
|--------------|----------------------|-------|-----------|-------------|-----------|--------------------|-------|----------------|-----------|
| | 50 Hz | 60 Hz | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| EN 20 | | | | | | | | | |
| 2 NO | 230 V | 264 V | 1 | 265069 | EN 20-20 | GHE 322 1101 R0006 | | 0.140 | 10 |

| Main poles | Control coil voltage | | N° module | Bbn 4013614 | | Order details | | Weight 1 piece | Pack unit |
|--------------|----------------------|---------------|-----------|-------------|-----------|--------------------|-------|----------------|-----------|
| | 40 ... 450 Hz | DC | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| EN 24 | | | | | | | | | |
| 4 NO | 230 ... 240 V | 230 ... 240 V | 2 | 133688 | EN 24-40 | GHE 326 1101 R0006 | | 0.240 | 5 |
| 3 NO | 230 ... 240 V | 230 ... 240 V | 2 | 134319 | EN 24-30 | GHE 326 1501 R0006 | | 0.230 | 5 |
| EN 40 | | | | | | | | | |
| 2 NO | 230 ... 240 V | 230 ... 240 V | 3 | 129582 | EN 40-20 | GHE 342 1401 R0006 | | 0.400 | 3 |
| 3 NO | 230 ... 240 V | 230...240 V | 3 | 212338 | EN 40-30 | GHE 342 1501 R0006 | | 0.400 | 3 |
| 4 NO | 230 ... 240 V | 230 ... 240 V | 3 | 133701 | EN 40-40 | GHE 342 1101 R0006 | | 0.410 | 3 |

| | | EN20 (AC operated) | EN24 (AC/DC operated) | EN40 (AC/DC operated) |
|---|----------|-----------------------|--------------------------|--------------------------|
| Technical details | | | | |
| Main Pole – Utilization Characteristics according to IEC | | | | |
| Rated operational voltage U_e max. | V | 250 | | 400 |
| Rated frequency limits | Hz | 50/60 | | 40 ... 450 |
| Utilization category AC-1 / AC-7a | | | | |
| for air temperature close to contactor < 55°C (NO) | A | 20 | 24 | 40 |
| Max. rated operational current I_e AC-1 / AC-7a (NC) | A | 20 | 24 | 30 |
| Rated operational power AC-1 | | | | |
| 230 V – 1 phase | kW | 4 | 5.3 | 8.8 |
| 400 V – 3 phases | kW | - | 16 | 26 |
| Utilization category AC-3 / AC-7b for air temperature close to contactor < 55°C | | | | |
| Max. rated operational current I_e AC-3/AC-7b | | | | |
| 230 V – 1 phase | A | 9 | 9 | 22 |
| 400 V – 3 phases | A | - | 9 | 22 |
| Rated operational power AC-3 | | | | |
| 230 V – 1 phase | kW | 1.1 | 2.2 | 5.5 |
| 400 V – 3 phases | kW | - | 4 | 11 |
| Rated making capacity AC-3 | | | | $10 \times I_e$ / AC-3 |
| Rated breaking capacity AC-3 | | | | $8 \times I_e$ / AC-3 |
| Short-circuit protection for contactors gG type fuse | A | 20 | 35 | 63 |
| Rated short-time withstand current I_{cw} at 40°C ambient temp., in free air, from a cold state 10 s | A | | 72 | 176 |
| Heat dissipation per pole I_e / AC-1/AC-7a | W | 1 | 1.5 | 3 |
| Max. electrical switching frequency | | | | |
| - for AC-1 / AC-7a | cycles/h | | | 300 |
| - for AC-3 / AC-7b | cycles/h | | | 600 |
| Electrical durability | | | | |
| - for AC-1 / AC-7a | cycles | 150000 | 150000 | 150000 |
| - for AC-3 / AC-7b | cycles | 150000 | 500000 | 170000 |
| Mechanical durability | | | | |
| - millions of operating cycles | | | | 1.000.000 |

Ordering data

EH04... auxiliary contact block

EH 04
2CSC400030F0124

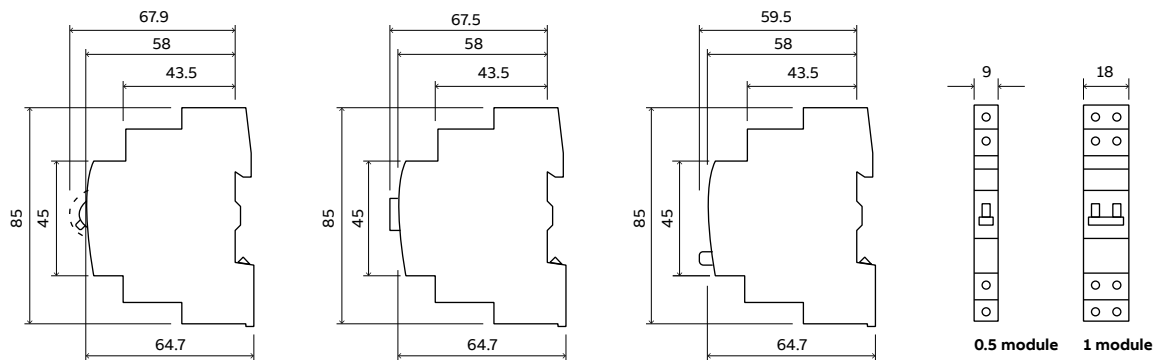


| Contactor Type | Contact blocks | N° module | Bbn 3471520 | Order details | | | Weight 1 piece | Pack unit |
|-------------------|----------------|-----------|-------------|---------------|------------|--------------------|----------------|-----------|
| | | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| ESB/EN 24, 40, 63 | 2 | - | 0.5 | 084768 | EH 04-20 | GHE 340 1321 R0001 | 0.004 | 10 |
| | 1 | 1 | 0.5 | 084768 | EH 04-11 | GHE 340 1321 R0002 | 0.004 | 10 |

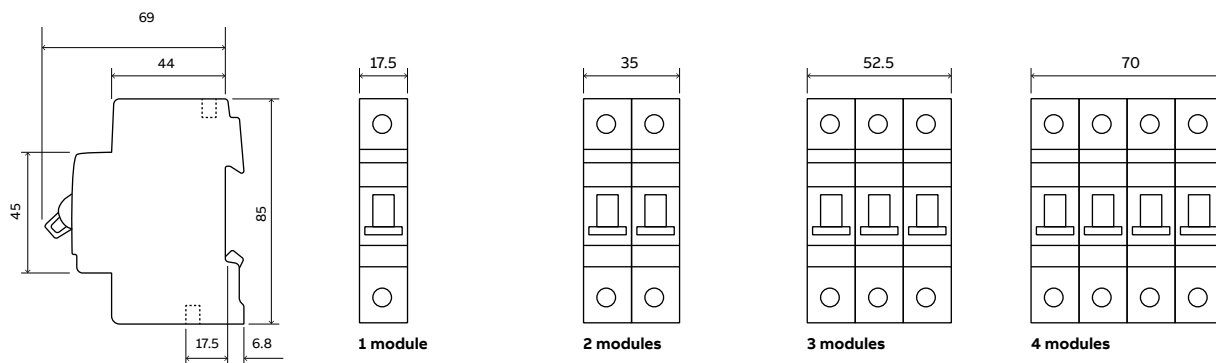
| | ESB20 (AC operated) | ESB24 (AC/DC operated) | ESB40 (AC/DC operated) | ESB63 (AC/DC operated) |
|--|------------------------|---------------------------|---------------------------|---------------------------|
| Technical details | | | | |
| Rated operational voltage U_e max. | V | - | - | 500 |
| Conventional free air thermal current I_{th} $\theta < 40^\circ\text{C}$ | A | - | - | 6 |
| Rated frequency limits | Hz | - | - | 50/60 |
| Rated operational current I_e / AC-15 acc. to IEC 60947-5-1 | | | | |
| 240 V 50/60 Hz | A | - | - | 4 |
| 415 V 50/60 Hz | A | - | - | 3 |
| 500 V 50/60 Hz | A | - | - | 2 |
| Making capacity acc. to IEC 60947-5-1 | - | - | - | $11 \times I_e$ AC-15 |
| Breaking capacity acc. to IEC 60947-5-1 | - | - | - | $11 \times I_e$ AC-15 |
| Short-circuit protection gl type fuse | A | - | - | 10 |
| Minimum switching capacity with failure rate acc. to IEC 60947-5-4 | V/mA | - | - | 17 / 5 |
| Heat dissipation per pole at 6 A | W | - | - | 0.1 |

Overall dimensions

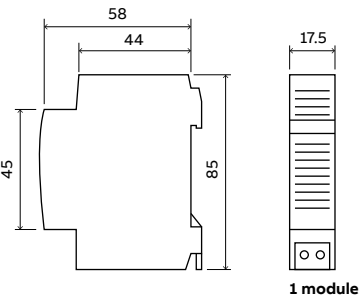
E 210 – Switches, pushbuttons and indicator lights



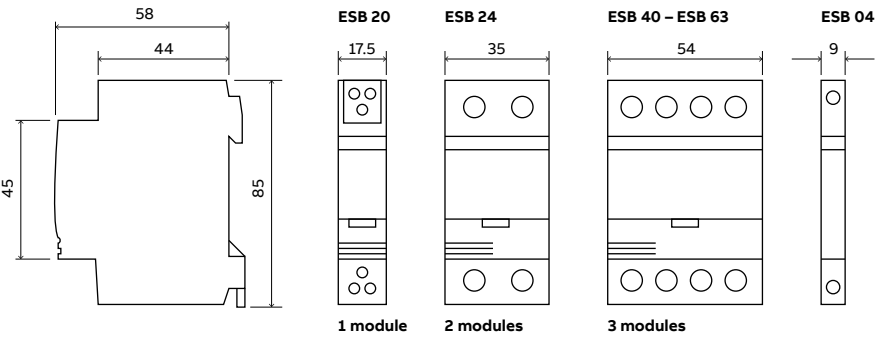
SHD 200



Bell and Buzzer



ESB/EN contactors



—

Comfort

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Comfortable living, easy to manage

ABB solutions for home comfort

The basic idea behind a modern electrical installation is to adapt the system to the users' needs and not vice versa, providing simple operation, safety and energy efficiency. ABB's products have all the necessary features to control homes through a flexible networking of solutions that make life easy.





Electronic components have always been used to improve performance, increase comfort and save energy.

Even in domestic installations, loads must be protected and monitored to guarantee their correct behaviour in critical conditions. This is a fundamental aspect for the comfort of users. ABB's portfolio provides efficient products to improve comfort at home.

The F2C-ARH-T autoreclosing unit for domestic and similar application periodically performs the auto test and reclosure of the associated residual current device (2-pole RCCBs up to 63 A – 30 mA / 100 mA), only after having checked that there are no effective faults in the system protected by the RCCB.

Modular devices in the load management devices category react automatically to variations of parameters and other events in the system to allow optimization. The priority switch is used in wiring systems where existing lead cross sections or the size of the power supply service box.

The E 450 priority switches in particular disconnects the long-term load as long as the short-term consumer is switched on.

Installed downstream of the main circuit-breaker, LSS1/2 load shedding switch compares the actual power consumption of the system to a preset maximum permitted value, and prevents tripping of the main circuit-breaker by sequentially switching off a maximum of two non-priority loads (NPL1 and NPL2) when the preset threshold is exceeded. A green LED indicates the presence of the supply voltage, and two red LEDs indicate the load OFF conditions. At preset time intervals, the device automatically attempts to reconnect the previously disabled loads.

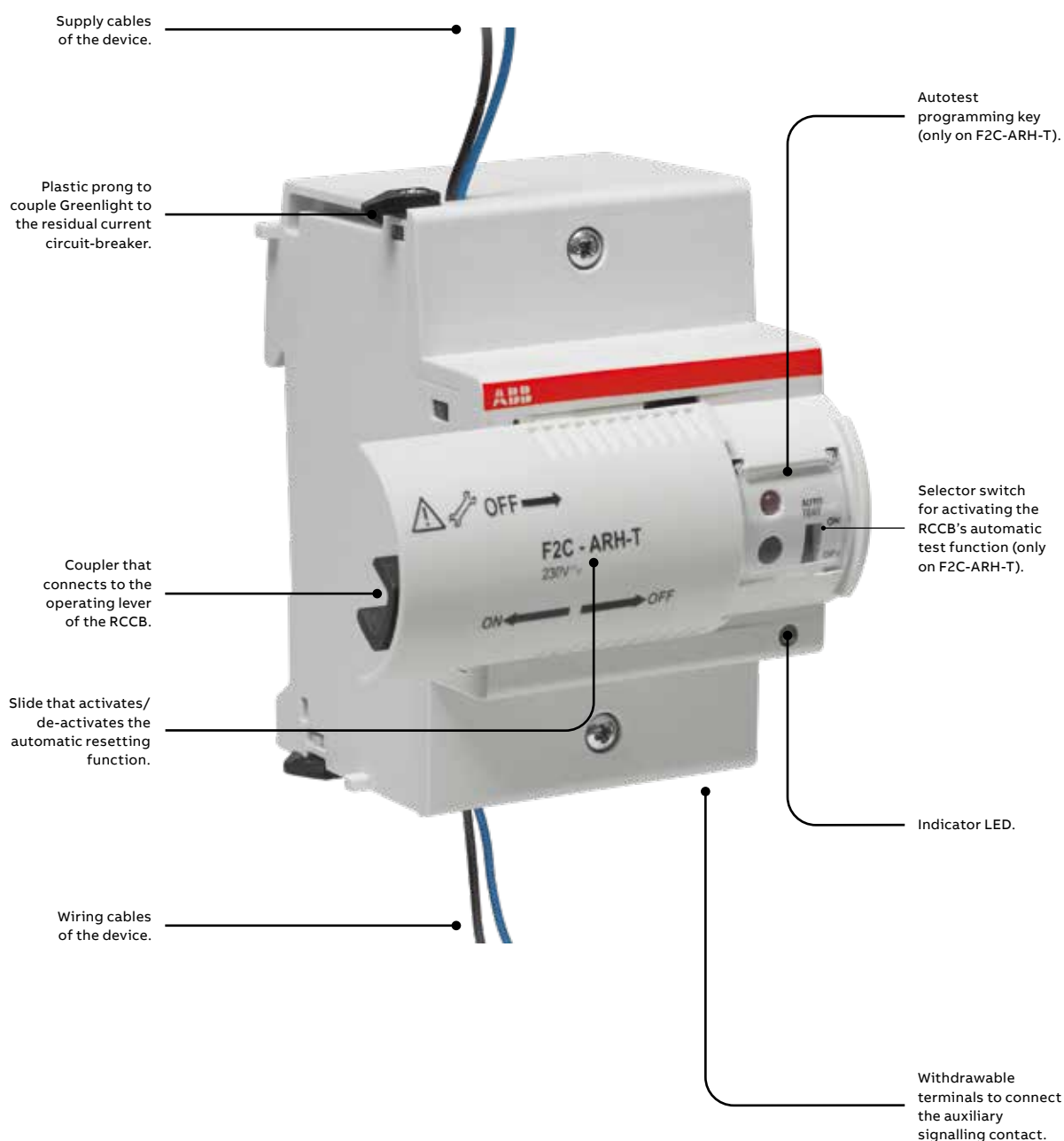
E 235 mains disconnection relays – Bioswitch – constant exposure of electrical interference fields originating from live conductors – as is the case e.g. in bedrooms – which may impair the well-being of people.

LEE 230 extractable power failure signalling lamp is an automatic electronic lamp that can be installed in any modular socket or wiring accessory socket conforming to the German VDE Schuko standard, to the Italian standard P11 10A, or to the 10/16 A Italian dual standard. The device functions both as a power failure signalling lamp and as a lighting device, to be used for example during maintenance activities or when seeking faults in the panel.

F2C-ARH and F2C-ARH-T.

The details make the difference

The characteristics and assets of an efficient and reliable product





Wiring

Greenlight auto-reclosing units are delivered already wired and ready to be installed and connected. You only need a screwdriver to turn the hooks that fasten it to the circuitbreaker and to tighten the terminals. The four wires of the Greenlight device are specially designed to be simply and reliably connected to the rear terminals of FH202 30 mA / 100 mA residual current circuit-breaker.



Set-up

Just a few minutes for the assembly, connection and programming procedures: Greenlight can be activated within an exceptionally short time. The operations are so simple that there is absolutely no room for error and the first autotest (available on F2C-ARHT), already included in the start-up procedure, allows you to immediately make sure that the system is working in an efficient and reliable way.



Autotest programming (only on F2C-ARH-T)

Once Greenlight with autotest has been assembled and connected, just power it, close the residual current circuit-breaker and move the slide towards the left to free the programming button. The red LED alongside the programming button will flash to indicate that the autotest needs to be programmed. Keep pressed the programming button for three seconds. The red LED light will become fixed and the device will perform the first test. The test will be repeated, at the same time of day, every six months.



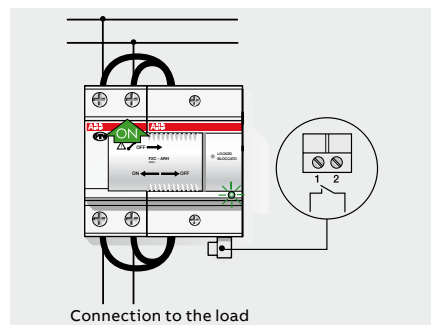
Delay time (only on F2C-ARH-T)

A simple programming system allows you to delay the time at which the test is performed in relation to the time when the autotest system was activated. A five, ten and fifteen hour delay can be obtained by releasing and pressing the programming key once, twice or three times when the red LED light has become fixed after having been pressed the first time.

| Colour | State | Auxiliary contact | Meaning |
|----------------------------|----------|-------------------|--|
| None | Off | Open | Greenlight not powered |
| Green | Flashing | Open | Greenlight powered and auto-reclosing not activated |
| Green | Fixed | Open | Auto-reclosing activated |
| Red | Flashing | Open | Inspection of the installation after the RCCB has tripped |
| Red | Fixed | Closed | Greenlight has blocked owing to a permanent fault in the line |
| Orange (only on F2C-ARH-T) | Fixed | Open | The RCCB automatic test has given a negative result: call an electrician |

LED light

The multicolored LED on the front of the Greenlight device informs the user at a glance when the system is in the normal condition: if the reclosing system is activated, if the system is being tested because the residual current circuit-breaker has tripped, if the device is in the blocked status owing to a permanent fault in the installation and, lastly, if the residual current circuit-breaker has not passed the automatic test (only F2C-ARH-T) and maintenance work by an electrician is required in order to inspect.



Signalling contacts

A signalling contact allows the device to signal faults by remote control. For example, in combination with a telephone actuator (ATT-22) it can transmit information to a mobile phone to warn the user that the residual current circuit-breaker has tripped and that Greenlight has failed its reclosing because it has detected a fault in the installation.

Ordering data

F2C-ARH, F2C-ARH-T

F2C-ARH
2CSC400030F0125



| Description | N° module [17.5 mm] | Bbn 8012542 EAN | Type code | Order details | | Weight 1 piece kg |
|---|------------------------|-----------------------|--------------|-----------------|-------|-------------------------|
| | | | | Order code | Price | |
| Auto-reclosing device for 30 mA 2P RCCBs | 3 | 732433 | F2C-ARH | 2CSF200992R0005 | | 0.200 |
| Auto-reclosing device for 100 mA 2P RCCBs | 3 | 658535 | F2C-ARH100 | 2CSF200990R0005 | | 0.200 |
| Auto-reclosing device with automatic test for 30 mA 2P RCCBs | 3 | 733232 | F2C-ARH-T | 2CSF200991R0005 | | 0.200 |
| Auto-reclosing device with automatic test for 100 mA 2P RCCBs | 3 | 593836 | F2C-ARH-T100 | 2CSF200989R0005 | | 0.200 |

| | F2C-ARH, F2C-ARH100 | F2C-ARH-T, F2C-ARH-T100 |
|--|---|---|
| Technical details | | |
| Power supply | 230 V a.c. (-15% / +10%) | 230 V a.c. (-15% / +10%) |
| Number of automatic reclosing attempts | 1 | 1 |
| Reset time for counter of automatic reclosing attempts | 12 sec | 12 sec |
| Power consumption during operation | (t < 0.5 s) 20 VA max | (t < 0.5s) 20 VA max |
| Power consumption when idle | 0.4 W max | 0.4 W max |
| Number of operations | ≤ 10,000 | ≤ 10,000 |
| Operating temperature | -25 ... +55°C | -25 ... + 55°C |
| Signalling contact cable section | ≤ 2.5 mm ² | ≤ 2.5 mm ² |
| Type of RCCB compatible | FH202-F202 30 mA/100 mA (depending on version), up to 63 A | FH202-F202 30mA /100 mA (depending on version), up to 63 A |
| Locked state signalling contact (terminals 1-2) | 1NO (change-over) | 1NO (change-over) |
| Rated current of locked state contact | 3 A (250 V a.c.) | 3 A (250 V a.c.) |
| Autotest of the residual current circuit-breaker | NO | YES |

Ordering data

E 450 priority switches

—
E 451-5.7A
2CSC400030F0126



The priority switch is used in wiring systems where existing lead cross sections or the size of the power supply service box do not allow for simultaneous operation of two powerful loads (e.g. storage heating and flow-type heater).

The priority switch disconnects the long-term load (storage heating) for as long as the short-term consumer (flow-type heater) is switched on.

The coil of the priority switch is connected in series to the short-term load. When this load is switched on, the NC contact of the priority switch disconnects e.g. the heating system contactor.

| Rated current range | Power loss | N° module | Bbn 4016779 | Order details | | | Weight 1 piece | Pack unit |
|---------------------|------------|-----------|-------------|---------------|-----------------|-------|----------------|-----------|
| | W | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 6.7 ... 39 A | 2.4 | 1 | 415903 | E 451 – 5.7 A | 2CDE160000R0901 | | 0.1 | 10 |
| 6.7 ... 39 A | 2.4 | 1 | 209502 | E 452 – 5.7 A | 2CDE160010R0901 | | 0.1 | 10 |

| | | E 451-5.7 | E 452-5.7 |
|--|-----------------|--|---|
| Technical details | | | |
| Operating coil | | | |
| Range of rated current | A | | 6.7 ... 39 |
| equivalent to | | 1.5 ... 9 kW at 230 V, 4.6 ... 27 kW at 230/400 V | |
| Threshold current | A | | 3.1 ... 5.3 |
| OFF delay (max.) | | 0 main half waves | 2 main half waves |
| Max. continuous current | A | | 43 |
| Therm. continuous capacity at 40°C/104°F | W | | 5 |
| Contact assembly | | | |
| Control contact | | | 1 NC contact |
| Rated contact current at 250 V | A | | 1 |
| Contact material | | | solid silver |
| Max. switching voltage | V | | 400 |
| Max. switching capacity | VA | | 230 |
| Max. switched current | A | | 1 |
| Max. inrush current peak | A | | 5 |
| Electr. service life | | | > 10 ⁴ operations |
| Mechanical service life | | | ca. 2 × 10 ⁴ operations |
| Max. electrical switching rate | | | ca. 1800 operations/hour |
| ON duration | | | 100 % |
| Ambient temperature | | | – 20°C/– 4°F to +40°C/104°F |
| Response time | | | 10 ... 20 ms |
| Release time | | 5 ... 20 ms | ≥ 20 ms |
| Test voltage contact/coil | | | 2.5 kV |
| Clearance and creepage distance | | | C/250 V AC according to IEC 669-1-23 |
| Degree of protection | | | IP 40 |
| Protection against electric shock | | | according to DIN VDE 0106 Part 100 (BGV A2) |
| Terminal contact | mm ² | series coil up to 16 mm ² , control contact up to 2.5 mm ² | |

Ordering data

LCR Load management relay

—
LCR
2CSM229901R1311



Installed downstream of the main circuit-breaker, it compares the actual power consumption of the system to a preset maximum permitted value. Additionally, the load management relay prevents tripping of the main circuit-breaker by sequentially switching off one non-priority load when the preset threshold is exceeded. One red LED and an integrated buzzer indicate the load OFF conditions. At preset time intervals, the device automatically attempts to reconnect the previously disabled load.

| Technical details | | |
|---|-------|---------------------------|
| Input | | |
| Rated voltage Un | [Vac] | 230 (-15%/+10%) |
| Rated frequency | [Hz] | 50/60 |
| Rated capacity In | [A] | 32 |
| Power consumption | [VA] | 4 |
| Display | | |
| Type of display | | backlit LCD |
| Resolution | [kW] | 0.01 |
| Display dimensions | [mm] | 27 × 23 |
| Non-priority load | | |
| Regulating thresholds | [kW] | 0.8..7 |
| Resolution of threshold | [kW] | 0.1 |
| Delay of loads disconnection | [sec] | 0..9999 |
| Delay between one connection and the next one | [sec] | 0..9999 |
| Alarm notification | | LED // buzzer |
| Relay output | | |
| Rated current | [A] | 16 |
| Rated voltage | [Vac] | 250 |
| Climatic conditions | | |
| Storage temperature | | -10°C to +65°C |
| Operating temperature | | -10°C to +45°C |
| Relative humidity | | max. 90% (non-condensing) |
| Protection degree | | |
| At terminals | | IP20 |
| On the front panel | | IP51 |
| Max cable cross-section | | |
| rigid | [mm²] | 4 |
| flexible | [mm²] | 6 |
| Modules (18mm) | [No.] | 2 |

| Rated current | | Bbn 8012542 | Order details | | Weight 1 piece | Pack unit |
|---------------|--------|----------------|-----------------|-------|-------------------|--------------|
| A | EAN | Type code | Order code | Price | kg | pc. |
| 32 | 299011 | LCR | 2CSM229901R1311 | | 0.135 | 1 |

Ordering data

E 235 mains disconnection relays – Bioswitch

Constant exposure of electrical interference fields originating from live conductors – as is the case e.g. in bedrooms – may impair the well-being of people, experts say.

With the extra base load adapter E235-GLA, the mains disconnection relays can be switched on manually.

For the permanent installation of loads that switch on independently of the supply voltage, such as fluorescent lamps, a E235-GLE PTC base load element is available.

E 235-GLA
2CSC400030F0131



E 235-NFS
2CSC400030F0130



| Description | N° module [17.5 mm] | Bbn 4016779 EAN | Order details | | | Weight 1 piece kg |
|---------------------------|------------------------|-----------------------|---------------|-----------------|-------|-------------------------|
| | | | Type code | Order code | Price | |
| mains disconnection relay | 1 | 571821 | E 235-NFS | 2CDE110000R1701 | | 0.065 |
| base load element | 1 | 571814 | E 235-GLE | 2CDE100500R1711 | | 0.001 |
| base load adapter | 1 | 571869 | E 235-GLA | 2CDE100510R1711 | | 0.070 |

| E 235 | | | | | |
|---|--|--------------------|--|--------------------------------------|--|
| Technical details | | | | | |
| Short circuit rupturing capacity | | V | | 16 A/230 V AC | |
| Rated frequency | | Hz | | 50/60 | |
| Range of control voltage Un | | Un | | 0.9 to 1.1 | |
| Load of filament lamps | | W | | 2300 | |
| | | twin lamp circuit | | 100 | |
| | | shunt compensated | | 56 | |
| Fluorescent lamp load: | | electronic ballast | | max. 36 W, dependent on manufacturer | |
| Induce load | | A | | 6 A cosφ = 0.6 | |
| Max. switching capacity (cosφ 0.5) | | VA | | 3500 | |
| Intrinsic consumption ca. | | W | | 1 | |
| Control voltage | | V | | 5 V | |
| Adjustable making capacity | | VA | | 2 – 15 | |
| Breaking capacity | | | | 0.66 × making capacity | |
| ON delay | | | | 50 ms | |
| OFF delay | | | | ca. 3 sec. | |
| Contact assembly | | | | 1 NO contact | |
| Service life at rated load | | | | > 100000 switching cycles | |
| Ambient temperature | | | | - 10°C/14°F to +45°C/113°F | |
| Connection capacity (clamping terminal) | | mm² | | max 2.5 | |

Ordering data

Socket Outlets

M1175
2CSC400030F0132



M1173
2CSC400030F0133



M1174
2CSC400030F0134

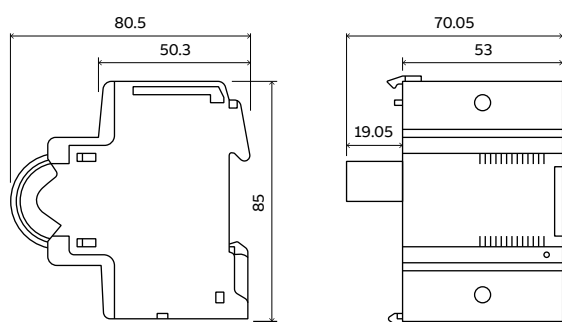


| N° module | Bbn 8012542 | Order details | | | Weight 1 piece | Pack unit |
|--|----------------|---------------|-----------------|-------|-------------------|--------------|
| [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| German Shuko standard modular sockets | | | | | | |
| 2.5 | 027850 | M1175 | 2CSM210000R0721 | | 0.120 | 4 |
| Italian P30 standard modular sockets | | | | | | |
| 2.5 | 004103 | M1173 | 2CSM110000R0701 | | 0.120 | 4 |
| French standard modular sockets | | | | | | |
| 2.5 | 006602 | M1174 | 2CSM110000R0711 | | 0.120 | 4 |

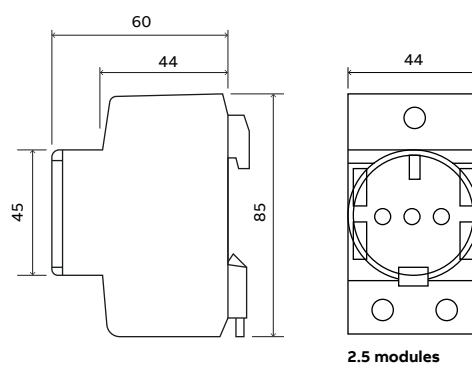
| | M1175 | M1174 | M1173 |
|------------------------------|----------------|---------------------------------|----------------------|
| Technical details | | | |
| Rated voltage U _n | [V] | | 250 AC |
| Rated current I _n | [A] | 16 (M1170, M1173, M1174, M1175) | |
| Rated frequency | [Hz] | | 50/60 |
| Power loss | [W] | | 0.6 |
| Modules | [No.] | | 2.5 |
| Safety shutters | | | yes, on entire range |
| Terminal type | | | positive safety |
| Cable section (ø min./max.) | [mm²] | | 2.5 / 16 |
| Tightening torque | [Nm] | | 1.2 |
| Temperature | storage [°C] | | -40 ... +70 |
| | operating [°C] | | -25 ... +35 |
| Protection degree | | | IP20 |
| Reference standards | DIN VDE 0620-1 | NF C 61 303 | CEI 23-50 |
| Approvals | VDE, GOST | LCIE, CEPEC, GOST | IMQ, GOST |

Overall Dimensions

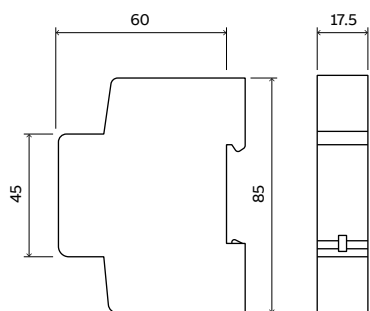
F2C-ARH, F2C-ARH-T



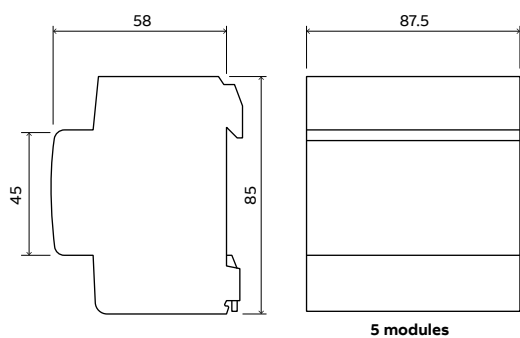
M1175, M1174, M1173 sockets



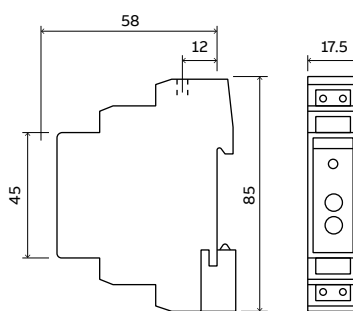
E 450



LCR



E 235





Energy efficiency

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Energy savings, safety gains

Keeping all the factors in view

ABB is the world-leading provider of smarter home, smarter building and intelligent community solutions. Its complete offering can help to achieve significant reduction of energy budget through an accurate monitoring and control of every parameter of the building: heating temperature, lighting, energy consumption of electric appliances can be adapted to actual needs, with a substantial saving potential without compromising comfort, safety or quality of life.



Commercial and residential buildings account for a big part of global end-user energy demand. ABB's solutions can help to achieve savings through an accurate monitoring and control of electric loads such HVAC systems, lighting installations and appliances.

The modular DIN rail electricity meters offer a wide range of programmable functions useful to measure electricity consumption and reduce energy costs. The line of DIN-mounted electricity meters and the wide range of communication adapters make sure to provide the perfect solution for every application.

Control loads operations in a system improves functionality and optimize power consumption. Programming the control of electric appliances according to the needs of each application obtains measurable advantages in terms of comfort and reduction of power wastage.

The range of ABB's modular analog and digital time switches includes several functions that guarantee the opening and closing of electrical circuits according to a scheduled program. AG analog time switches are available in both daily and weekly versions, with 16 A contact which can be operated according to a timing program. Some versions are equipped with a built-in battery, generally charged by the network voltage, which enables them to maintain the timing function even in case of lengthy power supply failures.

DBT digital time switches ABB are equipped with a permanent EEPROM memory to ensure that the scheduled timing is followed and the date and hour settings are maintained even in case of power down. The range, used for both daily and weekly programming, includes single/double channel versions with a change-over contact and a switching capacity of 16 or 10 A. Some time switches can be combined with DT-DCF antenna for automatic synchronization with Frankfurt official time. New features include a holiday mode that allows forcing of the ON-OFF output for a certain period, a random mode used to simulate event presence, and a waiver mode to carry out waivers remotely or locally.





Rationalization of the light consumption is very important.

To command the lighting in stairs of buildings, ABB offers the time-delay switch E 232. The switch includes an electro-mechanical timer with a synchronous motor drive to ensure high operational safety in whatever mounting position. The time range is adjustable in increments of 15 seconds from 1 to seven minutes. Devices include an integrated warning feature (warning by blinking) according to DIN 18015-2 as well as a 60 minute long-time function.

For lamps control, ABB's TW modular twilight switches allow to switch on and off lighting devices according to a scheduled level of ambient light. They are used in combination with a sensor to detect if the ambient light is higher or lower than the set level. TW2/10K, equipped with three different types of adjustment range (2:100, 2:1000, 2:10000), fits the daylight applications where Lux values are very high. This range addresses all applications, for example shop windows, parking areas and so on.

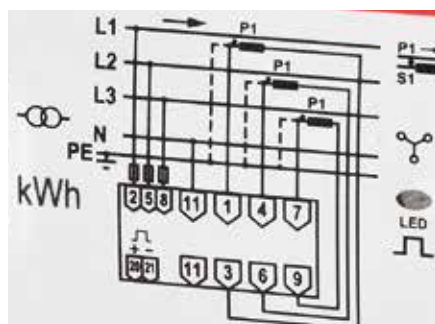
Hour counters – as E 233 series – offer a very important function for energy budget improvement. They are used to record operating times as well as to determine idle times and off times of electric loads in commercial or domestic installations, with an immediate feedback on energy consumption.

In terms of energy quality, modular digital instruments of VLMD and AMTD series measure voltage, current and frequency. The range is composed by a voltmeter for a.c./d.c. voltage monitoring, ammeter for a.c./d.c. currents, and frequency meter. Ammeters measure in indirect insertion thanks to measuring accessories, like current transformer for a.c. and shunt for d.c. The full scale is programmable by the user.

Electricity meters

The details make the difference





The DIN rail mounted electricity meters are available in single phase C11, B21 and A41 for direct connection and A42 for transformer connection.

For three phase direct connection there are the C13, B23 and A43, while B24 and A44 are for indirect connection.



There are five available functionalities for EQ meters with basic to advanced functionalities.

C-series are available with Steel Functionality that includes active energy of class 1, pulse or alarm output.

B-series are in Bronze, Silver and Silver categories. In addition to what is available in steel category, it is possible to import/export of energy in Bronze class and in Silver class it is also possible to have resettable register, optional class of 0.5S and fixed I/O's.

A-series are available in Gold and Platinum categories in addition to previous mentioned classes. Basic and advanced clock function, harmonics(THD) and configurable I/O's is available in these categories.



The EQ meters A-series and B-series offer flexible solutions for collecting data. This can be done via pulse output or serial communication interfaces such as M-bus, Modbus RTU and an Infrared port(IR). The meters can be integrated into InSite pro M compact® system, which can collect the data from meters and give a remote monitoring of system with the help of mentioned communication interfaces.



MID – Measuring Instrument Directive – means common testing rules based on IEC standards for all EU countries. You find a label certifying that the ABB electricity meter is tested and approved according to MID directive.

Technical features table for electricity meters

EQ meters



| Technical features | | |
|------------------------------------|---|---|
| | A41 | A42 |
| Voltage/current inputs | | |
| Nominal voltage | 230 V AC | |
| Voltage range | 57.7 - 288 V AC (-20% - +15%) | 57.7 - 288 or 100 ... 288 V AC (-20% - +15%) |
| Power dissipation voltage circuits | 1.5 VA (0.6 W) total at 230 V AC | |
| Power dissipation current circuits | 0.006 VA (0.006 W) at I_{ref} and I_b | 0.001 VA (0.001 W) at I_{ref} and I_n |
| Base current I_b | 5 A | – |
| Rated current I_n | – | 1 A |
| Reference current I_{ref} | 5 A | 1 A |
| Transitional current I_{tr} | 0.5 A | 0.05 A |
| Maximum current I_{max} | 80 A | 6 A |
| Minimum current I_{min} | 0.25 A | 0.02 A |
| Starting current I_{st} | < 20 mA | < 1 mA |
| Terminal wire area | 1 - 25 mm ² | 0.5 - 10 mm ² |
| Recommended tightening torque | 2 Nm | 1.2 Nm |
| Communication | | |
| Terminal wire area | 0.5 - 1 mm ² | 0.5 - 1 mm ² |
| Recommended tightening torque | 0.25 Nm | 0.25 Nm |
| Transformer ratios | | |
| Configurable current ratio (CT) | – | 1/9 - 9999/1 |
| Configurable voltage ratio (VT) | – | 1/999 - 999999/1 |
| Pulse indicator (LED) | | |
| Pulse frequency | 1000 imp/kWh | 5000 imp/kWh |
| Pulse length | 40 ms | 40 ms |
| Frequency | 50 or 60 Hz ± 5% | 50 or 60 Hz ± 5 % (or 16.7 Hz optional) |
| Accuracy Class | B (Cl.1) and Reactive Cl. 2 | B (Cl.1), C (Cl. 0,5 S) and Reactive Cl. 2 |
| Active energy | 1% | 0.5%, 1% |
| Display of energy | Pixel oriented display (LCD) | Pixel oriented display (LCD) |
| Environmental | | |
| Operating temperature | -40°C - +70°C | -40°C - +70°C |
| Storage temperature | -40°C - +85°C | -40°C - +85°C |
| Humidity | 75% yearly average, 95% on 30 days/year | 75% yearly average, 95% on 30 days/year |
| Resistance to fire and heat | Terminal 960°C, cover 650°C (IEC 60695-2-1) | Terminal 960°C, cover 650°C (IEC 60695-2-1) |
| Resistance to water and dust | IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529. | IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529. |
| Mechanical environment | Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU). | Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU). |
| Electromagnetic environment | Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU). | Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU). |



| A43 | A44 |
|---|---|
| 3x230/400 V AC | |
| 3x57.7/100 ... 288/500 V AC (-20% - +15%) | 3x57.7/100 ... 288/500 or 3x100/173 ... 400/690 V AC (-20% - +15%) |
| 1.8 VA (0.8 W) total at 230 V AC | |
| 0.006 VA (0.006 W) per phase at I_{ref} | 0.001 VA (0.001 W) at I_{ref} and I_n^* |
| 5 A | – |
| – | 1 A |
| 5 A | 1 A |
| 0.5 A | 0.05 A |
| 80 A | 6 A |
| 0.25 A | 0.01 A |
| < 20 mA | < 1 mA |
| 1 - 25 mm ² | 0.5 - 10 mm ² |
| 2 Nm | 1.2 Nm |
| 0.5 - 1 mm ² | 0.5 - 1 mm ² |
| 0.25 Nm | 0.25 Nm |
| – | 1/9 - 9999/1 |
| – | 1/999 - 999999/1 |
| 1000 imp/kWh | 5000 imp/kWh |
| 50 or 60 Hz ± 5 % | |
| A (Cl.2), B (Cl.1) and Reactive Cl. 2 | B (Cl.1), C (Cl. 0,5 S) and Reactive Cl. 2 |
| 1% | 0.5%, 1% |
| Pixel oriented display (LCD) | Pixel oriented display (LCD) |
| -40°C - +70°C | -40°C - +70°C |
| -40°C - +85°C | -40°C - +85°C |
| 75% yearly average, 95% on 30 days/year | 75% yearly average, 95% on 30 days/year |
| Terminal 960°C, cover 650°C (IEC 60695-2-1) | Terminal 960°C, cover 650°C (IEC 60695-2-1) |
| IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529. | IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529. |
| Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU). | Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU). |
| Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU). | Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU). |



Technical features

| | C11 | C13 |
|--|---|-------------|
| Outputs | | |
| Type | Transistor | |
| Current | 2 - 100 mA | |
| Voltage | 5 - 40 V DC | |
| Pulse output frequency | 100 or 1000 (imp/kWh) | |
| Pulse length | 100 ms | |
| Terminal wire area | 0.5 - 10 mm² | 0.5 - 6 mm² |
| Recommended tightening torque | 0.8 Nm | 0.25 Nm |
| EMC compatibility | | |
| Impulse voltage test | 6 kV 1.2/50 µs (IEC 60060-1) | |
| Surge voltage test | 4 kV 1.2/50 µs (IEC 61000-4-5) | |
| Fast transient burn test | 4 kV (IEC 61000-4-4) | |
| Immunity to electromagnetic HF-fields | 80 MHz - 2 GHz at 10 V/m (IEC 61000-4-3) | |
| Immunity to conducted disturbance | 150 kHz - 80 MHz (IEC 61000-4-6) | |
| Immunity to disturbance with harmonics | 2kHz - 150kHz | |
| Radio frequency emission | EN 55022, class B (CISPR22) | |
| Electrostatic discharge | 15 kV (IEC 61000-4-2) | |
| Standards | IEC 62052-11, IEC 62053-21 class 1, GB/T 17215.211-2006, GB/T 17215.321-2008 class 1, GB 4208-2008, EN 50470-1, EN 50470-3 category B | |
| Mechanical | | |
| Material | Glass reinforced polycarbonate | |
| Dimensions | | |
| Width | 17,5 mm | 54 mm |
| Height | 111 mm | 122 mm |
| Depth | 65 mm | 65 mm |
| DIN modules | 1 | 3 |

Energy efficiency

EQ meters B-series

B series



| Technical features | B series | |
|--|---|----------------|
| Outputs | | |
| Type | Transistor or MOSFET | |
| Current | 2 - 100 mA | |
| Voltage | 5 - 240 V AC/DC For meters with only 1 output 5 -40 VDC | |
| Pulse output frequency | Programmable 1 - 999999 imp/kWh | |
| Pulse length | Programmable 10 - 990 ms | |
| Terminal wire area | 0.5 - 1 mm² | |
| Recommended tightening torque | 0.25 Nm | |
| Inputs | | |
| Voltage | 0 - 240 V AC/DC | |
| OFF | 0 - 5 V AC/DC | |
| ON | 57 - 240 V AC/24 - 240 V DC | |
| Min. pulse length | 30 ms | |
| Terminal wire area | 0.5 - 1 mm² | |
| Recommended tightening torque | 0.25 Nm | |
| EMC compatibility | | |
| Impulse voltage test | 6 kV 1.2/50 µs (IEC 60060-1) | |
| Surge voltage test | 4 kV 1.2/50 µs (IEC 61000-4-5) | |
| Fast transient burn test | 4 kV (IEC 61000-4-4) | |
| Immunity to electromagnetic HF-fields | 80 MHz - 2 GHz (IEC 61000-4-6) | |
| Immunity to conducted disturbance | 150 kHz - 80 MHz (IEC 61000-4-6) | |
| Immunity to disturbance with harmonics | 2 kHz - 150 kHz | |
| Radio frequency emission | EN 55022, class B (CISPR22) | |
| Electrostatic discharge | 15 kV (IEC 61000-4-2) | |
| Standards | IEC 62052-11, IEC 62053-21 class 1 & 2, IEC 62053-22 class 0,5 S, IEC 62053-23 class 2, IEC 62054-21, GB/T 17215.211-2006, GB/T 17215.312-2008 class 1 & 2, GB/T 17215.322-2008 class 0,5 S, GB 4208-2008, EN 50470-1, EN 50470-3 category A, B & C | |
| Mechanical | | |
| Material | Polycarbonate in transparent front glass. Glass reinforced polycarbonate in bottom case and upper case. Polycarbonate in terminal cover. | |
| Dimensions | B21 | B23/B24 |
| Width | 35 mm | 70 mm |
| Height | 97 mm | 97 mm |
| Depth | 65 mm | 65 mm |
| DIN modules | 2 | 4 |

Ordering data

EQ meters B-series

The B-series are in single phase and three phase metering with direct connection up to 65A and indirect connection up to 6A.

The B-series meters are mounted on a DIN rail and are suitable for installation in distribution boards. They are suitable in applications where there is a need for reliable energy measurements and where space is limited.

Main characteristics include:

- Single and three phase metering
- Active energy, accuracy class B (Cl. 1)
- • Direct metering up to 65A and indirect metering up to 6A
- • LCD display
- • Pulse output or alarm
- • 4 tariffs
- • IEC and MID type approval

The information shown on the display can be changed in the settings of the meter using the push buttons.

The push button used for changing settings can be sealed. The EQ meters B-series includes up to 4 tariffs options which can be changed by inputs, communication. All EQ meters B-series are tested and approved according to different standards. These standards covers all technical aspects of the meter such as climate conditions, electro-magnetic compatibility (EMC), electrical requirements, mechanical requirements and the accuracy.

| N° module | Bbn 7392696 | Order details | | | Weight 1 piece | Pack unit |
|-----------|----------------|---------------|-----------------|-------|-------------------|--------------|
| | EAN | Type code | Order code | Price | kg | |
| [17.5 mm] | | | | | | |
| 6 | 310246 | OD4165 | 2CMA131024R1000 | | 0.420 | 1 |
| 6 | 310253 | OD4110 | 2CMA131025R1000 | | 0.450 | 1 |

Energy efficiency

EQ meters C-series

The C-series are compact meters available both in single phase and three phase for direct connected applications up to 40 A. The small size and the DIN rail mounting makes it suitable for installation in distribution boards and small standard enclosures. The power consumption of the meter is very low, less than 0.3W and 0.6W at 230V AC.

Main characteristics include:

- Single and three phase metering
- Active energy, accuracy class B (Cl. 1)
- Direct metering up to 40 A
- LCD display
- Pulse output or alarm
- IEC and MID type approval

EQ meters C-series have an LCD with large digits showing energy register and instrumentation values. Due to the compact design of the meters, 1 and 3 modules are available. The meters have a wide temperature range which makes it possible to install the meter in many locations, -25°C ... ±70°C (storage -25°C ... ±80°C).

Navigating the meter is easily done via the push-button below the display. The C-series meters support reading of instrument values. A number of electrical properties can be read:

- Power factor
- Active power
- Current
- Voltage

C-series meters have one output that could be used as pulse output or as an alarm output.

They are type approved according to IEC and MID. MID is the Measuring Instruments Directive 2014/32/EU from the European Commission.

The type approval is according to standards that covers all relevant technical aspects of the meter.

These include climate conditions, electromagnetic compatibility (EMC), electrical requirements, mechanical requirements and accuracy.

MID versions have initial verification according to annex F of the Measuring Instruments Directive.



C11

Direct connected energy meter up to 40 A. IEC approval. Instrument values.
Alarm function. Optional - Verified and approved according to MID.

Energy meters single phase electricity meter, 1 DIN, 40 A

Class B (Cl.1) with functionality level Steel. Active energy

| Description | Bbn | Order details | | Price | Weight | Pack |
|---|---------|--------------------------------|-----------------|---------|---------|------|
| | 7392696 | | | 1 piece | 1 piece | unit |
| | EAN | Type code | Order code | | kg | pc. |
| 1 x 230 V AC, Pulse output 1000 imp/kWh | 035712 | C11 110 - 101 ^{*)} | 2CMA103571R1000 | | 0.070 | 1 |

Class 1 with functionality level Steel. Active energy

| | | | | | | |
|---|--------|------------------|-----------------|--|-------|---|
| 1 x 230 V AC, Pulse output 1000 imp/kWh | 035729 | C11 110 - 301 | 2CMA103572R1000 | | 0.070 | 1 |
|---|--------|------------------|-----------------|--|-------|---|



C13

Direct connected energy meter. IEC approval. 3 element metering. Instrument values.
Alarm function. Optional - Verified and approved according to MID.

Energy meters three phase electricity meter, 3 DIN, 40 A

For direct connection up to 40 A. Class B (Cl.1) with functionality level Steel. Active energy

| Description | Bbn | Order details | | Price | Weight | Pack |
|---|---------|--------------------------------|-----------------|---------|---------|------|
| | 7392696 | | | 1 piece | 1 piece | unit |
| | EAN | Type code | Order code | | kg | pc. |
| 3 x 230/400 V AC, Pulse output 1000 imp/kWh | 035743 | C13 110 - 101 ^{*)} | 2CMA103574R1000 | | 0.170 | 1 |

For direct connection up to 40 A. Class 1 with functionality level Steel. Active energy

| | | | | | | |
|---|--------|------------------|-----------------|--|-------|---|
| 3 x 230/400 V AC, Pulse output 1000 imp/kWh | 035750 | C13 110 - 301 | 2CMA103575R1000 | | 0.170 | 1 |
|---|--------|------------------|-----------------|--|-------|---|

*) MID approval according to Module B and F

Ordering data

EQ meters A-series

A-series are advanced meters in single phase and three phase for active energy. They are designed for installation on a DIN rail in distribution boards and small enclosures. Key product features are internal clock for tariff handling and load profiles, configurable I/O and for direct metering up to 80A and indirect metering up to 6A.

Main specifications are:

- Single phase and three phase metering
- Active energy, accuracy class B (Cl. 1)
- Measure import/export energy
- Direct connection up to 80A and indirect connection up to 6A
- Pixel-oriented display
- In-built M-bus or Modbus, pulse output and IR for SCA
- Internal clock for up to 4 tariffs and monthly values
- Memory back-up (EEPROM)
- IEC and MID approval

The display is pixel-oriented and can show up to four quantities at the same time. Navigating the meter is easily done via the push-buttons which is protected against unauthorized use. The meters have up to 7 modules that save space in the installation.

The operating temperature range is from -40°C to +70°C (storage +80°C).

A-series have 4 ways to communicate depending on the type:

- In-built M-bus or Modbus (RS485)
- IR interface for serial communication (together with the serial communication adapter)
- Pulse output
- Front display

It is possible to choose information shown on the display and change the settings in the meter using the push buttons.

The push button used for changing settings can be sealed. The EQ meters A-series includes up to 4 tariffs options which can be changed by inputs, communication or internal clock.



A41

Direct connected energy meter up to 80 A. Verified and approved according to MID. IEC approval. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

Energy meters single phase electricity meter, 4 DIN with IR port, 80 A

Class B (Cl. 1) with functionality level Steel. Active energy

| Description | Bbn | Order details | | Price | Weight | Pack |
|---------------------------------------|---------|------------------|-----------------|---------|---------|------|
| | 7392696 | | | 1 piece | 1 piece | unit |
| | EAN | Type code | Order code | | kg | pc. |
| 57.7...288 V AC, Pulse output | 705547 | A41 111 - 100 | 2CMA170554R1000 | | 0.230 | 1 |
| 57.7...288 V AC, Pulse output, RS-485 | 705004 | A41 112 - 100 | 2CMA170500R1000 | | 0.230 | 1 |
| 57.7...288 V AC, Pulse output, M-Bus | 002400 | A41 113 - 100 | 2CMA100240R1000 | | 0.230 | 1 |

Class 1 (Reactive Class 2) with functionality level Silver.

Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

| | | | | | | |
|--|--------|------------------|-----------------|--|-------|---|
| 57.7...288 V AC, 2 output, 2 input, RS-485 | 705035 | A41 312 - 100 | 2CMA170503R1000 | | 0.230 | 1 |
| 57.7...288 V AC, 2 output, 2 input, M-Bus | 705042 | A41 313 - 100 | 2CMA170504R1000 | | 0.230 | 1 |

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Gold.

Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand.

| | | | | | | |
|--|--------|------------------|-----------------|--|-------|---|
| 57.7...288 V AC, 2 output, 2 input, RS-485 | 705059 | A41 412 - 100 | 2CMA170505R1000 | | 0.230 | 1 |
|--|--------|------------------|-----------------|--|-------|---|



A42

Transformer CTVT connected energy meter up to 6 A. Verified and approved according to MID. IEC approval. Voltage V - 57...288 V AC. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

Energy meters single phase electricity meter, 4 DIN with IR port, 80 A

Class B (Cl. 1) with functionality level Steel. Active energy

| Description | Bbn | Order details | | Price | Weight | Pack |
|---------------------------------------|---------|------------------|-----------------|---------|---------|------|
| | 7392696 | | | 1 piece | 1 piece | unit |
| | EAN | Type code | Order code | | kg | pc. |
| 57.7...288 V AC, Pulse output | 705554 | A42 111 - 100 | 2CMA170555R1000 | | 0.200 | 1 |
| 57.7...288 V AC, Pulse output, RS-485 | 705103 | A42 112 - 100 | 2CMA170510R1000 | | 0.200 | 1 |
| 57.7...288 V AC, Pulse output, M-Buss | 002424 | A42 113 - 100 | 2CMA100242R1000 | | 0.200 | 1 |

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver.

Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

| | | | | | | |
|--|--------|------------------|-----------------|--|-------|---|
| 57.7...288 V AC, 2 output, 2 input, RS-485 | 705127 | A42 312 - 100 | 2CMA170512R1000 | | 0.200 | 1 |
|--|--------|------------------|-----------------|--|-------|---|

Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Platinum.

Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand, advanced load profiles, harmonics and THD.

Versions for 16.7, 50 or 60 Hz

| | | | | | | |
|---|--------|------------------|-----------------|--|-------|---|
| 57.7...288 V AC, configurable 4 I/O channels, RS-485 | 002387 | A42 552 - 100 | 2CMA170505R1000 | | 0.200 | 1 |
| 100...288 V AC, configurable 4 I/O channels, RS-485 16.7 [°] , 50 or 60 Hz | 705189 | A42 552 - 120 | 2CMA100518R1000 | | 0.200 | 1 |
| 100...288 V AC, configurable 4 I/O channels, M-Bus 16.7 [°] , 50 or 60 Hz | 705196 | A42 553 - 120 | 2CMA100519R1000 | | 0.200 | 1 |

*) The meters are not tested and approved for placement on rolling stock.



A43

Direct connected energy meter up to 80 A. Verified and approved according to MID. IEC approval. 2- and 3-element metering. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

Energy meters single phase electricity meter, 4 DIN with IR port, 80 A

Class B (Cl. 1) with functionality level Steel. Active energy

| Description | Bbn | Order details | | Price | Weight | Pack |
|---|---------|------------------|-----------------|---------|---------|------|
| | 7392696 | Type code | Order code | 1 piece | 1 piece | unit |
| | EAN | | | | kg | pc. |
| 3 x 57.7/100...288/500 V AC, Pulse output | 705202 | A43 111 - 100 | 2CMA170520R1000 | | 0.440 | 1 |
| 3 x 57.7/100...288/500 V AC, Pulse output, RS-485 | 002448 | A43 112 - 100 | 2CMA100244R1000 | | 0.440 | 1 |
| 3 x 57.7/100...288/500 V AC, Pulse output, M-Bus | 002455 | A43 113 - 100 | 2CMA100245R1000 | | 0.440 | 1 |

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Bronze.

Active and reactive energy, import/export.

| | | | | | | |
|---|--------|------------------|-----------------|--|-------|---|
| 3 x 57.7/100...288/500 V AC, Pulse output, RS-485 | 705226 | A43 212 - 100 | 2CMA170522R1000 | | 0.440 | 1 |
| 3 x 57.7/100...288/500 V AC, Pulse output, M-Bus | 705233 | A43 213 - 100 | 2CMA170523R1000 | | 0.440 | 1 |

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver.

Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

| | | | | | | |
|--|--------|------------------|-----------------|--|-------|---|
| 3 x 57.7/100...288/500 V AC, 2 output, 2 input, RS-485 | 705257 | A43 312 - 100 | 2CMA170525R1000 | | 0.440 | 1 |
| 3 x 57.7/100...288/500 V AC, 2 output, 2 input, M-Bus | 705264 | A43 313 - 100 | 2CMA170526R1000 | | 0.440 | 1 |

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Platinum.

Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand, advanced load profiles, harmonics and THD.

| | | | | | | |
|--|--------|------------------|-----------------|--|-------|---|
| 3 x 57.7/100...288/500 V AC, configurable 4 I/O channels, RS-485 | 705318 | A43 512 - 100 | 2CMA170531R1000 | | 0.440 | 1 |
| 3 x 57.7/100...288/500 V AC, Cconfigurable 4 I/O channels, M-Bus | 705325 | A43 513 - 100 | 2CMA170532R1000 | | 0.440 | 1 |



A44

Transformer CTVT connected energy meter up to 6 A. Verified and approved according to MID. IEC approval. 2- and 3-element metering. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

Energy meters three phase electricity meter, 7 DIN with IR port, 6 A

Class B (Cl. 1) with functionality level Steel. Active energy

| Description | Bbn | Order details | | Price | Weight | Pack |
|---|---------|------------------|-----------------|---------|---------|------|
| | | Type code | Order code | 1 piece | 1 piece | unit |
| | 7392696 | | | | kg | pc. |
| 3 x 57.7/100...288/500 V AC, Pulse output | 000130 | A44 211 - 100 | 2CMA100013R1000 | | 0.350 | 1 |
| 3 x 57.7/100...288/500 V AC, Pulse output, RS-485 | 705349 | A44 212 - 100 | 2CMA170534R1000 | | 0.350 | 1 |
| 3 x 57.7/100...288/500 V AC, Pulse output, RS-485 | 705356 | A44 213 - 100 | 2CMA170535R1000 | | 0.350 | 1 |

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Bronze.

Active and reactive energy, import/export.

| | | | | | | |
|---|--------|------------------|-----------------|--|-------|---|
| 3 x 57.7/100...288/500 V AC, Pulse output | 705363 | A44 311 - 100 | 2CMA170536R1000 | | 0.350 | 1 |
|---|--------|------------------|-----------------|--|-------|---|

Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Silver.

Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

| | | | | | | |
|---|--------|------------------|-----------------|--|-------|---|
| 3 x 57.7/100...288/500 V AC, Pulse output, RS-485 | 705370 | A44 352 - 100 | 2CMA170537R1000 | | 0.350 | 1 |
| 3 x 57.7/100...288/500 V AC, Pulse output, M-Bus | 705387 | A44 353 - 100 | 2CMA170538R1000 | | 0.350 | 1 |

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver.

Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

| | | | | | | |
|--|--------|------------------|-----------------|--|-------|---|
| 3 x 57.7/100...288/500 V AC, 2 output, 2 input | 705400 | A44 452 - 100 | 2CMA170540R1000 | | 0.350 | 1 |
|--|--------|------------------|-----------------|--|-------|---|

Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Platinum.

Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand, advanced load profiles, harmonics and THD.

| | | | | | | |
|---|--------|------------------|-----------------|--|-------|---|
| 3 x 57.7/100...288/500 V AC, configurable 4 I/O channels, RS-485 | 705455 | A44 552 - 100 | 2CMA170545R1000 | | 0.350 | 1 |
| 3 x 57.7/100...288/500 V AC, configurable 4 I/O channels, M-Bus | 705462 | A44 553 - 100 | 2CMA170546R1000 | | 0.350 | 1 |
| 3 x 57.7/100...400/690 V AC, 1 input + 1 output, RS-485 | 705493 | A44 552 - 110 | 2CMA170549R1000 | | 0.350 | 1 |
| 3 x 57.7/100...400/690 V AC, 1 input + 1 output, M-Bus | 705486 | A44 553 - 110 | 2CMA170548R1000 | | 0.350 | 1 |

Ordering data

InSite pro M compact® System

System pro M compact® InSite is a solution in range of connected devices to support energy and asset management in electrical distribution.

The solution delivers highest data security standards as well as continuous upgrades thanks to regular firmware updates.

SCU100 is a control unit, that has been specifically developed to allow users to better manage energy and assets in sub distribution boards. It can gather data up to 16 energy meters and in addition to 96 current sensors.

Remotely monitoring of the system is made possible by a digital communication that supports different protocols: Modbus RTU, TCP. Its built-in web server offers intuitive access to the measured data, the configuration settings and the system parameters, providing one unique interface for both operations and commissioning process. The two interfaces – LAN (TCP/IP or Modbus TCP) and RS485 (Modbus RTU) – guarantee straightforward integration into any IT infrastructure.


To enable monitoring and control of the complete energy distribution system, the range is completed with a flexible choice of input and output modules, which can be easily connected to ABB's System pro M compact® accessories of MCBs and RCDs, as well as other DIN-Rail products with digital inputs or outputs.

Available functionalities are in range of simple monitoring of the installation to advanced analysis of historical data, customized alarms and implementation of automated actions to reduce energy consumption, identify potential risks and ensure operational continuity.




Accessories

The Sub-distribution Control Unit needs a flat cable to gather information from current sensors and digital I/O modules. The flat cable should be a 4-pin cable, flexible in length. Devices can be placed at customizable distances required by the specific application.

|  Sub distribution control unit | Technical feature | Unit | Description |
|---|--|--------------------|---|
| | Supply voltage | [VAC] | 80-277 (L1-N, +5%) |
| | Frequency | [Hz] | 50/60 |
| | Power input (L1-N) | [W] | 5...45 depending on number of sensors and I/O modules |
| | Power input , current trtransformer, secondary side | [VA] | Current circuit <2 (per phase) |
| | Voltage measurement range | [VAC] | 80-277 (L1, L2, L3-N) |
| | Measurement range, current transformer, secondary side | [A] | nominal: 5 max: 6 |
| | Hramonic component | [Hz] | up to 2000 |
| | Data rate of Modbus RTU | [Baud] | RS485 2- wire, 2400...115200 |
| | Refresh time | | 1sec / 30 sec (depending on type of data) |
| | Data storage and export | | Integrated 1-year data storage Automatic CSV data export |
| | Communication | | LAN: Modbus TCP/IP, SNMP v1, v2, encrypted v3 RS485: Modbus RTU |
| | Connected devices | | Up to 96 sensors/digital channels Up to 16 meters |
| | LAN | [Mbit/s] | 100 |
| | Conductor cross-section | [mm ²] | 0.5...2.5 |
| | Mounting method | | 35mm DIN rail (DIN 5022) |
| | Degree of protection | | IP20 |
| | Dimensions | [mm] | 161.5x87.0x64.9 (9WM) |
| | Opating temperature | [°C] | -25... +60 |
| | Stirage temperature | [°C] | -40... +85 |
| | Standards | | IEC61010-1 |

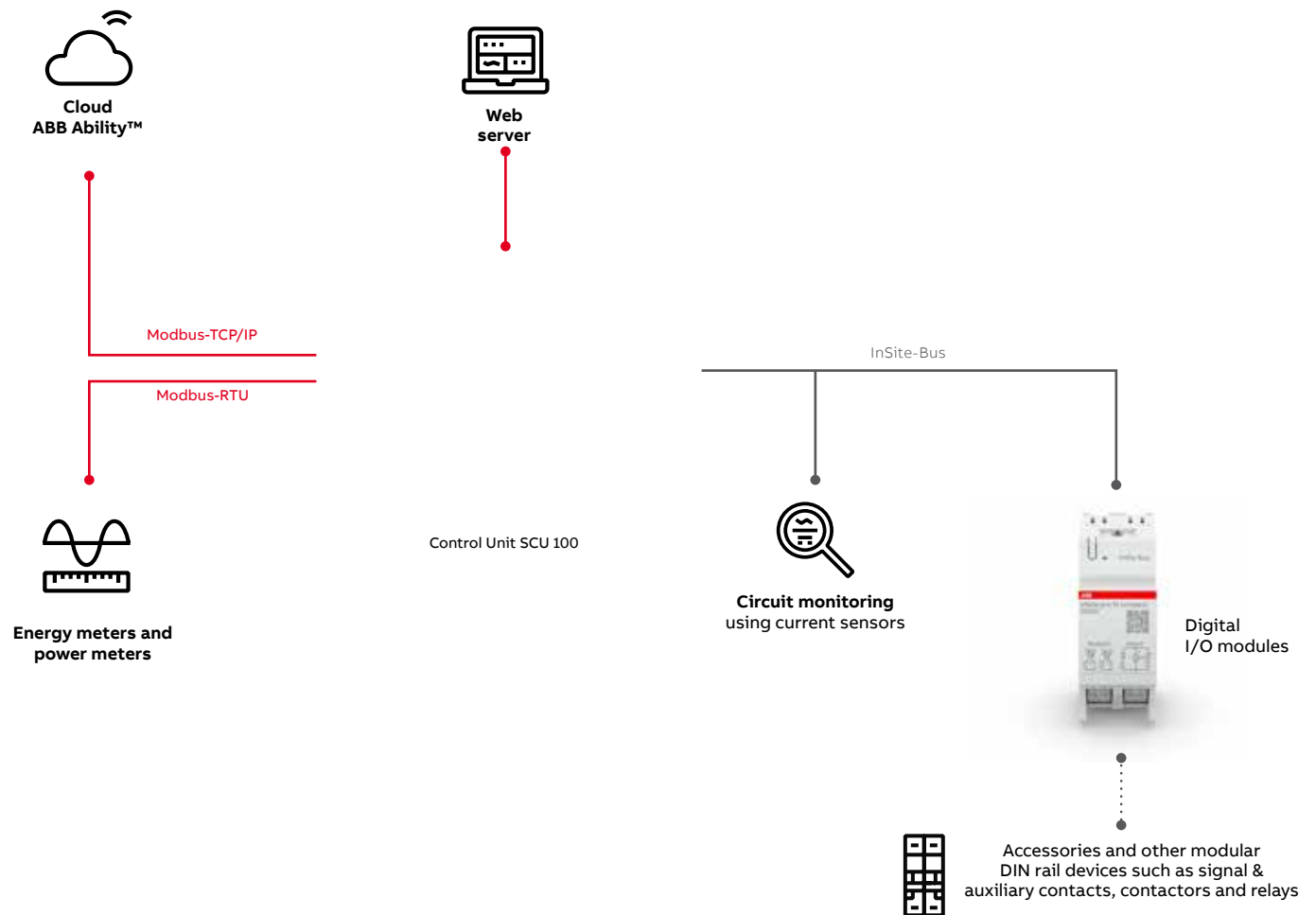
| Main circuit accuracy | Description |
|-----------------------------------|-------------|
| Voltage | ± 1% |
| Current | ± 1% |
| Harmonic component (up to 2500Hz) | ± 1% |
| Active power | ± 2% |
| Apparent power | ± 2% |
| Reactive power | ± 2% |
| Power factor | ± 2% |

| Input and Output modules | Technical feature | Unit | Input module DM11 | Output module DM00 | Input and Output module DM10 |
|---|----------------------------|--------------------|--|---|--|
|  | Number of digital channels | | 4 Input | 4 Output | 2 Input + 2 Output |
| | Voltage (min - max)* | | active input: 22-26 Vdc | relay output: 5Vdc-240Vac | active input: 22-26Vdc |
| | | | | | relay output: 5Vdc-240Vac |
| | Current (min - max)* | | active input: 4mA | relay output: 5mA-2.5A Max 4,5A (<5sec) | active input: 4mA |
| | | | | | relay output: mA-2.5A Max 4,5A (<5sec) |
| | Pulse minimum duration** | [ms] | 5 | n/a | 5 |
| | Pulse frequency** | [Hz] | 100 | n/a | 100 |
| | Terminals cross section | [mm ²] | 2,5 | 2,5 | 2,5 |
| | Mounting method | | 35 mm DIN rail (DIN 50022) or SMISSLINE TP plug base | | |
| | Degree of protection | | IP20 | IP20 | IP20 |
| | Dimensions | [mm] | 36x88x65 | 36x88x65 | 36x88x65 |
| | Operating temperature | [°C] | -25...+60 | -25...+60 | -25...+60 |
| | Storage temperature | [°C] | -40...+85 | -40...+85 | -40...+85 |
| | Standards | | IEC 61010 | IEC 61010 | IEC 61010 |

*relay output values reported are applicable to resistive load

**Applicable only to active inputs

Communication network



Ordering data

AG Timer electro-mechanical time switches

These analog timers are designed for installation on DIN-rail. They control circuit opening and closing according to the scheduled program. Available both on daily and weekly versions and equipped with a 16 A contact. They can be set on the scheduled program or on the permanent ON-OFF function. The AD1NO-R-15m, AD1CO-R-15m, AW1CO-R-120m, AD1CO-R-30m, AW1CO-R-210m versions are equipped with

a built-in battery, charged by the network voltage, which allows the devices to maintain the set time also in case of long (up to 150 h) power supply failures. The products fit applications such as control of lighting systems of shops or commercial buildings, heating and ventilation systems as well as control of automatic irrigation systems of private or external gardens.



AD1NO-R-15m
2CSM222461R1000



AD1CO-15m
2CSM222421R1000

| Technical features | | AD1NO-15m | AD1NO-R-15m | AD1CO-30m | AD1CO-R-30m | AW1CO-R-210m | AD1CO-15m | AD1CO-R-15m | AW1CO-R-120m |
|-----------------------------|-------|---------------------|-------------|-----------|-------------|--------------|-----------|-------------|--------------|
| Rated voltage | [V] | 230 AC | | | | | | | |
| Contact type | | 1NO | 1NO | 1NO/NC | | | | | |
| Resistive load | [A] | 16 | | | | | | | |
| Inductive load | [A] | 4 | | | | | | | |
| Rated frequency | [Hz] | 50/60 | | | | | | | |
| Setting step (tappet) | [min] | 15 | 15 | 30 | 30 | 210 | 15 | 15 | 120 |
| Number of tappets | | 96 | 96 | 48 | 48 | 48 | 96 | 96 | 84 |
| Running reserve | [h] | - | 100 | - | 150 | 150 | - | 150 | 150 |
| Power consumption | [W] | 0.5 | | | | | | | |
| Max. switching power | [VA] | 4000 | | | | | | | |
| Incandescent | [W] | 2500 | 2500 | 3000 | | | | | |
| Fluorescent | [VA] | 1200 | 1200 | 1200 | | | | | |
| Low voltage halogen | [VA] | 2000 | 2000 | 2000 | | | | | |
| Halogen (230 V ~) | [W] | 2500 | 2500 | 3000 | | | | | |
| Low consumption lamp (CFL) | [VA] | 900 | 900 | 900 | | | | | |
| LED | [VA] | 100 | 100 | 200 | | | | | |
| Protection degree | | IP20 | | | | | | | |
| Max. terminal cross-section | [mm²] | 4 | | | | | | | |
| Tightening torque | [Nm] | 0.3 | 0.3 | 0.5 | | | | | |
| Terminals | | with captive screws | | | | | | | |
| Installation type | | on DIN rail | | | | | | | |
| Operating temperature | [°C] | -10...+45 | -10...+45 | -10...+50 | | | | | |
| Storage temperature | [°C] | -20...+60 | -20...+60 | -20...+70 | | | | | |
| Modules | [n°] | 1 | 1 | 2 | 2 | 2 | 2.5 | 2.5 | 2.5 |
| Reference standards | | EN 60730-2-7 | | | | | | | |

| Contacts | Version | Bbn 8012542 | Order details | | Price 1 | Weight 1 piece | Pack unit |
|----------|-------------------------------------|----------------|---------------|-----------------|------------|-------------------|--------------|
| | | EAN | Type code | Order code | piece | kg | pc. |
| 1NO | Daily time switch without reserve | 224716 | AD1NO-15m | 2CSM222471R1000 | | 0.072 | 1 |
| 1NO | Daily time switch, running reserve | 224617 | AD1NO-R-15m | 2CSM222461R1000 | | 0.075 | 1 |
| 1NO/1NC | Daily time switch without reserve | 224518 | AD1CO-30m | 2CSM222451R1000 | | 0.105 | 1 |
| 1NO/1NC | Daily time switch, running reserve | 224419 | AD1CO-R-30m | 2CSM222441R1000 | | 0.109 | 1 |
| 1NO/1NC | Weekly time switch, running reserve | 224310 | AW1CO-R-210m | 2CSM222431R1000 | | 0.109 | 1 |
| 1NO/1NC | Daily time switch without reserve | 224211 | AD1CO-15m | 2CSM222421R1000 | | 0.112 | 1 |
| 1NO/1NC | Daily time switch, running reserve | 081517 | AD1CO-R-15m | 2CSM208151R1000 | | 0.116 | 1 |
| 1NO/1NC | Weekly time switch, running reserve | 081418 | AW1CO-R-120m | 2CSM208141R1000 | | 0.116 | 1 |

Ordering data

DBT Timer digital time switches

The unique design, with white back-light LCD display, and extreme ease of use with only four buttons, make DBT Timer ideal to automate the installation functions. The possibility to configure all digital devices via DBT Timer APP and Bluetooth connection makes the configuration and installation time even shorter. Add this paragraph as well in case you have enough space, otherwise skip the follow part: All functions and programs can be set on the device, and for the first time the device can also be programmed via app. This not only facilitates commissioning, but also

ensures maximum flexibility. The range includes 1 and 2 channel versions, equipped with large capacity internal battery to maintain operation without power supply and permanent memory EEPROM, to avoid the risk of program loss and to maintain the date and time settings in the event of power failure, irrespective of its duration. The D Line is particularly useful in environments and situations where user management is required with a time schedule flexible enough to predict or exclude activities according to time and day of week or month.



DBT Timer

| Technical features DBT Timer | | DY365 | DW1 | DW2 | DWA1 | DWA2 | DWTL1 |
|------------------------------|--------------------|--|--------|--------|--------|--------|--------|
| Power supply | [V] | 230 AC (-15 % ..+10 %) | | | | | |
| Rated pulsating voltage | [kV] | 4 | | | | | |
| Contact type | | 2NO/NC | 1NO/NC | 2NO/NC | 1NO/NC | 2NO/NC | 1NO/NC |
| Channel extension | | YES | NO | NO | NO | NO | NO |
| DY DCF77 antenna | | YES | NO | NO | NO | NO | NO |
| DY GPS antenna | | YES | NO | NO | NO | NO | NO |
| Resistive load | [A] | 16 | | | | | |
| Inductive load | [A] | 10 | | | | | |
| Rated frequency | [Hz] | 50/60 | | | | | |
| Minimum switching | | 1 min (1 s pulse program) | | | | | |
| Max number of events | | 900 | 120 | 120 | 120 | 120 | 120 |
| Number of cahnnels | | 2 | 1 | 2 | 1 | 2 | 1 |
| Operating accuracy | [sec/ 24h] | ± 0,5 | | | | | |
| Power consumption | [W] | 2.6 | 2 | 2 | 2 | 2 | 2 |
| Max. switching power | [VA] | 4000 | | | | | |
| Switching capacity | | | | | | | |
| Incandescent | [W] | 2000 | | | | | |
| Fluorescent | [VA] | 600 | | | | | |
| Low voltage halogen | [W] | 2000 | | | | | |
| Halogen | [W] | 2000 | | | | | |
| Low consumption lamp | [VA] | 600 | | | | | |
| LED | [W] | 500 | | | | | |
| Protection degree | [IP] | 20 | | | | | |
| Max terminal cross-section | [mm ²] | 2.5 | | | | | |
| Tightening torque | [Nm] | 0.5 | | | | | |
| Installation type | | DIN rail | | | | | |
| operating temperature | [°C] | -20...+50 | | | | | |
| Storage temperature | [°C] | -25...+70 | | | | | |
| Modules | [n°] | 4 | 2 | 2 | 2 | 2 | 2 |
| Reference standards | | EN 60730-1; EN 60730-2-7; ETSI EN 301 489-1; ETSI EN 301 489-17; ETSI EN 300 328 | | | | | |

| Version | Bbn 8012542 | Order details | | Price 1 | Weight 1 piece | Pack unit |
|---|----------------|---------------|-----------------|------------|-------------------|--------------|
| | | EAN | Type code | Order code | piece | kg |
| Yearly time switch, 2 channels | 212010 | DY365 | 2CSM221201R1000 | | 0.250 | 1 |
| Weekly time switch, 1 channel | 225317 | DW1 | 2CSM222531R1000 | | 0.129 | 1 |
| Weekly time switch, 2 channels | 225218 | DW2 | 2CSM222521R1000 | | 0.152 | 1 |
| Weekly astronomical time switch, 1 channel | 225119 | DWA1 | 2CSM222511R1000 | | 0.129 | 1 |
| Weekly astronomical time switch, 2 channels | 225010 | DWA2 | 2CSM222501R1000 | | 0.152 | 1 |
| Weekly twilight time switch, 1 channel | 224914 | DWTL1 | 2CSM222491R1000 | | 0.160 | 1 |

Ordering data

E 232 staircase lighting time-delay switches

Staircase lighting time-delay switches are usually operated by pushbuttons, often fitted with a glow lamp. Switches are designed for a glow lamp current of up to 150 mA and thus perfectly suitable for installations in multi-storey buildings.

The E 232-230 staircase lighting time-delay switch includes an electro-mechanical timer with a synchronous motor drive to ensure high operational safety in whatever mounting position. The time range is adjustable in increments of 15 seconds from 1 to seven minutes. Resettable after 30 seconds.

E 232E-230N and E 232E-8/230N devices feature electronic time delays. A high switching capacity, 150 mA glow lamp current parallel to the pushbuttons, steplessly adjustable time range from 0.5 to 20 min, as well as low switching noise make these devices so special.

Devices of the E 232E-230 Multi 10 and E 232E-8/230 Multi 10 series are multi-functional products with 10 functions to choose from that can be adjusted from the front.

Through an electronically controlled connection of the load at voltage zero, a very high switching capacity of 3,600 W (load of filament lamp) is reached.

The devices include an integrated warning feature (warning by blinking) according to DIN 18015-2 as well as a 60 minute long-time function.

The E 232E-8/230N and E 232E-8/230 Multi 10 staircase lighting time-delay switches offer an additional metallically separated control input for 8 ... 240 V AC/DC.

E232-230
2CSC400030F0149



E232E-8/230N
2CSC400030F0150



| Time range | Power loss | N° module | Bbn 4016779 | Order details | | | Weight 1 piece | Pack unit |
|------------|------------|-----------|-------------|-----------------------|-----------------|-------|----------------|-----------|
| | W | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| 1...7 min. | 1 V A | 1 | 548243 | E232 230 | 2CDE110000R0501 | | 0.081 | 10 |
| 20 min | 6 V A | 1 | 654166 | E232 E-230N | 2CDE110003R0511 | | 0.095 | 10 |
| 20 min | 6 V A | 1 | 654173 | E232 E-8/230N | 2CDE010003R0511 | | 0.100 | 10 |
| 20 min | 6 V A | 1 | 654180 | E232 E-230 Multi 10 | 2CDE110013R0511 | | 0.100 | 10 |
| 20 min | 6 V A | 1 | 654197 | E232 E-8/230 Multi 10 | 2CDE010013R0511 | | 0.095 | 10 |

| | E 232-230 | E 232E-230N | E 232E-8/230N | E 232E-230 Multi 10 | E 232E-8/230 Multi 10 |
|--|--|-------------|--|--|---------------------------------------|
| Technical details | | | | | |
| Time range (stepless) | 1 – 7 min. in 15 sec. increments | | | | 0.5 – 20 min. stepless |
| Control voltage 230 V AC | ■ | ■ | ■ | ■ | ■ |
| Universal voltage in addition | - | - | 8 ... 240 V AC/DC | - | 8 ... 240 V AC/DC |
| Glow lamp load | 50 mA | | | | 150 mA |
| 3/4 conductor operated | switches | | | | automatically |
| Resettable | ■ | ■ | ■ | ■ | ■ |
| Steady-light switch | ■ | ■ | ■ | ■ | ■ |
| Advance warning acc. DIN 18015-2 | | | | ■ | ■ |
| Long-time range of 60 min. | | | | ■ | ■ |
| Multi-functional device (10 functions) | | | | ■ | ■ |
| Rated voltage | 230 V AC | | | | 230 ... 240 V AC |
| Control voltage range | 50Hz | | | | 50 / 60 Hz |
| Power loss | 0.9 ... 1.1 Un | | | | 0.85 ... 1.1 Un |
| Rated switching capacity | 1 VA | | | | 6 VA |
| Filament lamp load | | | 2,300 W | | 3,600 W |
| Halogen lamp load | | | 2,300 W | | 3,600 W |
| Fluorescent lamps series compensated / uncorrected | | | 2,300 VA | | 3,600 VA ⁽¹⁾ |
| Fluorescent lamps inductive or capacitive | | | 2,300 VA | | 3,600 VA ⁽¹⁾ |
| Fluorescent lamps shunt compensated | 1,300 VA (70 μ F) | | 400 VA (42 μ F) | | 1,200 VA (120 μ F) ⁽¹⁾ |
| Electronic controlgear | 9x7 W, 6x11 W | | 9x7 W, 7x11 W | | 34x7 W, 27x11 W |
| Inductive load (cos ϕ = 0.6/230 V AC) | 5x15 W, 5x20 W | | 7x20 W, 7x23 W | | 24x15 W, 22x23 W |
| Contact material | | | | | AgSnO2 |
| Contact gap | ≥ 3 mm | | | | < 3 mm |
| Mech. serviceable life | > 10 ⁴ | | | | > 10 ⁴ |
| Serviceable life at rated load, cos ϕ =1 | > 10 ⁴ | | | | > 2x10 ⁴ |
| Serviceable life at rated load, cos ϕ =0.6 | > 10 ⁴ | | | | > 4x10 ⁴ |
| Terminal capacity | 10.7 mm ² | | | | 13 mm ² |
| Max. conductor capacity | 6 mm ² | | | | 4 mm ² |
| ON duration | Resettable after 30 sec. | | | | 100 % |
| Ambient temperature | -10°C to +50°C | | | | -25°C to +50°C |
| Housing and insulation material | | | heat resistant, self-extinguishing thermoplast | | |
| Control current at 230 V AC | 4.5 mA | | 26 mA | 26 mA (min. 8 mA at 8 V AC) | |
| Minimum command duration | 10 ms | | 20 ms | 20 ms / 50 ms for multi voltage input | |

⁽¹⁾ no disconnection advance warning possible for this application.

Control and automation

T Line twilight switches



TL1

T Line modular twilight switches

TL1 twilight switch allows to switch ON and switch OFF lighting devices according to a scheduled level of the ambient light. It is used in combination with an external sensor to detect if the ambient light is higher or lower than the set level . A switching delay prevents them from operating unnecessarily when the light intensity suddenly changes (e.g. lightning, moving vehicles, etc.). The TL1 twilight switch 1 channel is preset with a 10 LUX from factory and it is equipped with 2 signalling LEDs that indicate the setpoint value and display the status of the contact . The operating instructions are printed on the side of the product.

| Brightness range | Bbn 8012542 | Order details | Price 1 | Weight 1 piece | Pack unit |
|------------------|----------------|---------------|-----------------|-------------------|-----------|
| Ix | EAN | Type code | Order code | Piece | kg |
| 2 : 200 | 299219 | TL1 | 2CSM229921R1341 | 0.155 | 1 |



TLs

Accessories for T Line modular twilight switches

The external sensor TLs is supplied in the same package of the switch, TL1, but it's also available separately as spare part. The upper part of the external case (with screw locking), made up of thermoplastic material, bears up against ultraviolet rays to guarantee an homogeneous diffusion of the daylight internally. The sensor is also equipped with a cable gland.

| | Bbn 8012542 | Order details | Price 1 | Weight 1 piece | Pack unit |
|-----------------|----------------|---------------|-----------------|-------------------|-----------|
| | EAN | Type code | Order code | Piece | kg |
| External sensor | 299318 | TLs | 2CSM229931R1341 | 0.008 | 1 |

Control and automation

TL Line twilight switch



TL1 Pole

| Technical features | | |
|--|-------|--|
| | | TL1 POLE |
| Rated supply voltage | [V] | 110 ÷ 230 AC |
| Contact type | | 1NO polarized |
| Incandescent lamps cosφ 1 | [W] | 1000 |
| Fluorescent lamps cosφ 0.8 | [W] | 300 |
| Fluorescent- duo/electronic lamps | [W] | 300 |
| LED lamps | [W] | 100 |
| Rated frequency | [Hz] | 50/60 |
| Switching delay ON | [s] | 25+/-10% |
| Switching delay OFF | [s] | 35+/-10% |
| Brightness range (with tolerance of +/-20%) | [lx] | 2...200 |
| Protection degree twilight switch | | IP54 |
| Protection degree sensor | | IP54 |
| Operating temperature twilight switch | [°C] | -40...+70 |
| Operating temperature sensor | [°C] | -40...+70 |
| Storage temperature twilight switch | [°C] | -50...+80 |
| Storage temperature sensor | [°C] | -50...+80 |
| Power consumption | [W] | 0.25 W cosφ 0.35 (idle) 0.8 W cosφ 0.4 (active) |
| Max terminal cross section | [mm²] | 6 |
| Terminals | | loss-proof screw |
| Screw Type | | PZ1 |
| Tightening torque: terminals | [Nm] | 1.2 |
| screw sensor | [Nm] | 1.2 |
| Mounting | | Pole/wall mounted |
| Switching status indication/ brightness range | | red/green LEDs |
| Max wiring length | | 100 |
| Modules | | |
| Reference standards | | EN 60669-1 EN 60662-2-1 EN60730-1 |

TL1 Pole mounting twilight switch

The TL1 Pole version is designed for installation on the pole/wall, with photocell inputs and integrated cabling including cable gland seals to ensure a high protection degree. Thanks also to the high quality, TL1 Pole provides excellent resistance to atmospheric agents and a long service life. TL1 Pole is also internally equipped with a preset sensor of 10 LUX. The sensor is extractable from the base and allows an easy and efficient maintenance without needing further wiring. TL1 Pole is the ideal solution to manage the external light systems such as the public ones, more precisely, in cases where there is a need of controlling the lighting of public or private roads, gardens, courtyards at the decline of solar radiation during twilight.

| Brightness range | Bbn 8012542 | Order details | | Price 1 | Weight 1 piece | Pack unit |
|------------------|----------------|---------------|-----------------|------------|-------------------|--------------|
| lx | EAN | Type code | Order code | piece | kg | pc. |
| 2:200 | 299110 | TL1 Pole | 2CSM229911R1341 | | 0.135 | 1 |

Ordering data

DWA twilight astronomical switches

The astronomical switch DWA1 with 1 automatically control lighting circuits depending on the time of sunrise and sunset, greatly increasing energy efficiency. The programming is in fact based on a mathematical algorithm able to calculate the time of the rising and setting of the sun in a certain location for each day of the year. Once powered the device, simply insert date, time, geographical coordinates and time zone so that it is ready to work. These settings can also be

automatically defined using the DBT Timer APP.

The installation of astronomical digital time switches is particularly useful when using a twilight switch with external sensor is not recommended because it may be subject to malfunctions caused by air pollution, excessive brightness or vandalism. DWA1 is also indicated for the control of public lighting, shop windows of shops, neon signs, monuments, facades, illuminated fountains, ...

DWA-1
2CSC400030F0155



| Contacts | N° module | Bbn 8012542 | Type code | Order details | | Weight 1 piece kg | Pack unit |
|----------|-----------|----------------|-----------|-----------------|-------|-------------------------|--------------|
| | | | | Order code | Price | | |
| 1 CO | 2 | 043652 | DWA-1 | 2CSM204365R1341 | | 0.160 | 1 |

| DWA-1 | | | |
|--------------------------------|--------------------------------------|--------------------------|-----------|
| Technical details | | | |
| Rated supply voltage | [V] | 230 AC ± 15% | |
| Contact type | | 1NO/NC | |
| Switching capacity | resistive load | [A] | 16 |
| | inductive load cosϕ 0.6 | [A] | 10 |
| | incandescent and halogen fluorescent | [W] | 2300 |
| | compensated (max. 45 °F) | [W] | 400 |
| | non-compensated, series compensated | [W] | 1000 |
| Max. number of lamps | compact fluorescent | [W] | 500 |
| Rated frequency | [Hz] | 50/60 | |
| Time base | | quartz | |
| Minimum time between two steps | [min] | 1 | |
| Program steps | | 56 | |
| Power reserve | [years] | 5 | |
| Accuracy | | ± 1.5 sec / 24h | |
| Astronomical time accuracy | [min] | ± 10 | |
| Power consumption | [VA] | 6 | |
| Terminal size for cable | flexible | [mm²] | 1 to 6 |
| | rigid | [mm²] | 1.5 to 10 |
| Terminals | | loss-proof screw | |
| Mounting | | on DIN rail | |
| Operating temperature | [°C] | -10 ... +55 | |
| Storage temperature | [°C] | -20 ... +60 | |
| Protection degree | | IP20 | |
| Modules | | 2 | |
| Reference standards | | EN 60730-1; EN 60730-2-7 | |

Ordering data

E 233 electro-mechanical hour counters

Hour counters are used to record operating times as well as to determine idle times and off times of electrical loads in

domestic installations. No reset functionality.

E233-230
2CSC400030F0156



| Rated voltage | N° module | Bbn | Order details | | | Weight | Pack |
|----------------|-----------|--------|---------------|-----------------|-------|---------|------|
| | [17.5 mm] | EAN | Type code | Order code | Price | 1 piece | unit |
| | | | | | | kg | |
| AC 230 V/50 Hz | 1 | 630004 | E233-230 | 2CDE100000R1601 | | 0.050 | 10 |

| Technical details | AC equipment | DC equipment |
|-----------------------------------|--|--|
| | | |
| Rated voltage | 50 Hz: 24 V, 230 V 60 Hz: 24 V, 120 V, 240 V ⁽¹⁾ | DC 12 V ... 48 V |
| Voltage tolerance | ±15 % | ±10 % |
| Power consumption | 1.5 VA | ca. 20 mW (at 12 V DC) |
| Ambient temperature | -15°C/5°F ... +50°C/122°F | -10°C/14°F ... +50°C/122°F |
| Counting capacity | 99.999 h | 99.999 h |
| Precision class | 0.01 h | 0.1 h |
| Operation display | fast running | LED blinking |
| Protection against electric shock | according to DIN VDE 0106 Part 100 (BGV A2) | according to DIN VDE 0106 Part 100 (BGV A2) |
| Terminal size | up to 10 mm ² | up to 10 mm ² |

⁽¹⁾ UL approval

Ordering data

VLMD, AMTD digital instruments with alarm relay

The range comprises one voltmeter and one ammeter that display and monitor a value, tripping a relay contact and signalling the alarm condition if it over- or undershoots a programmable threshold. The alarm threshold as either a minimum or a maximum limit, the peak maximum and minimum values measured are stored in the non volatile instrument memory.

The contact type is NO, so that the contact is open when the instrument is powered off, but it is possible to obtain positive safety operation via a software setting which determines whether the alarm condition is with an open or closed contact. The instrument with relay can be used as either a minimum or maximum relay, but not for both functions simultaneously.

VLMD-1-2
2CSC400030F0157



AMTD-1
2CSC400030F0158

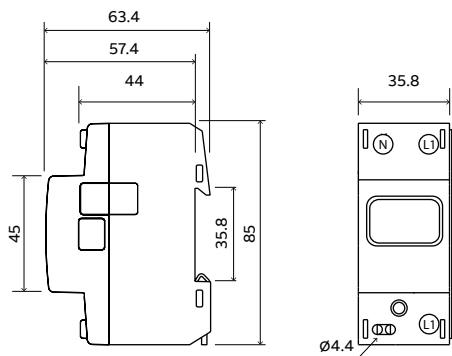


| Version | N° module | Bbn 8012542 | Order details | | | Weight 1 piece | Pack unit |
|--|-----------|----------------|---------------|-----------------|-------|-------------------|--------------|
| | [17.5 mm] | EAN | Type code | Order code | Price | kg | |
| AC/DC digital voltmeter with alarm relay | 3 | 746935 | VLMD-1-2-R | 2CSM274693R1011 | | 0.300 | 1 |
| AC digital ammeter with alarm relay | 3 | 747734 | AMTD-1-R | 2CSM274773R1011 | | 0.300 | 1 |

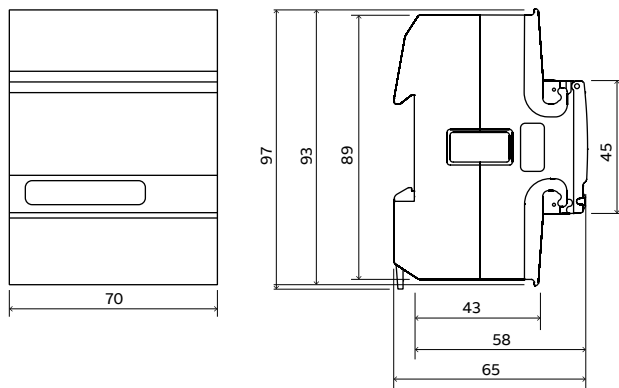
| VLMD, AMTD | | |
|--|---------|---|
| Technical details | | |
| Power supply | [V] | 230 V AC |
| Rated frequency | [Hz] | 50÷60 |
| Ammeter full scale value | [A] | 5, 20, 25, 40, 60, 100, 150, 200, 250, 400, 600 |
| Voltmeter full scale value | [V] | 300, 500 |
| Frequency meter range | [Hz] | 35 ... 400 |
| Tripping delay | [s] | 1, 5, 10, 20, 30 |
| Hysteresis | [%] | 5, 10, 20, 30 set threshold |
| Output pins | | 3-4 |
| Output relay | | NO |
| Rated voltage relay | [V] | 230 V AC |
| Rated current relay | [A] | AC1 16, AC15 3 |
| | | NO relay closes in alarm status |
| Relay configuration | | NC relay opens in alarm status, positive safety |
| Overload | [In/Vn] | 1, 2 |
| Accuracy class | [%] | ±0.5 full scale ±1 digit at 25°C |
| Max. signal input value for ammeters | | 5 A AC |
| Display | | 3 digit LED display |
| Operating temperature | [°C] | -10 ... +55 |
| Storage temperature | [°C] | -40 ... +70 |
| Protection degree | | IP20 |
| Power consumption | [VA] | 4 |
| Modules | | 3 |
| Overall dimensions front panel devices | [mm] | 36×72×61.5 (51.5 depth inside the switchboard) |

Overall dimensions

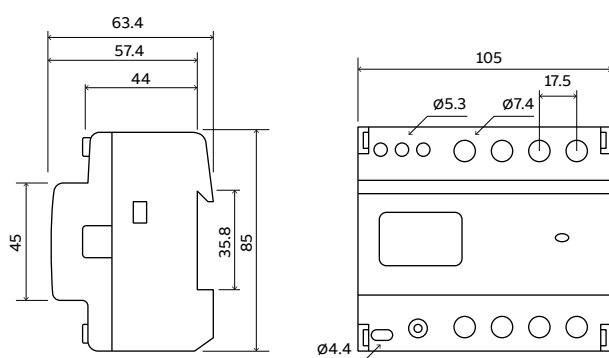
ODINsingle



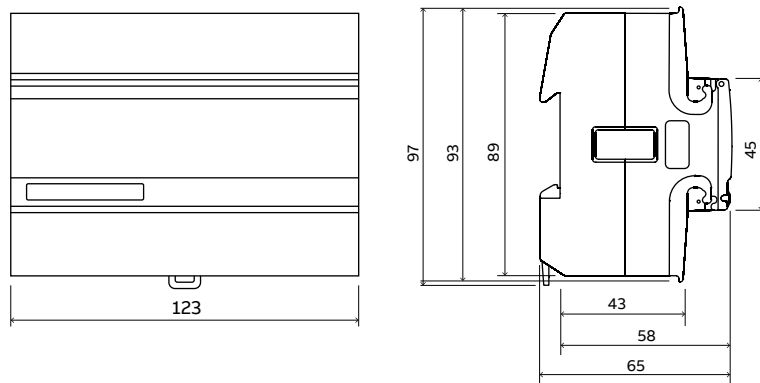
EQ meters A41



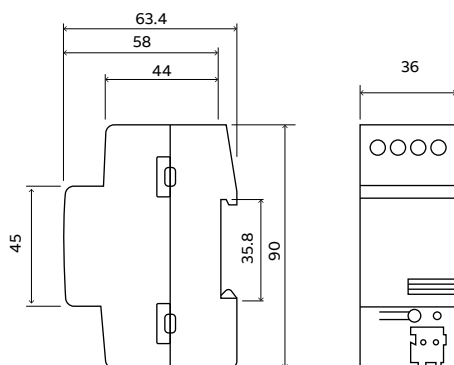
ODIN



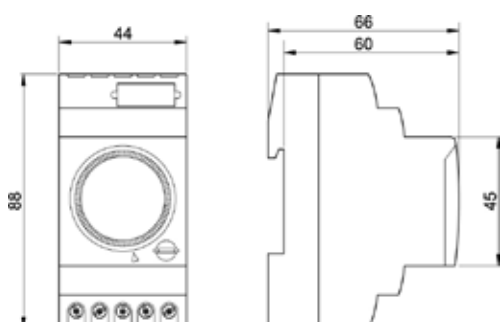
EQ meters A43



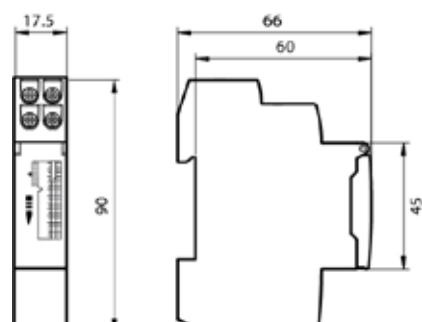
Communication adapters

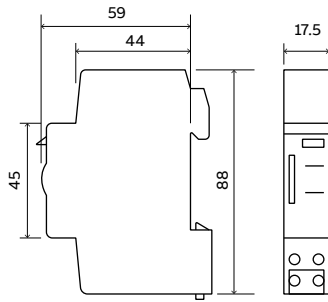
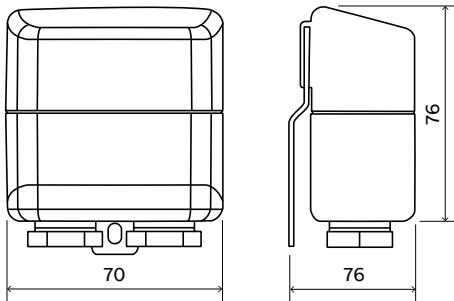
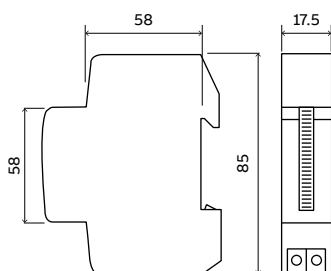
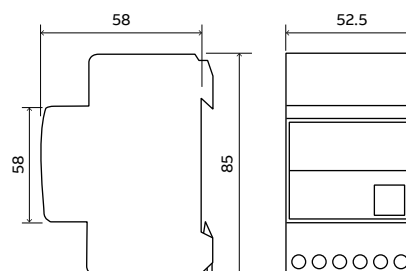


AD1NO-R-15m



AD1CO-R-15m



E 232**TLs****E 233****VLMD, AMTD**



Electrical installation solutions for buildings

Consumer units

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| | |
|----------------|--|
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MISTRAL41F

Endless installation possibilities

Reliable technology combined with a modern decorative look in a compact, elegant design.

Door opens up to 180° allowing full access to the interior of the unit.

In the flush-mounted version the depth of the base box ensures a perfect balance between internal space and the possibility of installation in thin walls.



The symmetrical design allows opening of the reversible door either from the left or from the right.

Door available in two versions: petrol blue and opaque.

Endless installation possibilities

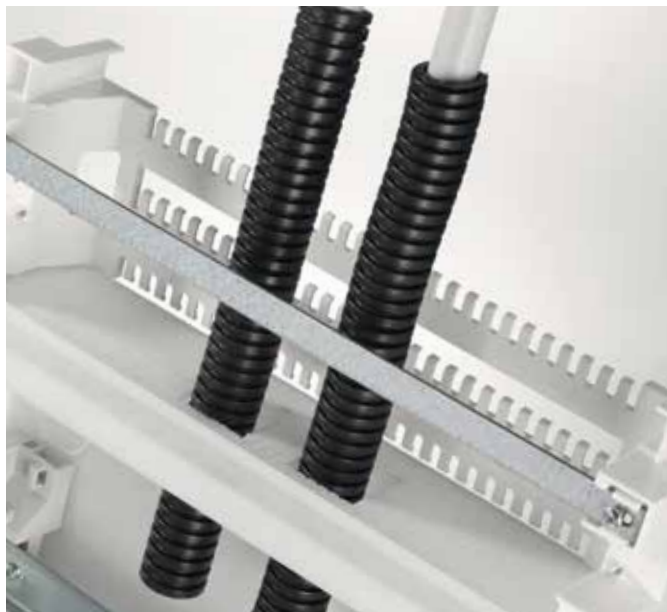
Horizontal coupling

The consumer units can be coupled side by side with the horizontal junction unit accessory, protecting the passage of cables between adjacent units.



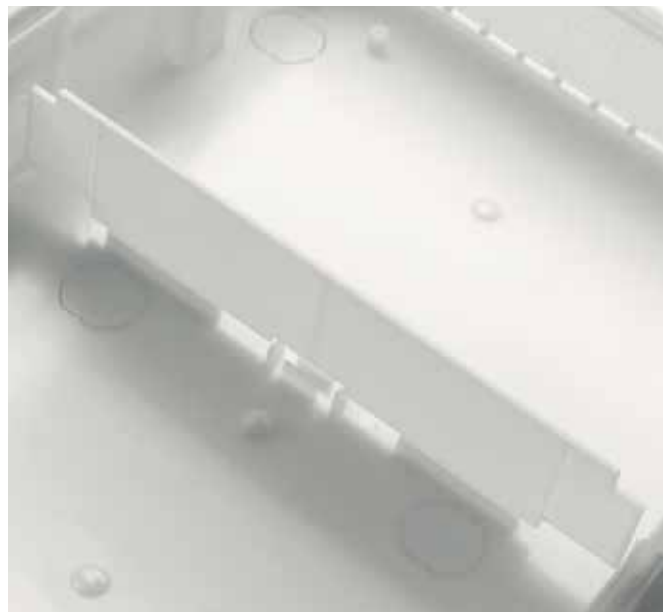
Mortar guard

All versions include a mortar guard that prevents mortar sprays inside the consumer unit.



Dual-function accessory

A single accessory performs a dual function. It can be used to fix pipes to the unit's housing or to vertically couple two consumer units.



Internal partition

The horizontal partition allows the interior of the unit to be divided into two parts.

Endless installation possibilities

Flanges

The flange with multi pre-cuts is designed to be sheared only where necessary in order to ensure a more secure fastening. The removable flange with knockout holes ensure a reliable and safe placing of flexible pipes and other conduits, especially in plasterboard installation.



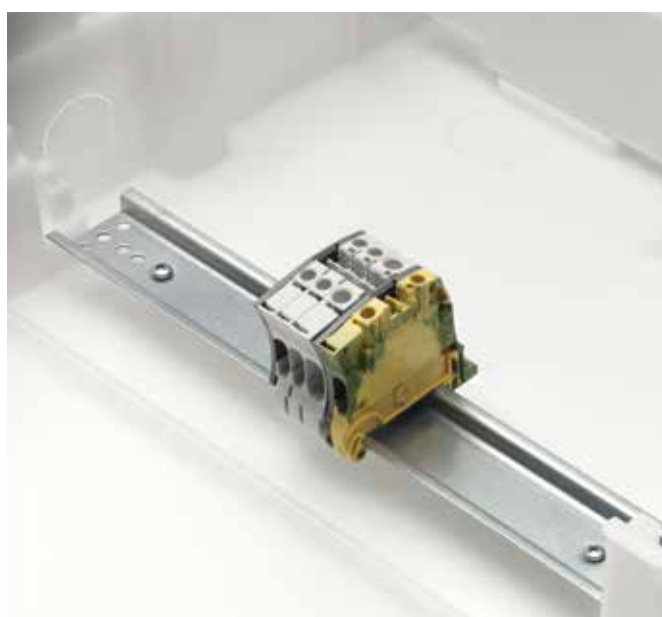
Two DIN rail positions

The extraxtable frame offers two DIN rail positions so devices of different depths, like S200 or S800 miniature circuit breakers, can be installed in perfect alignment.



Captive screw covers

Screw covers are hooked to the front panel so they can be removed without the risk of losing them.

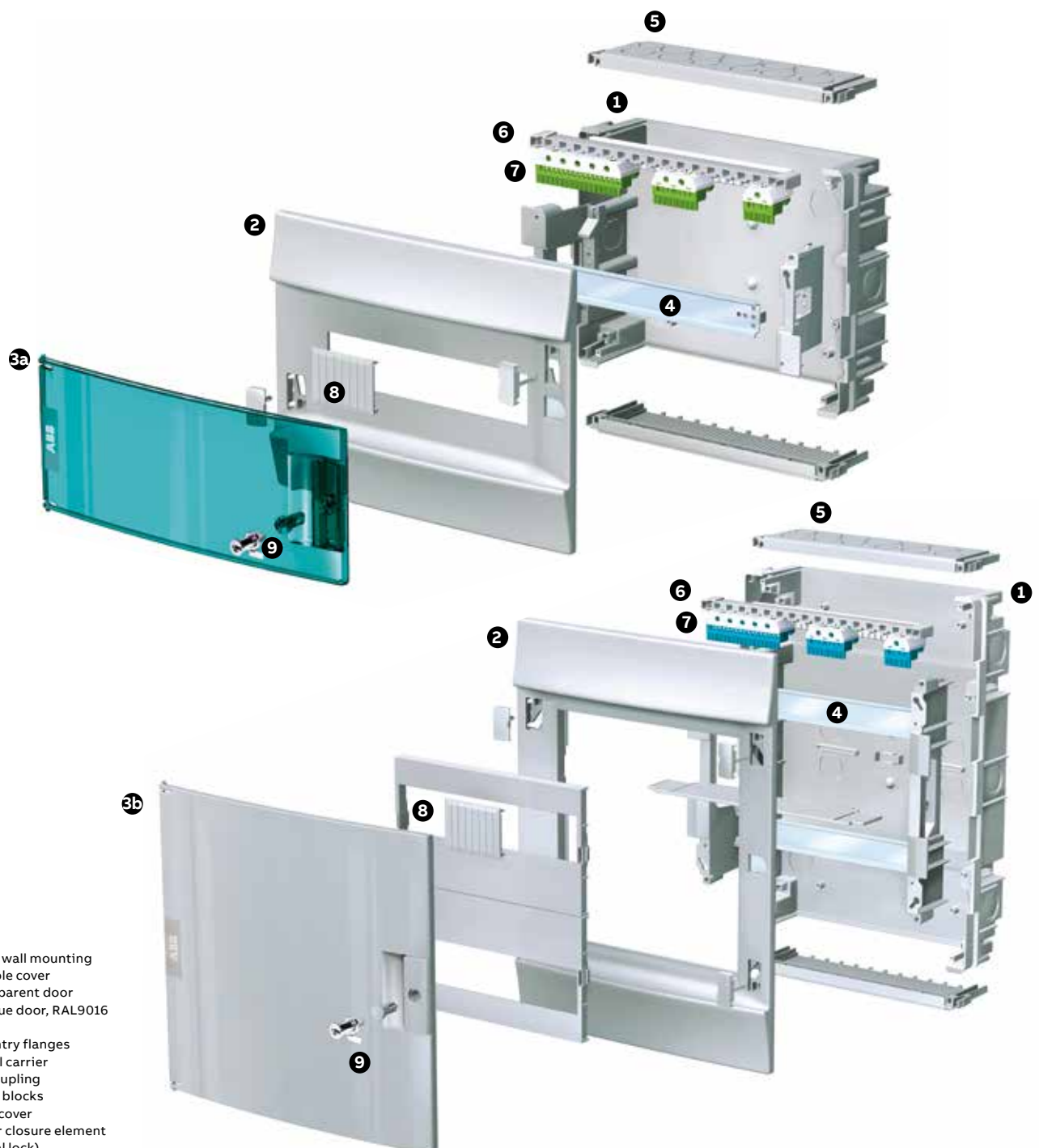


DIN rail terminals

It is possible to install an extra DIN rail at the bottom of the consumer unit.

A versatile range suitable for every application

The simple construction of the MISTRAL41F series makes the units fast and easy to assemble. What is more, the flexible design allows easy adaptation to various application requirements.



A versatile range suitable for every application

Horizontal levelling

The external adjustments of the front cover assure a perfect horizontal levelling even if the consumer unit is slightly crooked.



New generations terminals

The MISTRAL41 range of consumer units is supplied with a wide, completely new ABB terminal block range. Three different versions offer screw and spring fast coupling for easy and effective cabling up to 63A or 100A.



Hollow wall mounting

For the hollow wall mounting our consumer units provide a special enclosure and hollow mounting screws.



A smarter space for your installation ideas

MISTRAL41F

When it comes to flexibility, usability and design our Mistral41 consumer units can convince installers as well as end users in almost any kind of electrical distribution system in industrial, commercial or residential environments. A variety of innovative details make the MISTRAL41 series the perfect solution to realize all your installation ideas efficiently – now or in the future. Choose from a brick wall or hollow wall version to meet your individual needs. Learn more at abb.com/lowvoltage



Consumer units

MISTRAL41F – Order codes | Flush-mounted – Brick wall



4 modules



6 modules



8 modules



12 modules



18 modules



24 modules



36 modules

MISTRAL41F – Order codes 650

| Description | N° of modules | | Dimensions | | Order code | Type number | Packaging |
|---|---------------|-----|-----------------|-----------------|------------|-------------|-----------|
| | [18 mm] | GWT | W x H x D | [mm] | | | |
| Consumer units MISTRAL41 flush 650 - 1 Row | | | | | | | |
| Opaque door 4M | 4 | 650 | 152 x 202 x 105 | 1SLM004100A1100 | 41A04X11 | 1/24 | |
| Transparent door 4M | 4 | 650 | 152 x 202 x 105 | 1SLM004100A1200 | 41A04X12 | 1/24 | |
| Front transparent door 4M | 4 | 650 | 152 x 202 x 25 | 1SLM004100A1600 | 41F04X12 | 1/24 | |
| Flush-mounting box 4M | 4 | 650 | 129 x 182 x 80 | 1SLM004100A1700 | 41S04X1 | 1/24 | |
| | | | | | | | |
| Opaque door 6M | 6 | 650 | 192 x 202 x 105 | 1SLM004100A1101 | 41A06X11 | 1/18 | |
| Transparent door 6M | 6 | 650 | 192 x 202 x 105 | 1SLM004100A1201 | 41A06X12 | 1/18 | |
| Front transparent door 6M | 6 | 650 | 192 x 202 x 25 | 1SLM004100A1601 | 41F06X12 | 1/18 | |
| Flush-mounting box 6M | 6 | 650 | 149 x 182 x 80 | 1SLM004100A1701 | 41S06X1 | 1/18 | |
| | | | | | | | |
| Opaque door 8M | 8 | 650 | 232 x 250 x 108 | 1SLM004100A1102 | 41A08X11 | 1/12 | |
| Transparent door 8M | 8 | 650 | 232 x 250 x 108 | 1SLM004100A1202 | 41A08X12 | 1/12 | |
| Front opaque door 8M | 8 | 650 | 232 x 250 x 28 | 1SLM004100A1502 | 41F08x11 | 1/12 | |
| Front transparent door 8M | 8 | 650 | 232 x 250 x 28 | 1SLM004100A1602 | 41F08X12 | 1/12 | |
| Flush-mounting box 8M | 8 | 650 | 206 x 230 x 80 | 1SLM004100A1702 | 41S08X1 | 1/12 | |
| | | | | | | | |
| Opaque door 12M | 12 | 650 | 320 x 250 x 108 | 1SLM004100A1103 | 41A12X11 | 1/9 | |
| Transparent door 12M | 12 | 650 | 320 x 250 x 108 | 1SLM004100A1203 | 41A12X12 | 1/9 | |
| Front opaque door 12M | 12 | 650 | 320 x 250 x 28 | 1SLM004100A1503 | 41F12x11 | 1/9 | |
| Front transparent door 12M | 12 | 650 | 320 x 250 x 28 | 1SLM004100A1603 | 41F12X12 | 1/9 | |
| Flush-mounting box 12M | 12 | 650 | 294 x 230 x 80 | 1SLM004100A1703 | 41S12X1 | 1/9 | |
| | | | | | | | |
| Opaque door 18M | 18 | 650 | 430 x 250 x 108 | 1SLM004100A1104 | 41A18X11 | 1/6 | |
| Transparent door 18M | 18 | 650 | 430 x 250 x 108 | 1SLM004100A1204 | 41A18X12 | 1/6 | |
| Front transparent door 18M | 18 | 650 | 430 x 250 x 28 | 1SLM004100A1604 | 41F18X12 | 1/6 | |
| Flush-mounting box 18M | 18 | 650 | 404 x 230 x 80 | 1SLM004100A1704 | 41S18X1 | 1/6 | |
| Consumer units MISTRAL41 flush 650 - 2 Rows | | | | | | | |
| Opaque door 24M | 24 | 650 | 320 x 435 x 108 | 1SLM004100A1105 | 41A12X21 | 1/5 | |
| Transparent door 24M | 24 | 650 | 320 x 435 x 108 | 1SLM004100A1205 | 41A12X22 | 1/5 | |
| Front opaque door 24M | 24 | 650 | 320 x 435 x 28 | 1SLM004100A1505 | 41F12x21 | 1/5 | |
| Front transparent door 24M | 24 | 650 | 320 x 435 x 28 | 1SLM004100A1605 | 41F12X22 | 1/5 | |
| Flush-mounting box 24M | 24 | 650 | 294 x 415 x 80 | 1SLM004100A1705 | 41S12X2 | 1/5 | |
| | | | | | | | |
| Opaque door 36M 2F | 36 | 650 | 430 x 435 x 108 | 1SLM004100A1106 | 41A18X21 | 1/3 | |
| Transparent door 36M 2F | 36 | 650 | 430 x 435 x 108 | 1SLM004100A1206 | 41A18X22 | 1/3 | |



36 modules



54 modules



48 modules



72 modules

MISTRAL41F – Order codes 650

| Description | N° of modules | GWT | Dimensions | | Order code | Type | Packaging |
|---|------------------|-----|-----------------|-----------------|------------|--------|-----------|
| | [18 mm] | | W x H x D | [mm] | | number | |
| Consumer units MISTRAL41 flush 650 - 3 Rows | | | | | | | |
| Opaque door 36M 3F | 36 | 650 | 320 x 600 x 108 | 1SLM004100A1107 | 41A12X31 | 1/4 | |
| Transparent door 36M 3F | 36 | 650 | 320 x 600 x 108 | 1SLM004100A1207 | 41A12X32 | 1/4 | |
| Front opaque door 36M 3F | 36 | 650 | 320 x 600 x 28 | 1SLM004100A1507 | 41F12x31 | 1/4 | |
| Front transparent door 36M3F | 36 | 650 | 320 x 600 x 28 | 1SLM004100A1607 | 41F12x32 | 1/4 | |
| Flush-mounting box 36M 3F | 36 | 650 | 294 x 580 x 80 | 1SLM004100A1707 | 41S12x31 | 1/4 | |
| | | | | | | | |
| Opaque door 54M | 54 | 650 | 430 x 600 x 128 | 1SLM004100A1109 | 41A18X31 | 1/1 | |
| Transparent door 54M | 54 | 650 | 430 x 600 x 128 | 1SLM004100A1209 | 41A18X32 | 1/1 | |
| Consumer units MISTRAL41 flush 650 - 4 Rows | | | | | | | |
| Opaque door 48M | 48 | 650 | 320 x 735 x 108 | 1SLM004100A1108 | 41A12X41 | 1/4 | |
| Transparent door 48M | 48 | 650 | 320 x 735 x 108 | 1SLM004100A1208 | 41A12X42 | 1/4 | |
| | | | | | | | |
| Opaque door 72M | 72 | 650 | 430 x 735 x 128 | 1SLM004100A1110 | 41A18X41 | 1/1 | |
| Transparent door 72M | 72 | 650 | 430 x 735 x 128 | 1SLM004100A1210 | 41A18X42 | 1/1 | |

Consumer units

MISTRAL41F – Order codes | Flush-mounted – Hollow wall



4 modules



6 modules



8 modules



12 modules



18 modules



24 modules



36 modules

MISTRAL41F – Order codes 850

| Description | N° of modules [18 mm] | GWT | Dimensions W x H x D [mm] | Order code | Type number | Packaging |
|---|--------------------------|-----|---------------------------------|-----------------|----------------|-----------|
| Consumer units MISTRAL41 flush 850 - 1 Row | | | | | | |
| Opaque door 4M | 4 | 850 | 152 x 202 x 105 | 1SLM004100A1300 | 41C04X11 | 1/24 |
| Transparent door 4M | 4 | 850 | 152 x 202 x 105 | 1SLM004100A1400 | 41C04X12 | 1/24 |
| Opaque door 6M | 6 | 850 | 192 x 202 x 105 | 1SLM004100A1301 | 41C06X11 | 1/18 |
| Transparent door 6M | 6 | 850 | 192 x 202 x 105 | 1SLM004100A1401 | 41C06X12 | 1/18 |
| Opaque door 8M | 8 | 850 | 232 x 250 x 108 | 1SLM004100A1302 | 41C08X11 | 1/12 |
| Transparent door 8M | 8 | 850 | 232 x 250 x 108 | 1SLM004100A1402 | 41C08X12 | 1/12 |
| Opaque door 12M | 12 | 850 | 320 x 250 x 108 | 1SLM004100A1303 | 41C12X11 | 1/9 |
| Transparent door 12M | 12 | 850 | 320 x 250 x 108 | 1SLM004100A1403 | 41C12X12 | 1/9 |
| Opaque door 18M | 18 | 850 | 430 x 250 x 108 | 1SLM004100A1304 | 41C18X11 | 1/6 |
| Transparent door 18M | 18 | 850 | 430 x 250 x 108 | 1SLM004100A1404 | 41C18X12 | 1/6 |
| Consumer units MISTRAL41flush 850 - 2 Rows | | | | | | |
| Opaque door 24M | 24 | 850 | 320 x 435 x 108 | 1SLM004100A1305 | 41C12X21 | 1/5 |
| Transparent door 24M | 24 | 850 | 320 x 435 x 108 | 1SLM004100A1405 | 41C12X22 | 1/5 |
| Opaque door 36M 2F | 36 | 850 | 430 x 435 x 108 | 1SLM004100A1306 | 41C18X21 | 1/3 |
| Transparent door 36M 2F | 36 | 850 | 430 x 435 x 108 | 1SLM004100A1406 | 41C18X22 | 1/3 |



—
36 modules



—
54 modules



—
48 modules



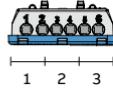
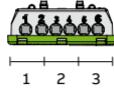
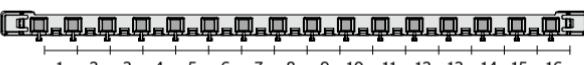
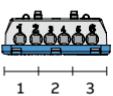
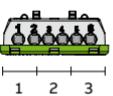
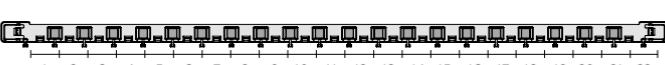
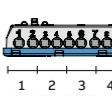
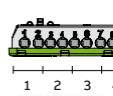
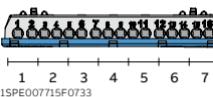
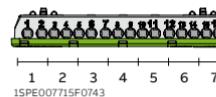
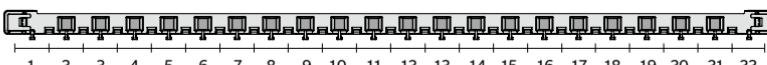
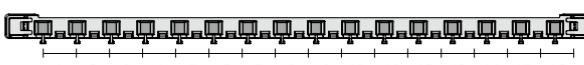
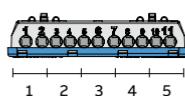
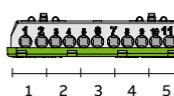
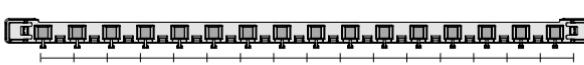
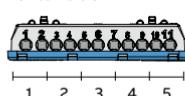
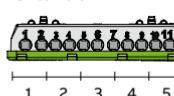
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72 modules

MISTRAL41F – Order codes 850

| Description | N° of modules | GWT | Dimensions | | Order code | Type number | Packaging |
|---|------------------|-----|-----------------|-----------------|------------|----------------|-----------|
| | [18 mm] | | W x H x D | [mm] | | | |
| Consumer units MISTRAL41 flush 850 - 3 Rows | | | | | | | |
| Opaque door 36M 3F | 36 | 850 | 320 x 600 x 108 | 1SLM004100A1307 | 41C12X31 | 1/4 | |
| Transparent door 36M 3F | 36 | 850 | 320 x 600 x 108 | 1SLM004100A1407 | 41C12X32 | 1/4 | |
| | | | | | | | |
| Opaque door 54M | 54 | 850 | 430 x 600 x 128 | 1SLM004100A1309 | 41C18X31 | 1/1 | |
| Transparent door 54M | 54 | 850 | 430 x 600 x 128 | 1SLM004100A1409 | 41C18X32 | 1/1 | |
| Consumer units MISTRAL41 flush 850 - 4 Rows | | | | | | | |
| Opaque door 48M | 48 | 850 | 320 x 735 x 108 | 1SLM004100A1308 | 41C12X41 | 1/1 | |
| Transparent door 48M | 48 | 850 | 320 x 735 x 108 | 1SLM004100A1408 | 41C12X42 | 1/1 | |
| | | | | | | | |
| Opaque door 72M | 72 | 850 | 430 x 735 x 128 | 1SLM004100A1310 | 41C18X41 | 1/1 | |
| Transparent door 72M | 72 | 850 | 430 x 735 x 128 | 1SLM004100A1410 | 41C18X42 | 1/1 | |

MISTRAL41F for concrete wall

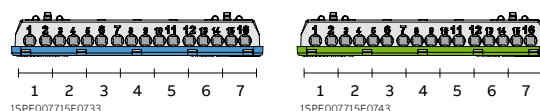
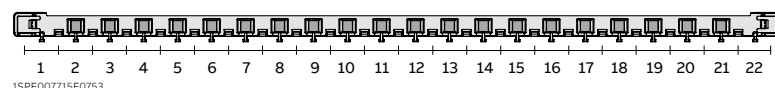
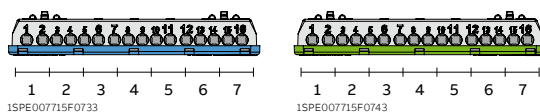
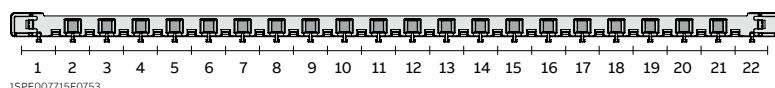


| Description | N° of modules [18 mm] | GWT | Dimensions W x H x D [mm] | Order code | Type number | Packaging |
|--|--------------------------|-----|---------------------------------|-----------------|----------------|-----------|
| MISTRAL41 flush | | | | | | |
| Opaque door 8M 12SM | 8 | 650 | 232 x 250 x 108 | 1SLM004102A1102 | 41A08X11A | 1/12 |
| Transparent door 8M 12SM | 8 | 650 | 232 x 250 x 108 | 1SLM004101A1202 | 41A08X12A | 1/12 |
|    | | | | | | |
| <div>1SPE007715F0751</div> <div>1SPE007715F0731</div> <div>1SPE007715F0741</div> | | | | | | |
| Opaque door 12M 12SM | 12 | 650 | 320 x 250 x 108 | 1SLM004102A1103 | 41A12X11A | 1/9 |
| Transparent door 12M 12SM | 12 | 650 | 320 x 250 x 108 | 1SLM004101A1203 | 41A12X12A | 1/9 |
|    | | | | | | |
| <div>1SPE007715F0752</div> <div>1SPE007715F0731</div> <div>1SPE007715F0741</div> | | | | | | |
| Opaque door 18M 22SM | 18 | 650 | 430 x 250 x 108 | 1SLM004102A1104 | 41A18X11A | 1/16 |
| Transparent door 18M 22SM | 18 | 650 | 430 x 250 x 108 | 1SLM004101A1204 | 41A18X12A | 1/16 |
|    | | | | | | |
| <div>1SPE007715F0753</div> <div>1SPE007715F0732</div> <div>1SPE007715F0742</div> | | | | | | |
| Opaque door 24M 32SM | 24 | 650 | 320 x 435 x 108 | 1SLM004102A1105 | 41A12X21A | 1/5 |
| Transparent door 24M 32SM | 24 | 650 | 320 x 435 x 108 | 1SLM004101A1205 | 41A12X22A | 1/5 |
|    | | | | | | |
| <div>1SPE007715F0752</div> <div>1SPE007715F0733</div> <div>1SPE007715F0743</div> | | | | | | |
| Opaque door 36M 2F 42SM | 36 | 650 | 430 x 435 x 108 | 1SLM004102A1106 | 41A18X21A | 1/3 |
| Transparent door 36M 2F 42SM | 36 | 650 | 430 x 435 x 108 | 1SLM004101A1206 | 41A18X22A | 1/3 |
|    | | | | | | |
| <div>1SPE007715F0753</div> <div>1SPE007715F0734</div> <div>1SPE007715F0744</div> | | | | | | |
| Opaque door 36M 3F 44SM | 36 | 650 | 320 x 600 x 108 | 1SLM004102A1107 | 41A12X31A | 1/4 |
| Transparent door 36M 3F 44SM | 36 | 650 | 320 x 600 x 108 | 1SLM004101A1207 | 41A12X32A | 1/4 |
|    | | | | | | |
| <div>1SPE007715F0752</div> <div>1SPE007715F0732</div> <div>1SPE007715F0742</div> | | | | | | |
|    | | | | | | |
| <div>1SPE007715F0752</div> <div>1SPE007715F0732</div> <div>1SPE007715F0742</div> | | | | | | |

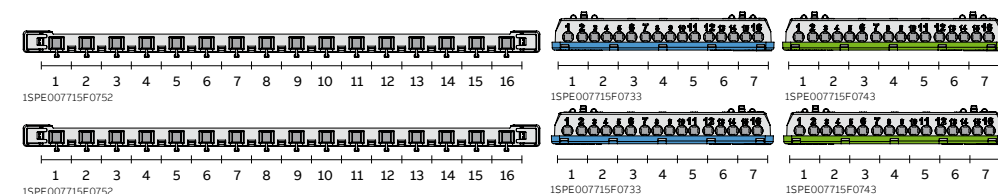


| Description | N° of modules | | Dimensions | Order code | Type | |
|-------------|---------------|-----|----------------|------------|--------|-----------|
| | [18 mm] | GWT | W x H x D [mm] | | number | Packaging |

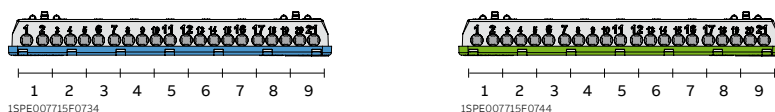
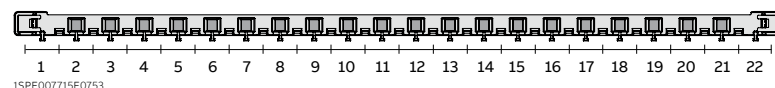
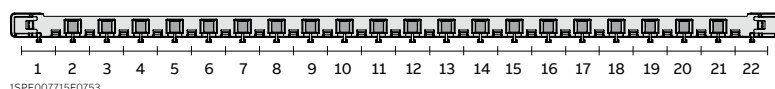
| MISTRAL41 flush | | | | | | |
|---------------------------|----|-----|-----------------|-----------------|-----------|-----|
| Opaque door 54M 64SM | 54 | 650 | 430 x 600 x 128 | 1SLM004102A1109 | 41A18X31A | 1/1 |
| Transparent door 54M 64SM | 54 | 650 | 430 x 600 x 128 | 1SLM004101A1209 | 41A18X32A | 1/1 |



| | | | | | | |
|---------------------------|----|-----|-----------------|-----------------|-----------|-----|
| Opaque door 48M 64SM | 48 | 650 | 320 x 735 x 108 | 1SLM004102A1108 | 41A12X41A | 1/1 |
| Transparent door 48M 64SM | 48 | 650 | 320 x 735 x 108 | 1SLM004101A1208 | 41A12X42A | 1/1 |



| | | | | | | |
|---------------------------|----|-----|-----------------|-----------------|-----------|-----|
| Opaque door 72M 84SM | 72 | 650 | 430 x 735 x 128 | 1SLM004102A1110 | 41A18X41A | 1/1 |
| Transparent door 72M 84SM | 72 | 650 | 430 x 735 x 128 | 1SLM004101A1210 | 41A18X42A | 1/1 |



Consumer units

MISTRAL41F – accessories



MISTRAL41F – Accessories doors

| Description | N° of modules [18 mm] | Order code | Type number | Packaging |
|--|-----------------------|-----------------|-------------|-----------|
| Opaque door | | | | |
| Opaque door 4M MISTRAL41F | 4 | 1SLM004100A1900 | 41Z83 | 1/20 |
| Opaque door 6M MISTRAL41F | 6 | 1SLM004100A1916 | 41Z84 | 1/20 |
| Opaque door 8M MISTRAL41F | 8 | 1SLM004100A1902 | 41Z85 | 1/10 |
| Opaque door 12M MISTRAL41F | 12 | 1SLM004100A1904 | 41Z86 | 1/20 |
| Opaque door 18M MISTRAL41F | 18 | 1SLM004100A1906 | 41Z87 | 1/20 |
| Opaque door 24M / 48M MISTRAL41F | 24 | 1SLM004100A1908 | 41Z88 | 1/15 |
| Opaque door 36M 3F MISTRAL41F | 36 | 1SLM004100A1910 | 41Z89 | 1/10 |
| Opaque door 36M 2F / 72M MISTRAL41F | 36 | 1SLM004100A1912 | 41Z90 | 1/10 |
| Opaque door 54M MISTRAL41F | 54 | 1SLM004100A1914 | 41Z91 | 1/5 |
| Transparent door | | | | |
| Transparent door 4M MISTRAL41F | 4 | 1SLM004100A1901 | 41Z92 | 1/20 |
| Transparent door 6M MISTRAL41F | 6 | 1SLM004100A1917 | 41Z93 | 1/20 |
| Transparent door 8M MISTRAL41F | 8 | 1SLM004100A1903 | 41Z94 | 1/10 |
| Transparent door 12M MISTRAL41F | 12 | 1SLM004100A1905 | 41Z95 | 1/20 |
| Transparent door 18M MISTRAL41F | 18 | 1SLM004100A1907 | 41Z96 | 1/20 |
| Transparent door 24M / 48M MISTRAL41F | 24 | 1SLM004100A1909 | 41Z97 | 1/15 |
| Transparent door 36M 3F MISTRAL41F | 36 | 1SLM004100A1911 | 41Z98 | 1/10 |
| Transparent door 36M 2F / 72M MISTRAL41F | 36 | 1SLM004100A1913 | 41Z99 | 1/10 |
| Transparent door 54M MISTRAL41F | 54 | 1SLM004100A1915 | 41Z100 | 1/5 |



41Z01, 41Z02



41Z03, 41Z04



41Z05



41Z06



41Z07, 41Z08, 41Z09, 41Z10



41Z11



41Z12



41Z13

MISTRAL41F – Other accessories

| Description | N° of modules [18 mm] | Order code | Type number | Packaging |
|--------------------------------------|-----------------------|-----------------|-------------|-----------|
| Other accessories | | | | |
| Horizontal partition 12M MISTRAL41F | 12 | 1SLM004100A1920 | 41Z01 | 1/100 |
| Horizontal partition 18M MISTRAL41F | 18 | 1SLM004100A1921 | 41Z02 | 1/100 |
| Vertical coupling / tubes holder 12M | 12 | 1SLM004100A1922 | 41Z03 | 1/20 |
| Vertical coupling / tubes holder 18M | 18 | 1SLM004100A1923 | 41Z04 | 1/15 |
| Module cover 12M RAL9016 | 12 | 1SPE007715F5650 | 41Z05 | 5/180 |
| Lock with key MISTRAL41 F | | 1SLM004100A1931 | 41Z06 | 20/300 |
| Central blind panel 12M MISTRAL41F | 12 | 1SLM004100A1945 | 41Z07 | 1/20 |
| Blind panel 12M MISTRAL41F | 12 | 1SLM004100A1946 | 41Z08 | 1/20 |
| Central blind panel 18M MISTRAL41F | 18 | 1SLM004100A1947 | 41Z09 | 1/30 |
| Blind panel 18M MISTRAL41F | 18 | 1SLM004100A1948 | 41Z10 | 1/30 |
| Horizontal junction unit | | 1SLM004100A1949 | 41Z11 | 1/50 |
| Wires holder comb | 12 | 1SLM004100A1942 | 41Z12 | 1/30 |
| Spirit level | | 1SLM004100A1943 | 41Z13 | 1/30 |

Consumer units

IP 40 and IP 55 panel fronts



IP 40 panel fronts**Technical characteristics**

- protection degree **IP 40**
- in **thermoplastic**, self-extinguishing and resistant to abnormal heat and fire up to 650 °C (glow wire flammability index) in compliance with IEC 60695-2-11 Standard
- available in **RAL 7035 grey**
- installation temperature from -25 °C to +60 °C
- resistant to heat: ball thermopressure up to +85 °C in compliance with EN 60695-10-2 Standard
- fronts are supplied with:
 - module covers
 - instruction sheet

IP 55 panel fronts**Technical characteristics**

- protection degree **IP 55**
- available with transparent, smoky horizontally hinged door in the version with lock and lead-sealable spring
- door designed to take a lock with coded key code 12 865
- available in **RAL 7035 grey**
- in **thermoplastic**, self-extinguishing and resistant to abnormal heat and fire up to 650 °C (glow wire flammability index) in compliance with IEC 60695-2-11 Standard
- installation temperature from -25 °C to +60 °C
- resistant to heat: ball thermopressure up to +85 °C in compliance with EN 60695-10-2 Standard
- shock resistance 6 Joules
- fronts are supplied with:
 - module covers
 - instruction sheet



Consumer units

IP 40 and IP 55 panel fronts



FLCO9069

IP 40 panel fronts – 2 modules

RAL 7035 grey

| Dimensions W × H × D [mm] | Order code | Box/pack No items |
|---------------------------------|------------|----------------------|
| 81x90x50 | 12 362 | 10/40 |



FLCO9070

IP 40 panel fronts – 3 modules

RAL 7035 grey

| Dimensions W × H × D [mm] | Order code | Box/pack No items |
|---------------------------------|------------|----------------------|
| 99x90x50 | 12 363 | 10/40 |



FLCO9071

IP 40 panel fronts – 4 modules

RAL 7035 grey

| Dimensions W × H × D [mm] | Order code | Box/pack No items |
|---------------------------------|------------|----------------------|
| 117x90x50 | 12 364 | 6/24 |



FLCO9085

IP 55 panel fronts – 4 modules

RAL 7035 grey

Spring closing

| Dimensions W × H × D [mm] | Order code | Box/pack No items |
|---------------------------------|------------|----------------------|
| 125x180x80 | 12 658 | 1/10 |



FLCO9086

IP 55 panel fronts – 6 modules

RAL 7035 grey

Spring closing

| Dimensions W × H × D [mm] | Order code | Box/pack No items |
|---------------------------------|------------|----------------------|
| 160x180x80 | 12 659 | 1/10 |



FLCO9087

IP 55 panel fronts – 10 modules

RAL 7035 grey

Spring closing

| Dimensions W × H × D [mm] | Order code | Box/pack No items |
|---------------------------------|------------|----------------------|
| 230x180x80 | 12 660 | 1/7 |

Consumer units

Accessories for IP 55 panel fronts



FLCO9228

Module covers

| No modules | Colour | Order code | Box/pack No items |
|------------|---------------|------------|----------------------|
| 1 | RAL 7035 grey | 12 861 | 50/1500 |
| 4 | RAL 7035 grey | 12 863 | 25/300 |



FLCO9243

Lock with key

| Description | Order code | Box/pack No items |
|-------------|------------|----------------------|
| Coded type | 12 865 | 10/300 |



FLCO9244

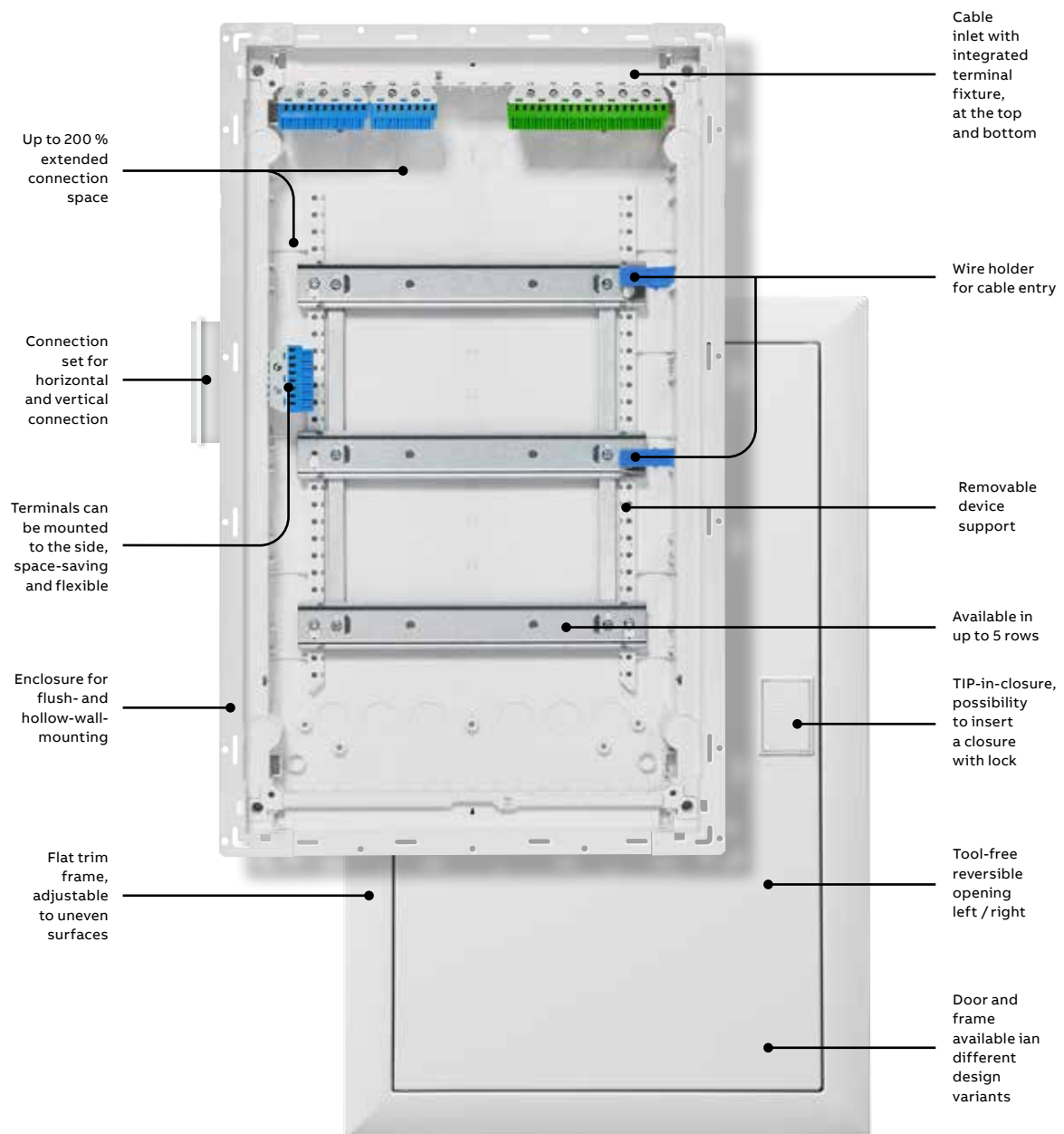
Spare transparent smoky doors

Spring closing

| For fronts type | Order code | Box/pack No items |
|-----------------|------------|----------------------|
| 12 696 | 12 658 | 10/40 |
| 12 697 | 12 659 | 10/40 |
| 12 698 | 12 660 | 10/20 |

UK600 Flush-mounting Series

Consumer units





Snap-on cable inlet with integrated terminal fixture allows easy insertion of incoming and outgoing cables and uses a quick, single-hand-operated push and-stay design, resulting in 80 % more cable inlet space. Both cable inlets can be screwed tight when installation is complete.



The generous wiring space considerably facilitates installation works for up to 200 % more wiring space and "slide in" wire holder.



All enclosures of the UK600 series are suitable for hollow-wall installation. Upgrading is incredibly quick and simple – just as easy as the hollow wall installation itself. You just need the UZ91P4 hollow wall set for UK600. No screws, yet nothing can slip. Fastening it is as easy as fastening cable ties.



Time-saving installation thanks to intelligent plug-in technology. The N/PE terminals which are laterally assembled provide a high level of flexibility. There are also versions available with screw-type terminals.



An innovative connection set for horizontal and vertical connection of several combi enclosures enables flexible extension and combination options.



The stable, removable device support can be snapped in and is installed quickly without tools. Here too, a variety of common installation techniques have been catered for – the device support can also be fixed in position using screws.



The triple socket makes the connection of different power supplies very easy. it offers 120° swiveling and can be snapped onto cable inlet.



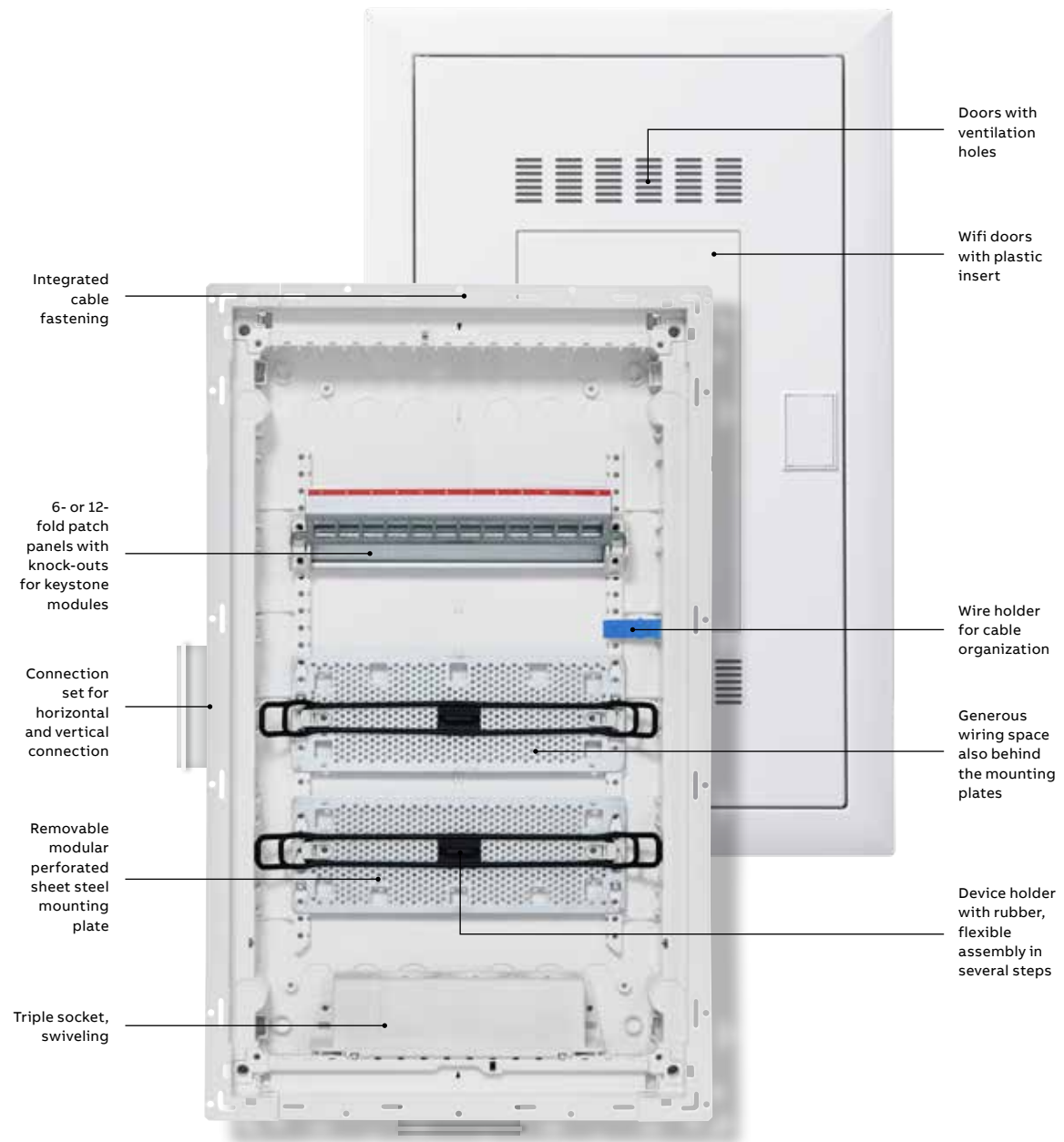
With the new media enclosure all conceivable devices such as routers or media modules find a safe space. The innovative combi enclosure combines the media and the consumer unit in one single cabinet, with a flexible partition separating the two parts from each other.



An attractive design feature – a perfect example of how easy it can be to combine functionality with design. The variety of high-quality doors and frame designs make the UK600 consumer units and media enclosures a design element in every living space. Media doors are available as Wifi-friendly and ventilated versions.

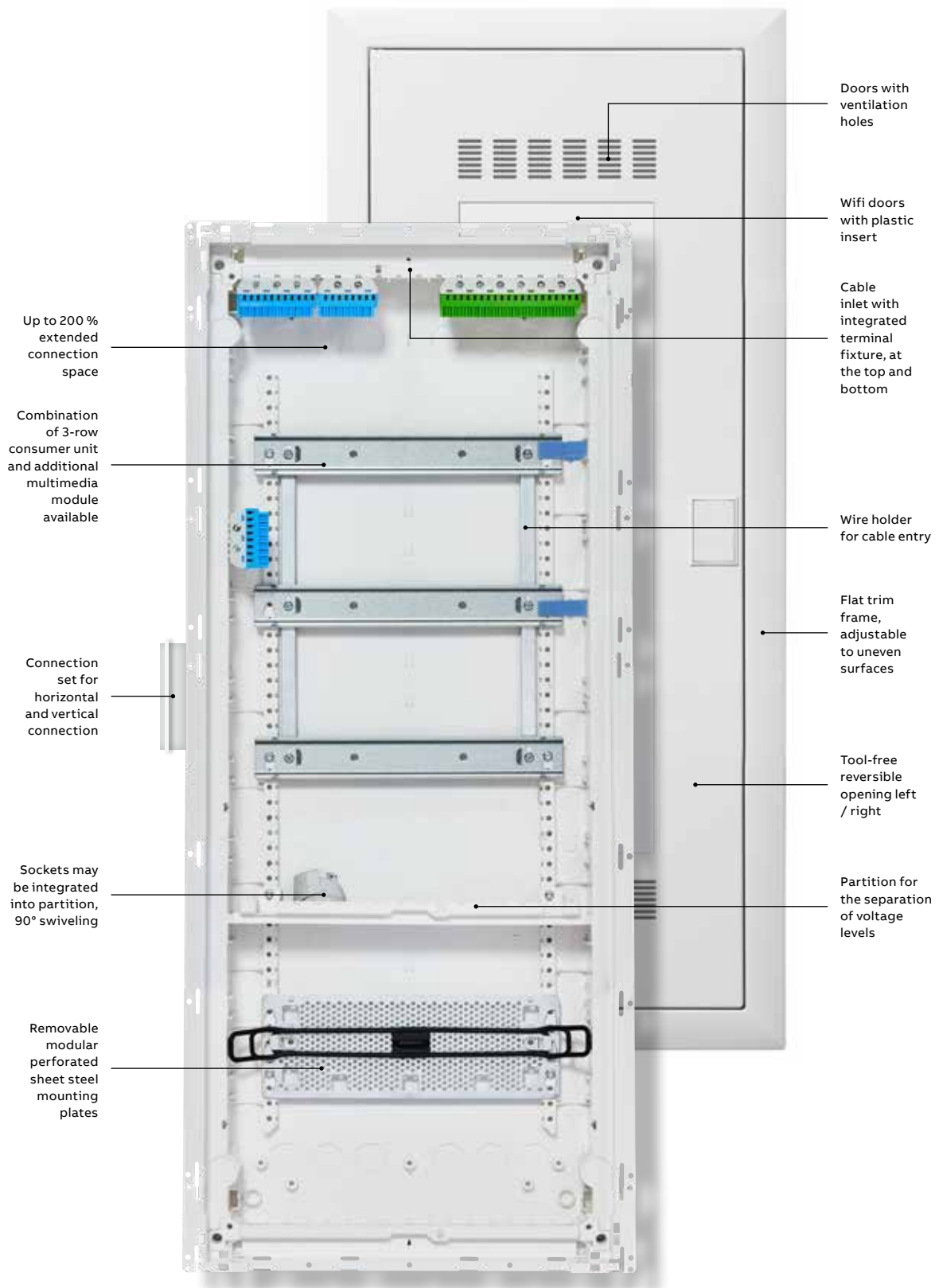
UK600 Flush-mounting Series

Media enclosures



UK600 Flush-mounting Series

Combi enclosures



Consumer units

Complete version UK600 with trim frame and door
With N/PE quick-terminals

- 01 N/PE quick-terminals
- 02 Wall box
- 03 Device carrier
- 04 Cover
- 05 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 – „;“

I_n up to 63 A

Consumer units DIN EN 60670-24, DIN 43871

Device support with removable DIN rail

Mechanical impact strength: IK07

Available in 1 up to 5 row versions as flush-mounted consumer units

Can be upgraded for surface-mounting or partially recessed mounting

Upgradeable for hollow-wall-mounting using UZ91P4

Wall box:

- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable

Wall grips

Reversible opening (tool-free)

Communication channel for horizontal and vertical connection

For building installation according to DIN 18015

With N/PE quick-terminals

Wire holder for professional cable organization

Cover with 90° quick-action screws, lead-sealable

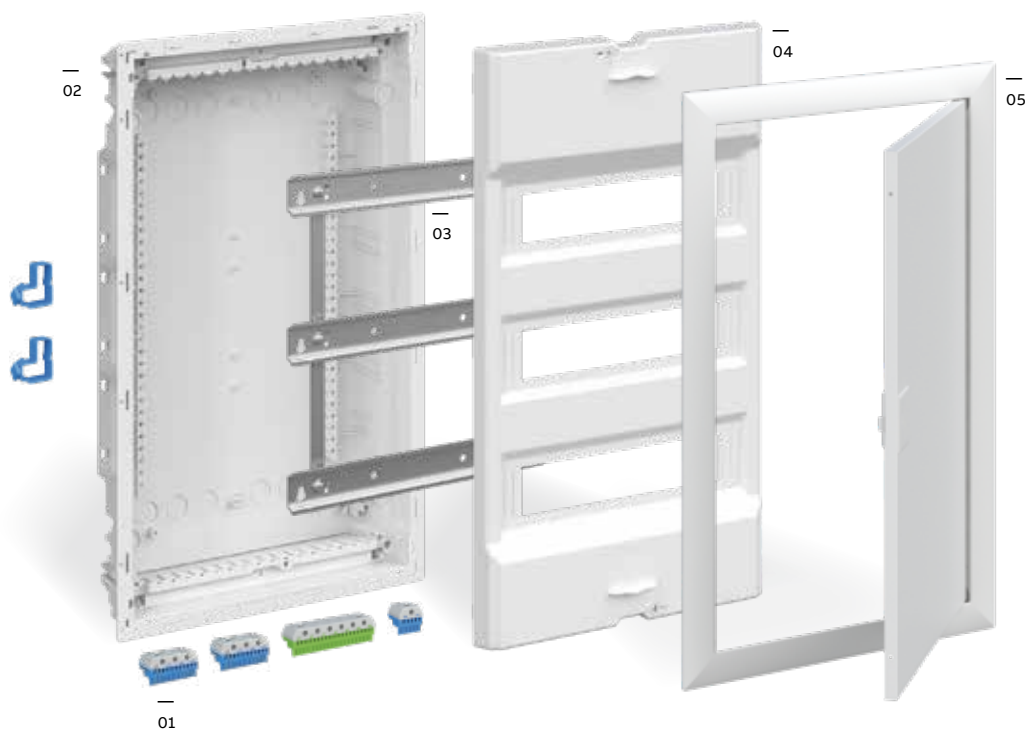
45 mm slots for 12 devices, expandable to 14

Labelling system

Trim frame and sheet steel door, adjustable for uneven surface

Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4





UK612N2



UK624N3



UK636N3



UK648N3



UK660N4

| Article | H x W x D (mm) | SU | Type | Ord. no. |
|--|----------------|------|---------|-----------------|
| Flush-mounted consumer units, 1-row | | | | |
| Niche dimensions for flush-mounting | 355 x 367 x 95 | 12 | UK612N2 | 2CPX031369R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 328 x 340 x 88 | (13) | | |
| With N/PE quick-terminals: ZK51B, ZK82B, ZK113G | | | | |
| Flush-mounted consumer units, 2-row | | | | |
| Niche dimensions for flush-mounting | 480 x 367 x 95 | 24 | UK624N3 | 2CPX031370R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 453 x 340 x 88 | (28) | | |
| With N/PE quick-terminals: ZK51B, ZK82B, ZK144G | | | | |
| Flush-mounted consumer units, 3-row | | | | |
| Niche dimensions for flush-mounting | 605 x 367 x 95 | 36 | UK636N3 | 2CPX031371R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 578 x 340 x 88 | (41) | | |
| With N/PE quick-terminals: ZK51B, 2 x ZK113B, ZK206G | | | | |
| Flush-mounted consumer units, 4-row | | | | |
| Niche dimensions for flush-mounting | 730 x 367 x 95 | 48 | UK648N3 | 2CPX031372R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 703 x 340 x 88 | (56) | | |
| With N/PE quick-terminals: 2 x ZK82B, ZK144B, ZK237G | | | | |
| Flush-mounted consumer units, 5-row | | | | |
| Niche dimensions for flush-mounting | 855 x 367 x 95 | 60 | UK660N4 | 2CPX031373R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 828 x 340 x 88 | (70) | | |
| With N/PE quick-terminals: ZK51B, 2 x ZK82B, ZK144B, ZK268G | | | | |

> N/PE quick-terminals, see page 41

> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Complete version UK600 with trim frame and door
N/PE screw-terminals

- 01 Screw-terminals
- 02 Wall box
- 03 Device carrier
- 04 Cover
- 05 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 , ; *

I_n up to 63 A

Consumer units DIN EN 60670-24, DIN 43871

For building installation according to DIN 18015

Mechanical impact strength: IK07

Available in 1 up to 5 row versions as flush-mounted consumer units

Can be upgraded for surface-mounting or partially recessed mounting

Upgradeable for hollow-wall-mounting using UZ91P4

Wall box:

- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable

Wall grips

Reversible opening (tool-free)

Communication channel for horizontal and vertical connection

Device support with removable DIN rail

With N/PE screw-terminals

Wire holder for professional cable organization

Cover with 90° quick-action screws, lead-sealable

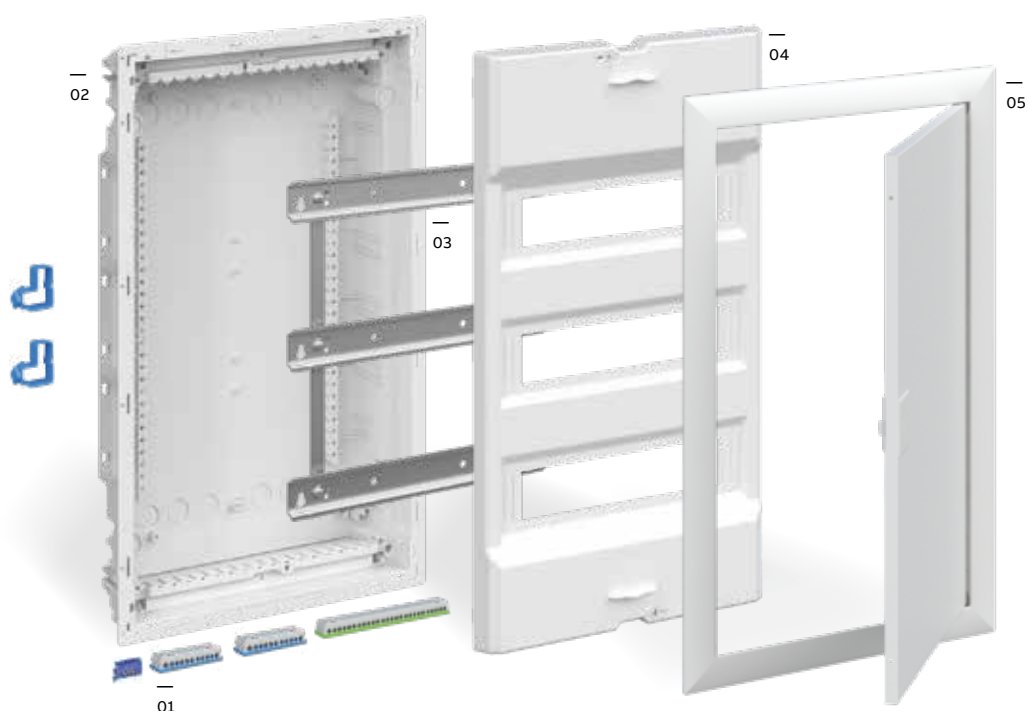
45 mm slots for 12 devices, expandable to 14

Labelling system

Trim frame and sheet steel door, adjustable for uneven surface

Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4





UK612E3



UK624E3



UK636E3



UK648E3



UK660E3

| Article | H x W x D (mm) | SU | Type | Ord. no. |
|---|----------------|------|---------|-----------------|
| Flush-mounted consumer units, 1-row | | | | |
| Niche dimensions for flush-mounting | 355 x 367 x 95 | 12 | UK612E2 | 2CPX077840R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 328 x 340 x 88 | (13) | | |
| With N/PE screw-terminals: ZK507, ZKS6B, ZKS16G | | | | |
| Flush-mounted consumer units, 2-row | | | | |
| Niche dimensions for flush-mounting | 480 x 367 x 95 | 24 | UK624E3 | 2CPX077841R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 453 x 340 x 88 | (28) | | |
| With N/PE screw-terminals: ZK507, ZKS16B, ZKS21G | | | | |
| Flush-mounted consumer units, 3-row | | | | |
| Niche dimensions for flush-mounting | 605 x 367 x 95 | 36 | UK636E3 | 2CPX077842R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 578 x 340 x 88 | (41) | | |
| With N/PE screw-terminals: ZK507, 2 x ZKS11B, ZKS26G | | | | |
| Flush-mounted consumer units, 4-row | | | | |
| Niche dimensions for flush-mounting | 730 x 367 x 95 | 48 | UK648E3 | 2CPX077843R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 703 x 340 x 88 | (56) | | |
| With N/PE screw-terminals: ZK507, ZKS11B, ZKS16B, ZKS26G | | | | |
| Flush-mounted consumer units, 5-row | | | | |
| Niche dimensions for flush-mounting | 855 x 367 x 95 | 60 | UK660E3 | 2CPX077844R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 828 x 340 x 88 | (70) | | |
| With N/PE screw-terminals: ZK507, 2 x ZKS16B, ZKS11G, ZKS21G | | | | |

> Screw-terminals, see page 42

> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Complete version UK600 with trim frame and door
Without terminals

- 01 Wall box
- 02 Device carrier
- 03 Cover
- 04 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 , ; *

I_n up to 63 A

Consumer units DIN EN 60670-24, DIN 43871

For building installation according to DIN 18015

Mechanical impact strength: IK07

Available in 1 up to 5 row versions as flush-mounted consumer units

Can be upgraded for surface-mounting or partially recessed mounting

Upgradeable for hollow-wall-mounting using UZ91P4

Wall box:

- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable

Wall grips

Reversible opening (tool-free)

Communication channel for horizontal and vertical connection

Device support with removable DIN rail

Without terminals

Wire holder for professional cable organization

Cover with 90° quick-action screws, lead-sealable

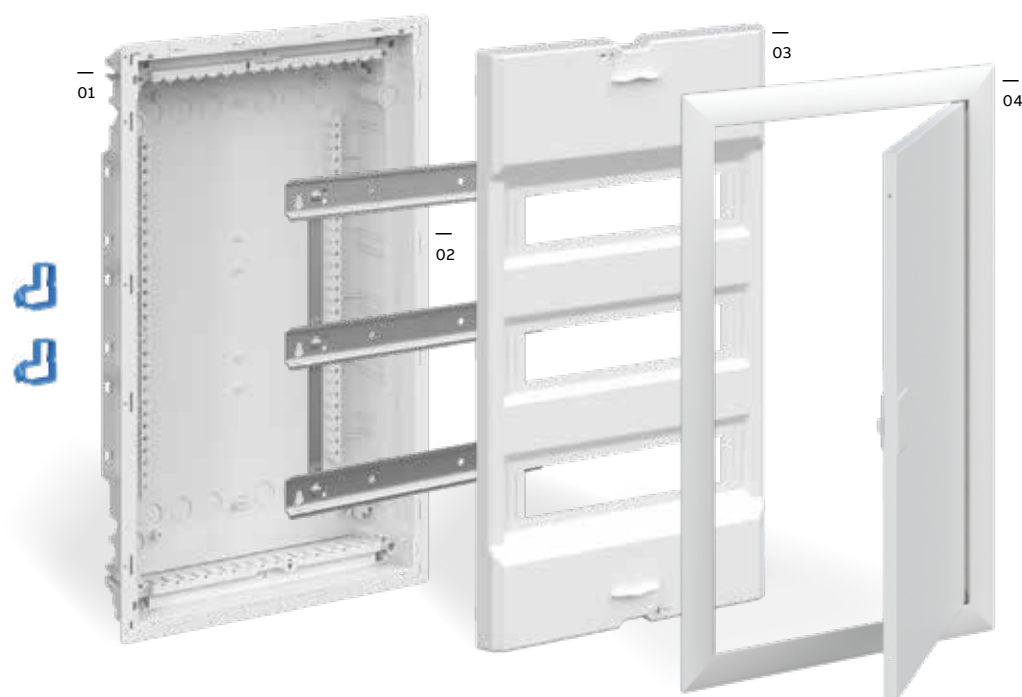
45 mm slots for 12 devices, expandable to 14

Labelling system

Trim frame and sheet steel door, adjustable for uneven surface

Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4



**UK612K****UK624K****UK636K****UK648K****UK660K**

| Article | H x W x D (mm) | SU | Type | Ord. no. |
|--|----------------|------|--------|-----------------|
| Flush-mounted consumer units, 1-row | | | | |
| Niche dimensions for flush-mounting | 355 x 367 x 95 | 12 | UK612K | 2CPX031379R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 328 x 340 x 88 | (13) | | |
| Flush-mounted consumer units, 2-row | | | | |
| Niche dimensions for flush-mounting | 480 x 367 x 95 | 24 | UK624K | 2CPX031380R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 453 x 340 x 88 | (28) | | |
| Flush-mounted consumer units, 3-row | | | | |
| Niche dimensions for flush-mounting | 605 x 367 x 95 | 36 | UK636K | 2CPX031381R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 578 x 340 x 88 | (41) | | |
| Flush-mounted consumer units, 4-row | | | | |
| Niche dimensions for flush-mounting | 730 x 367 x 95 | 48 | UK648K | 2CPX031382R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 703 x 340 x 88 | (56) | | |
| Flush-mounted consumer units, 5-row | | | | |
| Niche dimensions for flush-mounting | 855 x 367 x 95 | 60 | UK660K | 2CPX031383R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 828 x 340 x 88 | (70) | | |

> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Basic version UK600 without trim frame and door
With N/PE quick-terminals

- 01 N/PE quick-terminals
- 02 Wall box
- 03 Device carrier
- 04 Cover

Flush-mounted consumer units – UK600, IP30 – , ; , *

I_n up to 63 A

Consumer units DIN EN 60670-24, DIN 43871

For building installation according to DIN 18015

Mechanical impact strength: IK07

Available in 1 up to 5 row versions as flush-mounted consumer units

Can be upgraded for surface-mounting or partially recessed mounting

Upgradeable for hollow-wall-mounting using UZ91P4

Wall box:

- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable

Wall grips

Reversible opening (tool-free)

Communication channel for horizontal and vertical connection

Device support with removable DIN rail

With N/PE quick-terminals

Wire holder for professional cable organization

Cover with 90° quick-action screws, lead-sealable

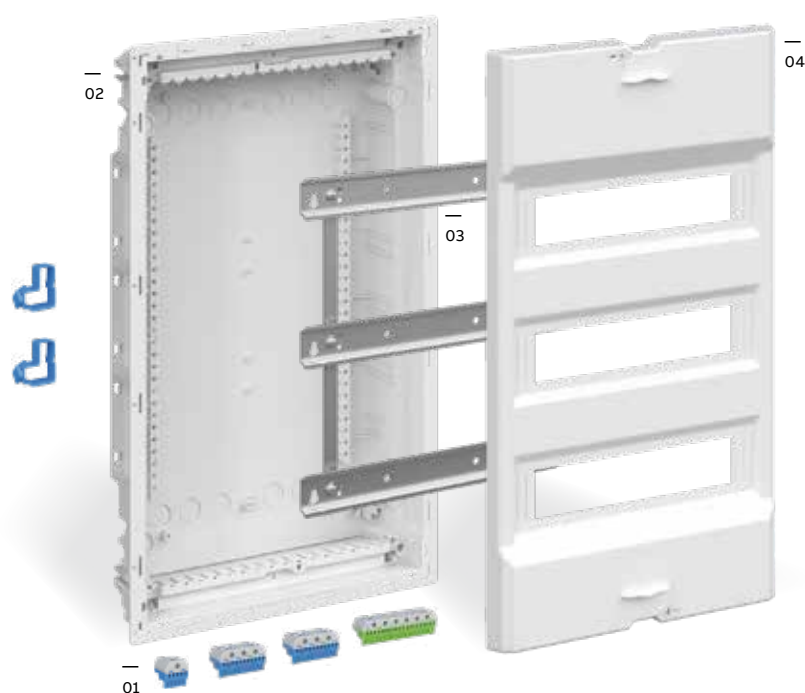
45 mm slots for 12 devices, expandable to 14

Labelling system

Trim frame and sheet steel door, adjustable for uneven surface

Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4





UK612NB



UK624NB



UK636NB



UK648NB



UK660NB

| Article | H x W x D (mm) | SU | Type | Ord. no. |
|--|----------------|------|---------|-----------------|
| Flush-mounted consumer units, 1-row | | | | |
| Niche dimensions for flush-mounting | 355 x 367 x 95 | 12 | UK612NB | 2CPX031374R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 328 x 340 x 88 | (13) | | |
| With N/PE quick-terminals: | | | | |
| ZK51B, ZK82B, ZK113G | | | | |
| Flush-mounted consumer units, 2-row | | | | |
| Niche dimensions for flush-mounting | 480 x 367 x 95 | 24 | UK624NB | 2CPX031375R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 453 x 340 x 88 | (28) | | |
| With N/PE quick-terminals: | | | | |
| ZK51B, ZK82B, ZK144G | | | | |
| Flush-mounted consumer units, 3-row | | | | |
| Niche dimensions for flush-mounting | 605 x 367 x 95 | 36 | UK636NB | 2CPX031376R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 578 x 340 x 88 | (41) | | |
| With N/PE quick-terminals: | | | | |
| ZK51B, 2 x ZK113B, ZK206G | | | | |
| Flush-mounted consumer units, 4-row | | | | |
| Niche dimensions for flush-mounting | 730 x 367 x 95 | 48 | UK648NB | 2CPX031377R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 703 x 340 x 88 | (56) | | |
| With N/PE quick-terminals: | | | | |
| 2 x ZK82B, ZK144B, ZK237G | | | | |
| Flush-mounted consumer units, 5-row | | | | |
| Niche dimensions for flush-mounting | 855 x 367 x 95 | 60 | UK660NB | 2CPX031378R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 828 x 340 x 88 | (70) | | |
| With N/PE quick-terminals: | | | | |
| ZK51B, 2 x ZK82B, ZK144B, ZK268G | | | | |

> N/PE quick-terminals, see page 40

> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Basic version UK600 without trim frame and door
N/PE screw-terminals

- 01 Screw-terminals
- 02 Wall box
- 03 Device carrier
- 04 Cover
- 05 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 , ; *

I_n up to 63 A

Consumer units DIN EN 60670-24, DIN 43871

For building installation according to DIN 18015

Mechanical impact strength: IK07

Available in 1 up to 5 row versions as flush-mounted consumer units

Can be upgraded for surface-mounting or partially recessed mounting

Upgradeable for hollow-wall-mounting using UZ91P4

Wall box:

- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable

Wall grips

Reversible opening (tool-free)

Communication channel for horizontal and vertical connection

Device support with removable DIN rail

With N/PE screw-terminals

Wire holder for professional cable entry

Cover with 90° quick-action screws, lead-sealable

45 mm slots for 12 devices, expandable to 14

Labelling system

Trim frame and sheet steel door, adjustable for uneven surface

Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4





UK612EB



UK624EB



UK636EB



UK648EB



UK660EB

| Article | H x W x D (mm) | SU | Type | Ord. no. |
|---|----------------|------|---------|-----------------|
| Flush-mounted consumer units, 1-row | | | | |
| Niche dimensions for flush-mounting | 355 x 367 x 95 | 12 | UK612EB | 2CPX077845R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 328 x 340 x 88 | (13) | | |
| With N/PE screw-terminals: ZK507, ZKS6B, ZKS16G | | | | |
| Flush-mounted consumer units, 2-row | | | | |
| Niche dimensions for flush-mounting | 480 x 367 x 95 | 24 | UK624EB | 2CPX077846R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 453 x 340 x 88 | (28) | | |
| With N/PE screw-terminals: ZK507, ZKS16B, ZKS21G | | | | |
| Flush-mounted consumer units, 3-row | | | | |
| Niche dimensions for flush-mounting | 605 x 367 x 95 | 36 | UK636EB | 2CPX077847R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 578 x 340 x 88 | (41) | | |
| With N/PE screw-terminals: ZK507, 2 x ZKS11B, ZKS26G | | | | |
| Flush-mounted consumer units, 4-row | | | | |
| Niche dimensions for flush-mounting | 730 x 367 x 95 | 48 | UK648EB | 2CPX077848R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 703 x 340 x 88 | (56) | | |
| With N/PE screw-terminals: ZK507, ZKS11B, ZKS16B, ZKS26G | | | | |
| Flush-mounted consumer units, 5-row | | | | |
| Niche dimensions for flush-mounting | 855 x 367 x 95 | 60 | UK660EB | 2CPX077849R9999 |
| Wall cut out dimensions for hollow-wall-mounting | 828 x 340 x 88 | (70) | | |
| With N/PE screw-terminals: ZK507, 2 x ZKS16B, ZKS11G, ZKS21G | | | | |

* In connection with a standard door, with TIP-in closure there will be one space unit less.

> Screw-terminals, see page 43

> Technical specifications UK600 trim frame dimensions, see page 60

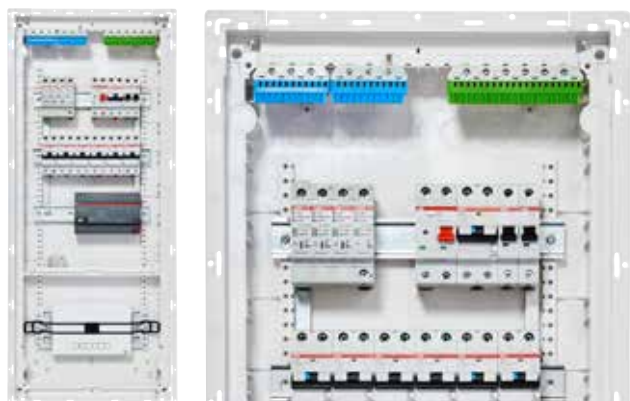
Consumer units

N/PE quick-terminals

Standardized, future-oriented and flexible


Configure based on your needs

The modularity and the extensive range of products allow customizing the products to the needs based on real-world use. Various quick-terminals can be combined on one quick carrier as necessary. If a larger N or PE terminal has to be used, simply connect two quick-terminals using the ZK10P10 connecting bridge.



Product benefits

- Flexible terminal system for several N potentials:
Screw connections: 2.5 to 25 mm² for rigid conductors;
for flexible conductors up to 25 mm²
(wire end sleeves required)
- Spring connection: 1.5 to 4 mm² for rigid conductors;
for flexible conductors up to 25 mm²
(wire end sleeves required)
- Optimal when using several residual current circuit breakers
- Ease of expansion using connecting bridges
- Precise assignment of the terminals by clear colour coding: N = blue, PE = yellow-green
- Easy labelling of the terminals using pre-printed, self-adhesive number strips
- Wide range of applications: may be used in the UK600 and MISTRAL65 consumer unit series, in all compact distribution boards, and with all meter cabinets, wall-mounting and floor-standing cabinets

| N/PE terminals with units | N quick-terminals | | Screw connection system | Spring connection system | PE quick-terminals | Screw connection system | Spring connection system |
|---|--|-----------------|-------------------------|--|--------------------|-------------------------|------------------------------|
|  |   | ZK50B ZK50BT | 0 x 25 mm ² | 5 x 1,5 - 4 mm ² | - | - | - |
|  |  | ZK51B | 1 x 25 mm ² | 5 x 1,5 - 4 mm ²  | ZK51G | 1 x 25 mm ² | 5 x 1,5 - 4 mm ² |
|  |  | ZK82B | 2 x 25 mm ² | 8 x 1,5 - 4 mm ²  | ZK82G | 2 x 25 mm ² | 8 x 1,5 - 4 mm ² |
|  |  | ZK113B | 3 x 25 mm ² | 11 x 1,5 - 4 mm ²  | ZK113G | 3 x 25 mm ² | 11 x 1,5 - 4 mm ² |
|  |  | ZK144B | 4 x 25 mm ² | 14 x 1,5 - 4 mm ²  | ZK144G | 4 x 25 mm ² | 14 x 1,5 - 4 mm ² |
|  |  | ZK175B | 5 x 25 mm ² | 17 x 1,5 - 4 mm ²  | ZK175G | 5 x 25 mm ² | 17 x 1,5 - 4 mm ² |
|  |  | ZK206B | 6 x 25 mm ² | 20 x 1,5 - 4 mm ²  | ZK206G | 6 x 25 mm ² | 20 x 1,5 - 4 mm ² |
|  |  | ZK237B | 7 x 25 mm ² | 23 x 1,5 - 4 mm ²  | ZK237G | 7 x 25 mm ² | 23 x 1,5 - 4 mm ² |
|  |  | ZK268B | 8 x 25 mm ² | 26 x 1,5 - 4 mm ²  | ZK268G | 8 x 25 mm ² | 26 x 1,5 - 4 mm ² |

Consumer units

N/PE quick-terminals

Accessories / equipment with the UK600



ZK50B



ZK50BT



ZK51G



ZK10P10



ZK600

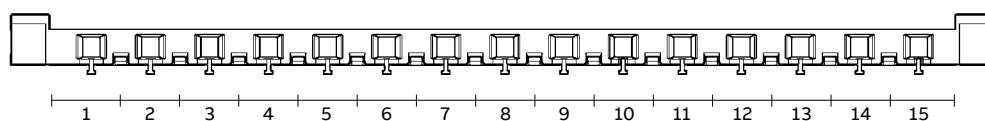


UZB1



ZK603

| Article | Number terminals 1.5 x 4 mm ² | Number terminals 2.5 x 25 mm ² | External dimensions H x W x D in mm | Pieces | Type | Ord. no. |
|---|---|--|---|--------|---------|-----------------|
| N quick-plug terminals | 5 x 1.5 - 4 | 0 x 25 | 23 x 32 x 21 | 1 | ZK50B | 2CPX062750R9999 |
| For terminal carriers | 5 x 1.5 - 4 | 1 x 25 | 32 x 32 x 31 | 1 | ZK51B | 2CPX062751R9999 |
| | 8 x 1.5 - 4 | 2 x 25 | 32 x 49 x 31 | 1 | ZK82B | 2CPX062752R9999 |
| | 11 x 1.5 - 4 | 3 x 25 | 32 x 65 x 31 | 1 | ZK113B | 2CPX062753R9999 |
| | 14 x 1.5 - 4 | 4 x 25 | 32 x 82 x 31 | 1 | ZK144B | 2CPX062754R9999 |
| | 17 x 1.5 - 4 | 5 x 25 | 32 x 98 x 31 | 1 | ZK175B | 2CPX062755R9999 |
| | 20 x 1.5 - 4 | 6 x 25 | 32 x 115 x 31 | 1 | ZK206B | 2CPX062756R9999 |
| | 23 x 1.5 - 4 | 7 x 25 | 32 x 132 x 31 | 1 | ZK237B | 2CPX063163R9999 |
| | 26 x 1.5 - 4 | 8 x 25 | 32 x 149 x 31 | 1 | ZK268B | 2CPX063164R9999 |
| N quick-plug terminals | 5 x 1.5 - 4 | 0 x 25 | 28 x 39 x 25 | 1 | ZK50BT | 2CPX062745R9999 |
| With adapter ZK15 for lateral assembling in the UK6... or for fastening to the DIN rail | | | | | | |
| PE quick-plug terminals | 5 x 1.5 - 4 | 1 x 25 | 32 x 32 x 31 | 1 | ZK51G | 2CPX062757R9999 |
| For terminal carriers | 8 x 1.5 - 4 | 2 x 25 | 32 x 49 x 31 | 1 | ZK82G | 2CPX062758R9999 |
| | 11 x 1.5 - 4 | 3 x 25 | 32 x 65 x 31 | 1 | ZK113G | 2CPX062759R9999 |
| | 14 x 1.5 - 4 | 4 x 25 | 32 x 82 x 31 | 1 | ZK144G | 2CPX062760R9999 |
| | 17 x 1.5 - 4 | 5 x 25 | 32 x 98 x 31 | 1 | ZK175G | 2CPX062761R9999 |
| | 20 x 1.5 - 4 | 6 x 25 | 32 x 115 x 31 | 1 | ZK206G | 2CPX062762R9999 |
| | 23 x 1.5 - 4 | 7 x 25 | 32 x 132 x 31 | 1 | ZK237G | 2CPX063165R9999 |
| | 26 x 1.5 - 4 | 8 x 25 | 32 x 149 x 31 | 1 | ZK268G | 2CPX063166R9999 |
| Connecting bridges | | | | 10 | ZK10P10 | 2CPX062763R9999 |
| For terminal carriers | | | | | | |
| Quick-carriers | | | | 1 | ZK600 | 2CPX064980R9999 |
| For UK6... consumer units Usable width for terminals 247 mm 15 units | | | | | | |
| Cable inlet for wall box | | | | 1 | UZB1 | 2CPX031407R9999 |
| With integrated terminal carrier Top or bottom, 1 to 5 rows Usable width for terminals 277 mm, 17 units | | | | | | |
| N/PE quick-plug terminal set for UK... | | | Type With | 1 | ZK603 | 2CPX063177R9999 |
| Quick-plug terminals: ZK144B: N 4 x 25 + 14 x 4 mm ² ZK82B: N 2 x 25 + 8 x 4 mm ² ZK206G: PE 6 x 25 + 20 x 4 mm ² | | | | | | |



Consumer units

Screw terminals

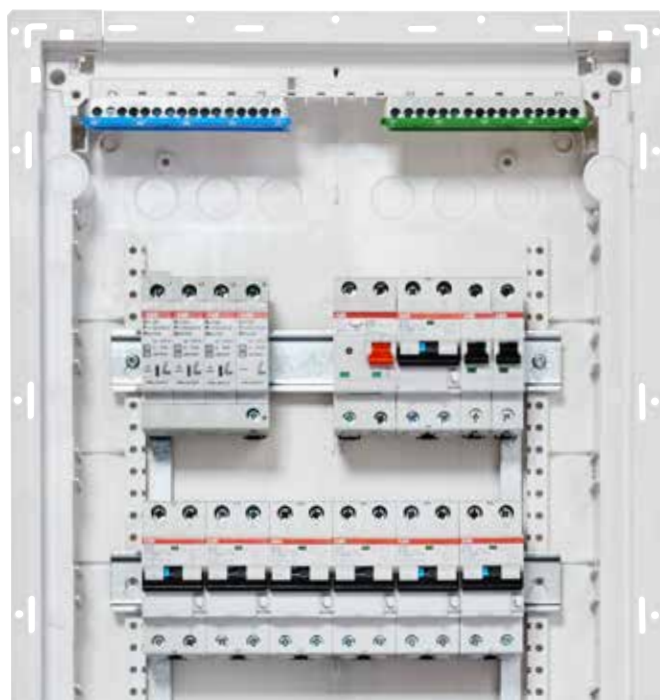
Standardized, future-oriented and flexible




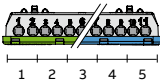


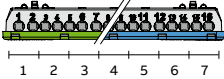


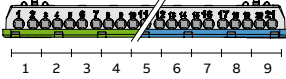





Configure based on your needs

The modularity and the extensive range of products allow customizing the new products to the needs based on realworld use. Various terminals can be combined on one common carrier as necessary.

Product benefits

- Flexible terminal system for several N potentials:
Screw connections: 1.5 to 16 mm² for rigid conductors;
for flexible conductors up to 16 mm²
(wire end sleeves required)
- Optimal when using several residual current circuit breakers
- Precise assignment of the terminals by clear colour coding: N = blue, PE = yellow-green
- Easy labelling of the terminals using pre-printed, self-adhesive number strips
- Wide range of applications: may be used in the UK600 and MISTRAL65 consumer unit series, in all compact distribution boards, and with all meter cabinets, wall-mounting and floor-standing cabinets



| N/PE terminals with units | N screw-terminals | Screw connection system | | PE screw-terminals | Screw connection system | |
|---|---|-------------------------|------------------------|-------------------------|--|---|
|  |  | ZKS6B | 3 x 6 mm ² | 3 x 16 mm ² |  | ZKS6G 3 x 6 mm ² 3 x 16 mm ² |
|  |  | ZKS11B | 5 x 6 mm ² | 5 x 16 mm ² |  | ZKS11G 5 x 6 mm ² 5 x 16 mm ² |
|  |  | ZKS16B | 9 x 6 mm ² | 7 x 16 mm ² |  | ZKS16G 9 x 6 mm ² 7 x 16 mm ² |
|  |  | ZKS21B | 12 x 6 mm ² | 9 x 16 mm ² |  | ZKS21G 12 x 6 mm ² 9 x 16 mm ² |
|  |  | ZKS26B | 15 x 6 mm ² | 11 x 16 mm ² |  | ZKS26G 15 x 6 mm ² 11 x 16 mm ² |

Consumer units

Screw terminals

Accessories / equipment with the UK600



ZKS11B



ZKS16B



ZKS21B



ZKS26B



ZKS6G



ZKS11G



ZKS16G



ZKS21G



ZKS26G

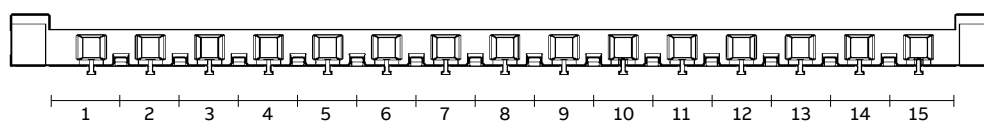


ZK507



ZK600

| Article | Number terminals 1.5 x 6 mm ² | Number terminals 1.5 x 16 mm ² | External dimensions H x W x D in mm | Pieces | Type | Ord. no. |
|---|---|--|---|--------|--------|-----------------|
| N screw-terminals | 3 x 6 | 3 x 16 | 27 x 50 x 20 | 1 | ZKS6B | 2CPX063167R9999 |
| For terminal carriers | 6 x 6 | 5 x 16 | 27 x 83 x 20 | 1 | ZKS11B | 2CPX063168R9999 |
| | 9 x 6 | 7 x 16 | 27 x 116 x 20 | 1 | ZKS16B | 2CPX063169R9999 |
| | 12 x 6 | 9 x 16 | 27 x 149 x 20 | 1 | ZKS21B | 2CPX063170R9999 |
| | 15 x 6 | 11 x 16 | 27 x 182 x 20 | 1 | ZKS26B | 2CPX063171R9999 |
| PE screw-terminals | 3 x 6 | 3 x 16 | 27 x 50 x 20 | 1 | ZKS6G | 2CPX063172R9999 |
| For terminal carriers | 6 x 6 | 5 x 16 | 27 x 83 x 20 | 1 | ZKS11G | 2CPX063173R9999 |
| | 9 x 6 | 7 x 16 | 27 x 116 x 20 | 1 | ZKS16G | 2CPX063174R9999 |
| | 12 x 6 | 9 x 16 | 27 x 149 x 20 | 1 | ZKS21G | 2CPX063175R9999 |
| | 15 x 6 | 11 x 16 | 27 x 182 x 20 | 1 | ZKS26G | 2CPX063176R9999 |
| N-FI rail 3 x 16 mm ² + 2 x 10 mm ² Cu pluggable | | | | 1 | ZK507 | 2CPX030892R9999 |
| Quick-carriers For UK6... consumer units Usable width for terminals 247 mm 15 units | | | | 1 | ZK600 | 2CPX063178R9999 |



Consumer units

UK600 consumer unit

Project options



UZB636



UZS636B



UZS636N



UZS636K

| Article | Pieces | Type | Ord. no. |
|---------------------------------|--------|--------|-----------------|
| Wall box with wall grips | | | |
| To be used with UK61... | 1 | UZB612 | 2CPX031113R9999 |
| To be used with UK62... | 1 | UZB624 | 2CPX031114R9999 |
| To be used with UK63... | 1 | UZB636 | 2CPX031115R9999 |
| To be used with UK64... | 1 | UZB648 | 2CPX031116R9999 |
| To be used with UK66.. | 1 | UZB660 | 2CPX031117R9999 |

| | | | |
|--|---|---------|-----------------|
| Cover, device support and N/PE quick-plug terminals | | | |
| To be used with UK61... | 1 | UZS612B | 2CPX031139R9999 |
| To be used with UK62... | 1 | UZS624B | 2CPX031140R9999 |
| To be used with UK63... | 1 | UZS636B | 2CPX031141R9999 |
| To be used with UK64... | 1 | UZS648B | 2CPX031142R9999 |
| To be used with UK66.. | 1 | UZS660B | 2CPX031143R9999 |

| | | | |
|--|---|---------|-----------------|
| Trim frame with door, cover, device support and N/PE quick-plug terminals | | | |
| To be used with UK61... | 1 | UZS612N | 2CPX031131R9999 |
| To be used with UK62... | 1 | UZS624N | 2CPX031132R9999 |
| To be used with UK63... | 1 | UZS636N | 2CPX031133R9999 |
| To be used with UK64... | 1 | UZS648N | 2CPX031134R9999 |
| To be used with UK66.. | 1 | UZS660N | 2CPX031135R9999 |

| | | | |
|---|---|---------|-----------------|
| Trim frame with door, cover, device support and DIN rail for terminal blocks | | | |
| To be used with UK63... | 1 | UZS636K | 2CPX031136R9999 |
| To be used with UK64... | 1 | UZS648K | 2CPX031137R9999 |
| To be used with UK66.. | 1 | UZS660K | 2CPX031138R9999 |

Consumer units

UK600 consumer unit

Spare parts and accessories



AP636



UZB1



UZB2



UZB3



UZT1



UZT2



UZT3



UZT4

| Article | Pieces | Type | Ord. no. |
|---|--------|-------|-----------------|
| Surface mounting | | | |
| For wall-mounting or partially recessed installation with predetermined breaking points, only suitable for standard door | | | |
| To be used with UK61... | 1 | AP612 | 2CPX031402R9999 |
| To be used with UK62... | 1 | AP624 | 2CPX031403R9999 |
| To be used with UK63... | 1 | AP636 | 2CPX031404R9999 |
| To be used with UK64... | 1 | AP648 | 2CPX031405R9999 |
| To be used with UK66.. | 1 | AP660 | 2CPX031406R9999 |
| Cable inlet | | | |
| With integrated terminal carrier Top or bottom, 1 to 5 rows Usable width for terminals 277 mm, 17 units | | | |
| UZB1 | 1 | UZB1 | 2CPX031407R9999 |
| Connecting channel for horizontal and vertical apposition and cross-wiring of the consumer units | | | |
| UZB2 | 1 | UZB2 | 2CPX031408R9999 |
| Horizontal partition with integrated terminal carrier, Knock-out for two sockets, type ZE224 and five knock-outs for communications racks* | | | |
| UZB3 | 1 | UZB3 | 2CPX031409R9999 |
| Hinge set for UK600 | | | |
| UZT1 | 2 | UZT1 | 2CPX031410R9999 |
| TIP-in-closure Colour: White, RAL 9016 | | | |
| UZT2 | 1 | UZT2 | 2CPX031411R9999 |
| Closure with lock, standard With 2 keys | | | |
| UZT3 | 1 | UZT3 | 2CPX031412R9999 |
| Closure with lock, Ronis With 2 keys | | | |
| UZT4 | 1 | UZT4 | 2CPX031413R9999 |

Consumer units

UK600 consumer unit

Spare parts and accessories



UZT5



UZ4P2



UZG636



UZA636



UZM620



UZ91P4



ZA120



ZA89P20

| Article | Pieces | Type | Ord. no. |
|---|--------|---------|-----------------|
| Labelling system Self-adhesive With labelling panels and numbers 1-70 with legend | 1 | UZT5 | 2CPX031429R9999 |
| Wall grips To fix the wall box in two mounting depths | 4 | UZ4P2 | 2CPX062447R9999 |
| DIN rail with device insert | | | |
| To be used with UK61... | 1 | UZG612 | 2CPX031118R9999 |
| To be used with UK62... | 1 | UZG624 | 2CPX031119R9999 |
| To be used with UK63... | 1 | UZG636 | 2CPX031120R9999 |
| To be used with UK64... | 1 | UZG648 | 2CPX031121R9999 |
| To be used with UK66.. | 1 | UZG660 | 2CPX031122R9999 |
| Cover with 90° quick-action screws | | | |
| To be used with UK61... | 1 | UZA612 | 2CPX031123R9999 |
| To be used with UK62... | 1 | UZA624 | 2CPX031124R9999 |
| To be used with UK63... | 1 | UZA636 | 2CPX031125R9999 |
| To be used with UK64... | 1 | UZA648 | 2CPX031126R9999 |
| To be used with UK66.. | 1 | UZA660 | 2CPX031127R9999 |
| Mounting plate, sheet steel, galvanised | | | |
| To be used with UK61..., H x W = 212 x 242 mm | 1 | UZM610 | 2CPX031414R9999 |
| To be used with UK62..., H x W = 337 x 242 mm | 1 | UZM620 | 2CPX031415R9999 |
| To be used with UK63..., H x W = 462 x 242 mm | 1 | UZM630 | 2CPX031416R9999 |
| To be used with UK64..., H x W = 587 x 242 mm | 1 | UZM640 | 2CPX031417R9999 |
| To be used with UK65..., H x W = 712 x 242 mm | 1 | UZM650 | 2CPX031418R9999 |
| Hollow-wall-mounting set To modify the flush-mounting consumer unit into a hollow-wall consumer unit UK600 (type label and 20 cable ties included) wall thickness min. 8 mm, max. 35 mm | 4 | UZ91P4 | 2CPX031434R9999 |
| Touch-up applicator Colour: RAL 9016, 12 ml | 1 | ZA120 | 2CPX039043R9999 |
| Screws 20 pcs. for fixing DIN rails and mounting plates | 1 | ZA89P20 | 2CPX062376R9999 |

Consumer units

UK600 consumer unit

Trim frame with door and design foils



BL610



BL611

| Article | To be used with... | Pieces | Type | Ord. no. |
|---|--------------------|--------|-------|-----------------|
| Trim frame with door (standard) Colour: White, RAL 9016 sheet steel, powder coated | UK61.. | 1 | BL610 | 2CPX031081R9999 |
| | UK62.. | 1 | BL620 | 2CPX031082R9999 |
| | UK63.. | 1 | BL630 | 2CPX031083R9999 |
| | UK64.. | 1 | BL640 | 2CPX031084R9999 |
| | UK66.. | 1 | BL650 | 2CPX031085R9999 |

| | | | | |
|---|--------|---|-------|-----------------|
| Trim frame with door Colour: Anthracite, RAL 7016 sheet steel, powder coated | UK61.. | 1 | BL611 | 2CPX031086R9999 |
| | UK62.. | 1 | BL621 | 2CPX031087R9999 |
| | UK63.. | 1 | BL631 | 2CPX031088R9999 |
| | UK64.. | 1 | BL641 | 2CPX031089R9999 |
| | UK66.. | 1 | BL651 | 2CPX031090R9999 |

| Article | To be used with... | Pieces | Type | Ord. no. |
|---|--------------------|--------|-----------|-----------------|
| Blackboard foil For labelling of UK600 sheet steel doors | UK61.. | 1 | UZ640D | |
| | UK62.. | 10 | UZ640DP10 | 2CPX031790R9999 |
| | UK63.. | | | |
| | UK64.. | | | |
| | UK66.. | | | |
| Stones Design foil for UK600 sheet steel doors | UK61.. | 1 | UZ641D | 2CPX031787R9999 |
| | UK62.. | 10 | UZ641DP10 | 2CPX031791R9999 |
| | UK63.. | | | |
| | UK64.. | | | |
| | UK66.. | | | |
| Wooden walkway Design foil for UK600 sheet steel doors | UK61.. | 1 | UZ642D | 2CPX031788R9999 |
| | UK62.. | 10 | UZ642DP10 | 2CPX031792R9999 |
| | UK63.. | | | |
| | UK64.. | | | |
| | UK66.. | | | |
| Water drops Design foil for UK600 sheet steel doors | UK61.. | 1 | UZ643D | 2CPX031789R9999 |
| | UK62.. | 10 | UZ643DP10 | 2CPX031793R9999 |
| | UK63.. | | | |
| | UK64.. | | | |
| | UK66.. | | | |



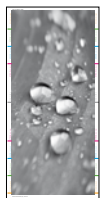
Blackboard
foil



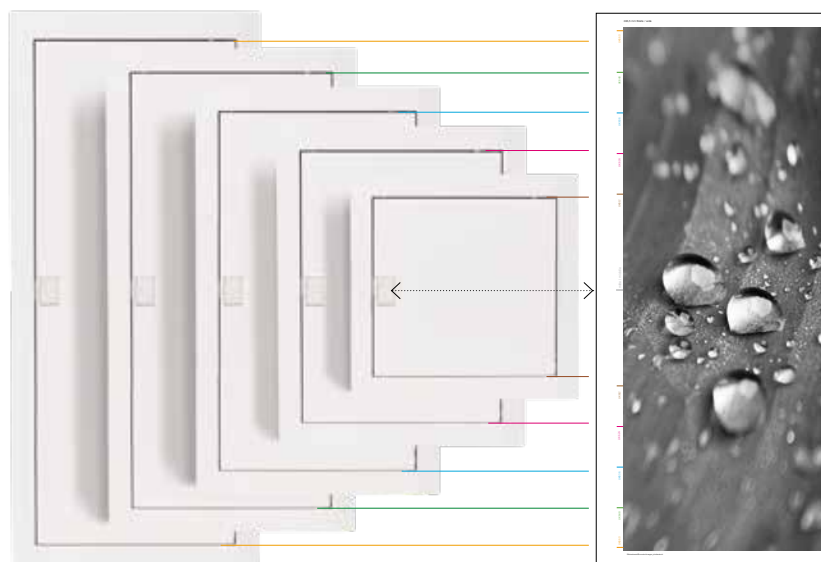
Stones



Wooden
walkway



Water
drops



Consumer units

UK600 consumer unit

Design frames and inserts



BL630D



UZD630



UZD631



UZD632



UZD633



UZD634



UZD635

| Article | To be used with... | Pieces | Type | Ord. no. |
|---|--------------------|--------|--------|-----------------|
| Interchangeable design frame Aluminium brushed, stainless steel finish without insert | UK62.. | 1 | BL620D | 2CPX031794R9999 |
| | UK63.. | 1 | BL630D | 2CPX031795R9999 |
| | UK64.. | 1 | BL640D | 2CPX031796R9999 |
| | UK66.. | 1 | BL650D | 2CPX031797R9999 |

Inserts for the interchangeable design frame

| | | | | |
|--|--------|---|--------|-----------------|
| Image insert For your own images as you wish | UK62.. | 1 | UZD620 | 2CPX031762R9999 |
| | UK63.. | 1 | UZD630 | 2CPX031768R9999 |
| | UK64.. | 1 | UZD640 | 2CPX031774R9999 |
| | UK66.. | 1 | UZD650 | 2CPX031780R9999 |

| | | | | |
|---|--------|---|--------|-----------------|
| Pinboard insert Grey felt with pins | UK62.. | 1 | UZD621 | 2CPX031763R9999 |
| | UK63.. | 1 | UZD631 | 2CPX031769R9999 |
| | UK64.. | 1 | UZD641 | 2CPX031775R9999 |
| | UK66.. | 1 | UZD651 | 2CPX031781R9999 |

| | | | | |
|----------------------|--------|---|--------|-----------------|
| Mirror insert | UK62.. | 1 | UZD622 | 2CPX031764R9999 |
| | UK63.. | 1 | UZD632 | 2CPX031770R9999 |
| | UK64.. | 1 | UZD642 | 2CPX031776R9999 |
| | UK66.. | 1 | UZD652 | 2CPX031782R9999 |

| | | | | |
|--------------------------------------|--------|---|--------|-----------------|
| Stainless steel finish insert | UK62.. | 1 | UZD623 | 2CPX031765R9999 |
| | UK63.. | 1 | UZD633 | 2CPX031771R9999 |
| | UK64.. | 1 | UZD643 | 2CPX031777R9999 |
| | UK66.. | 1 | UZD653 | 2CPX031783R9999 |

| | | | | |
|---|--------|---|--------|-----------------|
| LED panel insert With backlight foil* | UK62.. | 1 | UZD624 | 2CPX031766R9999 |
| | UK63.. | 1 | UZD634 | 2CPX031772R9999 |
| | UK64.. | 1 | UZD644 | 2CPX031778R9999 |
| | UK66.. | 1 | UZD654 | 2CPX031784R9999 |

| | | | | |
|---|--------|---|--------|-----------------|
| Wooden finish insert With 5 magnetic pins | UK62.. | 1 | UZD625 | 2CPX031767R9999 |
| | UK63.. | 1 | UZD635 | 2CPX031773R9999 |
| | UK64.. | 1 | UZD645 | 2CPX031779R9999 |
| | UK66.. | 1 | UZD655 | 2CPX031785R9999 |

*12 V DC REG voltage supply must be ordered separately.

Consumer units

UK600 consumer unit

Design frames and inserts

A special highlight of the UK600 consumer unit system are the numerous door and frame options, which turn your consumer unit into an attractive design object at home. Images, pinboards, mirrors, magnetic boards and much more may be inserted into the interchangeable design frame.

— 01 Basic version UK600

— 02 Interchangeable design frame

— 03 Insert example with backlight foil LED backlight



Consumer units

Media enclosure UK600

With and without trim frame and door

Flush-mounted consumer units – UK600, IP30 - , ; *

Consumer units UK600 as multimedia version,

dimensions according to the standard enclosures as per DIN 43871

Mechanical impact strength: IK07

Available in 2 up to 5 row versions as flush-mounted consumer units

Can be upgraded for surface-mounting or partially recessed mounting

Upgradeable for hollow-wall-mounting using UZ91P4

Wall box:

- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable

Reversible opening (tool-free)

Communication channel for horizontal and vertical connection

With removable DIN rail in the top row

Patch panel in isolated design for up to 12 keystone modules

Modular perforated sheet steel mounting plate for devices

Simple and tool-free installation of the devices using the "device strap"

120° swiveling triple socket for the power supply of built-in devices

Wire holder for professional cable organization

With trim frame and sheet steel doors as sheet steel door with white plastic insert, for improved Wifi signals or as basic option without trim frame and door

*in connection with hollow-wall-mounting set UZ91P4





UK636MV

| Article | Dimensions | H x D x D (mm) | Type | Ord. no. |
|--|--------------------------------------|----------------------------------|---------|-----------------|
| Flush-mounted media enclosure with trim frame and door with ventilation holes | | | | |
| Wall box with modular perforated sheet steel mounting plates and removable DIN rail | 3 rows Niche wall cut out dimensions | 605 x 367 x 95 578 x 340 x 88 | UK636MV | 2CPX031384R9999 |
| Wire holder for cable entry | 4 rows Niche wall cut out dimensions | 730 x 367 x 95 703 x 340 x 88 | UK648MV | 2CPX031385R9999 |
| Patch panel for up to 12 keystone modules | | | | |
| Snap-on triple socket swiveling 120° with EURO insert | 5 rows Niche wall cut out dimensions | 855 x 367 x 95 828 x 340 x 88 | UK660MV | 2CPX031386R9999 |
| Device strap for tool-free installation. | | | | |
| Sheet steel door ventilated | | | | |



UK636MW

| | | | | |
|---|--------------------------------------|----------------------------------|---------|-----------------|
| Flush-mounted media enclosure with trim frame and ventilated Wifi door | | | | |
| Wall box with modular perforated sheet steel mounting plates and removable DIN rail | 3 rows Niche wall cut out dimensions | 605 x 367 x 95 578 x 340 x 88 | UK636MW | 2CPX031387R9999 |
| Wire holder for cable entry | 4 rows Niche wall cut out dimensions | 730 x 367 x 95 703 x 340 x 88 | UK648MW | 2CPX031388R9999 |
| Patch panel for up to 12 keystone modules | | | | |
| Snap-on triple socket swiveling 120° with EURO insert | 5 rows Niche wall cut out dimensions | 855 x 367 x 95 828 x 340 x 88 | UK660MW | 2CPX031389R9999 |
| Device strap for tool-free installation. | | | | |
| Sheet steel door with white plastic insert, for improved Wifi signals | | | | |



UK630MV

| | | | | |
|--|--------------------------------------|----------------------------------|---------|-----------------|
| Flush-mounted media enclosure with trim frame and door with ventilation holes | | | | |
| Wall box with modular perforated sheet steel mounting plates and removable DIN rail | 2 rows Niche wall cut out dimensions | 480 x 367 x 95 453 x 340 x 88 | UK620MV | 2CPX031390R9999 |
| Wire holder for cable entry | 3 rows Niche wall cut out dimensions | 605 x 367 x 95 578 x 340 x 88 | UK630MV | 2CPX031391R9999 |
| Dual socket with mounting bracket | | | | |
| Device strap for tool-free installation | 4 rows Niche wall cut out dimensions | 730 x 367 x 95 703 x 340 x 88 | UK640MV | 2CPX031392R9999 |
| Sheet steel door ventilated | | | | |
| | 5 rows Niche wall cut out dimensions | 855 x 367 x 95 828 x 340 x 88 | UK650MV | 2CPX031393R9999 |



UK630MB

| | | | | |
|---|--------------------------------------|----------------------------------|---------|-----------------|
| Flush-mounted media enclosure as basis without trim frame and door | | | | |
| Wall box with modular perforated sheet steel mounting plates and removable DIN rail | 2 rows Niche wall cut out dimensions | 480 x 367 x 95 453 x 340 x 88 | UK624MB | 2CPX031394R9999 |
| Wire holder for cable entry | 3 rows Niche wall cut out dimensions | 605 x 367 x 95 578 x 340 x 88 | UK636MB | 2CPX031395R9999 |
| Mounting bracket | | | | |
| Device strap for tool-free installation | 4 rows Niche wall cut out dimensions | 730 x 367 x 95 703 x 340 x 88 | UK648MB | 2CPX031396R9999 |
| | | | | |
| | 5 rows Niche wall cut out dimensions | 855 x 367 x 95 828 x 340 x 88 | UK660MB | 2CPX031397R9999 |

Consumer units

Combi enclosure UK600

With trim frame and door

Flush-mounted consumer units – UK600, IP30 , ; *

I_n up to 63 A

Combi enclosure as consumer unit and media enclosure

dimensions according to the standard enclosures as per DIN 43871

For building installation according to DIN 18015

Mechanical impact strength: IK07

Available as 2 or 3 row versions as flush-mounted consumer units

Can be upgraded for surface-mounting or partially recessed mounting

Upgradeable for hollow-wall-mounting using UZ91P4

Wall box:

- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable

Reversible opening (tool-free)

Communication channel for horizontal and vertical connection

With N/PE quick-plug terminal

Cover with 90° quick-action screws, lead-sealable

45 mm slots for 12 devices, expandable to 14

Labelling system

Standardized separation of the voltage levels using a partition with knock-out for socket and media modules

Modular perforated sheet steel mounting plate for devices

Simple and tool-free installation of the devices using the "device strap"

"Click in" socket, swiveling 90° for the power supply of built-in devices

Wire holder for professional cable organization

With trim frame and sheet steel door or sheet steel door with white plastic insert,

for improved Wifi signal, with surface compensation

*in connection with hollow-wall-mounting set UZ91P4





UK662CV



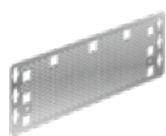
UK662CW

| Article | Dimensions | H x D x D (mm) | Type | Ord. no. |
|---|-------------------------|----------------|---------|-----------------|
| Flush-mounted combi enclosure with trim frame and ventilated door | | | | |
| Wall box with modular perforated sheet steel mounting plates and removable device support | 2 rows | | UK662CV | 2CPX031398R9999 |
| Wire holder for cable entry | Niche | 855 x 367 x 95 | | |
| Partition for electrical isolation, snap-on socket, swiveling 90° with EURO insert | wall cut out dimensions | 828 x 340 x 88 | | |
| "Device strap" for tool-free installation | 3 rows | | UK663CV | 2CPX031399R9999 |
| Sheet steel door ventilated | Niche | 855 x 367 x 95 | | |
| | wall cut out dimensions | 828 x 340 x 88 | | |
| Flush-mounted combination enclosure with trim frame and ventilated Wifi door | | | | |
| Wall box with modular perforated sheet steel mounting plates and removable device support | 2 rows | | UK662CW | 2CPX031400R9999 |
| Wire holder for cable entry | Niche | 855 x 367 x 95 | | |
| Partition for electrical isolation, snap-on socket, swiveling 90° with EURO insert | wall cut out dimensions | 828 x 340 x 88 | | |
| "Device strap" for tool-free installation | 3 rows | | UK663CW | 2CPX031401R9999 |
| Sheet steel door ventilated with white plastic insert, for improved Wifi signals | Niche | 855 x 367 x 95 | | |
| | wall cut out dimensions | 828 x 340 x 88 | | |

Consumer units

Media enclosure

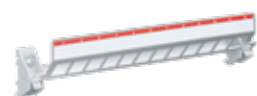
Accessories



UZM61M



ZX340



ZE336



ZE338



ZE224



ZE225



ZE226



UZB3

| Article | Pieces | Type | Ord. no. |
|--|--------|--------|-----------------|
| Perforated mounting plate for media enclosures | 1 | UZM61M | 2CPX031421R9999 |
| Media device support Device strap elastic with 2 clips for assembly, e.g. to UZM61M | 1 | ZX340 | 2CPX031422R9999 |
| Patch panel empty for communication modules, e.g. RJ45, COAX module, etc. For the direct and insulated assembly to the EDF-rail, DIN rail or mounting plate | | | |
| Patch panel, 6-fold | 1 | ZE335 | 2CPX031423R9999 |
| Patch panel, 12-fold | 1 | ZE336 | 2CPX031424R9999 |
| Patch panel holder | 1 | ZE338 | 2CPX031426R9999 |
| | | | |
| Single socket Snap-in, swiveling 90° with touch guard and strain relief, for assembling to partition UZB3 with EURO insert | 1 | ZE224 | 2CPX031427R9999 |
| | | | |
| Dual socket 230 V AC voltage for assembling to mounting plate ZX29 with EURO insert | 1 | ZE225 | 2CPX061177R9999 |
| | | | |
| Triple socket 230 V AC voltage, 120° swiveling with EURO insert to be snapped on to the cable inlet or DIN rail; to be screwed to the mounting plate | 1 | ZE227 | 2CPX061211R9999 |
| | | | |
| Partition For standard-compliant electrical isolation with terminal block with 2 knock-outs for the installation of the socket ZE224 5 knock-outs for assembling keystone modules | | UZB3 | 2CPX031409R9999 |



ZX29



UZED1



ZX287P10



ZE316



ZE317



ZE318



ZE319



ZE320



ZE311



ZE310



ZB120

| Article | Pieces | Type | Ord. no. |
|---|--------|----------|-----------------|
| Mounting plate For clamping on to terminal carrier or for assembling to the perforated sheet steel plate of the UK... media enclosures and of the 1MM... media panels | 1 | ZX29 | 2CPX061178R9999 |
| Wire holder UK600 | 1 | UZED1 | 2CPX031419R9999 |
| | 10 | UZED1P | 2CPX031420R9999 |
| Screws M4 x 14 thread rolling for the perforated sheet steel mounting plate | 10 | ZX287P10 | 2CPX061180R9999 |
| Connectors for patch panels | | | |
| COAX module F/F connector | 1 | ZE316 | 2CPX039246R9999 |
| COAX module IEC connector | 1 | ZE317 | 2CPX039247R9999 |
| COAX module IEC plug | 1 | ZE318 | 2CPX039248R9999 |
| OpDAT module LC guide sleeve, ceramics | 1 | ZE319 | 2CPX039249R9999 |
| Blind module | 1 | ZE320 | 2CPX039250R9999 |
| RJ45 connector Plastic | 1 | ZE311 | 2CPX038612R9999 |
| IP patch module RJ45 module with adapter for assembling the DIN rail | 1 | ZE310 | 2CPX038625R9999 |
| Insulating tube | | | |
| For communication line | | | |
| 50 mm | 1 | ZB120 | 2CPX071111R9999 |
| 150 mm | 1 | ZB122 | 2CPX071112R9999 |

Consumer units
Media enclosure
Doors



BL620V



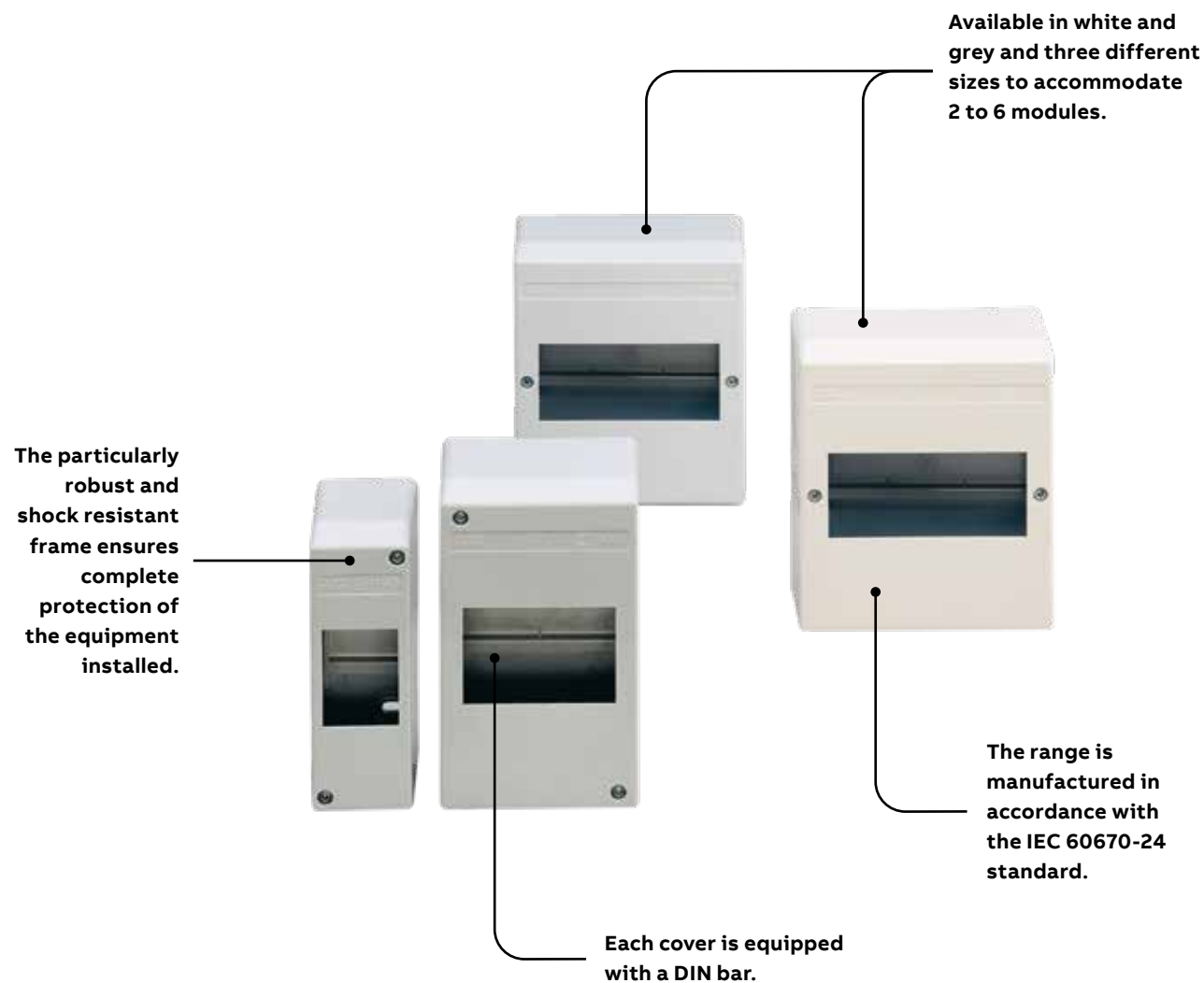
BL620W

| Article | To be used with... | Pieces | Type | Ord. no. |
|--|--------------------|--------|--------|-----------------|
| Trim frame with door and ventilation holes Colour: White, RAL 9016 Sheet steel, powder-coated | UK62.. | 1 | BL620V | 2CPX031091R9999 |
| | UK63.. | 1 | BL630V | 2CPX031092R9999 |
| | UK64.. | 1 | BL640V | 2CPX031093R9999 |
| | UK66.. | 1 | BL650V | 2CPX031094R9999 |

| | | | | |
|--|--------|---|--------|-----------------|
| Trim frame with door and ventilation holes Sheet steel with white plastic insert, for improved Wifi signal | UK62.. | 1 | BL620W | 2CPX031095R9999 |
| | UK63.. | 1 | BL630W | 2CPX031096R9999 |
| | UK64.. | 1 | BL640W | 2CPX031097R9999 |
| | UK66.. | 1 | BL650W | 2CPX031098R9999 |

Mini EUROPA40

Wall-mounting covers without door IP40





This consumer unit without door reaches IP40.



The upper and lower walls include precuts on the internal side for the passing through of wiring trunking.



These covers can be opened from the front side to ensure easier access during installation.

Technical characteristics

Protection degree: IP40.

Colour: RAL 9016 red and RAL 7035 grey.

Material: manufactured in self-extinguishing thermoplastic resistant to abnormal heat and to fire up to 650°C (glow wire test), according to IEC 60695-2-11 standard.

Installation temperature: -25°C ÷ +60°C.

Shock resistant: 6 joule (with mounted circuit breakers).

Conformity: IEC 60670-24 certification.



Consumer units

Mini EUROPA40 - Order codes



2 modules



4 modules



6 modules

| Description | No. of modules [18 mm] | Dimensions WxHxD [mm] | Order code | Packaging |
|----------------|---------------------------|-----------------------------|------------|-----------|
| RAL 9016 white | 2 | 50x140x65 | 1SL2402A00 | 1/45 |
| RAL 7035 grey | 2 | 50x140x65 | 12422 | 1/45 |
| RAL 9016 white | 4 | 95x160x65 | 1SL2404A00 | 1/20 |
| RAL 7035 grey | 4 | 95x160x65 | 12424 | 1/20 |
| RAL 9016 white | 6 | 140x160x65 | 1SL2406A00 | 1/12 |
| RAL 7035 grey | 6 | 140x160x65 | 12426 | 1/12 |



| Description | | | |
|---------------------------------|--|-------------------------|------------|
| No of holes x Ø holes (mm) | | | |
| + No of holes x mm ² | | For covers type | Order code |
| Terminal bars | | | |
| | | 1SL2404A00 - 1SL2406A00 | |
| 2x16 + 3x25 | | 12424 - 12426 | 12502 |
| | | | 25/750 |



| Description | | | |
|----------------|--|------------------------|------------|
| | | No. of modules [18 mm] | Order code |
| Module covers | | | |
| RAL 9016 white | | 1 | 1SL2857A00 |
| RAL 9016 white | | 4 | 1SL2859A00 |
| RAL 7035 grey | | 1 | 12861 |
| RAL 7035 grey | | 4 | 12863 |
| | | | 25/300 |



| Description | | |
|------------------------------|--|------------|
| | | Order code |
| Screw lead sealing accessory | | |
| | | 12860 |
| | | 50/1500 |

MISTRAL41W

Wall-mounted series

The MISTRAL41W series of consumer units gives installers the freedom and flexibility to implement any type of electrical distribution system in residential buildings. This wide range of wall-mounted, IP41-rated units has been designed from scratch to enhance the unique features that make ABB the leading industry standard.

The units are fast and easy to install and look great anywhere thanks to their elegant design. Furthermore, ample internal space, a choice of doors and a unified range of accessories offer endless possibilities to create high-quality work installers can be proud of.



MISTRAL41W

Endless installation possibilities

Fast and easy to be installed. Design and simplicity “all in one”.



Endless installation possibilities

Invisible cable entry and exit

Pre-cut knockout slots allow cable entry and exit from the top and bottom. When not used, the slots remain invisible on the outside maintaining the consumer unit's sleek look and feel.



More than enough internal space

Lots of internal space makes cabling even easier. Cable clips and holes allow wires to be fastened to the frame with simple cable ties.



Easy installation of extra modules

An extra module can be added by removing two pre-cut elements. This offers a quick and easy solution when unexpected additional installation is required.



Fast and tidy cabling

Various snap-on terminal blocks for N and PE connection be installed in the upper and lower part of the unit. Two versions offer screw or spring couplings.

Double insulation protection

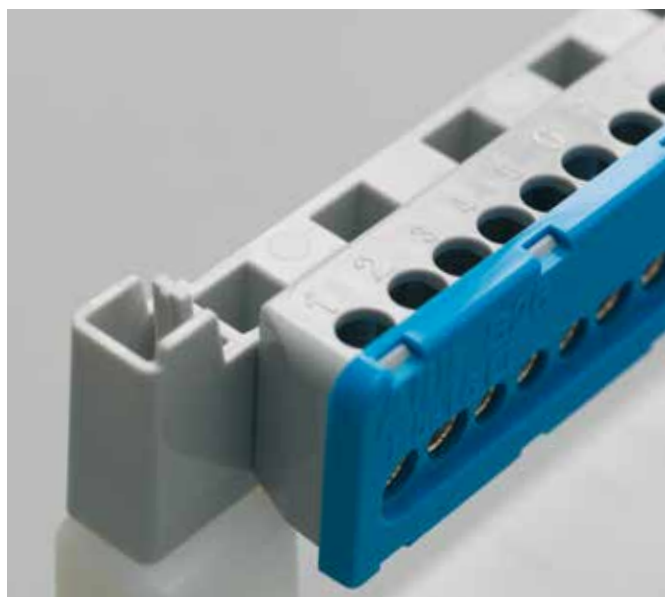
The unit housing and all accessories have been designed and developed to ensure Class II double insulation protection.

**Multi-row units**

Multi-row units are available with a standard distance of 125 mm between DIN rails.

**Optional door lock**

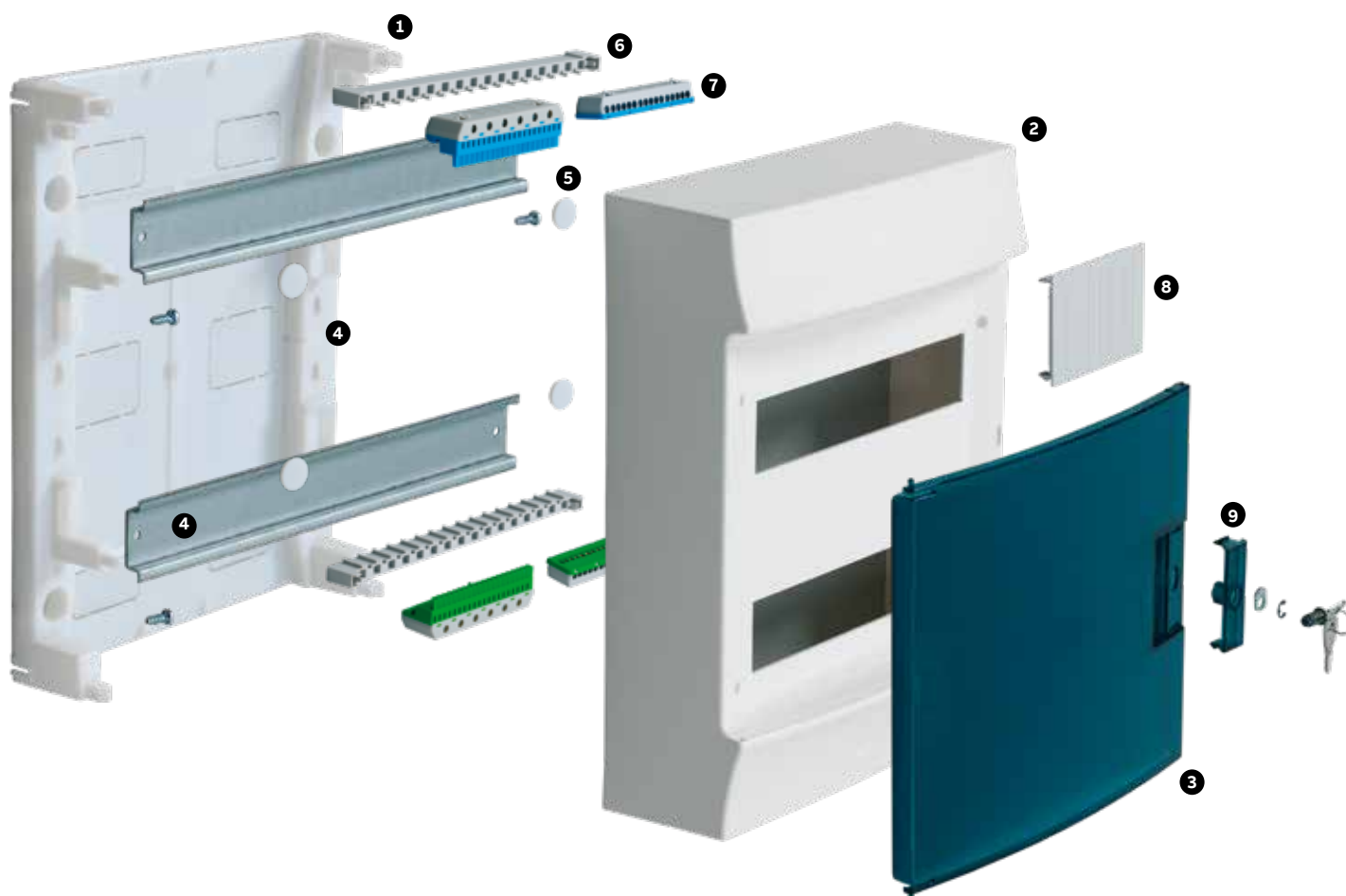
The standard door with ergonomic handle is available with a lock for added security.

**New generation terminals**

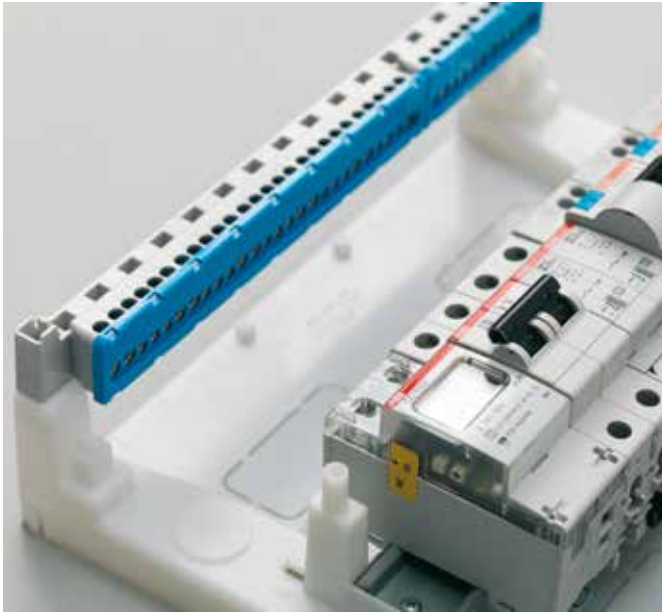
The MISTRAL range of consumer units is amended with a wide, completely new ABB terminal blocks. Two different versions offer screw and spring fast coupling for easy and effective cabling up to 63A or 100A.

A versatile range suitable for every application

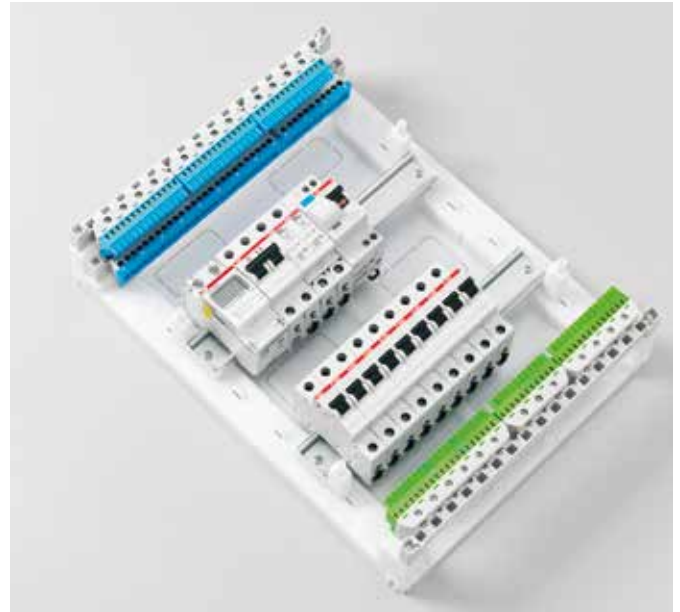
The simple construction of the MISTRAL41W series makes the units fast and easy to assemble. Furthermore, they can be easily adapted to various application requirements thanks to their flexible design.



- 1. Base for wall mounting
- 2. Reversible cover
- 3. Transparent door
- 4. DIN rail
- 5. Plugs, protection class II
- 6. Terminal carrier
- 7. Quick coupling terminal blocks
- 8. Module cover
- 9. Finish or closure element
(optional lock)

**A unified range of products**

The MISTRAL41W series is compatible with a unified range of ABB products. As a result, terminal blocks, circuit breakers, switches, surge protective devices and many other components can all be installed in the units for a wide variety of applications.

**3 different terminal systems available**

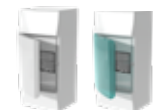
A new generation of terminal blocks is available in different colours, wide range of sizes and two different connection options.

Consumer units

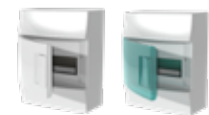
MISTRAL41W – Order codes wall-mounted (650)



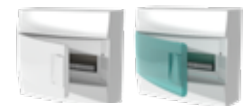
2 modules



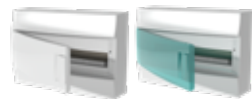
4 modules



8 modules



12 modules



18 modules



24 modules



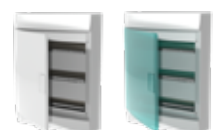
36 modules

MISTRAL41W – Order codes 650

| Description | N° of modules [18 mm] | GWT | Dimensions W x H x D [mm] | Order code | Type number | Packaging |
|---|--------------------------|-----|---------------------------------|-----------------|----------------|-----------|
| Consumer units MISTRAL41 wall - 1 Row | | | | | | |
| Without door 2M | 2 | 650 | 68 x 210 x 93 | 1SPE007717F0100 | 41P02X10 | 1/36 |
| Without door 4M | 4 | 650 | 96 x 210 x 93 | 1SPE007717F0200 | 41P04X10 | 1/24 |
| Opaque door 4M | 4 | 650 | 96 x 210 x 93 | 1SPE007717F0210 | 41P04X11 | 1/24 |
| Transparent door 4M | 4 | 650 | 96 x 210 x 93 | 1SPE007717F0220 | 41P04X12 | 1/24 |
| Without door 8M | 8 | 650 | 202 x 257 x 120 | 1SPE007717F0300 | 41P08X10 | 1/7 |
| Opaque door 8M | 8 | 650 | 202 x 257 x 120 | 1SPE007717F0310 | 41P08X11 | 1/7 |
| Transparent door 8M | 8 | 650 | 202 x 257 x 120 | 1SPE007717F0320 | 41P08X12 | 1/7 |
| Without door 12M | 12 | 650 | 292 x 257 x 120 | 1SPE007717F0400 | 41P12X10 | 1/3 |
| Opaque door 12M | 12 | 650 | 292 x 257 x 120 | 1SPE007717F0410 | 41P12X11 | 1/3 |
| Transparent door 12M | 12 | 650 | 292 x 257 x 120 | 1SPE007717F0420 | 41P12X12 | 1/3 |
| Without door 18M | 18 | 650 | 382 x 257 x 120 | 1SPE007717F0800 | 41P18X10 | 1/3 |
| Opaque door 18M | 18 | 650 | 382 x 257 x 120 | 1SPE007717F0810 | 41P18X11 | 1/3 |
| Transparent door 18M | 18 | 650 | 382 x 257 x 120 | 1SPE007717F0820 | 41P18X12 | 1/3 |
| Consumer units MISTRAL41 wall - 2 Rows | | | | | | |
| Without door 24M | 24 | 650 | 292 x 382 x 120 | 1SPE007717F0500 | 41P12X20 | 1/2 |
| Opaque door 24M | 24 | 650 | 292 x 382 x 120 | 1SPE007717F0510 | 41P12X21 | 1/2 |
| Transparent door 24M | 24 | 650 | 292 x 382 x 120 | 1SPE007717F0520 | 41P12X22 | 1/2 |
| Without door 36M 2F | 36 | 650 | 382 x 382 x 120 | 1SPE007717F0900 | 41P18X20 | 1/2 |
| Opaque door 36M 2F | 36 | 650 | 382 x 382 x 120 | 1SPE007717F0910 | 41P18X21 | 1/2 |
| Transparent door 36M 2F | 36 | 650 | 382 x 382 x 120 | 1SPE007717F0920 | 41P18X22 | 1/2 |



36 modules



54 modules



48 modules



72 modules

MISTRAL41W – Order codes 650

| Description | N° of modules [18 mm] | GWT | Dimensions W x H x D [mm] | Order code | Type number | Packaging |
|---|--------------------------|-----|---------------------------------|-----------------|----------------|-----------|
| Consumer units MISTRAL41 wall - 3 Rows | | | | | | |
| Without door 36M 3F | 36 | 650 | 292 x 507 x 120 | 1SPE007717F0600 | 41P12X30 | 1/2 |
| Opaque door 36M 3F | 36 | 650 | 292 x 507 x 120 | 1SPE007717F0610 | 41P12X31 | 1/2 |
| Transparent door 36M 3F | 36 | 650 | 292 x 507 x 120 | 1SPE007717F0620 | 41P12X32 | 1/2 |
| Consumer units MISTRAL41 wall - 4 Rows | | | | | | |
| Without door 54M | 54 | 650 | 382 x 507 x 120 | 1SPE007717F1000 | 41P18X30 | 1/2 |
| Opaque door 54M | 54 | 650 | 382 x 507 x 120 | 1SPE007717F1010 | 41P18X31 | 1/2 |
| Transparent door 54M | 54 | 650 | 382 x 507 x 120 | 1SPE007717F1020 | 41P18X32 | 1/2 |
| Without door 48M | 48 | 650 | 292 x 656 x 120 | 1SPE007717F0700 | 41P12X40 | 1/1 |
| Opaque door 48M | 48 | 650 | 292 x 656 x 120 | 1SPE007717F0710 | 41P12X41 | 1/1 |
| Transparent door 48M | 48 | 650 | 292 x 656 x 120 | 1SPE007717F0720 | 41P12X42 | 1/1 |
| Without door 72M | 72 | 650 | 382 x 656 x 120 | 1SPE007717F1100 | 41P18X40 | 1/1 |
| Opaque door 72M | 72 | 650 | 382 x 656 x 120 | 1SPE007717F1110 | 41P18X41 | 1/1 |
| Transparent door 72M | 72 | 650 | 382 x 656 x 120 | 1SPE007717F1120 | 41P18X42 | 1/1 |

Consumer units

MISTRAL41W – Order codes wall-mounted (750)



2 modules



4 modules



8 modules



12 modules



18 modules



24 modules



36 modules

MISTRAL41W – Order codes 750

| Description | N° of modules [18 mm] | GWT | Dimensions W x H x D [mm] | Order code | Type number | Packaging |
|--|--------------------------|-----|---------------------------------|-----------------|--------------|-----------|
| Consumer units MISTRAL41 wall - 1 Row | | | | | | |
| Without door 2M | 2 | 750 | 68 x 210 x 93 | 1SPE007717F1500 | 41P02X100750 | 1/36 |
| Without door 4M | 4 | 750 | 96 x 210 x 93 | 1SPE007717F1600 | 41P04X100750 | 1/24 |
| Without door 8M | 8 | 750 | 202 x 257 x 120 | 1SPE007717F1700 | 41P08X100750 | 1/7 |
| Without door 12M | 12 | 750 | 292 x 257 x 120 | 1SPE007717F1800 | 41P12X100750 | 1/3 |
| Without door 18M | 18 | 750 | 382 x 257 x 120 | 1SPE007717F2200 | 41P12X200750 | 1/3 |
| Consumer units MISTRAL41 wall - 2 Rows | | | | | | |
| Without door 24M | 24 | 750 | 292 x 382 x 120 | 1SPE007717F1900 | 41P12X300750 | 1/2 |
| Without door 36M 2F | 36 | 750 | 382 x 382 x 120 | 1SPE007717F2300 | 41P12X400750 | 1/2 |



36 modules



54 modules



48 modules



72 modules

MISTRAL41W – Order codes 750

| Description | N° of modules | GWT | Dimensions | Order code | Type number | Packaging |
|--|------------------|-----|-------------------|-----------------|--------------|-----------|
| | [18 mm] | | W x H x D [mm] | | | |
| Consumer units MISTRAL41 wall - 3 Rows | | | | | | |
| Without door 36M 3F | 36 | 750 | 292 x 507 x 120 | 1SPE007717F2000 | 41P18X100750 | 1/2 |
| Without door 54M | 54 | 750 | 382 x 507 x 120 | 1SPE007717F2400 | 41P18X300750 | 1/2 |
| Consumer units MISTRAL41 wall - 4 Rows | | | | | | |
| Without door 48M | 48 | 750 | 292 x 656 x 120 | 1SPE007717F2100 | 41P18X200750 | 1/1 |
| Without door 72M | 72 | 750 | 382 x 656 x 120 | 1SPE007717F2500 | 41P18X400750 | 1/1 |

Consumer units

MISTRAL41W – Order codes with terminals (650)



8 modules



12 modules



18 modules



24 modules

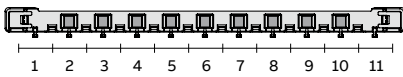
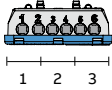
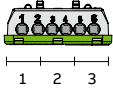
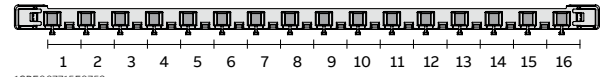
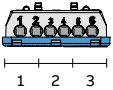
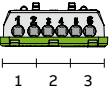
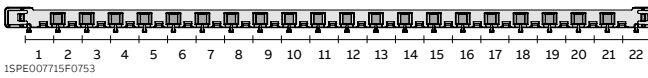
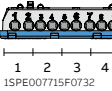
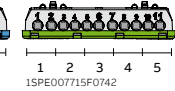
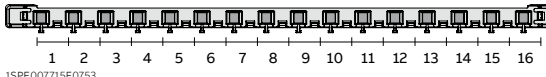
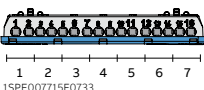
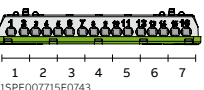
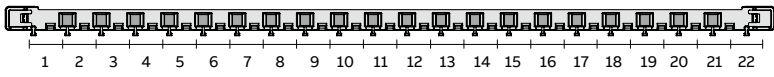
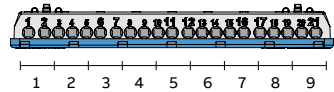
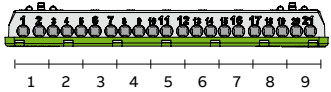
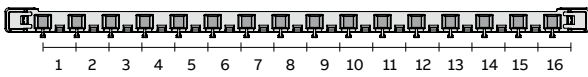
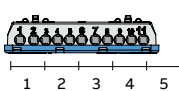
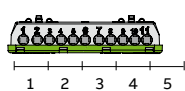
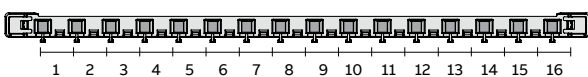
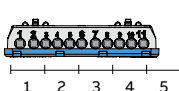
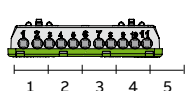


36 modules




36 modules

MISTRAL41W – Order codes

| Description | N° of modules [18 mm] | GWT | Dimensions W x H x D [mm] | Order code | Type number | Packaging |
|--|--------------------------|-----|---------------------------------|-----------------|-----------------|-----------------|
| Consumer units MISTRAL41W | | | | | | |
| Opaque door 8M 12SM | 8 | 650 | 202 x 257 x 120 | 1SLM004102A3102 | 41P08X11A | 1/7 |
| Transparent door 8M 12SM | 8 | 650 | 202 x 257 x 120 | 1SPE007717F0321 | 41P08X12A | 1/7 |
|    | | | | | | |
| | | | | 1SPE007715F0751 | 1SPE007715F0731 | 1SPE007715F0741 |
| Opaque door 12M 12SM | 12 | 650 | 292 x 257 x 120 | 1SLM004102A3103 | 41P12X11A | 1/3 |
| Transparent door 12M 12SM | 12 | 650 | 292 x 257 x 120 | 1SPE007717F0421 | 41P12X12A | 1/3 |
|    | | | | | | |
| | | | | 1SPE007715F0752 | 1SPE007715F0731 | 1SPE007715F0741 |
| Opaque door 18M 22SM | 18 | 650 | 382 x 257 x 120 | 1SLM004102A3104 | 41P12X21A | 1/3 |
| Transparent door 18M 22SM | 18 | 650 | 382 x 257 x 120 | 1SPE007717F0821 | 41P12X22A | 1/3 |
|    | | | | | | |
| | | | | 1SPE007715F0753 | 1SPE007715F0732 | 1SPE007715F0742 |
| Opaque door 24M 32SM | 24 | 650 | 292 x 382 x 120 | 1SLM004102A3105 | 41P12X31A | 1/2 |
| Transparent door 24M 32SM | 24 | 650 | 292 x 382 x 120 | 1SPE007717F0521 | 41P12X32A | 1/2 |
|    | | | | | | |
| | | | | 1SPE007715F0753 | 1SPE007715F0733 | 1SPE007715F0743 |
| Opaque door 36M 2F 42SM | 36 | 650 | 382 x 382 x 120 | 1SLM004102A3106 | 41P12X41A | 1/2 |
| Transparent door 36M 2F 42SM | 36 | 650 | 382 x 382 x 120 | 1SPE007717F0921 | 41P12X42A | 1/2 |
|  | | | | | | |
| | | | | 1SPE007715F0753 | | |
|   | | | | | | |
| | | | | 1SPE007715F0734 | 1SPE007715F0744 | |
| Opaque door 36M 3F 44SM | 36 | 650 | 292 x 507 x 120 | 1SLM004102A3107 | 41P18X11A | 1/2 |
| Transparent door 36M 3F 44SM | 36 | 650 | 292 x 507 x 120 | 1SPE007717F0621 | 41P18X12A | 1/2 |
|    | | | | | | |
| | | | | 1SPE007715F0752 | 1SPE007715F0732 | 1SPE007715F0742 |
|    | | | | | | |
| | | | | 1SPE007715F0752 | 1SPE007715F0732 | 1SPE007715F0742 |



72 modules

| Description | N° of modu- les [18 mm] | GWT | Dimensions W x H x D [mm] | | Order code | Type | Packaging |
|--|----------------------------------|-----|---------------------------------|-----------------|------------|------|-----------|
| | | | | number | | | |
| Consumer units MISTRAL41W | | | | | | | |
| Opaque door 54M 64SM | 54 | 650 | 382 x 507 x 120 | 1SLM004102A3109 | 41P18X31A | | 1/2 |
| Transparent door 54M 64SM | 54 | 650 | 382 x 507 x 120 | 1SPE007717F1021 | 41P18X32A | | 1/2 |
|  1SPE007715F0753 | | | | | | | |
|  1SPE007715F0733 | | | | | | | |
|  1SPE007715F0753 | | | | | | | |
|  1SPE007715F0733 | | | | | | | |
|  1SPE007715F0753 | | | | | | | |
|  1SPE007715F0733 | | | | | | | |
| Opaque door 48M 64SM | 48 | 650 | 292 x 656 x 120 | 1SLM004102A3108 | 41P18X21A | | 1/1 |
| Transparent door 48M 64SM | 48 | 650 | 292 x 656 x 120 | 1SPE007717F0721 | 41P18X22A | | 1/1 |
|  1SPE007715F0752 | | | | | | | |
|  1SPE007715F0752 | | | | | | | |
|  1SPE007715F0733 | | | | | | | |
|  1SPE007715F0733 | | | | | | | |
|  1SPE007715F0743 | | | | | | | |
|  1SPE007715F0743 | | | | | | | |
| Opaque door 72M 84SM | 72 | 650 | 382 x 656 x 120 | 1SLM004102A3110 | 41P18X41A | | 1/1 |
| Transparent door 72M 84SM | 72 | 650 | 382 x 656 x 120 | 1SPE007717F1121 | 41P18X42A | | 1/1 |
|  1SPE007715F0753 | | | | | | | |
|  1SPE007715F0733 | | | | | | | |
|  1SPE007715F0753 | | | | | | | |
|  1SPE007715F0733 | | | | | | | |

Consumer units

MISTRAL41W – Order codes accessories



MISTRAL41W – Accessories doors

| Description | N° of modules [18 mm] | Order code | Type number | Packaging |
|--|-----------------------|-----------------|-------------|-----------|
| Opaque door | | | | |
| Opaque door 4M MISTRAL41W | 4 | 1SPE007717F9900 | 41Z33 | 1/24 |
| Opaque door 8M MISTRAL41W | 8 | 1SPE007717F9901 | 41Z34 | 1/14 |
| Opaque door 12M MISTRAL41W | 12 | 1SPE007717F9902 | 41Z35 | 1/14 |
| Opaque door 24/48M MISTRAL41W | 24/48 | 1SPE007717F9903 | 41Z36 | 1/15 |
| Opaque door 36M (3 rows) MISTRAL41W | 36 | 1SPE007717F9904 | 41Z37 | 1/18 |
| Opaque door 18M MISTRAL41W | 18 | 1SPE007717F9905 | 41Z38 | 1/14 |
| Opaque door 36/72M (2 rows) MISTRAL41W | 36/72 | 1SPE007717F9906 | 41Z39 | 1/18 |
| Opaque door 54M MISTRAL41W | 54 | 1SPE007717F9907 | 41Z40 | 1/18 |
| Transparent door | | | | |
| Transparent door blue 4M MISTRAL41W | 4 | 1SPE007717F9908 | 41Z41 | 1/24 |
| Transparent door blue 8M MISTRAL41W | 8 | 1SPE007717F9909 | 41Z42 | 1/14 |
| Transparent door blue 12M MISTRAL41W | 12 | 1SPE007717F9910 | 41Z43 | 1/14 |
| Transparent door blue 24/48M MISTRAL41W | 24/48 | 1SPE007717F9911 | 41Z44 | 1/15 |
| Transparent door blue 36M (3 rows) MISTRAL41W | 36 | 1SPE007717F9912 | 41Z45 | 1/18 |
| Transparent door blue 18M MISTRAL41W | 18 | 1SPE007717F9913 | 41Z46 | 1/14 |
| Transparent door blue 36/72M (2 rows) MISTRAL41W | 36/72 | 1SPE007717F9914 | 41Z47 | 1/18 |
| Transparent door blue 54M MISTRAL41W | 54 | 1SPE007717F9915 | 41Z48 | 1/18 |



41Z14, 41Z15, 41Z16



41Z17, 41Z18



41Z19, 41Z20



41Z21, 41Z22



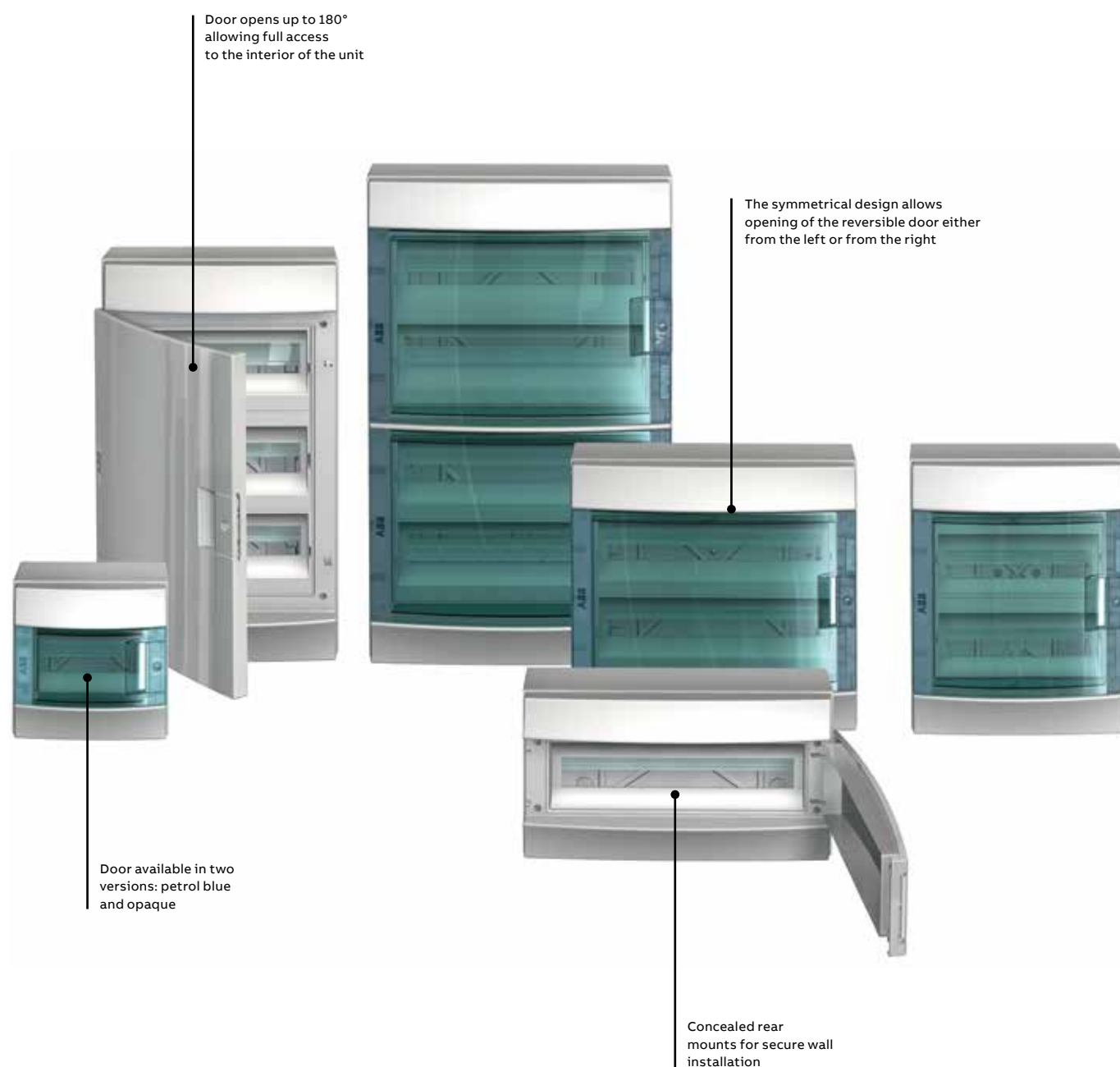
41Z23, 41Z24

MISTRAL41W – Other accessories

| Description | N° of modules [18 mm] | Order code | Type number | Packaging |
|---------------------------------------|-----------------------|-----------------|-------------|-----------|
| Other accessories | | | | |
| Lock set white LMW | | 1SPE007715F5009 | 41Z14 | 1 |
| Lock set blue LMB | | 1SPE007715F5010 | 41Z16 | 1 |
| Flange for conduit derivation GWT 650 | | 1SLM004100A1951 | 41Z17 | 1/30 |
| Flange for conduit derivation GWT 750 | | 1SPE007715F5111 | 41Z18 | 1/30 |
| Label holder 12M | 12 | 1SPE007715F5012 | 41Z19 | 5 |
| Label holder 18M | 18 | 1SPE007715F5018 | 41Z20 | 5 |
| Partition wall 12M | 12 | 1SPE007715F5112 | 41Z21 | 5 |
| Partition wall 18M | 18 | 1SPE007715F5118 | 41Z22 | 5 |
| MCB cover 12M GWT 650 | 12 | 1SPE007715F5650 | 41Z23 | 5/180 |
| MCB cover 12M GWT 750 | 12 | 1SPE007715F5750 | 41Z24 | 5/180 |

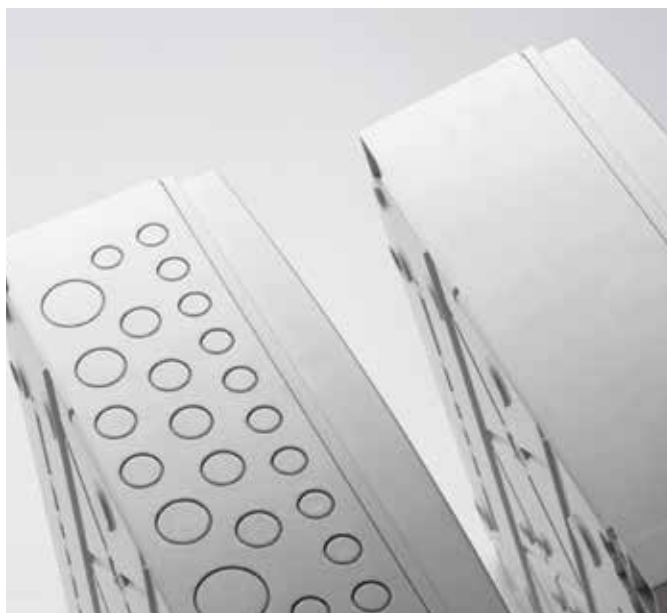
MISTRAL65

Endless installation possibilities



Invisible cable entry and exit

The MISTRAL65 (GWT 650) comes with smooth surfaces for the cables entry on top and bottom. The MISTRAL65 (GWT 750) version is provided with knockouts of various dimensions.

**More internal space**

Internal spaces have been created to make cabling even easier, with cable clips and holes for fastening wires to the frame with simple cable ties.

**Easy installation of extra modules**

Additional modules can be installed by removing two pre-trimmed elements. This offers an easy and tidy solution when there are unforeseen installation requirements.

**New generation terminals**

The new MISTRAL range of consumer units is amended with a wide, completely new ABB terminal blocks. To different versions offer screw and spring fast coupling for easy and effective cabling up to 63A or 100A.

MISTRAL65

Endless installation possibilities

Protected trunking entry

The new polycarbonate accessory for trunking entry can be positioned at the top or bottom of the consumer unit, connecting and protecting the conductor bundles. A series of internal knockouts allows it to house any type of trunking.



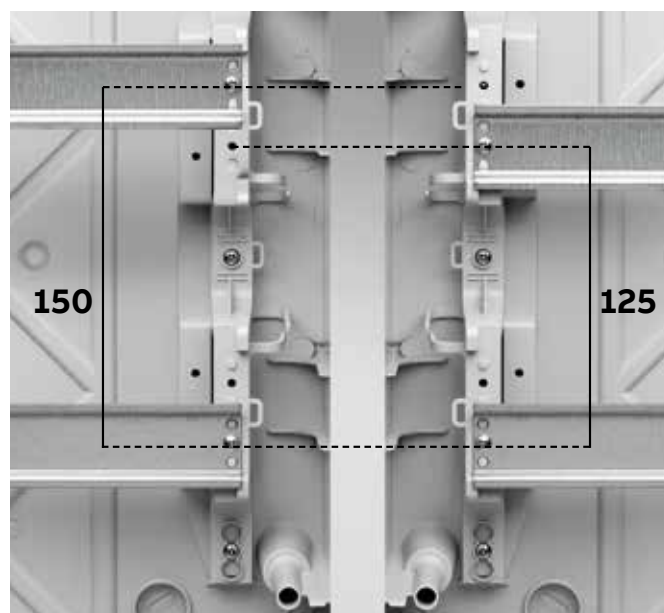
Aesthetically clean installation

Interior slots allow the unit to be fixed to the wall at points that cannot be seen from the outside, making for an aesthetically clean installation. Special snap-in closure plugs guarantee class II protection (double insulation).



Optional door lock

The standard door with ergonomic handle and snap-on closure can be supplied with a lock and key on request. This ensures only authorized people have access and prevents tampering or incorrect operation.



Variable distance between DIN-Rails

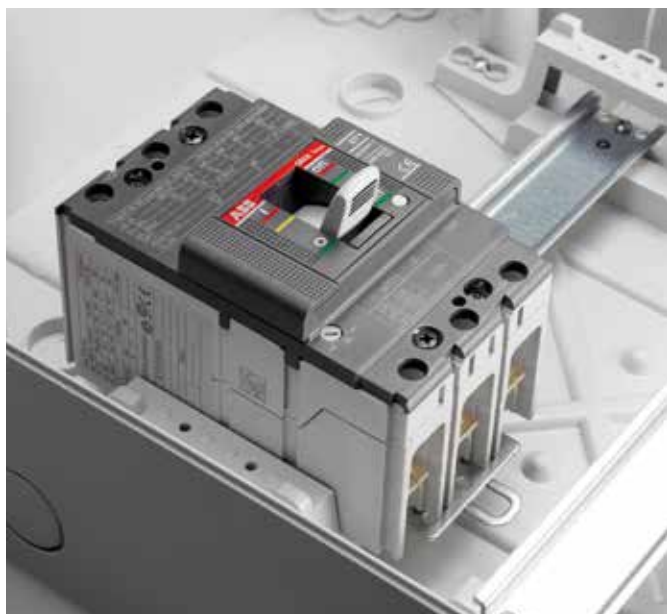
To create space at the top or bottom of the consumer unit, the central distance between the DIN-Rails can be modified from the standard 150 mm to 125 mm. The front panel can be removed, reversed and re-installed with a simple click.

Horizontal coupling

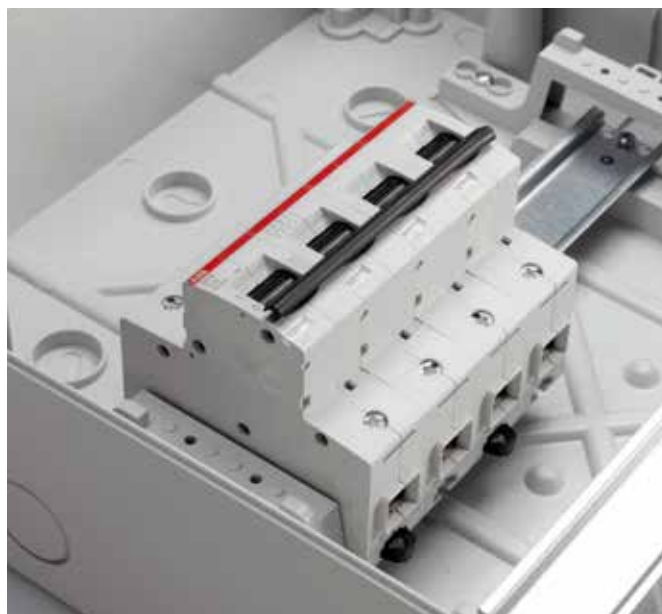
The consumer units can be installed side by side, with cable gland accessories protecting the conductors' path between adjacent units.

**Blind panels for small automation application**

Accessories include blind panels and base plates allowing the installation of other types of devices, in addition to modular DIN-Rail products, like contactors, motor starters or devices on the front of the panel.

**Two DIN positions**

The frame has two DIN-Rail positions so accessories of different depths, like MCCBs, can be installed in perfect alignment.

**Easy installation of non-standard devices**

The flexibility of the frame allows easy installation of devices with above-standard depth like high-performance MCBs.

MISTRAL65

Endless installation possibilities

Compatible with standard modular devices

The first depth allows the installation of standard products. These include most modular devices currently on the market.



Non-modular equipment

Accessories like blind panels and base plates enable the installation of other types of devices, in addition to modular DIN products, on the front of the panel. These include control buttons and indicator lights.



Consumer units

MISTRAL65 650



—
4 modules
2CSC000995F0014



—
4 modules
2CSC000996F0014



—
8 modules
2CSC000997F0014



—
8 modules
2CSC000998F0014



—
12 modules
2CSC000999F0014



—
12 modules
2CSC001000F0014



—
18 modules
2CSC001001F0014



—
18 modules
2CSC001002F0014



—
24 modules
2CSC001003F0014



—
24 modules
2CSC001004F0014



—
36 modules
2CSC001005F0014



—
36 modules
2CSC001006F0014

| | N° of modules | | Dimensions | | | | |
|--|------------------|-----|-------------|------------|-------------|-------|-----------|
| | [18 mm] | GWT | WxHxD | | | | |
| Description | | | [mm] | Order code | Type number | Price | Packaging |
| Consumer units MISTRAL65 wall - 1 Row | | | | | | | |
| Opaque door 4M | 4 | 650 | 152x202x117 | 1SL1100A00 | 65P04X11 | | 1/24 |
| Transparent door 4M | 4 | 650 | 152x202x117 | 1SL1200A00 | 65P04X12 | | 1/24 |
| | | | | | | | |
| Opaque door 8M | 8 | 650 | 232x250x154 | 1SL1101A00 | 65P08X11 | | 1/11 |
| Transparent door 8M | 8 | 650 | 232x250x154 | 1SL1201A00 | 65P08X12 | | 1/11 |
| | | | | | | | |
| Opaque door 12M | 12 | 650 | 320x250x155 | 1SL1102A00 | 65P12X11 | | 1/7 |
| Transparent door 12M | 12 | 650 | 320x250x155 | 1SL1202A00 | 65P12X12 | | 1/7 |
| | | | | | | | |
| Opaque door 18M | 18 | 650 | 430x250x155 | 1SL1103A00 | 65P18X11 | | 1/4 |
| Transparent door 18M | 18 | 650 | 430x250x155 | 1SL1203A00 | 65P18X12 | | 1/4 |
| Consumer units MISTRAL65 wall - 2 Rows | | | | | | | |
| Opaque door 24M | 24 | 650 | 320x435x155 | 1SL1104A00 | 65P12X21 | | 1/4 |
| Transparent door 24M | 24 | 650 | 320x435x155 | 1SL1204A00 | 65P12X22 | | 1/4 |
| | | | | | | | |
| Opaque door 36M2F | 36 | 650 | 430x435x155 | 1SL1105A00 | 65P18X21 | | 1/2 |
| Transparent door 36M2F | 36 | 650 | 430x435x155 | 1SL1205A00 | 65P18X22 | | 1/2 |

Consumer units

MISTRAL65 650°



36 modules
2CSC001007F0014



36 modules
2CSC001008F0014



54 modules
2CSC001009F0014



54 modules
2CSC001010F0014



48 modules
2CSC001011F0014



48 modules
2CSC001012F0014



72 modules
2CSC001013F0014



72 modules
2CSC001014F0014

| | N° of modules [18 mm] | | Dimensions WxHxD [mm] | | | |
|--|-----------------------------|-----|-----------------------------|------------|-------------|-----------|
| Description | | GWT | | Order code | Type number | Packaging |
| Consumer units MISTRAL65 wall - 3 Rows | | | | | | |
| Opaque door 36M3F | 36 | 650 | 320x600x155 | 1SL1106A00 | 65P12X31 | 1/3 |
| Transparent door 36M3F | 36 | 650 | 320x600x155 | 1SL1206A00 | 65P12X32 | 1/3 |
| | | | | | | |
| Opaque door 54M | 54 | 650 | 430x600x155 | 1SL1108A00 | 65P18X31 | 1/1 |
| Transparent door 54M | 54 | 650 | 430x600x155 | 1SL1208A00 | 65P18X32 | 1/1 |
| Consumer units MISTRAL65 wall - 4 Rows | | | | | | |
| Opaque door 48M | 48 | 650 | 320x735x155 | 1SL1107A00 | 65P12X41 | 1/1 |
| Transparent door 48M | 48 | 650 | 320x735x155 | 1SL1207A00 | 65P12X42 | 1/1 |
| | | | | | | |
| Opaque door 72M | 72 | 650 | 430x735x155 | 1SL1109A00 | 65P18X41 | 1/1 |
| Transparent door 72M | 72 | 650 | 430x735x155 | 1SL1209A00 | 65P18X42 | 1/1 |

Consumer units

MISTRAL65 750°



—
4 modules
2CSC001015F0014



—
8 modules
2CSC001016F0014



—
12 modules
2CSC001017F0014



—
18 modules
2CSC001018F0014



—
24 modules
2CSC001019F0014



—
36 modules
2CSC001020F0014



—
36 modules
2CSC001021F0014



—
54 modules
2CSC001022F0014



—
48 modules
2CSC001023F0014



—
72 modules
2CSC001024F0014

| Description | N° of modules [18 mm] | GWT | Dimensions WxHxD [mm] | Order code | Type number | Packaging |
|--------------------------|--------------------------|-----|-----------------------------|------------|-----------------|-----------|
| MISTRAL65 – 1 Row | | | | | | |
| Transparent door 4M | 4 | 750 | 152x202x117 | 1SL1210A00 | 1SLM006500A1210 | 1/24 |
| Transparent door 8M | 8 | 750 | 232x250x154 | 1SL1211A00 | 1SLM006500A1211 | 1/11 |
| Transparent door 12M | 12 | 750 | 320x250x155 | 1SL1212A00 | 1SLM006500A1212 | 1/7 |
| Transparent door 18M | 18 | 750 | 430x250x155 | 1SL1213A00 | 1SLM006500A1213 | 1/4 |
| MISTRAL65 – 2 Row | | | | | | |
| Transparent door 24M | 24 | 750 | 320x435x155 | 1SL1214A00 | 1SLM006500A1214 | 1/4 |
| Transparent door 36M 2R | 36 | 750 | 430x435x155 | 1SL1215A00 | 1SLM006500A1215 | 1/2 |
| MISTRAL65 – 3 Row | | | | | | |
| Transparent door 36M 3R | 36 | 750 | 320x600x155 | 1SL1216A00 | 1SLM006500A1216 | 1/3 |
| Transparent door 54M | 54 | 750 | 430x600x155 | 1SL1218A00 | 1SLM006500A1218 | 1/1 |
| MISTRAL65 – 4 Row | | | | | | |
| Transparent door 48M | 48 | 750 | 320x735x155 | 1SL1217A00 | 1SLM006500A1217 | 1/1 |
| Transparent door 72M | 72 | 750 | 430x735x155 | 1SL1219A00 | 1SLM006500A1219 | 1/1 |

Consumer units

MISTRAL65 with terminals



—
8 modules
2CSC001025F0014



—
8 modules
2CSC000997F0014



—
12 modules
2CSC001027F0014



—
12 modules
2CSC000999F0014



—
18 modules
2CSC001029F0014



—
18 modules
2CSC001001F0014



—
18 modules
2CSC001031F0014



—
18 modules
2CSC001001F0014



—
24 modules
2CSC001033F0014



—
24 modules
2CSC001003F0014

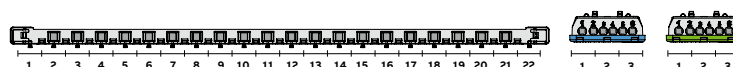
| Description | N° of modules | | Dimensions | | Order code | Type number | Packaging |
|---|---------------|-----|-------------|-----------------|------------|-------------|-----------|
| | [18 mm] | GWT | W x H x D | [mm] | | | |
| Consumer units MISTRAL65 wall - 8 modules | | | | | | | |
| Opaque door 8M 12SM | 8 | 650 | 232x250x154 | 1SLM006501A1101 | 65P08X11A | 1/11 | |
| Transparent door 8M 12SM | 8 | 650 | 232x250x154 | 1SLM006501A1201 | 65P08X12A | 1/11 | |



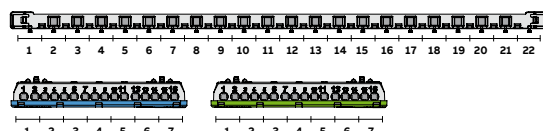
| | | | | | | |
|---|----|-----|-------------|-----------------|-----------|-----|
| Consumer units MISTRAL65 wall - 12 modules | | | | | | |
| Opaque door 12M 22SM | 12 | 650 | 320x250x155 | 1SLM006501A1102 | 65P12X11A | 1/7 |
| Transparent door 12M 22SM | 12 | 650 | 320x250x155 | 1SLM006501A1202 | 65P12X12A | 1/7 |



| | | | | | | |
|---|----|-----|-------------|-----------------|-----------|-----|
| Consumer units MISTRAL65 wall - 18 modules | | | | | | |
| Opaque door 18M 12SM | 18 | 650 | 430x250x155 | 1SLM006501A1103 | 65P18X11Z | 1/4 |
| Transparent door 18M 12SM | 18 | 650 | 430x250x155 | 1SLM006501A1203 | 65P18X12Z | 1/4 |



| | | | | | | |
|---|----|-----|-------------|-----------------|-----------|-----|
| Consumer units MISTRAL65 wall - 18 modules | | | | | | |
| Opaque door 18M 32SM | 18 | 650 | 430x250x155 | 1SLM006502A1103 | 65P18X11A | 1/4 |
| Transparent door 18M 32SM | 18 | 650 | 430x250x155 | 1SLM006502A1203 | 65P18X12A | 1/4 |



| | | | | | | |
|---|----|-----|-------------|-----------------|-----------|-----|
| Consumer units MISTRAL65 wall - 24 modules | | | | | | |
| Opaque door 24M 24SM | 24 | 650 | 320x435x155 | 1SLM006501A1104 | 65P12X21Z | 1/4 |
| Transparent door 24M 24SM | 24 | 650 | 320x435x155 | 1SLM006501A1204 | 65P12X22Z | 1/4 |





24 modules
2CSC001035F0014



24 modules
2CSC001003F0014



36 modules
2CSC001037F0014



36 modules
2CSC001005F0014

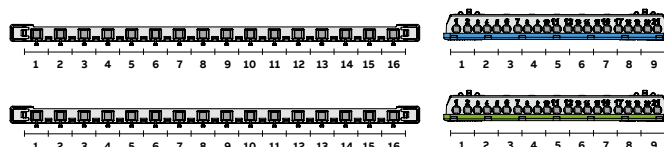


36 modules
2CSC001039F0014

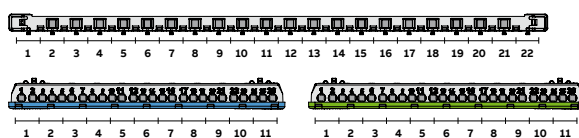


36 modules
2CSC001007F0014

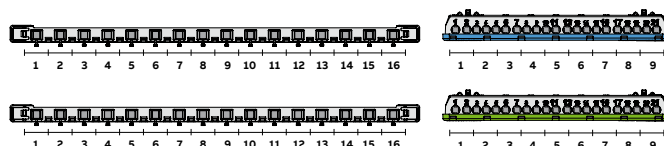
| Description | N° of modules [18 mm] | GWT | Dimensions W x H x D [mm] | Order code | Type number | Packaging |
|---|--------------------------|-----|---------------------------------|-----------------|-------------|-----------|
| Consumer units MISTRAL65 wall - 24 modules | | | | | | |
| Opaque door 24M 42SM | 24 | 650 | 320x435x155 | 1SLM006502A1104 | 65P12X21A | 1/4 |
| Transparent door 24M 42SM | 24 | 650 | 320x435x155 | 1SLM006502A1204 | 65P12X22A | 1/4 |



| Consumer units MISTRAL65 wall - 36 modules | | | | | | |
|--|----|-----|-------------|-----------------|-----------|-----|
| Opaque door 36M2F 52SM | 36 | 650 | 430x435x155 | 1SLM006501A1105 | 65P18X21A | 1/2 |
| Transparent door 36M2F 52SM | 36 | 650 | 430x435x155 | 1SLM006501A1205 | 65P18X22A | 1/2 |



| Consumer units MISTRAL65 wall - 36 modules | | | | | | |
|--|----|-----|-------------|-----------------|-----------|-----|
| Opaque door 36M3F 42SM | 36 | 650 | 320x600x155 | 1SLM006501A1106 | 65P12X31A | 1/3 |
| Transparent door 36M3F 42SM | 36 | 650 | 320x600x155 | 1SLM006501A1206 | 65P12X32A | 1/3 |



Consumer units

MISTRAL65 with terminals



48 modules
2CSC001041F0014



48 modules
2CSC001011F0014



54 modules
2CSC001043F0014



54 modules
2CSC001009F0014

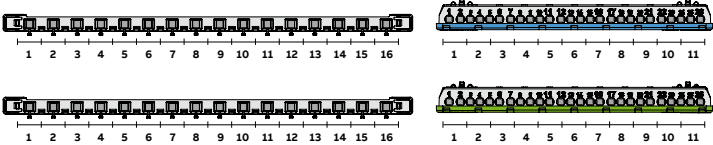


72 modules
2CSC001045F0014

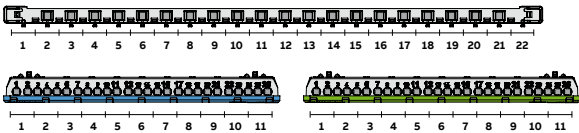


72 modules
2CSC001013F0014

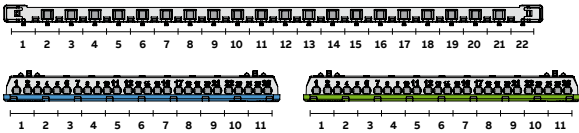
| Description | N° of modules | | Dimensions | | Order code | Type number | Packaging |
|--|---------------|-----|-------------|-----------------|------------|-------------|-----------|
| | [18 mm] | GWT | W x H x D | [mm] | | | |
| Consumer units MISTRAL65 wall - 48 modules | | | | | | | |
| Opaque door 48M 52SM | 48 | 650 | 320x735x155 | 1SLM006501A1107 | 65P12X41A | 1/1 | |
| Transparent door 48M 52SM | 48 | 650 | 320x735x155 | 1SLM006501A1207 | 65P12X42A | 1/1 | |



| Consumer units MISTRAL65 wall - 54 modules | | | | | | |
|--|----|-----|-------------|-----------------|-----------|-----|
| Opaque door 54M 52SM | 54 | 650 | 430x600x155 | 1SLM006501A1108 | 65P18X31A | 1/1 |
| Transparent door 54M 52SM | 54 | 650 | 430x600x155 | 1SLM006501A1208 | 65P18X32A | 1/1 |



| Consumer units MISTRAL65 wall - 72 modules | | | | | | |
|--|----|-----|-------------|-----------------|-----------|-----|
| Opaque door 72M 52SM | 72 | 650 | 430x735x155 | 1SLM006501A1109 | 65P18X41A | 1/1 |
| Transparent door 72M 52SM | 72 | 650 | 430x735x155 | 1SLM006501A1209 | 65P18X42A | 1/1 |



Consumer units

Accessories for MISTRAL65



—
Opaque door
2CSC001047F0014



—
Transparent door
2CSC001048F0014



—
Base plates
2CSC001049F0014



—
Blind panel
2CSC001050F0014

| Description | Order code | Type number | Price | Packaging |
|---|------------|-----------------|-------|-----------|
| Opaque door | | | | |
| Opaque door 4M MISTRAL65 | 1SL1900A00 | 1SLM006500A1900 | | 1/15 |
| Opaque door 8M MISTRAL65 | 1SL1902A00 | 1SLM006500A1902 | | 1/20 |
| Opaque door 12M MISTRAL65 | 1SL1904A00 | 1SLM006500A1904 | | 1/10 |
| Opaque door 18M MISTRAL65 | 1SL1906A00 | 1SLM006500A1906 | | 1/20 |
| Opaque door 24M / 48M MISTRAL65 | 1SL1908A00 | 1SLM006500A1908 | | 1/6 |
| Opaque door 36M (3 rows) MISTRAL65 | 1SL1910A00 | 1SLM006500A1910 | | 1/10 |
| Opaque door 36M (2 rows) / 72M MISTRAL65 | 1SL1912A00 | 1SLM006500A1912 | | 1/14 |
| Opaque door 54M MISTRAL65 | 1SL1914A00 | 1SLM006500A1914 | | 1/8 |
| Transparent door | | | | |
| Transparent door 4M MISTRAL65 | 1SL1901A00 | 1SLM006500A1901 | | 1/15 |
| Transparent door 8M MISTRAL65 | 1SL1903A00 | 1SLM006500A1903 | | 1/20 |
| Transparent door 12M MISTRAL65 | 1SL1905A00 | 1SLM006500A1905 | | 1/10 |
| Transparent door 18M MISTRAL65 | 1SL1907A00 | 1SLM006500A1907 | | 1/20 |
| Transparent door 24M / 48M MISTRAL65 | 1SL1909A00 | 1SLM006500A1909 | | 1/6 |
| Transparent door 36M (3 rows) MISTRAL65 | 1SL1911A00 | 1SLM006500A1911 | | 1/10 |
| Transparent door 36M (2 rows) / 72M MISTRAL65 | 1SL1913A00 | 1SLM006500A1913 | | 1/14 |
| Transparent door 54M MISTRAL65 | 1SL1915A00 | 1SLM006500A1915 | | 1/8 |
| Base plates | | | | |
| Metal base plate 12M MISTRAL65 | 1SL1920A00 | 1SLM006500A1920 | | 1/12 |
| Metal base plate 2x12M MISTRAL65 | 1SL1921A00 | 1SLM006500A1921 | | 1/4 |
| Metal base plate 18M MISTRAL65 | 1SL1922A00 | 1SLM006500A1922 | | 1/8 |
| Metal base plate 2x18M MISTRAL65 | 1SL1923A00 | 1SLM006500A1923 | | 1/4 |
| Blind panel | | | | |
| Central blind panel 12M MISTRAL65 * | 1SL1945A00 | 1SLM006500A1945 | | 1/15 |
| Blind panel 12M MISTRAL65 | 1SL1946A00 | 1SLM006500A1946 | | 1/20 |
| Central blind panel 18M MISTRAL65 ** | 1SL1947A00 | 1SLM006500A1947 | | 1/30 |
| Blind panel 18M MISTRAL65 | 1SL1948A00 | 1SLM006500A1948 | | 1/30 |

* Blind panel for the central row of MISTRAL65 36 modules (3 x 12)

** Blind panel for the central row of MISTRAL65 54 modules (3 x 18)

Consumer units

Accessories for MISTRAL65



Wall fixing brackets
2CSC001051F0014



Module cover
2CSC001052F0014



Lock
2CSC001053F0014



Cable gland
2CSC001054F0014



Adapter for trunking
2CSC001055F0014



Junction unit
2CSC001056F0014

| Description | Order code | Type number | Price | Packaging |
|--|------------|-----------------|-------|-----------|
| Other accessories | | | | |
| Wall fixing brackets (4 pcs) MISTRAL65 | 1SL1927A00 | 1SLM006500A1927 | | 1/30 |
| Module cover 12M MISTRAL65 | 1SL1929A00 | 1SLM006500A1929 | | 5/180 |
| Sealing kit MISTRAL65 | 1SL1950A00 | 1SLM006500A1950 | | 1/50 |
| Lock with key MISTRAL65 | 1SL1931A00 | 1SLM006500A1931 | | 1/10 |
| Cable glands | | | | |
| Cable gland Ø 16 | 1SL1935A00 | 1SLM006500A1935 | | 10/100 |
| Cable gland Ø 20 | 1SL1936A00 | 1SLM006500A1936 | | 10/100 |
| Cable gland Ø 25 | 1SL1937A00 | 1SLM006500A1937 | | 10/100 |
| Cable gland Ø 32 | 1SL1938A00 | 1SLM006500A1938 | | 5/50 |
| Adapter | | | | |
| Adapter for trunking MISTRAL65 | 1SL1942A00 | 1SLM006500A1942 | | 1/10 |
| Junction unit | | | | |
| Junction unit Ø 28,5 MISTRAL65 | 1SL1949A00 | 1SLM006500A1949 | | 10/400 |

Consumer units

Terminal blocks

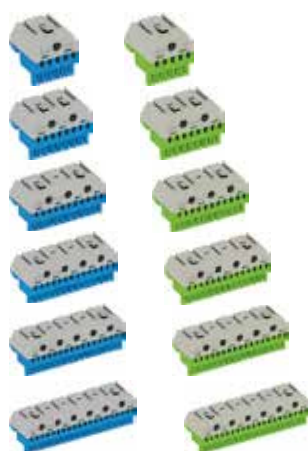


MISTRAL41 – Terminal blocks

| Description | Maximum current [A] | Order code | Type number | Packaging |
|---|---------------------|-----------------|-------------|-----------|
| Terminal block | | | | |
| Terminal block N 3 x 16 mm ² +3 x 6 mm ² | 100 | 1SPE007715F0731 | 41Z57 | 5/270 |
| Terminal block N 5 x 16 mm ² +6 x 6 mm ² | 100 | 1SPE007715F0732 | 41Z58 | 5/150 |
| Terminal block N 7 x 16 mm ² +9 x 6 mm ² | 100 | 1SPE007715F0733 | 41Z59 | 5/120 |
| Terminal block N 9 x 16 mm ² +12 x 6 mm ² | 100 | 1SPE007715F0734 | 41Z60 | 5/90 |
| Terminal block N 11 x 16 mm ² +15 x 6 mm ² | 100 | 1SPE007715F0735 | 41Z61 | 5/90 |
| | | | | |
| Terminal block PE 3 x 16 mm ² +3 x 6 mm ² | 100 | 1SPE007715F0741 | 41Z62 | 5/270 |
| Terminal block PE 5 x 16 mm ² +6 x 6 mm ² | 100 | 1SPE007715F0742 | 41Z63 | 5/150 |
| Terminal block PE 7 x 16 mm ² +9 x 6 mm ² | 100 | 1SPE007715F0743 | 41Z64 | 5/120 |
| Terminal block PE 9 x 16 mm ² +12 x 6 mm ² | 100 | 1SPE007715F0744 | 41Z65 | 5/90 |
| Terminal block PE 11 x 16 mm ² +15 x 6 mm ² | 100 | 1SPE007715F0745 | 41Z66 | 5/90 |

MISTRAL41 – Terminal blocks screwless

| Description | Maximum current [A] | Order code | Type number | Packaging |
|--|---------------------|-----------------|-------------|-----------|
| Terminal block screwless | | | | |
| Terminal block screwless N 5 x 1,5–4 mm ² | 63 | 1SPE007715F9701 | 41Z70 | 5/280 |
| Terminal block screwless N 5 x 1,5–4 mm ² +1 x 25 mm ² | 63 | 1SPE007715F9702 | 41Z71 | 5/180 |
| Terminal block screwless N 8 x 1,5–4 mm ² +2 x 25 mm ² | 63 | 1SPE007715F9703 | 41Z72 | 5/150 |
| Terminal block screwless N 11 x 1,5–4 mm ² +3 x 25 mm ² | 63 | 1SPE007715F9704 | 41Z73 | 5/100 |
| Terminal block screwless N 14 x 1,5–4 mm ² +4 x 25 mm ² | 63 | 1SPE007715F9705 | 41Z74 | 5/90 |
| Terminal block screwless N 17 x 1,5–4 mm ² +5 x 25 mm ² | 63 | 1SPE007715F9706 | 41Z75 | 5/70 |
| Terminal block screwless N 20 x 1,5–4 mm ² +6 x 25 mm ² | 63 | 1SPE007715F9707 | 41Z76 | 5/60 |
| | | | | |
| Terminal block screwless PE 5 x 1,5–4 mm ² +1 x 25 mm ² | 63 | 1SPE007715F9712 | 41Z77 | 5/180 |
| Terminal block screwless PE 8 x 1,5–4 mm ² +2 x 25 mm ² | 63 | 1SPE007715F9713 | 41Z78 | 5/150 |
| Terminal block screwless PE 11 x 1,5–4 mm ² +3 x 25 mm ² | 63 | 1SPE007715F9714 | 41Z79 | 5/100 |
| Terminal block screwless PE 14 x 1,5–4 mm ² +4 x 25 mm ² | 63 | 1SPE007715F9715 | 41Z80 | 5/90 |
| Terminal block screwless PE 17 x 1,5–4 mm ² +5 x 25 mm ² | 63 | 1SPE007715F9716 | 41Z81 | 5/70 |
| Terminal block screwless PE 20 x 1,5–4 mm ² +6 x 25 mm ² | 63 | 1SPE007715F9717 | 41Z82 | 5/60 |



MISTRAL41 – Terminal block carriers

| Description | Order code | Type number | Packaging |
|--------------------------|-----------------|-------------|-----------|
| Terminal carriers | | | |
| Carrier 8M | 1SPE007715F0751 | 41Z67 | 5/280 |
| Carrier 12M | 1SPE007715F0752 | 41Z68 | 5/225 |
| Carrier 18M | 1SPE007715F0753 | 41Z69 | 5/150 |

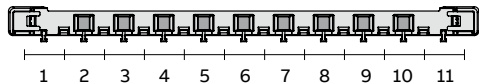


Consumer units

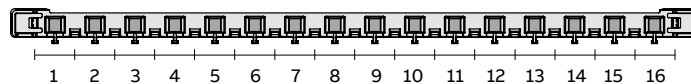
Terminal blocks

Terminal block carriers

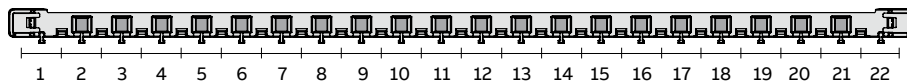
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1SPE007715F0752



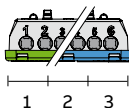
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Terminal blocks

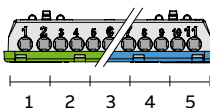
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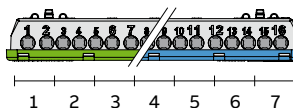
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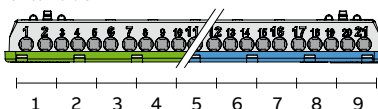
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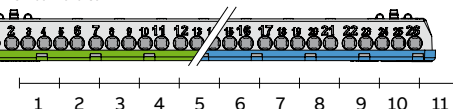
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1SPE007715F0745

1SPE007715F0735



Terminal blocks screwless

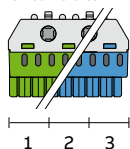
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1SPE007715F9702



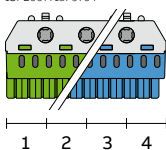
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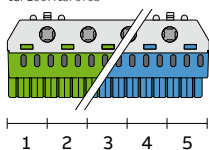
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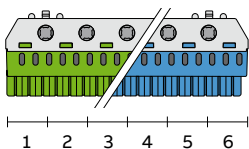
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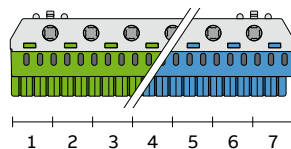
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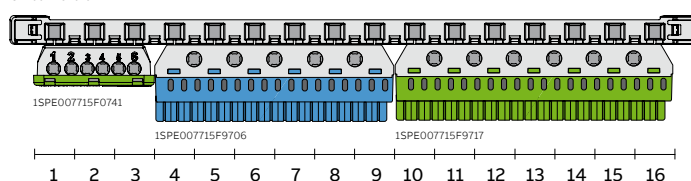
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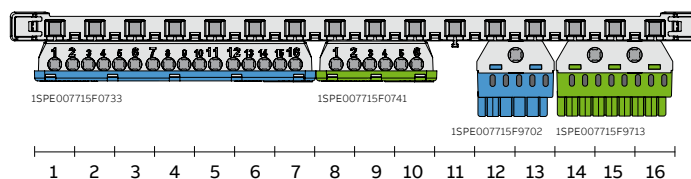


Assembly examples

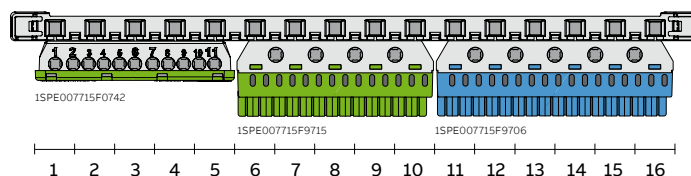
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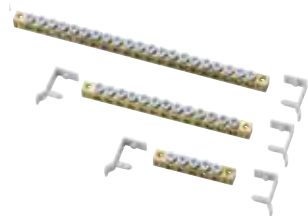


1SPE007715F0752



Consumer units

Terminal blocks for MISTRAL series



MISTRAL41 – Terminal bars

| Description | Order code | Type number |
|---|------------|-------------|
| Terminal bars | | |
| Terminal bar 5 holes D.4.5 mm | 12531 | 41Z28 |
| Terminal bar 10 holes D.4.5 mm and 3 holes D.5.6 mm | 12532 | 41Z29 |
| Terminal bar 16 holes D.4.5 mm and 3 holes D.5.6 mm | 12533 | 41Z30 |
| Terminal bar 15 holes D.4.5 mm and 6 holes D.5.6 mm | 12534 | 41Z31 |
| Terminal bar 19 holes D.4.5 mm and 6 holes D.5.6 mm | 12535 | 41Z32 |



MISTRAL41 – Terminal bar carriers

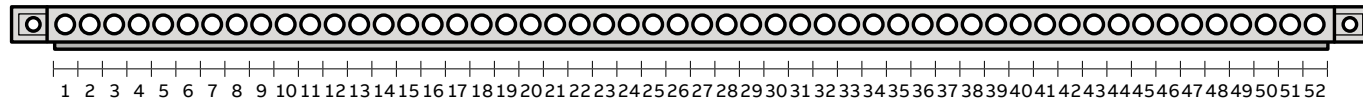
| Description | Order code | Type number |
|-------------------------|-----------------|-------------|
| Terminal carrier | | |
| Carrier for 8 moduls | 1SLM004100A1953 | 41Z25 |
| Carrier for 12 modules | 1SLM004100A1954 | 41Z26 |
| Carrier for 18 modules | 1SLM004100A1955 | 41Z27 |

Consumer units

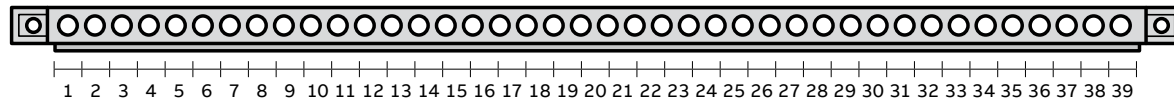
Terminal blocks – assembly examples

Terminal bar carriers

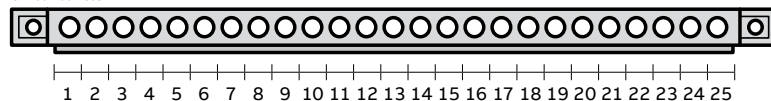
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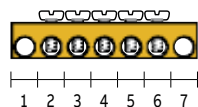


1SLM004100A1953

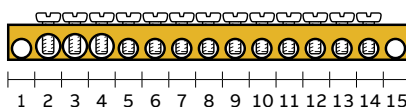


Terminal bars

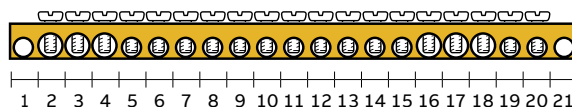
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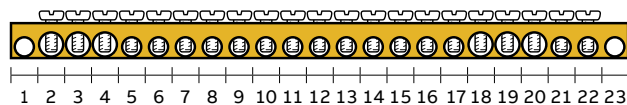
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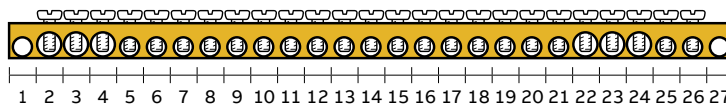
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12534

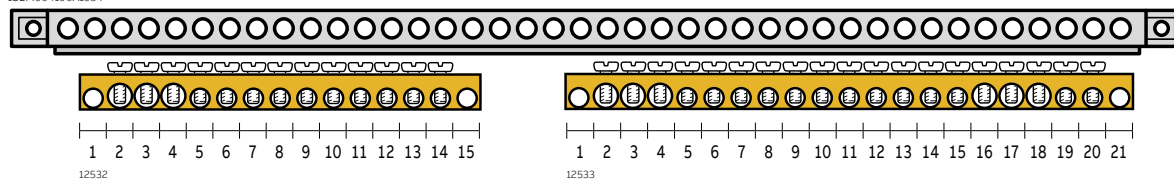


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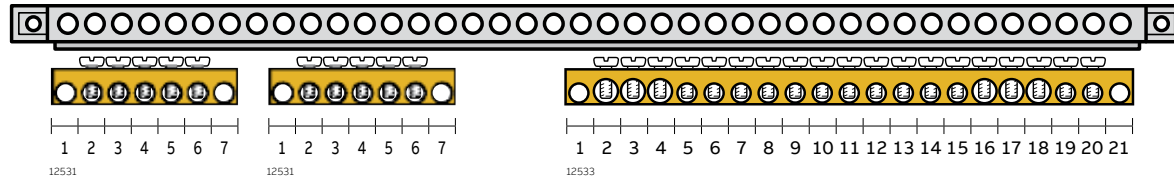


Assembly examples

1SLM004100A1954



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