



Catalogue – 2018

Electrical installation solutions for buildings – Supplement 2

New products added 11/2018 – product description, quick and easy selection of product codes



- Arc Fault Detection Devices
- Energy efficiency
- Door entry system
- Light switches and socket outlets
- Intrusion alarm systems
- Consumer units



Electrical installation solutions for buildings

Product news – 11/2018

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AFDD DS-ARC1:

Arc Fault Detection Device Integrated with RCBO

Easy to install

Twin terminals for separate feeding with busbar and cables. Connection possible both from top and bottom side.

Anti counterfeiting

RFid tag containing a unique serial number assigned to ABB in order to authenticate the product.

Test pushbutton and self test

White test pushbutton to verify the correct functioning of RCD. Orange test pushbutton to verify the correct functioning of AFDD.

Internal self test is also continuously running in order to check the arc detection circuit.

LED for troubleshooting

LED troubleshooting indicator to monitor the operation of the AFDD and give indication of the cause of the trip. Possibility to recall in memory the last tripping due to arc fault and overvoltage.

Contact position indicator (CPI)

To always know the status of the contacts (red: closed; green: open) Independent from the toggle position



Laser printed information

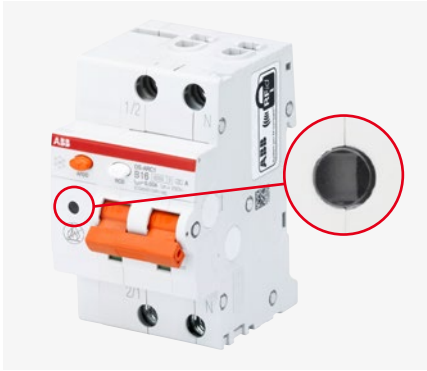
Information on the device are laser printed to ensure readability over time.

Combination with auxiliary elements

Platform suitable for combination with System pro M compact® accessories. Combination possible also with auxiliary for bottom fitting.

The DS-ARC1 is the new 1P+N Arc Fault Detection Device (AFDD) with an integrated residual current circuit breaker with overcurrent protection (RCBO) in only three module width.

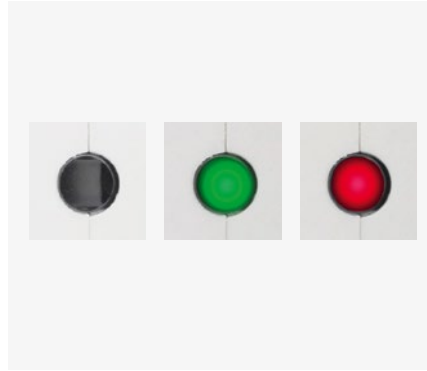
The series offers a complete protection against arc faults and overvoltage, reducing the risk of fire. The integrated RCBO is adding protection against overcurrent and earth fault currents: compact solution for a complete protection of people and valuable assets.



LED for easy troubleshooting

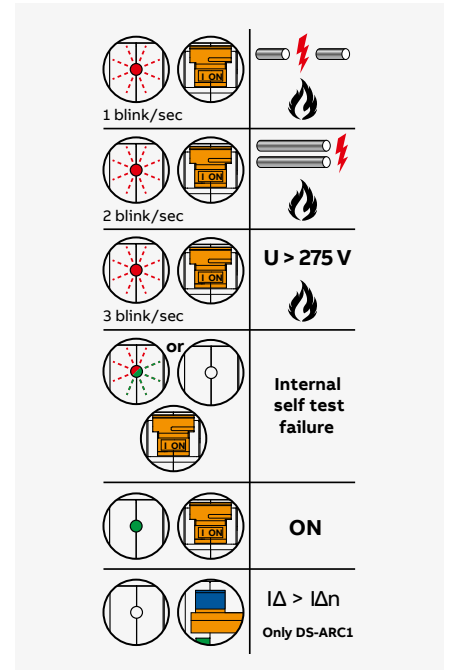
LED to monitor the correct working conditions of the device and have an easier troubleshooting in case of trip. Consequently the downtime for maintenance can be reduced.

- Toggle ON: GREEN LED
- Toggle OFF: LED OFF
- Different indications after the trip, after reclosing the toggle
- Possibility to recall in memory the last tripping due to arc fault and overvoltage



LED color	Blink/sec	Signalling duration	Cause of trip
Green		Permanent	Manual trip, manual test, overcurrent
Red blinking	1	5 sec	Series arc
Red blinking	2	5 sec	Parallel arc
Red blinking	3	5 sec	Over voltage

In case of internal self test failure, the led can switch off or start blinking green/red alternatively.



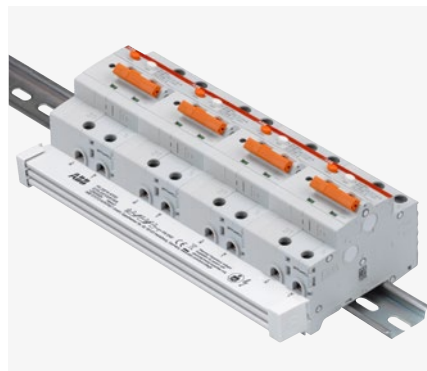
Dedicated sticker for LED

Dedicated sticker that summarizes the LED function is present in addition to the instructions sheet.



Double slot terminals

Fail-safe terminals to avoid improper connection. Two slots of different dimensions (25 mm² and 10 mm²) available to allow the connection both with cables and busbars. Connection possible both from top and bottom side. Standard System pro M compact® clip ensures a stable fixing on DIN rail and easy and fast mounting and dismantling operations.



Compatibility with busbars

A quick and easy installation is possible in one step using dedicated busbars for DS-ARC1 installation no additional cables required for the wiring.



Earth fault indicator

Blue flag on the toggle to identify earth fault trips, making the troubleshooting easier while reducing the downtime for maintenance operations. In case of earth fault trip, after reclosing the toggle, the LED becomes green.

AFDD

DS-ARC1 arc fault detection device with integrated RCBO – technical data

Technical specifications

			DS-ARC1	DS-ARC1 M	
Standards			IEC/EN 62606; IEC/EN 61009-1; IEC/EN 61009-2-1		
Electrical Functions	Type (wave form of the earth leakage sensed)			A	
	Number of poles			1P + N	
	Rated current I _n		A	6 ≤ I _n ≤ 20	
	Rated sensitivity IΔn		A	0.03	
	Rated voltage U _e		V	230 – 240	
	Insulation voltage U _i		V	500 V AC	
	Overvoltage category			III	
	Pollution degree			2	
	Operating voltage of RCD circuit test U _t		V	170 – 264	
	Threshold for protection against overvoltage		V	275	
	Rated frequency		Hz	50/60	
	Rated breaking capacity acc. to IEC/EN 61009-1	ultimate I _{cn}	A	6000	10000
	Rated breaking capacity acc. to IEC/EN 60947-2 (only referring to short circuit test)	ultimate I _{cu}	kA	7.5	10
		service I _{cs}	kA	6	7.5
	Rated residual breaking capacity IΔm		A	6000	
	Rated impulse withstand voltage (1.2/50) U _{imp}		kV	4	
	Dielectric test voltage at ind. freq. for 1 min.		kV	2.5 (50/60 Hz, 1 min.)	
	Thermomagnetic release – characteristic	B: 3 I _n ≤ I _m ≤ 5 I _n		■	
		C: 5 I _n ≤ I _m ≤ 10 I _n		■	
	Energy limiting class			3	
	Surge current resistance (wave 8/20)			NA	
Mechanical Main features	Housing			Insulation group I, RAL 7035	
	Toggle			Insulation group II, Orange RAL 2004, sealable in ON-OFF-positions	
	Contact position indication			Green/red window	
	Earth fault trip indication			Blue flag on toggle	
	Electrical life			10000 operations	
	Mechanical life			20000 operations	
	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			0.2 mm or 5 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 ≤ +35 °C)		°C	-25 ... +55	
	Storage temperature		°C	-40 ... +70	
	Assembly	Terminal type	top/bottom		failsafe bi-directional cylinder-lift terminal (shock-protected)
		Terminal size for cables	top/bottom	mm²	25/25
Terminal size for busbars		top/bottom	mm²	10/10	
Tightening torque		top/bottom	Nm	2.8	
Stripping length of the cable			mm	12	
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 52.5		
	Weight	g	240		

AFDD

DS-ARC1 and DS-ARC1 M



DS-ARC1, 6 kA

Number of poles	Rated residual current $I_{\Delta n}$ mA	Characteristics	Rated current I_n A	Bbn 8012542 EAN	Ordering details Type code	Order code	Weight 1 pcs kg	Pkg qty pce
1P+N	30	B	6	736516	DS-ARC1 B6 A30	2CSA255103R1065	0.240	1
			10	735618	DS-ARC1 B10 A30	2CSA255103R1105	0.240	1
			13	736417	DS-ARC1 B13 A30	2CSA255103R1135	0.240	1
			16	735519	DS-ARC1 B16 A30	2CSA255103R1165	0.240	1
			20	736318	DS-ARC1 B20 A30	2CSA255103R1205	0.240	1
1P+N	30	C	6	736110	DS-ARC1 C6 A30	2CSA255103R1064	0.240	1
			10	735212	DS-ARC1 C10 A30	2CSA255103R1104	0.240	1
			13	748311	DS-ARC1 C13 A30	2CSA255103R1134	0.240	1
			16	611110	DS-ARC1 C16 A30	2CSA255103R1164	0.240	1
			20	735113	DS-ARC1 C20 A30	2CSA255103R1204	0.240	1



DS-ARC1 M, 10 kA

Number of poles	Rated residual current $I_{\Delta n}$ mA	Characteristics	Rated current I_n A	Bbn 8012542 EAN	Ordering details Type code	Order code	Weight 1 pcs kg	Pkg qty pce
1P+N	30	B	6	734710	DS-ARC1 M B6 A30	2CSA275103R1065	0.240	1
			10	733812	DS-ARC1 M B10 A30	2CSA275103R1105	0.240	1
			13	734611	DS-ARC1 M B13 A30	2CSA275103R1135	0.240	1
			16	733713	DS-ARC1 M B16 A30	2CSA275103R1165	0.240	1
			20	734512	DS-ARC1 M B20 A30	2CSA275103R1205	0.240	1
1P+N	30	C	6	734314	DS-ARC1 M C6 A30	2CSA275103R1064	0.240	1
			10	733416	DS-ARC1 M C10 A30	2CSA275103R1104	0.240	1
			13	748113	DS-ARC1 M C13 A30	2CSA275103R1134	0.240	1
			16	611011	DS-ARC1 M C16 A30	2CSA275103R1164	0.240	1
			20	748014	DS-ARC1 M C20 A30	2CSA275103R1204	0.240	1

Dedicated codes of auxiliary for bottom fitting suitable for the combination with DS-ARC1

Description	Type code	Order code	Pkg qty pce
1 NC	S 2C-H01	2CDS200970R0031	1
1 NO	S 2C-H10	2CDS200970R0032	1
1 NC	S 2C-H01 15x	2CDS200970R0041	15
1 NO	S 2C-H10 15x	2CDS200970R0042	15

Voltage drop, power loss, internal resistance, own consumption

I_n	Voltage drop (mV)	Internal res. (mΩ)	PW loss (W)	Own consumption (W)
6 A	408	68	2,5	0,5
10 A	183	18	1,8	0,5
13 A	195	20	2,0	0,5
16 A	194	12	3,1	0,5
20 A	212	11	4,2	0,5

String monitoring

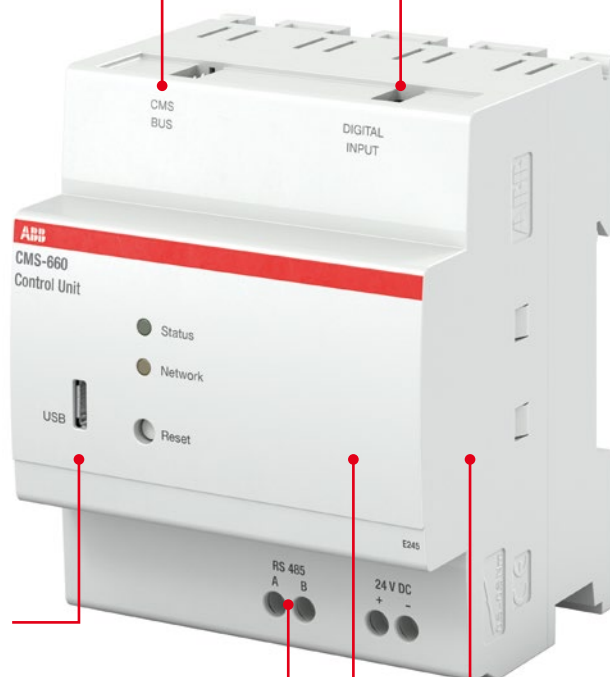
CMS-660 circuit monitoring system

Extreme flexibility

The number (up to 32) and positioning of the sensors is fully customizable, ensuring the highest flexibility in integration to different system conditions

Up-to-date system status

CMS-660 immediately detects unusual system status (e.g. solar shading, over-voltages, breaker trip, high temperature), facilitating maintenance of the system



User friendliness

Local information, thanks to the LEDs, about network and device status. Reset button to easily set the device.

Compatibility

RS485 port to guarantee easy integration with the plant / inverter monitoring systems.

Smart commissioning

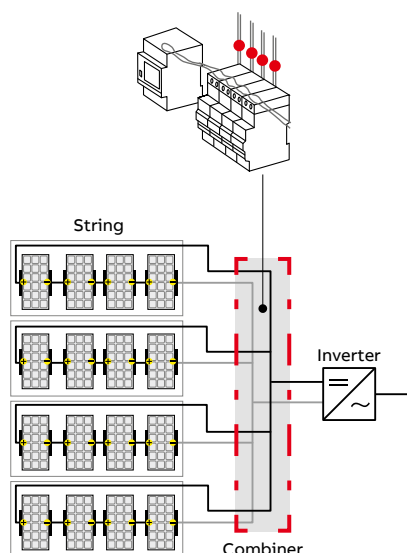
Thanks to the intelligent, intuitive configuration, the CMS system can be configured and put into operation in just a few minutes.

One sensor for all currents and strings

Direct, alternating or mixed – in a wide measuring range up to 80A, allowing the combination of two strings into one solid-core sensor.

Energy efficiency

String monitoring CMS-660



Circuit monitoring system for PV applications

The CMS string monitoring increases the efficiency of photovoltaic systems by detecting failures on PV strings. With the easy-to-integrate system you can immediately detect unusual system status, e.g. defective strings, over-voltages, breaker trips or high temperatures, enabling you to quickly implement appropriate countermeasures.

Key features:

- Current and temperature measurement directly from the sensors
- Monitoring of two strings can be combined into one single CMS solid-core sensor
- Integration of SPD and Switch disconnecter status via 2 digital inputs
- Up to 32 flexible monitoring points, placed where measurement is required
- LEDs provide local information about network and device status.
- Modbus RTU protocol guarantees easy integration into plant or inverter monitoring systems
- Connection technology is extremely simple and requires no special tools

Control unit – CMS-660

Main technical specification

CMS-660

General data

Degree of protection		IP20
Operating temperature	[°C]	– 25 .. +70 °C
Storage temperature	[°C]	– 40 .. +85 °C
Dimensions W / H / D	[mm]	71.8 x 87.0 x 64.9 (4 modules)
Screw-type terminals		0.5...2.5 mm ² , max 0.6 Nm
Altitude	[m]	≤ 2000 m
Insulation strength	[VAC]	400
Installation on DIN-rail		35 mm (DIN EN 50022)
Reference standards		IEC 61010-1 UL 508/CSA C22.2 No. 14

Supply

Supply voltage	[VDC]	24 (±10%)
Power Input	[W]	0.5 - 11 (dep. on n. of sensors)

Serial interface (RS-485)

Serial transmission speed		2.4 ... 115.2 kbps
Cable type		Twisted, shielded
Communication protocol		Modbus RTU

Measuring inputs

Max. number of sensors		32
Refresh time		≤1 sec with max 32 sensors

Digital inputs

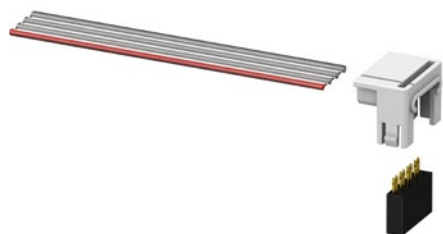
Connection method		Push-in spring connection
Cable diameter		max. 0.5mm ²
Electrical characteristics		for potential-free contact

Micro USB port

1

Energy efficiency

String monitoring CMS-660



Sensors

Mounting type	System pro M	DIN rail	Cable Ties
	Direct mounting on fuse holders E90 1000V DC	universal use	universal use
CMS-120xx (80 A)		CMS-120DR	CMS-120CA
CMS-121xx (40 A)	CMS-121FH	CMS-121DR	CMS-121CA
CMS-122xx (20 A)	CMS-122FH	CMS-122DR	CMS-122CA

Main technical specifications		CMS-120xx	CMS-121xx	CMS-122xx
Max. measured current	[A]	80	40	20
Measuring method		TRMS, AC 50/60 Hz, DC		
Peak factor, distorted waveform		≤ 1.5	≤ 3	≤ 6
AC accuracy* (TA = + 25 °C)			≤ ± 1 %	
AC temperature coefficient			≤ ± 0,04 %	
DC accuracy* (TA = + 25 °C)		≤ ± 1.2 %	≤ ± 1.4 %	≤ ± 1.8 %
DC temperature coefficient		≤ ± 0.14 %	≤ ± 0.24 %	≤ ± 0.44 %
Resolution	[A]		0.01	
Sampling rate, internal	[Hz]		5000	
Response time (±1 %)	[sec]		typ. 0.34	
Max. cable diameter	[mm]		9,6	
Insulation strength	[V]		690V AC/1500V DC	
Reference standards		IEC 61010-1 UL508/CSA C22.2 No 14		
Dimensions				
CMS-120FH Serie	[mm]		17.4 x 41.0 x 38.9	
CMS-120CA Serie	[mm]		17.4 x 41.0 x 29.0	
CMS-120DR Serie	[mm]		17.4 x 51.5 x 43.2	

* All accuracy specifications refer to the relevant full scale value and apply at 25 °C.
The position of the cable affects accuracy.

Accessories

The CMS flat cable is a 4-pin cable to connect sensors and control unit. The cable is available in four lengths (2m, 5m, 10m, 30m). Cables can be adapted, through cutting, to the various lengths required by the application. Maximum cable length of the CMS flat cable depends on the number of sensors.

A connector set is available to connect the flat cable to the sensors.

Open-core sensors

Description		ABB code	Weight of 1 unit (kg)	Unit conf. (Pcs)
Type				
Open-core sensors 18 mm for retrofit of E90 fuseholders 1000VDC				
40 A	CMS-121FH	2CCA880216R0001	0.012	1
20 A	CMS-122FH	2CCA880217R0001	0.012	1
Open-core sensors 18 mm for DIN-rail (universal use)				
80 A	CMS-120DR	2CCA880240R0001	0.015	1
40 A	CMS-121DR	2CCA880241R0001	0.015	1
20 A	CMS-122DR	2CCA880242R0001	0.015	1
Open-core sensors 18 mm for cable tie mounting (universal use)				
80 A	CMS-120CA	2CCA880220R0001	0.011	1
40 A	CMS-121CA	2CCA880221R0001	0.011	1
20 A	CMS-122CA	2CCA880222R0001	0.011	1

Solid-core sensors

Description		ABB code	Weight of 1 unit (kg)	Unit conf. (Pcs)
Type				
Solid-core sensors 18 mm for pro M & SMISLINE installation devices with twin terminals				
80 A	CMS-100PS	2CCA880100R0001	0.012	1
40 A	CMS-101PS	2CCA880101R0001	0.012	1
20 A	CMS-102PS	2CCA880102R0001	0.012	1
Solid-core sensors 18 mm for DIN rail mounting (universally usable)				
80 A	CMS-100DR	2CCA880128R0001	0.015	1
40 A	CMS-101DR	2CCA880129R0001	0.015	1
20 A	CMS-102DR	2CCA880130R0001	0.015	1
Solid-core sensors 18 mm for cable tie mounting (universally usable)				
80 A	CMS-100CA	2CCA880107R0001	0.011	1
40 A	CMS-101CA	2CCA880108R0001	0.011	1
20 A	CMS-102CA	2CCA880109R0001	0.011	1

Control Unit

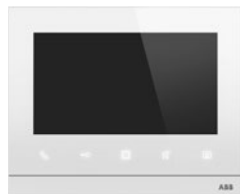
Description		ABB code	Weight of 1 unit (kg)	Unit conf. (Pcs)
Type				
CMS-660 control unit	CMS-660	2CCA880020R0001	0.153	1

Accessories

Description		ABB code	Weight of 1 unit (kg)	Unit conf. (Pcs)
Type				
2 m flat cable	CMS-800	2CCA880148R0001	0.017	1
5 m flat cable	CMS-802	2CCA880331R0001	0.045	1
10 m flat cable	CMS-803	2CCA880332R0001	0.090	1
30 m flat cable	CMS-805	2CCA880333R0001	0.270	1
Connector set (35 pcs)	CMS-820	2CCA880145R0001	0.024	35

Door entry system

ABB-Welcome Video Indoor Station 7"



Video indoor station 7"

The 7" panel is the new member of ABB-Welcome indoor world. It has touch screen with glass surface material. 7.8 mm thickness after flush mounted makes this new panel more fashion than ever. It can be surface-mounted, flush-mounted, desktop installation to fit all your needs. The new panel has 5 keys to control main video door entry functions: accept the call, door release, programmable button, mute, surveillance. In-built LED shows the missed call, auto-unlock status, and mute status.

Feature:

- Display and record the video image from outdoor station or external cameras
- Different bell sounds are adjustable for door and floor ringing
- Five different bell sounds are available and also you can play your favorite ringtone from SD card
- Leave message to family members or visitors when out of home
- "Doctor" function for automatic unlock
- Internal call to other users living in the apartment or neighbors
- Call concierge if guard unit is ready in the system
- Send SOS alarm to guard unit

Technical data:

- Display feature: 7" capacitive touchscreen
- Display resolution: 1024×600
- Installation: surface-mounted, flush-mounted and desktop installation
- Bus voltage: 20–30 V DC
- Standby current: ≤15 mA @ 24 V DC
- Operating current: ≤300 mA @ 24 V DC
- Operating temperature: -10 °C – +55 °C; 14 °F – 131 °F
- Single-wire clamps: 2 × 0.28 mm² – 2 × 0.75 mm²
- Fine-wire clamps: 2 × 0.28 mm² – 2 × 0.75 mm²
- Product dimensions: 198.5 mm × 162.3 mm × 17 mm

Article No.	Order No.	Description	Pack/Qty
M22381-W	2TMA220050W0007	White	1
M22381-B	2TMA220050B0004	Black	1



Surface-mounted box

Mounting of indoor station on the wall

- For surface-mounted installation
- The product is packed with accessories to ensure qualified installation.

Article No.	Order No.	Description	Pack/Qty
42381S-W	2TMA220160W0002	White	1
42381S-B	2TMA220160B0001	Black	1



Flush-mounted box&pre-installation box

- For flush-mounted installation
- The product is packed with accessories to ensure qualified installation.

Article No.	Order No.	Description	Pack/Qty
42361F	2TMA130160B0132	Black	1



Video 1 family kit, mini OS, 1 button, SM, ID + 7" VIS

This kit contain below products

- Mini video outdoor station, 1 pushbutton, ID, SM
- Mini-system controller, MDRC
- Video indoor station 7, white
- Surface mounted box for video indoor station 7, white
- New Proximity key fob, ID card, white
- New Proximity key fob, ID card, black

Article No.	Order No.	Description	Pack/Qty
M20421	2TMA220310N0002	Kit	1



Video 1 family kit, mini OS, 1 button, FM, ID + 7" VIS


This kit contain below products

- Mini video outdoor station, 1 pushbutton, ID, FM
- Pre-installation box
- Mini-system controller, MDRC
- Video indoor station 7, white
- Surface mounted box for video indoor station 7, white
- New Proximity key fob, ID card, white
- New Proximity key fob, ID card, black


Article No.	Order No.	Description	Pack/Qty
M20422	2TMA220310N0004	Kit	1

Light switches and socket outlets


Busch-axcent® frames

Product	Article-No.	Order-No.	Pack/Qty
 Cover frame ¹⁾ 1gang frame Available from December 2018			
270 platinum	1721-270-500	2CKA001754A4688	1
275 black matt	1721-275-500	2CKA001754A4708	1
276 titanium	1721-276-500	2CKA001754A4698	1


¹⁾ Real metal surface.

 Cover frame ¹⁾ 2gang frame For vertical or horizontal installation. Available from December 2018			
270 platinum	1722-270-500	2CKA001754A4689	1
275 black matt	1722-275-500	2CKA001754A4709	1
276 titanium	1722-276-500	2CKA001754A4699	1


¹⁾ Real metal surface.

 Cover frame ¹⁾ 3gang frame For vertical or horizontal installation. Available from December 2018			
270 platinum	1723-270-500	2CKA001754A4690	1
275 black matt	1723-275-500	2CKA001754A4710	1
276 titanium	1723-276-500	2CKA001754A4700	1

¹⁾ Real metal surface.

Product	Article-No.	Order-No.	Pack/Qty
 Cover frame ¹⁾ 4gang frame For vertical or horizontal installation. Available from December 2018			
270 platinum	1724-270-500	2CKA001754A4691	1
275 black matt	1724-275-500	2CKA001754A4711	1
276 titanium	1724-276-500	2CKA001754A4701	1

¹⁾ Real metal surface.

 Cover frame ¹⁾ 5gang frame For vertical or horizontal installation. Available from December 2018			
270 platinum	1725-270-500	2CKA001754A4692	1
275 black matt	1725-275-500	2CKA001754A4712	1
276 titanium	1725-276-500	2CKA001754A4702	1

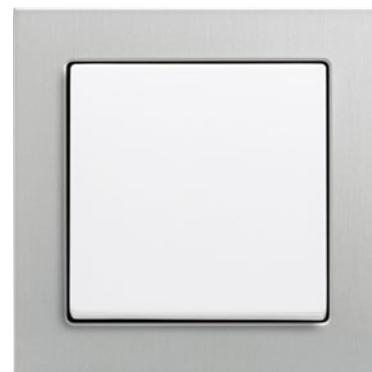
¹⁾ Real metal surface.



— anthracite / platinum



— black matt / black matt



— studio white / titanium

ABB-secure@home

Securing peace of mind

Whether at home or out and about, you and your loved ones can go about your daily activities knowing you don't have to worry about unwelcome intruders or dangerous incidents any time of day or night.

Unobtrusive simplicity

Installing and commissioning ABB-secure@home is straightforward and simple. Thanks to interference-proof and professional wireless devices it won't damage any existing brickwork or wall finishes. It has an intuitive architecture and is easy to manage via its smart central unit, dedicated remote control or remotely, from your smart-phone or tablet.

With ABB-secure@home security and simplicity are within easy reach.

360° freedom

ABB-secure@home offers comprehensive security, protecting your home, day and night, both inside and out. Not only from intruders but also unfortunate events such as floods and fires. Being a highly evolved system, it's completely customizable to suit your individual lifestyle.



All-round protection

Both indoors and out

Security starts outside and continues inside your home. Your peace of mind is guaranteed by comprehensive protection and monitoring solutions.

Volumetric detection

Any movement, any presence inside the house is detected by volumetric sensors. They are located in strategic points and are equipped with different coverage lenses according to specific needs, and they will automatically adjust to changes of the environmental conditions and provide adjustable sensitivity. The alarm signal can be selected between the instant or delayed mode.

Opening detection

Windows, doors, main or secondary entrances, shutters or blinds, any opening of the house is controlled by perimeter detection sensors. The contact safety can also be associated with inertial devices which detect a possible shock occurred on a door or a window. Many small eyes stand guard on your tranquility, to ensure total protection and maximum serenity.



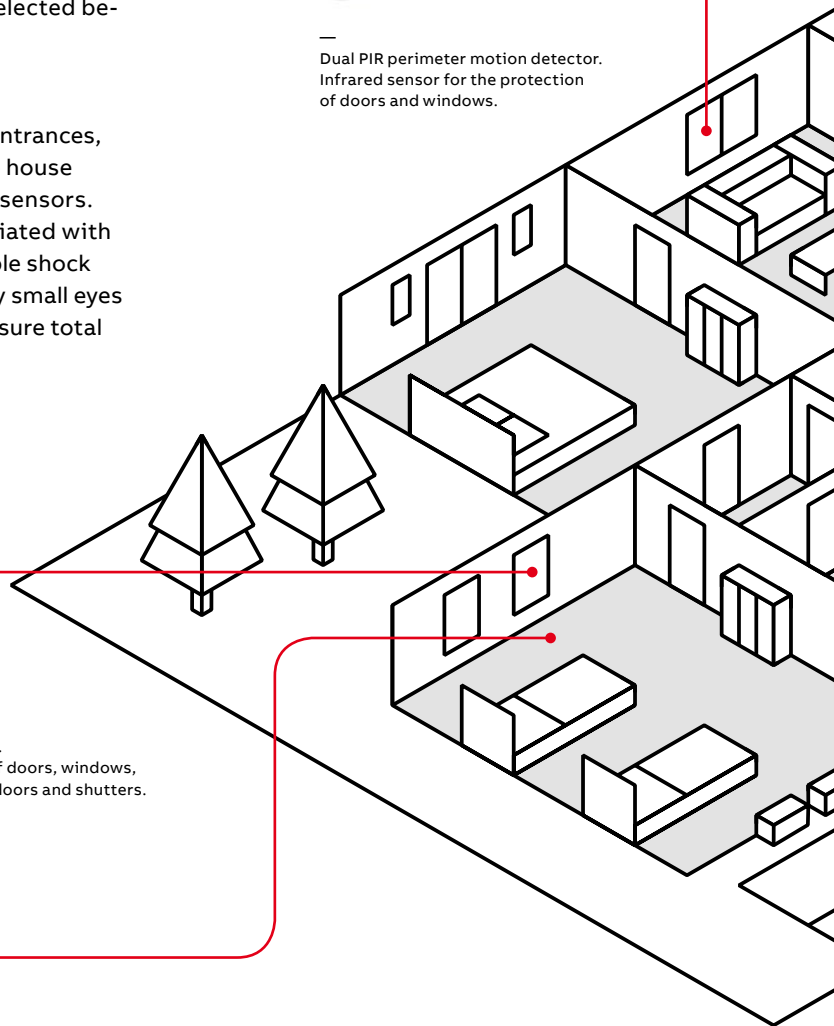
— Dual PIR perimeter motion detector. Infrared sensor for the protection of doors and windows.

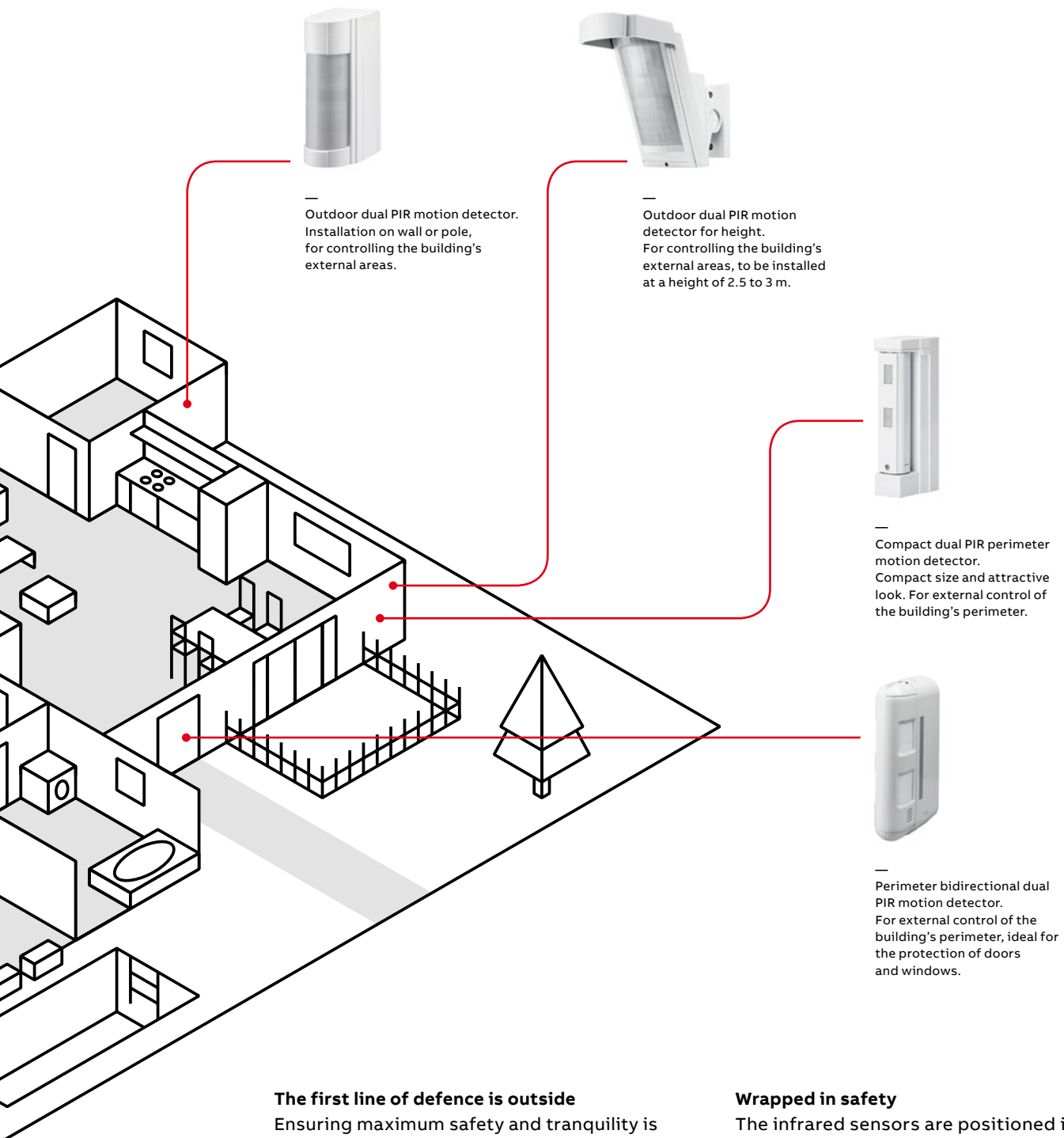


— Magnet reed contacts. Control the opening of doors, windows, overhead and sliding doors and shutters.



— Passive infrared detector with volumetric lens. Automatically adjusts to changing environmental conditions.





Hassle-free security

Simple integration that simply works

Imagine an intuitive, state-of-the-art security system that works with wireless technology and fits directly into your home design with minimum fuss. With ABB-secure@home, imagination becomes reality.

No wires, no problems

ABB-secure@home is a highly evolved system that's easy to install into inhabited, furnished homes and existing designs. Its use of wireless radio frequency technology minimizes invasiveness and disturbances during installation and when your system needs change in the future, it will adapt with them.

Safety and plug-and-play protection

With the connection to ABB-free@home® you have access to your system wherever you are. The ABB-secure@home configuration is immediate. Once installed and turned on, the sensors are automatically recognized by the central unit. The parameters are fully customizable according to your customers' needs. Then just press OK and you're done!



State-of-the-art technology

At the heart of everything we do

A processor and an integrated GSM (Global System for Mobile Communications) interface are at the heart of ABB-secure@home. This technology will protect your most valuable assets and itself from external tampering and interference.

Smart radio, maximum security

The wireless ABB-secure@home system transmits and receives at 868.3 MHz, making it able to distinguish and interpret signals with absolute precision. The bidirectional encrypted communication allows you to limit energy consumption and provide greater security during transmission, while everything is guaranteed by a proprietary protocol. Integrated CSMA (Carrier Sense Multiple Access) technology allows the optimisation

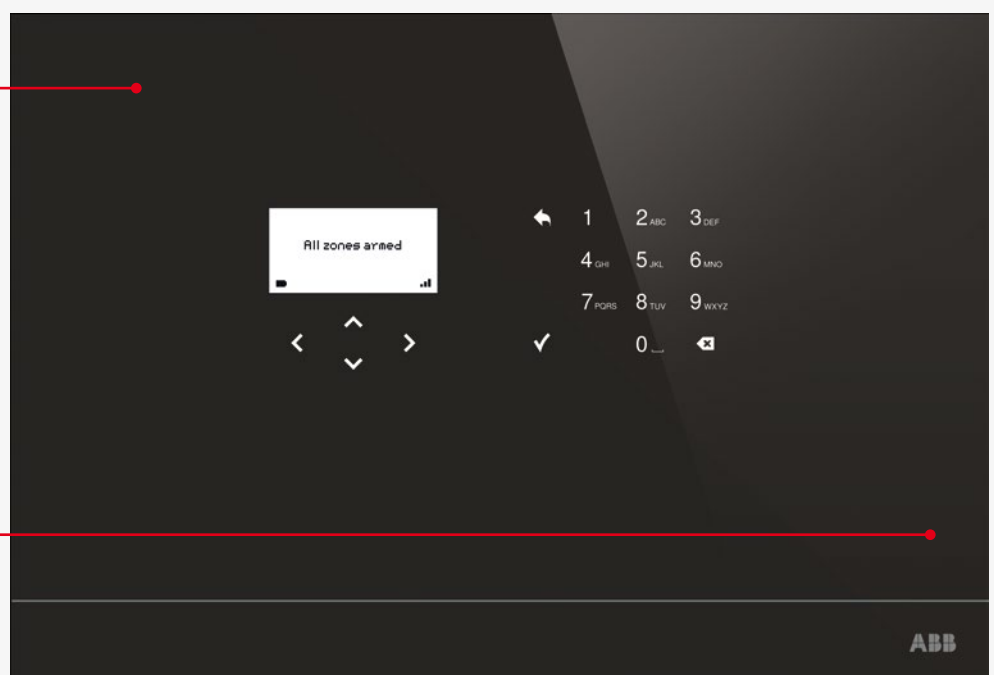
of communication to avoid interference and disturbance. The alarm transmitter and receiver verify the absence of band occupancy, ensuring continuously successful communication.

A system that's always connected

The ABB-secure@home central unit is equipped with an integrated GSM interface through which each alarm is immediately sent via voice calls and/or SMS to all programmed telephone numbers.

868.3 MHz
bidirectional
encrypted
proprietary
protocol plus a
unique rolling
code for all
arming/dis-
arming controls

Integrated
GSM module
for sending
alarms via voice
call or SMS



ABB

Beautiful flexibility

Stylish remote controls

Technology and design are always in harmony with ABB-secure@home. Each control device is built with a clear intention to please at first glance.

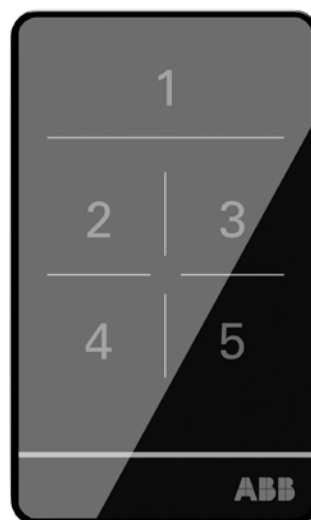
Comfort in your hands

ABB-secure@home puts the power of your anti-intrusion system directly into your hands in the most simple way possible: with a stylish plug-and-play remote control. Four keys are fully configured and one is freely configurable. The most common functions are assigned to the four preconfigured keys, to arm the intrusion zones in Home Stay or Home Away mode, to disarm all the anti-intrusion zones, and also to launch a panic alarm.



A remote control that manages everything

A lightweight object with heavyweight power. The ABB-secure@home remote control allows you to operate your anti-intrusion system in the most simple way possible: using five keys and five LEDs, fully configurable. Each of them can be configured to arm or disarm anti-intrusion zones and special functions such as robbery alarm, panic alarm and first aid alarm. All this contained in an elegant, attractive design.



Security is a breeze

Programmable in a few steps

—
01 Authentication.
Once you have booted the system from the central unit, authenticate yourself as an installer.

—
02. Connection to ABB-free@home®.
If the central unit is connected to the free@home bus, you can pair the two systems just copying the shown key into the free@home dedicated menu.

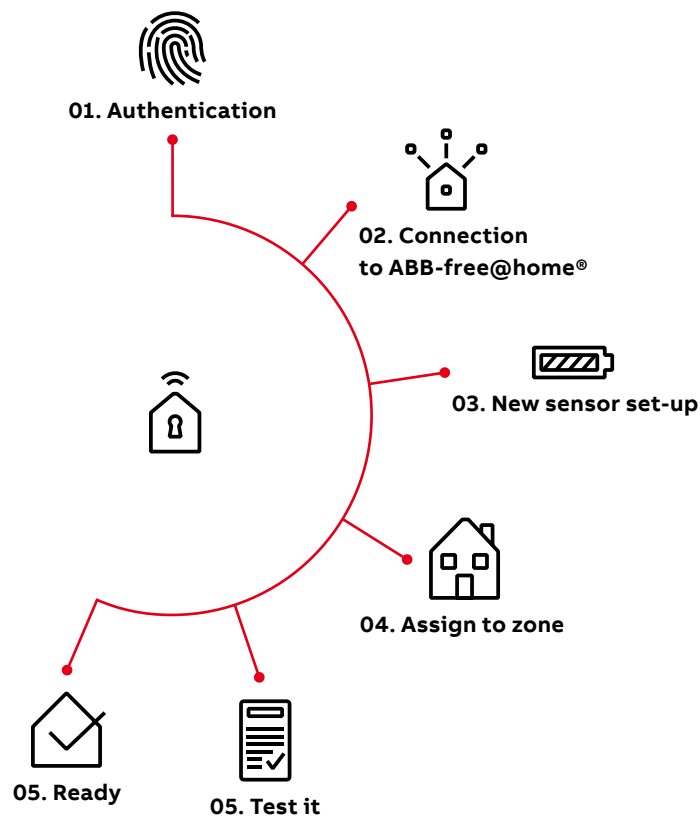
—
03 New sensor set-up.
To power the sensor, connect the battery. The central unit registers the sensor automatically.

—
04 Assign to zone.
Choose the home zone to place the sensor or create new ones to assign it to.

—
05 Test it.
As you finish the initial set-up, the central unit automatically performs a sensor test and shows you a report to check everything is working properly.

—
06 Ready.
The initial set-up lets you also easily add notification and installer contacts, create the user PIN and assign the allowed zones.

When a system is well thought out, everything becomes easier, and configuring ABB-secure@home is just as easy as installing it. The initial set-up takes only a few simple steps and you are done. It saves you valuable working hours and will help you gain more customers, too.



Comfort through security

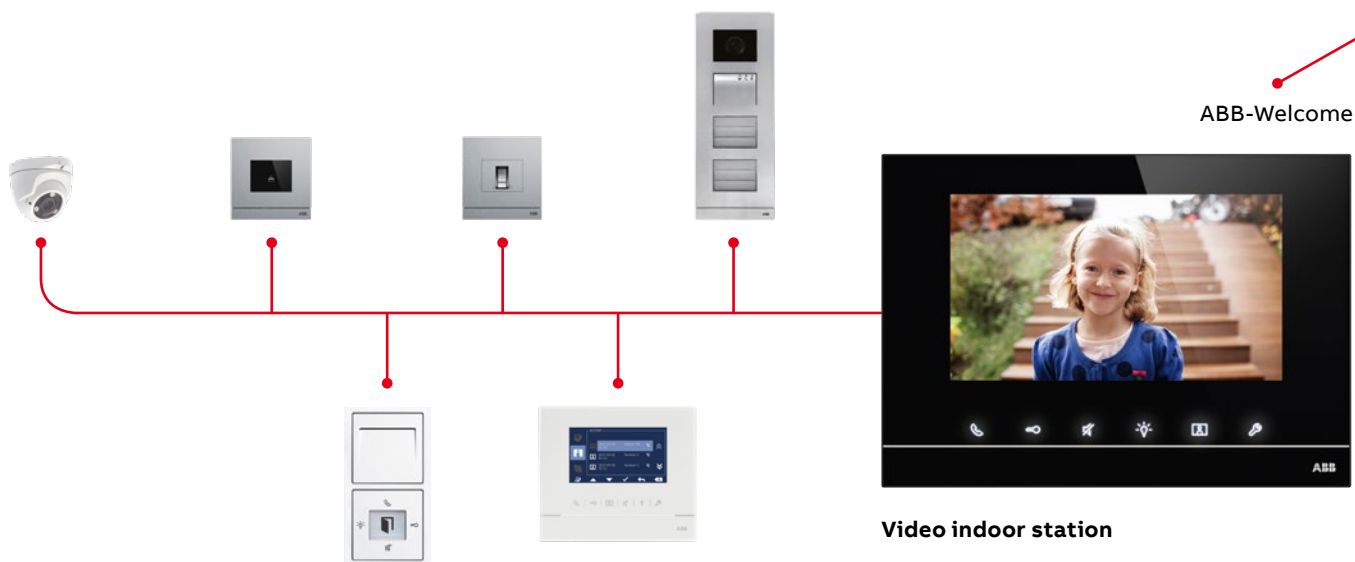
Within a fully integrated system

The residential security system, ABB-secure@home, is part of the ABB Smarter Home system alongside the ABB-free@home® home automation system, and the Welcome door entry system.



Easy remote control

Always in the know about what is happening at home. Via app you can check at any time whether all the windows are closed or if someone has forgotten to switch off the lights. This makes it possible to maintain control – even while on holiday.



Central unit



ABB-secure@home

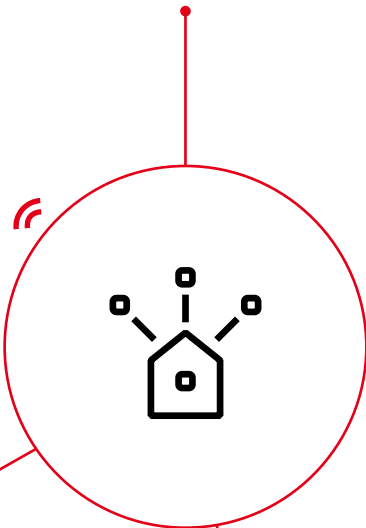
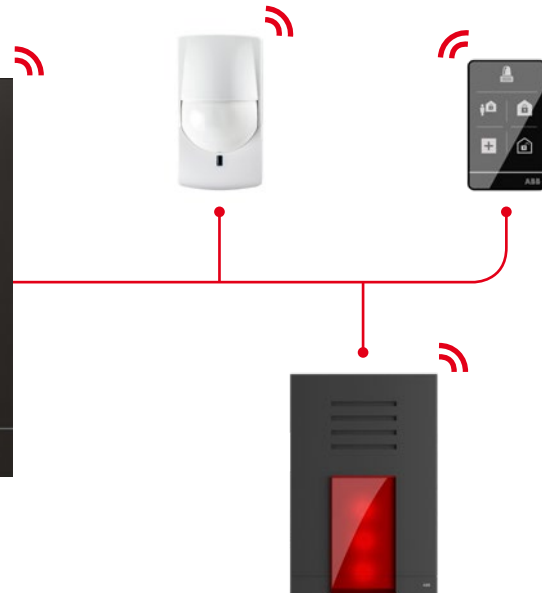


ABB-free@home®



System Access Point

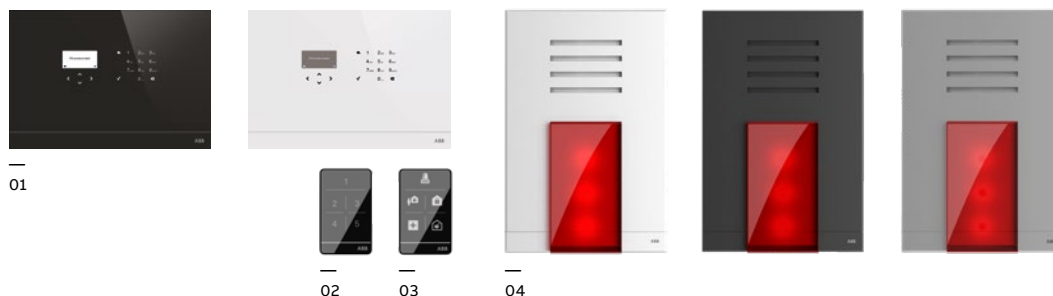


Flexible security

A range of products around you

ABB-secure@home has what it takes to work with you, in exactly the way you want it to. A range of products stand ready to help make your project special and to offer your customers the safety and security they deserve.

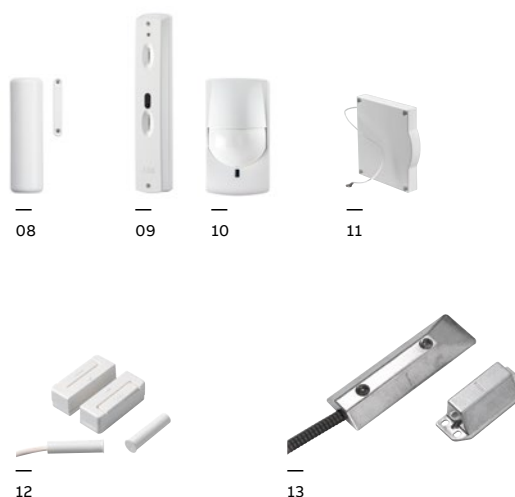
System devices



Home safety



Indoor security



- 01 ABB-secure@home central units
- 02 Remote control
- 03 Pre-configured remote control
- 04 Outdoor alarm sirens
- 05 Smoke detector
- 06 Heat detector

- 07 Water detector
- 08 Perimeter magnet reed contact detector
- 09 Dual passive IR perimeter motion detector
- 10 Indoor passive IR motion detector
- 11 Roller shutter sensor

- 12 Magnet reed contact for surface/flush mounting
- 13 Rolling door magnet reed contact

Outdoor security

15



16



17



18

—
15 Compact dual passive IR
perimeter motion detector

—
16 Outdoor dual passive
IR motion detector

—
17 Perimeter bidirectional dual
passive IR motion detector

—
18 Outdoor dual passive IR
motion detector for height



Intrusion alarm systems

ABB-secure@home: Central unit

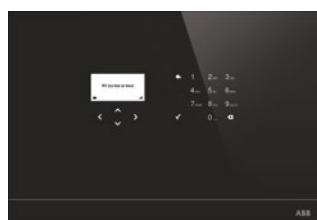


ABB-secure@home central units

The central unit is at the heart of the ABB-secure@home system. It complies with the EN 50131-1 grade 2 class I standard. It communicates with other system devices based on radio frequency via a bidirectional protocol and makes the following features available to the user:

- Management of security and home safety devices
- Alarm notification via voice or SMS messages to the programmed telephone numbers
- Integration with ABB-free@home® for a complete smarter home solution with both security and home automation systems

The central unit, equipped with a backup battery, indicates a power failure and its subsequent recovery inside the home. Via the integrated GSM unit, it can send alarms both as a voice call, and via SMS messages to a maximum of twelve telephone numbers. In addition, the GSM unit enables the reception of commands from fixed or mobile phones through SMS messages.

For each command received, the central unit sends a message confirming its execution. The embedded keypad and display allow you to work in a simple and intuitive way to display status and alarms and to verify, control and program all controlled devices. The central unit has an integrated indoor siren, an embedded microphone for environmental listening, and is able to manage a main history of 250 events and a secondary one of 128 events.

System capability



Bidirectional



Indoor



Rechargeable battery backup up to 30 h



Direct 230 V power supply



Up to 7 zones



Integrated indoor siren up to 95 db at 1 m



Capacitive touch keypad

Device type		Max. no. of devices	Max. no. of zones
Anti-intrusion	Indoor and outdoor volumetric passive infrared detectors Magnet reed contacts	64	7
Home safety	Flood detectors, optical smoke detectors, heat detectors		1 active 24 h
Signaling	Outdoor sirens	4	-
Control	Remote controls, security keypads	16	-
Others	Wireless repeaters, wired interface	4	-

All devices communicate wirelessly using the 868.3 MHz radio frequency band. Each device has a unique address and is controlled by the central unit, which it promptly notifies of both tampering attempts and low battery.

To ensure maximum reliability, the central unit continuously detects and reports immediately any attempt at communication frequency blinding. It is possible to use repeaters.

The central unit is able to manage up to seven security zones, set as anti-burglar type (armed/disarmed), one safety zone, set as technical alarm always-on, and one zone dedicated to system devices. Each zone of the anti-theft system can be activated in three different modes:

	User	System activation after a detection
Notification mode	Located inside the apartment, office, shop	Notification only (e.g., SMS)
Home mode		Internal warning only (e.g., indoor siren)
Away mode	Located outside	All possible notifications (external and indoor siren, SMS, actuations)



USB connection



PC connection

The central unit provides two USB ports:

- 1 USB type A for updating the central unit firmware via USB stick
- 1 USB type B port for connection via USB type B cable to a computer with maintenance software

Electrical specifications:

- Power supply: 230 VAC \pm 10%, 50/60 Hz
- Max. current: 45 mA
- Backup battery: Ni-Mh rechargeable, 6 V, 1.600 mAh

Dimensions (LxHxD):

- Square shaped: 273 x 188 x 48 mm

Conditions of use:

- Environmental class: I (indoor)
- Operating temperature: -5 °C to +45 °C
- Relative humidity: 75% average, non-condensing, 90% peak
- Installation: wall-mounted

Communication technologies:

- Safety devices: bidirectional FM transmission at 868.3 MHz
- Range in free field: 300 m
- For GSM models only:
 - Dual band GSM/UMTS module 900 MHz/1.800 MHz
 - Internal antenna
- Serial link: RS485 interface, 3-wire terminal block
- ABB-free@home® 2-wire bus

Other features:

- Backlit LCD display, 128 x 64 pixels
- Indoor siren: built-in piezo siren, 95 dB at 1 m
- Protection: anti-tamper, anti-removal

Description	GSM	ABB-free@home®	Color	Type	Order number	Pack unit
Central unit	•	•	Glass white	SAS-W1.1E	2CSY233921R003	1
Central unit		•	Glass white	SAS-W2.1E	2CSY245181R004	1
Central unit	•	•	Glass black	SAS-W1.1F	2CSY233541R003	1
Central unit		•	Glass black	SAS-W2.1F	2CSY255461R004	1
Spare batteries						
Rechargeable battery pack, Ni-Mh, 6 V, 1.6 Ah				SBA-W1.1	2CSY255111R0801	1

Intrusion alarm systems

ABB-secure@home: Control devices



Remote control

The remote control is a mobile device that can operate the anti-intrusion system in the simplest manner. The remote control features five buttons with numerical identification. All keys are fully configurable; each of them can be assigned activation or deactivation functions for the anti-intrusion zones, that is, special functions such as an anti-theft alarm, panic alarm, and first aid alarm. The remote control features five fully configurable LEDs; one is a service LED to restore the power supply and communication status with the remote control central unit and four are used to reset the activation status (red LED on) or deactivation (green LED on) of the different system zones. Key and LED configuration, which can be different for each remote control, is performed during installation/programming through the specific functions available on the alarm unit.



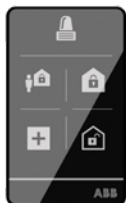
Bidirectional



**Battery
up to 5 years**

- Power supply:
1 lithium battery type CR2032, 3 V, 220 mAh
- Battery life: 5 years
- Protection: IP32
- Operating temperature: -5 °C to +55 °C
- Relative humidity: max. 93% (non-condensing)
- Environment: indoors, outdoors
- Range in free field: 200 m
- Local signals: 5 LEDs red/green/orange
- Dimensions (LxHxD): 40 x 78 x 10 mm

Description	Color	Type	Order number	Pack unit
Remote control	Glass black	SAD-W2.1F	2CSY251641R0306	1
Spare lithium button battery, 3 V (CR2032), normally available on the market				



Preconfigured remote control

The remote control is a mobile device that can operate the anti-intrusion system in the simplest manner. The remote control features five buttons with symbolic identification. One key is freely configurable and the other four keys are preconfigured with the following functions: external arming, internal arming, disarming, and panic alarm. The remote control features five LEDs: one is a service LED that gives information about the battery level and the communication status with the central unit; the other four LEDs are used as a feedback regarding the arming (red LED on) or disarming (green LED on) status of the different system zones. All LEDs flash yellow for 2 seconds if there is something preventing the correct arming/disarming of the system (e.g. an open window).

The free-key configuration, which can be different for each remote control, is performed during installation/programming through the specific functions available on the central unit.



Bidirectional



**Battery
up to 5 years**

- Power supply: 1 lithium battery type CR2032, 3 V, 220 mAh
- Battery life: 5 years
- Protection: IP32
- Operating temperature: -5 °C to +55 °C
- Relative humidity: max. 93% (non-condensing)
- Environment: indoors, outdoors
- Range in free field: 200 m
- Local signals: 5 LEDs red/green/orange
- Dimensions (LxHxD): 40 x 78 x 10 mm

Description	Color	Type	Order number	Pack unit
Preconfigured remote control	Glass black	SAD-W1.1F	2CSY202821R0305	1
Spare lithium button battery, 3 V (CR2032), normally available on the market				

Intrusion alarm systems

ABB-secure@home: Indoor sensors



Bidirectional



Indoor



**Battery
up to 5 years**

Perimeter magnet reed contact detector

The perimeter detector controls doors and windows and detects their opening or closing through the internal reed contact and the external magnet. It includes an additional input to connect wired conventional sensors. This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or in delayed mode (with a programmable delay of 0 to 90 s, that can be different for input and output). During installation/programming it is possible to configure all the device parameters through the specific functions available on the alarm unit.

- Power supply: lithium battery 3 V, 1.4 Ah
- 30-day guaranteed operation from low battery signal
- Battery life: 5 years with average use of 10 opening/closing operations daily
- Protection degree: IP30
- Dimensions (LxHxD): detector 31 x 106 x 35 mm, magnet 8 x 56 x 10 mm
- Color: white or brown
- Operating temperature: -5 °C to +45 °C
- Relative humidity: max. 93% (non-condensing)
- Usage environment: indoors (dry and sheltered places)
- Range in free field: 300 m
- Local signals: 1 calibration LED
- Installation: free
- Protection degree: dual tamper
- Performance level: complies with EN 50131-1 and EN 50131-2-6 Class I standards

Description	Color	Type	Order number	Pack unit
Universal perimeter detector	White	SMC-W1.1A	2CSY255791R0104	1
Universal perimeter detector	Brown	SMC-W1.1D	2CSY255731R0104	1
Spare lithium battery 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1



Rolling door magnet reed contact

This device signals the opening of overhead or sliding doors. It needs to be connected to a perimeter magnet reed contact detector (type codes: SMC-W1.1A or SMC-W1.1D) or to a dual passive IR perimeter motion detector (type codes: SMD-W2.1A or SMD-W2.1D), and is equipped with a 1.2-meter connection cable for this purpose. It is made of aluminum with high resistance to the transit of heavy vehicles. The minimum fixing distance is 20 mm from ferrous materials and 25 mm from non-ferrous materials.

- Protection degree: IP66
- Dimensions (LxHxD): 140 x 15.5 x 42 mm (fixed part) 86 x 25 x 32 mm (moving part)
- Operating temperature: -25 °C to +70 °C

Description	Color	Type	Order number	Pack unit
Magnetic contact for overhead doors	-	SMC-W2.1	2CSY255341R0602	1



Roller shutter sensor

The device detects the lifting of shutters through the movement of the retractable rope. It is made of thermoplastic material; the rope is 3.5 m long. It needs to be connected to a perimeter magnet reed contact detector (type codes: SMC-W1.1A or SMC-W1.1D).

- Protection degree: IP40
- Dimensions (LxHxD): 100 x 77 x 15 mm
- Weight: 280 g
- Operating temperature: -25 °C to +70 °C

Description	Color	Type	Order number	Pack unit
Rope-operated contact for shutters, monitors the opening of windows and doors, complete, for screw-on or drilling	White	SLM-W1.1	2CSY255001R0603	1



Magnet reed contact for surface/flush mounting

The device monitors the opening of windows and doors. Installation options:

- Wall-mounted, inserting with pressure the cylindrical parts into 8 mm diameter holes
- Flush-mounted, with the use of the plastic adapters included in the packaging

It needs to be connected to a perimeter magnet reed contact detector (type codes: SMC-W1.1A or SMC-W1.1D) or to a dual passive IR perimeter motion detector (type codes: SMD-W2.1A or SMD-W2.1D) and is equipped with a 1.2-meter connection cable for this purpose. It is made of aluminum with high resistance to the transit of heavy vehicles. The minimum fixing distance is 20 mm from ferrous materials and 25 mm from non-ferrous materials.

- Protection degree: IP66
- Dimensions (LxHxD): 45 x 16.5 x 15 mm
- Weight: 50 g
- Operating temperature: -25 °C to +70 °C

Description	Color	Type	Order number	Pack unit
Projecting or flush-mounted magnetic contact	White	SMC-W3.1A	2CSY295241R0606	1
Projecting or flush-mounted magnetic contact	Brown	SMC-W3.1D	2CSY295201R0606	1



Shock inertial sensor

This device detects a possible shock occurring on a door, window, or the surface on which it is installed. Equipped with a 2-meter connection cable, it must be connected to a perimeter magnet reed contact detector (type codes: SMC-W1.1A or SMC-W1.1D). Assembly: projecting on door/window/generic surfaces using screws or double-sided adhesive tape.

- Protection degree: IP54
- Dimensions (LxHxD): 33 x 32.7 x 23.7 mm
- Weight: 40 g
- Operating temperature: -25 °C to +70 °C

Description	Color	Type	Order number	Pack unit
Shock inertial sensor	White	SGB-W1.1A	2CSY255871R0604	1

Intrusion alarm systems

ABB-secure@home: Indoor sensors



Dual passive IR perimeter motion detector

The dual passive IR perimeter detector protects doors and/or windows using a tent-type cover on the opening and two infrared sensors. The device is also equipped with an extra input (which can be disabled, leaving only the active IR mode), where you can connect an external, wired magnetic contact (with anti-tamper). The detector provides the anti-masking feature (which can be disabled). This device is supervised by the central unit at programmable intervals (every 15 minutes by default); it can be programmed in real time or in delayed mode (with a programmable delay of 0 to 90 s, which can be different for input and output). During installation/programming it is possible to change the supervision interval through the specific functions available on the central unit.



Bidirectional



Indoor



**Battery
up to 4 years**

- Power supply: lithium battery 3 V, 1.4 Ah (included in the package)
- 30-day guaranteed operation from low battery signal
- Battery life: 4 years with average use of 10 daily operations
- Protection degree: IP34
- Dimensions (LxHxD): 220 x 38 x 32 mm
- Operating temperature: -20 °C to +55 °C
- Relative humidity: max. 93% (non-condensing)
- Usage environment: indoors (dry and sheltered places)
- Range in free field: 300 m
- Local signals: 1 red LED
- Detecting element: 2 IR sensors with linear Fresnel lens; 1 external contact with anti-tamper (can be excluded), anti-masking (can be excluded)
- Installation: free
- Anti-tamper protection: anti-opening, anti-tear (optional)

Description	Color	Type	Order number	Pack unit
Perimeter detector	White	SMD-W2.1A	2CSY235871R0103	1
Perimeter detector	Brown	SMD-W2.1D	2CSY200091R0103	1
Spare lithium battery 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1

Diagram of side coverage

Typical installation between window and blind.

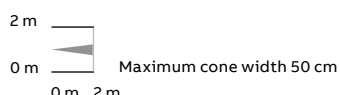
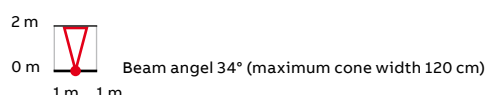
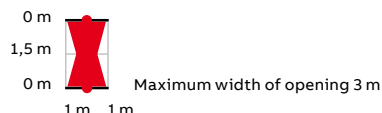
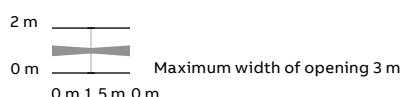


Diagram of top coverage



Side installation for large openings with two opposing devices.





Indoor passive IR motion detector

The indoor passive infrared detector signals the presence of intruders inside the controlled area. The device is equipped with an IR sensor with Fresnel lens and, by default, it operates with a wide-ranging coverage (90° angle and 11 m distance). It is possible, through a different internal configuration, to operate with long distance coverage (10° angle and 17 m distance). This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or in delayed mode (with a programmable delay of 0 to 90 s, which can be different for input and output).

These parameters can be configured during installation/programming through the specific functions available on the central unit.



Bidirectional



Indoor



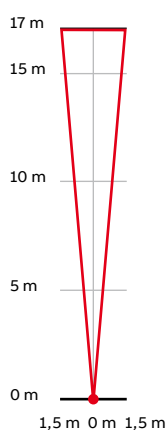
**Battery
up to 4 years**

- Power supply: lithium battery 3 V, 1.4 Ah (included in the package)
- Battery life: 4 years (operation guaranteed 30 days from low battery signal)
- Protection degree: IP30
- Operating temperature: -5 °C to +45 °C
- Relative humidity: max. 95% (non-condensing)
- Environment: indoors
- Range in free field: 300 m
- Detecting elements: 1 IR sensor with Fresnel lens
- Programming elements: 2 jumpers, one for testing, one for pulse counting
- Local signals: 1 LED
- Anti-tamper protection: lid opening tamper
- Dimensions (LxHxD): 70 x 114 x 128 mm

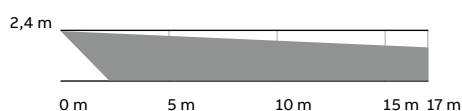
Description	Color	Type	Order number	Pack unit
Indoor passive infrared detector	White	SMD-W1.1A	2CSY255701R0105	1
Spare lithium battery 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1
Joint for mounting the IR wall detector	White	SIM-W2.1A	2CSY255101R0607	1

Long distance coverage

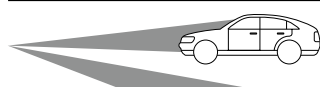
Top view



Side view

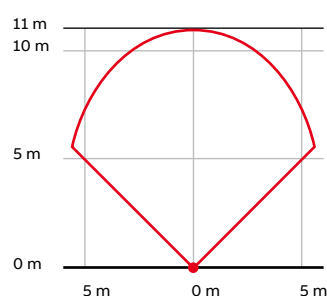


No reaction
Only upper IR beam is crossed

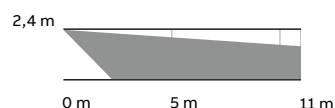


Wide coverage angle

Top view



Side view



No reaction
Only lower IR beam is crossed



Alarm
Both IR beams are crossed



Intrusion alarm systems

ABB-secure@home: Warning devices



Outdoor alarm sirens

The outdoor alarm siren is a two-way, self-powered device capable of emitting acoustic and light alarms. The siren is installed outdoors on a wall and is equipped with anti-opening, anti-removal, anti-perforation, and anti-shock protection, as well as an anti-foaming patented system. Siren configuration (sound type played, duration, sound levels, LEDs, etc.) is customized by programming the anti-intrusion central unit.

- Power supply: no. 1 battery pack LR20 7.5 V (5 type "D"x 1.5 V batteries), 12Ah
- Operation guaranteed 30 days from low battery signal
- Battery life: 3 years under normal use
- Protection degree: IP55
- Color: silver, flashing orange
- Operating temperature: -20 °C to +55 °C
- Relative humidity: max. 93% (non-condensing)
- Range in free field: 300 m
- Local signals: 1 trumpet, 100 dBA sound pressure at 3 m, 1x 8-LED flash
- Installation: free
- Anti-tamper protection: anti-opening and anti-removal
- Performance level: complies with EN 50131-1 and EN 50131-4 standards
- Environmental class: III, safety degree: 2
- Dimensions (LxHxD): 210 x 330 x 155 mm

Description	Color	Type	Order number	Pack unit
Outdoor siren	White	SSD-W1.1A	2CSY277631R0502	1
Outdoor siren	Silver	SSD-W1.1C	2CSY296961R0502	1
Outdoor siren	Anthracite	SSD-W1.1B	2CSY229751R0502	1
Battery pack, LR20, 7.5 V, 12 Ah	-	SBA-W3.1	2CSY254991R0803	1



Bidirectional



Outdoor



**Battery
up to 3 years**

Intrusion alarm systems

ABB-secure@home: Outdoor sensors



Outdoor dual passive IR motion detector

Installation on a wall or pole, for controlling the building's external areas.

The device integrates two infrared detectors – the upper one is fixed, the lower one is vertically adjustable in five positions (with 2.5, 3.5, 6, 8.5 and 12 m average coverage area).

The alarm is triggered only if both sensors detect a presence; this operation mode makes the device particularly suitable for avoiding false signals due to the presence of pets.

The horizontal detection area is 90°. It can be rotated according to six possible angle positions. The detector provides an anti-masking function (which can be disabled).

This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or in delayed mode (with a programmable delay of 0 to 90 s, which can be different for input and output). During installation/programming it is possible to configure these parameters through the specific functions available on the alarm unit.



Bidirectional



Outdoor



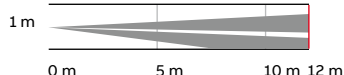
**Battery
up to 3 years**

- Power supply: lithium battery 3 V, 1.4 Ah (included in the package)
- Battery life: 3 years (operation guaranteed 30 days from low battery signal)
- Protection degree: IP55
- Operating temperature: -15 °C to +55 °C
- Relative humidity: max. 93% (non-condensing)
- Environment: outdoors
- Range in free field: 300 m
- Detecting element: no. 2 IR sensors
- Programming elements: no. 2 DIP switches (with 3 and 6 switches)
- Local signals: no. 1 LED
- Anti-tamper protection: cover opening
- Dimensions (LxHxD): 71 x 186 x 105 mm

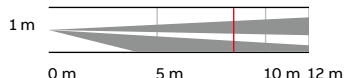
Description	Color	Type	Order number	Pack unit
Outdoor dual passive IR motion detector	White	SMD-W3.1A	2CSY255211R0201	1
Lithium battery, 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1

Diagram of side coverage

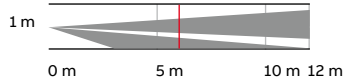
Detector position 1 (12 m average coverage area)



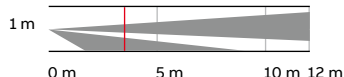
Detector position 2 (8.5 m average coverage area)



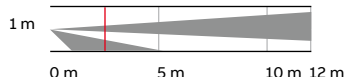
Detector position 3 (6 m average coverage area)



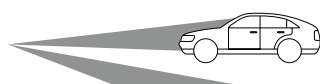
Detector position 4 (3.5 m average coverage area)



Detector position 5 (2.5 m average coverage area)



No reaction
Only upper IR beam is crossed



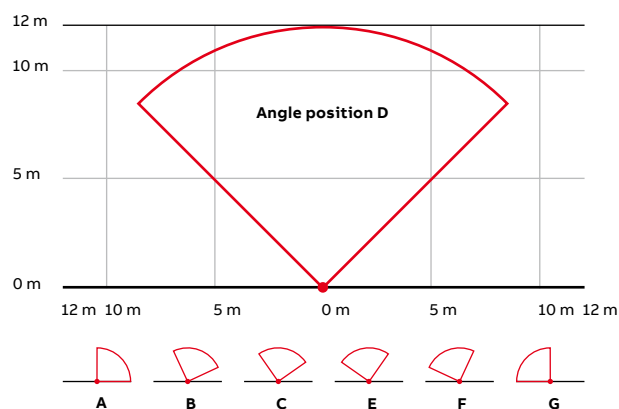
No reaction
Only lower IR beam is crossed



Alarm
Both IR beams are crossed



Diagram of top coverage



Intrusion alarm systems

ABB-secure@home: Outdoor sensors



Perimeter bidirectional dual passive IR motion detector

The device must be installed on a wall and allows the external control of the building's perimeter, making it ideal for the protection of doors and windows. Inside the device there are four infrared detectors, two per side; both sensors on one side, coupled, can be adjusted horizontally to 0° or 3°. In a vertical direction, for each side, the upper sensor is fixed while the lower one is adjustable to one of four positions (with detection distance of 2, 5, 8 and 12 m). The alarm is triggered only if both sensors, even on just one side, detect a presence; this operation mode makes the device particularly suitable for avoiding false signals due to the presence of pets. This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or in delayed mode (with a programmable delay of 0 to 90 s, which can be different for input and output). During installation/programming it is possible to configure these parameters through the specific functions available on the alarm unit.



Bidirectional



Outdoor

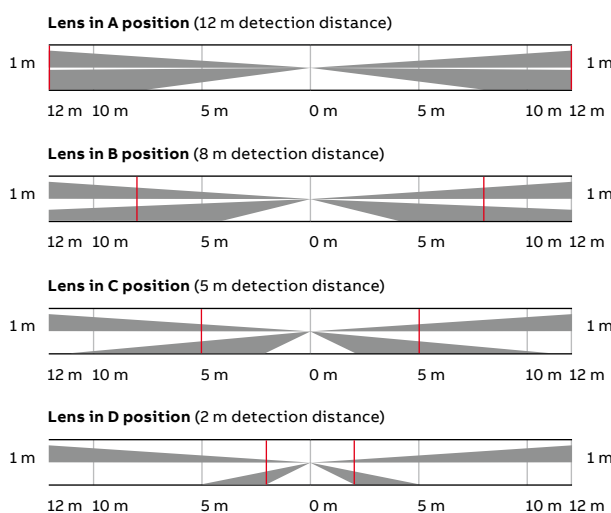


**Battery
up to 3 years**

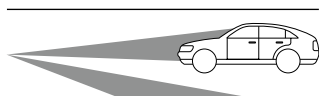
- Power supply: lithium battery 3 V, 1.4 Ah (included in the package)
- Battery life: 4 years (operation guaranteed 30 days from low battery signal)
- Protection degree: IP55
- Environment: outdoors
- Range in free field: 300 m
- Detecting elements: no. 4 sensors
- Programming elements: a 3-way DIP switch
- 1 sensitivity switch
- Local signals: 2 LEDs
- Anti-tamper protection: cover opening
- Dimensions (LxHxD): 56 x 235 x 128 mm
- Operating temperature: -15 °C to +55 °C
- Relative humidity: max. 93% (non-condensing)

Description	Color	Type	Order number	Pack unit
Perimeter bidirectional dual passive IR motion detector	White	SMD-W4.1A	2CSY254971R0202	1
Lithium battery, 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1

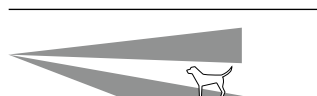
Diagram of side coverage



No reaction
Only upper IR beam is crossed



No reaction
Only lower IR beam is crossed



Alarm
Both IR beams are crossed

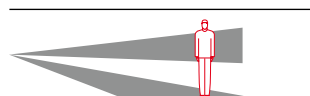
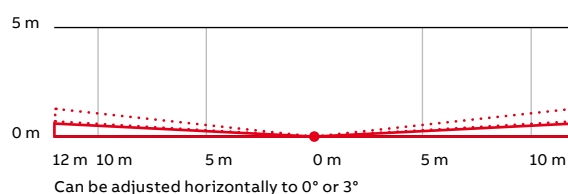


Diagram of top coverage





Compact dual passive IR perimeter motion detector

The compact-size device to be installed on the wall allows control of the building's outdoor perimeter and it is particularly suitable for the protection of doors and windows.

The curtain-type detection area (5° detection angle) has an adjustable length to 2 or 5 m.

The device is internally fitted with two infrared detectors, one of which is adjustable.

The alarm is triggered only if both sensors detect a presence; this operation mode makes the device particularly suitable for avoiding false signals due to the presence of pets.

The detector provides an anti-masking function. This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or in delayed mode (with a programmable delay of 0 to 90 s, which can be different for input and output). During installation/programming it is possible to configure these parameters through the specific functions available on the alarm unit.



Bidirectional



Outdoor



**Battery
up to 3 years**

- Power supply: lithium battery 3 V, 1.4 Ah (included in the package)
- Battery life: 4 years (operation guaranteed 30 days from low battery signal)
- Protection degree: IP55
- Dimensions (LxHxD): 35 x 155 x 85 mm
- Operating temperature: -15 °C to +55 °C
- Relative humidity: max. 93% (non-condensing)
- Range in free field: 300 m
- Detecting element: 2 IR sensors
- Programming elements: 1 DIP switch (with 6 switches)
- Local signals: no. 1 LED
- Anti-tamper protection: cover opening

Description	Color	Type	Order number	Pack unit
Compact dual passive IR perimeter motion detector	White	SMD-W5.1A	2CSY254981R0203	1
Lithium battery, 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1

Diagram of side coverage

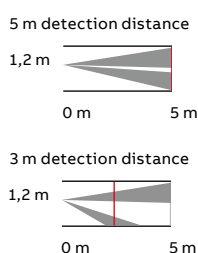
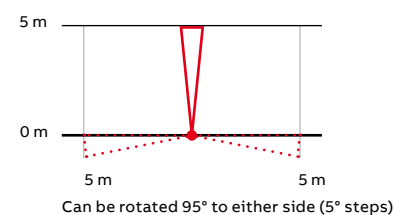
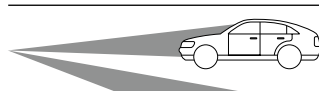


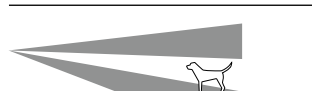
Diagram of top coverage



No reaction
Only upper IR beam is crossed



No reaction
Only lower IR beam is crossed



Alarm
Both IR beams are crossed



Intrusion alarm systems

ABB-secure@home: Outdoor sensors



Bidirectional



Outdoor



**Battery
up to 3 years**

Outdoor dual passive IR motion detector for height

The product, to be installed on the wall at a height of 2.5–3 m, allows the control of a building's external areas. Through the two IR detectors, the device indicates the presence of intruders, avoiding false alarm alerts. The detector provides an anti-masking function (which can be disabled). This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or in delayed mode (with a programmable delay of 0 to 90 s, which can be different for input and output). During installation/programming it is possible to change the supervision interval through the specific functions available on the alarm unit.

- Power supply: lithium battery 3 V, 1.4 Ah (included in the package)
- Battery life: 4 years (with 120 s active interdiction)
- Operation guaranteed 30 days from low battery signal
- Protection degree: IP55
- Operating temperature: -20 °C to +60 °C
- Relative humidity: max. 95% (non-condensing)
- Range in free field: 300 m
- Detecting element: 2 IR sensors
- Programming elements: 1 DIP switch (with 6 switches) – 2 sensitivity selectors
- Local signals: no. 1 LED
- Tamper protection
- Dimensions (LxHxD): detector with joint 99 x 205 x 266 mm coverage, detector without joint 92 x 198 x 148 mm

Description	Color	Type	Order number	Pack unit
Outdoor dual passive IR motion detector for height	White	SMD-W6.1A	2CSY255311R0204	1
Lithium battery, 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1

Diagram of side coverage

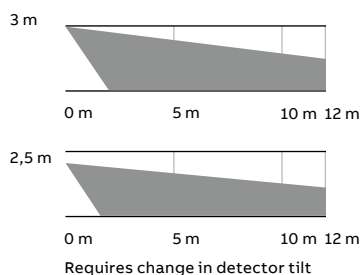
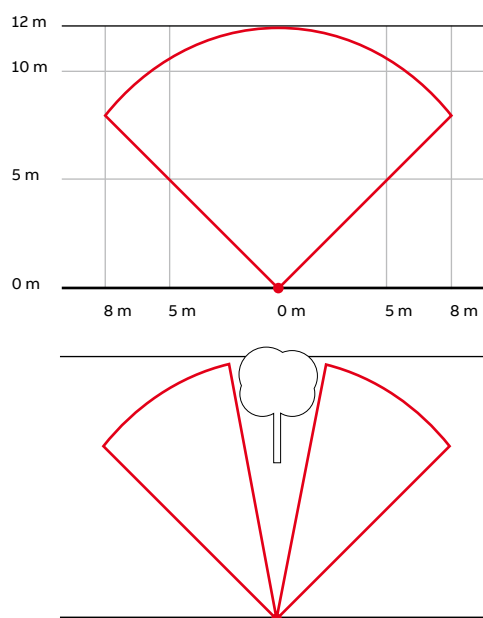
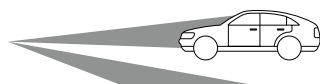


Diagram of top coverage



No reaction
Only upper IR beam is crossed



No reaction
Only lower IR beam is crossed



Alarm
Both IR beams are crossed



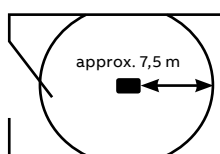
Intrusion alarm systems

ABB-secure@home: Home safety

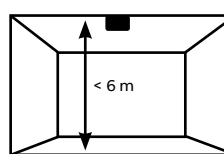


Smoke detector

Equipped with an optical detection system, the device indicates the presence of smoke inside the room where it is installed via the internal buzzer (85 dB at 3 m) and an alarm message to the central unit. It is equipped with an alarm LED and a control of the battery charge. An internal interface board (type code: STD-W1.1) must be housed inside. Integrated lithium battery with a minimum duration of ten years. Test button and beep deactivation. The device features bidirectional communication with the central unit that supervises it with a programmable supervision interval (typically every 15 minutes). During installation/programming it is possible to change the supervision interval through the specific functions available on the central unit.



Coverage area (radius 7,5 m)



Maximum height (6 m)



Bidirectional



Indoor



**Battery
10 years**

- Power supply: lithium battery 3 V, not replaceable
- Battery life: 10 years
- Dimensions (diameter x D): 120 mm x 47.5 mm

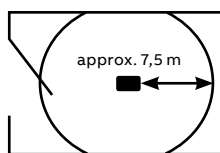
- Local signals: alarm (LED and buzzer), low battery (LED)
- Installation: ceiling

Description	Color	Type	Order number	Pack unit
Optical smoke detector	White	6833/01-84-500	2CKA006800A2721	1

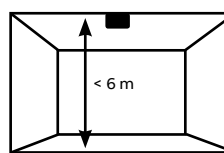


Heat detector

The device triggers when a temperature of 58°C is exceeded, activating the internal buzzer (85 dB at 3 m) and the alarm LED and sending a message to the central unit. An internal interface board (type code: STD-W1.1) must be installed inside. The detector is equipped with an integrated lithium battery with a minimum lifetime of ten years and a button for testing purposes and to deactivate the acoustic signal. The device features bidirectional communication with the central unit that supervises it with a programmable supervision interval (typically every 15 minutes). During installation/programming it is possible to change the supervision interval through the specific functions available on the central unit.



Coverage area (radius 7,5 m)



Maximum height (6 m)



Bidirectional



Indoor



**Battery
10 years**

- Power supply: lithium battery 3 V, not replaceable
- Battery life: 10 years
- Dimensions (diameter x D): 120 x 55 mm
- Color: white

- Usage environment: indoors
- Local signals: acoustic horn, sound pressure 85 dB at 3 m
- 1 alarm LED – low battery
- Installation: ceiling

Description	Color	Type	Order number	Pack unit
Heat detector	White	6835/01-84-500	2CKA006800A2723	1

Intrusion alarm systems

ABB-secure@home: Home safety



ABB-Secure@home wireless interface module for Busch-Smoke alarm detector

The device is required for interfacing the smoke detectors (order number: 2CKA006800A2721) or heat detectors (order number: 2CKA006800A2723) with the central unit.

The module is equipped with an integrated lithium battery with a minimum life of ten years. The device features bidirectional communication with the central unit that supervises it with a programmable supervision interval (typically every 15 minutes). During installation/programming it is possible to change the supervision interval through the specific functions available on the central unit.



Bidirectional



Indoor



**Battery
10 years**

- Power supply: lithium battery 3 V, not replaceable
- Battery life: 10 years
- Installation: inside a smoke detector, heat detector
- Communication technology: FM 868.3 MHz transmission
- Range in free field: 300 m

Description	Color	Type	Order number	Pack unit
Smoke/heat detector interface module	-	STD-W1.1	2CSY254961R0701	1



Water detector

It detects the presence of water and sends an alarm message to the central unit. The minimum detectable level of the liquid is 1 mm and this can be adjusted to higher levels. It is equipped with an anti-tamper device (breakage or removal), self-diagnostics and a control of the battery charge. The device consists of the interface module and the flood detection probe. The device features bidirectional communication with the central unit that supervises it with a programmable supervision interval (typically every 15 minutes). During installation/programming it is possible to change the supervision interval through the specific functions available on the central unit.



Bidirectional



Indoor



**Battery
up to 3 years**

- Power supply: lithium battery 3 V, 1.4 Ah (included in the package)
- Battery life: 3 years, operation guaranteed 30 days from low battery signal
- Color: white
- Operating temperature: 0 °C to +55 °C
- Range in free field: 300 m
- Local signals: 1 alarm LED
- Dimensions:
interface module: 30 x 36 x 103 mm
flood probe: 40 x 44 x 23 mm
- Connection cable length: 5 m
- Installation: wall

Description	Color	Type	Order number	Pack unit
Flood detector	White	STD-W5.1A	2CSY255191R0705	1
Lithium battery, 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1

Intrusion alarm systems

ABB-secure@home: Accessories



Rechargeable battery pack, Ni-Mh, 6 V, 1.6 Ah

This is the central unit's dedicated battery pack. It is rechargeable, therefore it normally does not need to be replaced. Buy a spare battery only if its performance has significantly decreased, which could mean that the battery has reached its end-of-life.

Description	Color	Type	Order number	Pack unit
	-	SBA-W1.1	2CSY255111R0801	1



Lithium battery, 3 V, 1.4 Ah

These lithium batteries are the ones used by all the ABB-secure@home safety and security sensors.

Description	Color	Type	Order number	Pack unit
Lithium battery, 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1



Battery pack, LR20, 7.5 V, 12 Ah

This is the outdoor siren's dedicated battery pack.

Description	Color	Type	Order number	Pack unit
	-	SBA-W3.1	2CSY254991R0803	1



Wireless repeater

The repeater boosts the signal between detectors, controls, sirens, actuators and alarm unit, extending the range of the radio frequency transmissions.

The device features a bidirectional communication with the alarm unit that supervises it with a programmable supervision interval (typically every 15 minutes).

During installation/programming it is possible to change the supervision interval through the specific functions available on the central unit. Up to four repeaters can be configured for each alarm unit. Each repeater has a list of devices to be managed: The devices listed for a particular repeater can be updated directly through specific functions of the alarm unit.

The device can be powered by a plug-in 220 V power supply; in this case the battery has a backup function in the event of a mains power failure. It is equipped with an anti-tamper device (breakage or removal), self-diagnostics and control of battery charge.



Bidirectional



Indoor



**Battery
up to 3 years**

- Power supply: 4 3 V DC batteries (included) or external 5 V DC plug-in power supply (optional, not included)
- Battery life: 3 years without 220 V power supply with 4 batteries installed (capacity 1.4 Ah x 4 = 5,6 Ah)
- Protection: IP20
- Dimensions (LxHxD): 97 x 97 x 35 mm
- Color: white
- Operating temperature: -5°C to +45°C
- Relative humidity: 93% max. (non-condensing)
- Usage environment: indoors, in a dry, sheltered place
- Communication technology: FM 868,3 MHz transmission
- Range in free field: 300 m
- Programming elements: no. 1 button
- Signaling elements: none
- Installation: wall
- Tamper protection: anti-tamper and anti-burglary

Description	Color	Type	Order number	Pack unit
Wireless repeater	-	SIM-W1.1	2CSY255201R0601	1
Lithium battery, 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1

Spare batteries

All sensors use the same type of batteries; the outdoor siren has a dedicated battery. Normally the central unit's battery is rechargeable, therefore it does not need to be replaced. Buy a spare battery only if its performance has significantly decreased, which could mean that the battery has reached its end-of-life.

Description	Color	Type	Order number	Pack unit
Rechargeable battery pack, Ni-Mh, 6 V, 1.6 Ah	-	SBA-W1.1	2CSY255111R0801	1
Lithium battery, 3 V, 1.4 Ah	-	SBA-W2.1	2CSY255331R0802	1
Battery pack, LR20, 7.5 V, 12 Ah	-	SBA-W3.1	2CSY254991R0803	1

Intrusion alarm systems

ABB-secure@home: Start kit

ABB-secure@home start kit – GSM

The start kits represent the installation base for the extended system solutions, containing all the basic devices usually common to any installation. They are easily expandable to fit any customer needs.



Description	Color	Type	Order number	Pack unit
ABB-secure@home start kit, GSM	-	SSK-W1.1E	2CSY295371R0051	1

Includes the following:

Central unit with GSM, square	Glass white	SAS-W1.1E	2CSY233921R003	1
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Preconfigured remote control	Glass black	SAD-W1.1F	2CSY202821R0305	1
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Perimeter magnet reed contact detector	White	SMC-W1.1A	2CSY255791R0104	1
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Indoor passive IR motion detector	White	SMD-W1.1A	2CSY255701R0105	1
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ABB-secure@home start kit – Basic

The start kits represent the installation base for the extended system solutions, containing all the basic devices usually common to any installation. They are easily expandable to fit any customer needs.



Description	Color	Type	Order number	Pack unit
ABB-secure@home start kit, basic	-	SSK-W2.1E	2CSY295411R0050	1
Includes the following:				
Central unit, square	Glass white	SAS-W2.1E	2CSY245181R0004	1
Preconfigured remote control	Glass black	SAD-W1.1F	2CSY202821R0305	1
Perimeter magnet reed contact detector	White	SMC-W1.1A	2CSY255791R0104	1
Indoor passive IR motion detector	White	SMD-W1.1A	2CSY255701R0105	1

MISTRAL Multimedia

Easy installation for media equipment

Suitable for all kinds of walls

Available for brick walls, flush and hollow wall mounting, with drilled metal base plates always included.



MISTRAL family feeling

MISTRAL Multimedia as enriching addition to the product family.



Neat cabling

The complete installation materials in one place.



Just snap the router on

The device carrier (rubber) makes it easy to assembly internet routers without any additional tools (snap on trap).



Easy connection to different power supplies



Triple socket, 120° swiveling and to fit all sorts of plugs.




Versatile connections

Patch-panels to host RJ45 keystone jacks.

MISTRAL Multimedia – Order codes 850 / 650*

MISTRAL Multimedia	Description	Dimensions W×H×D		Order code	Type code	Packaging
		GWT	[mm]			
	Mistral 41F Multimedia 2×12 size opaque door **	850	320×435×107	1SLM004100A6305	M41C24X210850	1/5
	Mistral 41F Multimedia 3×12 size opaque door **	850	320×600×107	1SLM004100A6307	M41C36X310850	1/2
	Mistral 41F Multimedia 3×18 size opaque door **	850	430×600×127	1SLM004100A6309	M41C54X310850	1/2
	Mistral 41W Multimedia 2×12 size opaque door	650	297×387×119	1SLM004100A7105	M41P24X21	1/2
	Mistral 41W Multimedia 3×12 size opaque door	650	297×512×119	1SLM004100A7107	M41P36X31	1/2
	Mistral 41W Multimedia 3×18 size opaque door	650	387×512×119	1SLM004100A7109	M41P54X31	1/2

MISTRAL Multimedia – Other accessories

MISTRAL Multimedia	Description	Order code	Type code	Packaging
	3-gang socket outlet for Multimedia	1SLM004100A1956	41Z122	1
	Patchpanel 10 positions for Multimedia	1SLM004100A3904	41Z141	1/15
	Patchpanel 16 positions for Multimedia	1SLM004100A1957	41Z123	1/15
	Router holder for Multimedia	1SLM004100A1958	41Z124	1
	10-screw kit for Multimedia metal plate	1SLM004100A1959	41Z139	1
	Wire holder for Multimedia metal plate	1SLM004100A1960	41Z140	1/5
	Hollow wall fixing kit Mistral41 Multimedia	1SLM004100A1961	41Z142	1
	Drilled metal base plate 12-module size 41W***	1SLM004100A3902	41Z143	1/10
	Drilled metal base plate 18-module size 41W***	1SLM004100A3911	41Z144	1/10
	Router Holder Clips	1SLM004100A3912	41Z145	1
	Router Holder Rubber	1SLM004100A3913	41Z146	1
	Drilled metal base plate 12-module size 41F***	1SLM004100A3914	41Z147	1/10
	Drilled metal base plate 18-module size 41F***	1SLM004100A3915	41Z148	1/10

* = drilled metal base plates included

** = for brick and hollow wall applications (hollow wall: fixing kit to be ordered separately)

*** = spare part

Consumer units

MISTRAL41F & Multimedia: Technical details

MISTRAL41F – Technical details

Codes	1SLM004101A1202 1SLM004101A1203 1SLM004101A1204 1SLM004101A1205					
	1SLM004100A1100	1SLM004100A1101	1SLM004100A1102	1SLM004100A1103	1SLM004100A1104	1SLM004100A1105
	1SLM004100A1200	1SLM004100A1201	1SLM004100A1202	1SLM004100A1203	1SLM004100A1204	1SLM004100A1205
Number of modules	4	6	8	12	18	24
Dimensions (W×H×D) in mm	152×202×105	192×202×105	232×250×108	320×250×108	430×250×108	320×435×108
Colour	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white
Door type	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque
Protection class	II □	II □	II □	II □	II □	II □
Fire resistance	GWT 650°C	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08	IK08
Installation temperature	-15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C	15°C / + 60 °C
Resistance to heat	BPT 70°C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP41	IP41	IP41	IP41	IP41	IP41
Max. dissipation power	11 W	14 W	18 W	22 W	27 W	41 W
Extractable frame	Yes	Yes	Yes	Yes	Yes	Yes
Maximum current	63A	63 A	63 A	63 A	125 A	63 A
DIN rail centre distance	–	–	–	–	–	150 mm
Halogen free	Yes	Yes	Yes	Yes	Yes	Yes
Cable entry	Knockout	Knockout	Flange multi pre-cuts	Flange multi pre-cuts	Flange multi pre-cuts	Flange multi pre-cuts

Codes	1SLM004101A1206 1SLM004101A1207 1SLM004101A1208 1SLM004101A1209 1SLM004101A1210				
	1SLM004100A1106	1SLM004100A1107	1SLM004100A1108	1SLM004100A1109	1SLM004100A1110
	1SLM004100A1206	1SLM004100A1207	1SLM004100A1208	1SLM004100A1209	1SLM004100A1210
Number of modules	36 (2×18)	36 (3×12)	48	54	72
Dimensions (W×H×D) in mm	430×435×108	320×600×108	320×735×108	430×600×128	430×735×128
Colour	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white
Door type	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque
Protection class	II □	II □	II □	II □	II □
Fire resistance	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08
Installation temperature	-15°C / + 60 °C	15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C
Resistance to heat	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP41	IP41	IP41	IP41	IP41
Max. dissipation power	47 W	50 W	59 W	59 W	82 W
Extractable frame	Yes	Yes	Yes	Yes	Yes
Maximum current	125 A	100 A	100 A	125 A	125 A
DIN rail centre distance	150 mm	150 mm	150 mm	150 mm	150 mm
Halogen free	Yes	Yes	Yes	Yes	Yes
Cable entry	Flange multi pre-cuts	Flange multi pre-cuts	Flange multi pre-cuts	Flange multi pre-cuts	Flange multi pre-cuts

Note: the versions with box and frontal splitted have the same characteristics of standard product

MISTRAL41F & Multimedia – Technical details

Codes	1SLM004100A1300	1SLM004100A1301	1SLM004100A1302	1SLM004100A1303	1SLM004100A1304	1SLM004100A1305
	1SLM004100A1400	1SLM004100A1401	1SLM004100A1402	1SLM004100A1403	1SLM004100A1404	1SLM004100A1405
	1SLM004100A6305					
Number of modules	4	6	8	12	18	24
Dimensions (W×H×D) in mm	152×202×105	192×202×105	232×250×108	320×250×108	430×250×108	320×435×108
Colour	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white
Door type	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque
Protection class	II □	II □	II □	II □	II □	II □
Fire resistance	GWT 850 °C	GWT 850 °C	GWT 850 °C	GWT 850 °C	GWT 850 °C	GWT 850 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08	IK08
Installation temperature	-15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C	15°C / + 60 °C
Resistance to heat	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP41	IP41	IP41	IP41	IP41	IP41
Max. dissipation power	11 W	14 W	18 W	22 W	27 W	41 W (Multimedia 61 W)
Extractable frame	Yes	Yes	Yes	Yes	Yes	Yes
Maximum current	63 A	63 A	63 A	63 A	125 A	63 A
DIN rail centre distance	–	–	–	–	–	150 mm
Halogen free	Yes	Yes	Yes	Yes	Yes	Yes
Cable entry	Flange with knockouts	Flange with knockouts	Flange with knockouts	Flange with knockouts	Flange with knockouts	Flange with knockouts

Codes	1SLM004100A1306	1SLM004100A1307	1SLM004100A1308	1SLM004100A1309	1SLM004100A1310
	1SLM004100A1406	1SLM004100A1407	1SLM004100A1408	1SLM004100A1409	1SLM004100A1410
	1SLM004100A6307			1SLM004100A6309	
Number of modules	36 (2×18)	36 (3×12)	48	54	72
Dimensions (W×H×D) in mm	430×435×108	320×600×108	320×735×108	430×600×128	430×735×128
Colour	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white
Door type	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque	Transparent / opaque
Protection class	II □	II □	II □	II □	II □
Fire resistance	GWT 850 °C	GWT 850 °C	GWT 850 °C	GWT 850 °C	GWT 850 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08
Installation temperature	-15°C / + 60 °C	15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C	-15°C / + 60 °C
Resistance to heat	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP41	IP41	IP41	IP41	IP41
Max. dissipation power	47 W	50 W (Multimedia 63 W)	59 W	59 W (Multimedia 74 W)	82 W
Extractable frame	Yes	Yes	Yes	Yes	Yes
Maximum current	125 A	100 A	100 A	125 A	125 A
DIN rail centre distance	150 mm	150 mm	150 mm	150 mm	150 mm
Halogen free	Yes	Yes	Yes	Yes	Yes
Cable entry	Flange with knockouts	Flange with knockouts	Flange with knockouts	Flange with knockouts	Flange with knockouts

Note: the versions with box and frontal splitted have the same characteristics of standard product

Consumer units

MISTRAL41F & Multimedia: Technical details

MISTRAL41W & Multimedia – Technical details

Codes	1SPE007717F0200	1SPE007717F0300	1SPE007717F0400	1SPE007717F0800	1SPE007717F0500	
	1SPE007717F0210	1SPE007717F0310	1SPE007717F0410	1SPE007717F0810	1SPE007717F0510	
	1SPE007717F0100	1SPE007717F0220	1SPE007717F0320	1SPE007717F0420	1SPE007717F0520	
	1SLM004100A7105					
Number of modules	2	4	8	12	18	24
Dimensions (W×H×D) in mm	68×210×93	96×210×93	202×257×120	292×257×120	382×257×120	292×382×120
Colour	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white
Door type	No door	No door / transparent / opaque	No door / transparent / opaque	No door / transparent / opaque	No door / transparent / opaque	No door / transparent / opaque
Protection class	II ☐	II ☐	II ☐	II ☐	II ☐	II ☐
Fire resistance	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08	IK08
Installation temperature	-15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C	15 °C / + 60 °C
Resistance to heat	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP41	IP41	IP41	IP41	IP41	IP41
Max. dissipation power	9,2W	9,3 W	17,7 W	23,8 W	29,8 W	30,2 W (Multimedia 41 W)
Maximum current	63A	63 A	63 A	63 A	63 A	63 A
DIN rail centre distance	–	–	–	–	–	125 mm
Halogen free	Yes	Yes	Yes	Yes	Yes	Yes
Cable entry	Smooth	Smooth	Smooth	Smooth	Smooth	Smooth

Codes	1SPE007717F0900	1SPE007717F0600	1SPE007717F0700	1SPE007717F1000	1SPE007717F1100
	1SPE007717F0910	1SPE007717F0610	1SPE007717F0710	1SPE007717F1010	1SPE007717F1110
	1SPE007717F0920	1SPE007717F0620	1SPE007717F0720	1SPE007717F1020	1SPE007717F1120
	1SLM004100A7107			1SLM004100A7109	
Number of modules	36 (2×18)	36 (3×12)	48	54	72
Dimensions (W×H×D) in mm	382×382×120	292×507×120	292×656×120	382×507×120	382×656×120
Colour	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white
Door type	No door / transparent / opaque	No door / transparent / opaque	No door / transparent / opaque	No door / transparent / opaque	No door / transparent / opaque
Protection class	II □	II □	II □	II □	II □
Fire resistance	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08
Installation temperature	-15 °C / + 60 °C	15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C
Resistance to heat	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP41	IP41	IP41	IP41	IP41
Max. dissipation power	37,5 W	36,8 W (Multimedia 48 W)	44,8 W	45,2 W (Multimedia 52 W)	54,4 W
Maximum current	63 A	63 A	63 A	63 A	63 A
DIN rail centre distance	125 mm	125 mm	125 mm	125 mm	125 mm
Halogen free	Yes	Yes	Yes	Yes	Yes
Cable entry	Smooth	Smooth	Smooth	Smooth	Smooth

Note: the versions with box and frontal splitted have the same characteristics of standard product

MISTRAL41W – Technical details

Codes	1SPE007717F1500	1SPE007717F1600	1SPE007717F1700	1SPE007717F1800	1SPE007717F2200	1SPE007717F1900
Number of modules	2	4	8	12	18	24
Dimensions (W×H×D) in mm	68×210×93	96×210×93	202×257×120	292×257×120	382×257×120	292×382×120
Colour	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white
Door type	No door	No door	No door	No door	No door	No door
Protection class	II □	II □	II □	II □	II □	II □
Fire resistance	GWT 750 °C	GWT 750 °C	GWT 750 °C	GWT 750 °C	GWT 750 °C	GWT 750 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08	IK08
Installation temperature	-15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C	15 °C / + 60 °C
Resistance to heat	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP41	IP41	IP41	IP41	IP41	IP41
Max. dissipation power	9,2 W	9,3 W	17,7 W	23,8 W	29,8 W	30,2 W
Maximum current	63 A	63 A	63 A	63 A	63 A	63 A
DIN rail centre distance	–	–	–	–	–	125 mm
Halogen free	No	No	No	No	No	No
Cable entry	Smooth	Smooth	Smooth	Smooth	Smooth	Smooth

Codes	1SPE007717F2300	1SPE007717F2000	1SPE007717F2100	1SPE007717F2400	1SPE007717F2500
Number of modules	36 (2×18)	36 (3×12)	48	54	72
Dimensions (W×H×D) in mm	382×382×120	292×507×120	292×656×120	382×507×120	382×656×120
Colour	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white	RAL 9016 white
Door type	No door	No door	No door	No door	No door
Protection class	II □	II □	II □	II □	II □
Fire resistance	GWT 750 °C	GWT 750 °C	GWT 750 °C	GWT 750 °C	GWT 750 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08
Installation temperature	-15 °C / + 60 °C	15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C	-15 °C / + 60 °C
Resistance to heat	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP41	IP41	IP41	IP41	IP41
Max. dissipation power	37,5 W	36,8 W	44,8 W	45,2 W	54,4 W
Maximum current	63 A	63 A	63 A	63 A	63 A
DIN rail centre distance	125 mm	125 mm	125 mm	125 mm	125 mm
Halogen free	No	No	No	No	No
Cable entry	Smooth	Smooth	Smooth	Smooth	Smooth

Note: the versions with box and frontal splitted have the same characteristics of standard product

MISTRAL65H:

Consumer units and switchboards for smarter outdoor installations

Resistance to salt, dust or UV rays is an essential feature in outdoor applications. Saline environments, chemical industries, sandy/dusty or PV applications require specifically robust products to guarantee reliable distribution of energy to where it is required.



Made for harsh environments and outdoor installations

The MISTRAL65H consumer units and switchboards are self-extinguishing and resistant to abnormal heat and fire up to 750 °C (GWT). They provide shock resistance IK10 (20 Joules) and IP65 degree of protection.

Available in 4 sizes and with a wide range of accessories the MISTRAL65H enclosures have been specifically designed for heavy duty environments.



Certified robustness

The new MISTRAL65H consumer units and switchboards are perfectly suitable for heavy duty environments and outdoor installations as they have been tested and certified for:

- Dust/sand resistance (factory internal tested)
- Saline environments (according to IEC 60068-2-52)
- Weathering (according to IEC 60068-2-5)
- Permanent sun exposure (IEC 60068-2-5)
- Self-extinguishing and resistant to abnormal heat and fire up to 750°C (GWT)
- Shock resistance: IK10 (20 Joules)
- Degree of protection: IP65
- Opaque and transparent doors
- Common accessories with the MISTRAL65 standard range

MISTRAL65 / 65H

Fast and easy installation of consumer units

The project design also aimed to optimise cabling, assembly and installation times of the consumer units. Everything has been designed to make the installer's job quicker and easier, allowing them to implement functional and tidy consumer units.

In the multi-row versions, the centre distance of the DIN rails can be varied from 150 mm to 125 mm, further increasing the versatility of the product and using the same standard accessories. The frame is extractable for quick and easy bench cabling.

The ample internal space makes the cables more accessible, facilitating cabling and giving the possibility to anchor the cable-ties to special eye-holes on the frame.

The consumer units are designed to house optional dedicated terminal blocks in two different color schemes to allow quick and tidy cabling, and making separate power supplies easily recognisable, when used.

The range is completely coordinated with ABB MCBs and MCCBs, all of which can be easily installed simply by moving the rail provided for their housing.



01



02



03

01 Variable distance of the DIN rails, 125 mm and 150 mm.

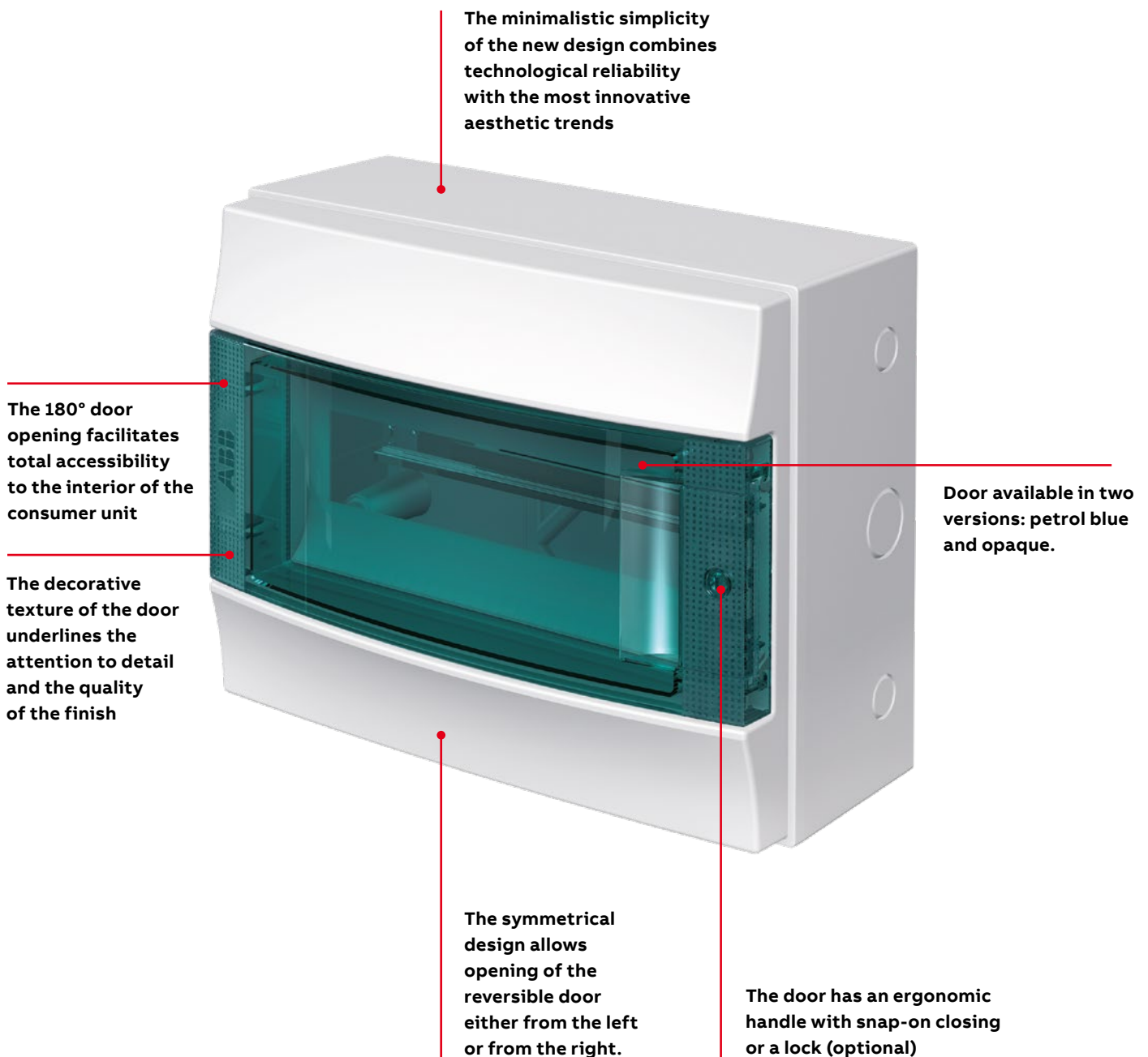
02 Withdrawable frame, adjustable DIN rail depth to ease the installation of any DIN device.

03 Fast and easy installation using wall fixing brackets.

MISTRAL65 / 65H

Design and simplicity "all in one".

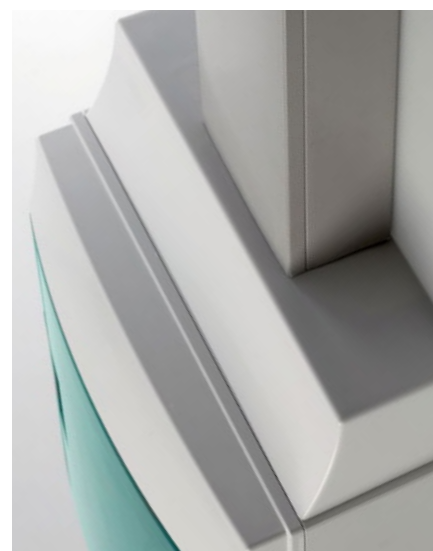
The refined design is marked by some particular characteristics, for example the perfect symmetry, which allows either the whole consumer unit or just the front panel to be rotated, easily changing the door opening side.



MISTRAL65 is equipped with smooth surfaces on top and bottom sides. Knockouts are available on both sides of the enclosure.

Interior slots allow the consumer unit to be fixed to the wall in points which are not visible from the outside, thus contributing to an aesthetically clean installation. Special snap-in closure plugs guarantee protection class II (double insulated).

The possibility to add an additional module by removing two pre-trimmed elements is an extremely useful solution which allows additions to be managed easily and tidily when unforeseen installation requirements are called for.



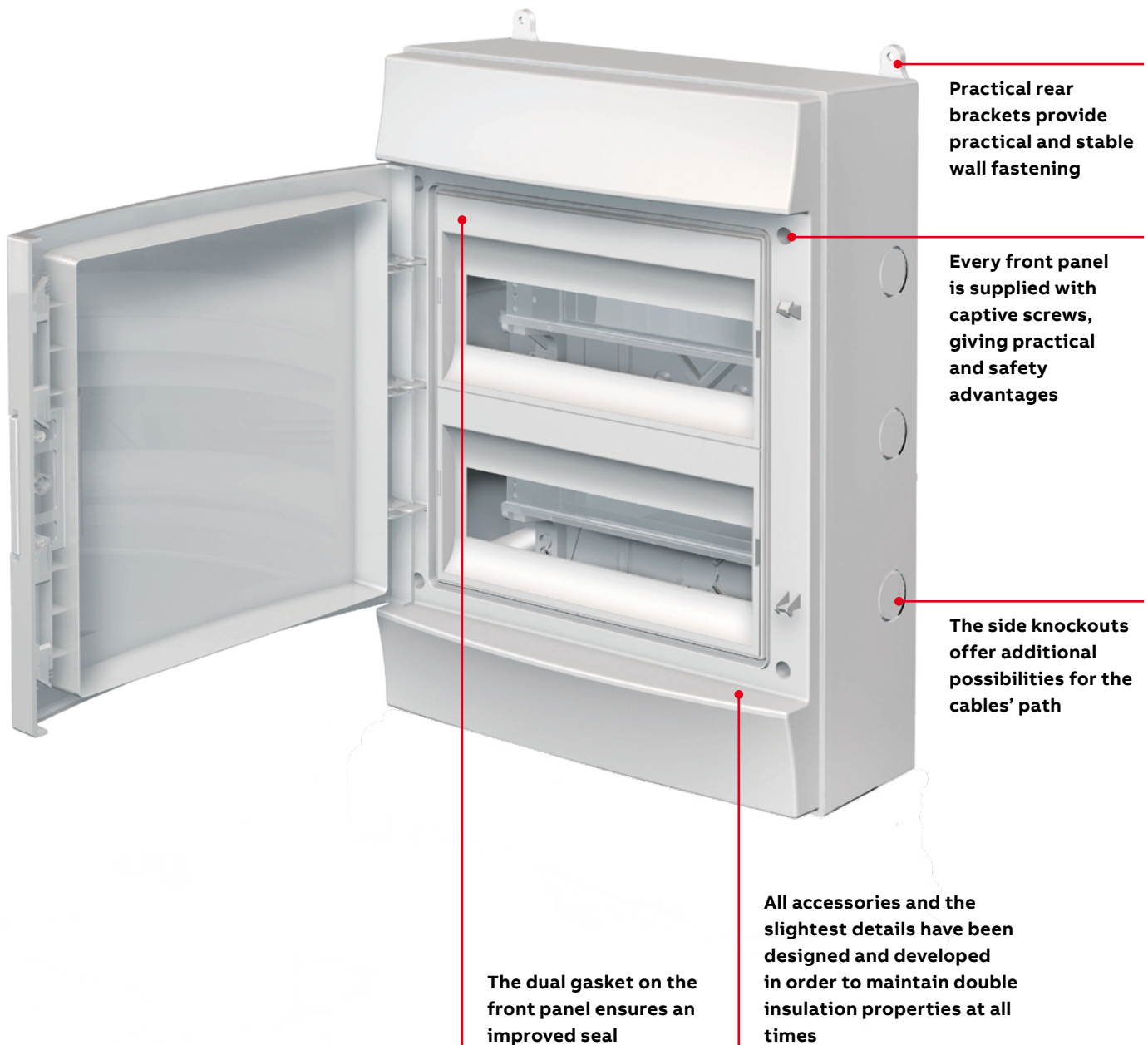
MISTRAL65H is equipped on one side with knockouts for cable glands, the other side with a smooth surface.

The standard door with ergonomic handle and snap-on closure can be equipped with a lock and key on request, ensuring only authorised persons have access and avoiding tampering or incorrect operations.

An 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.

MISTRAL65 / 65H

For simplicity and effectiveness



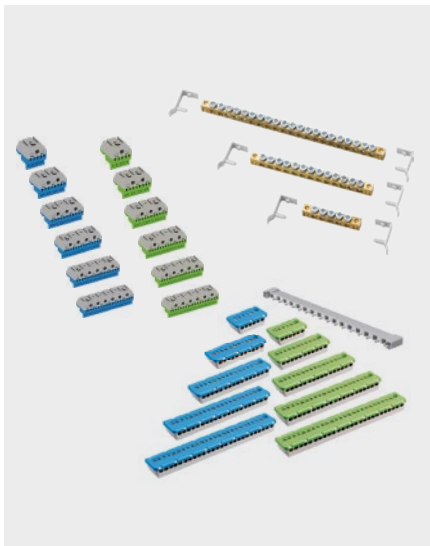
The extractable frame simplifies and speeds up bench cabling operations. The slotted holes in the frame allow it to be quickly fixed inside the enclosure.



In order to create space at the top or bottom of the consumer unit, the centre distance of the DIN rails can be modified from the standard distance of 150 mm to 125 mm. The closure panels, which are completely reversible, can be unhooked, reversed and reinstalled with a simple click.



Spaces have been created inside the consumer units to make cabling even easier, with cable clips and holes for fastening the conductors to the frame with simple cable-ties.



3 different terminal systems available

The MISTRAL range of consumer units is supplied with a wide range of terminal systems: Terminal bars with screws and the two versions of terminal blocks offering screw or screwless couplings.



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



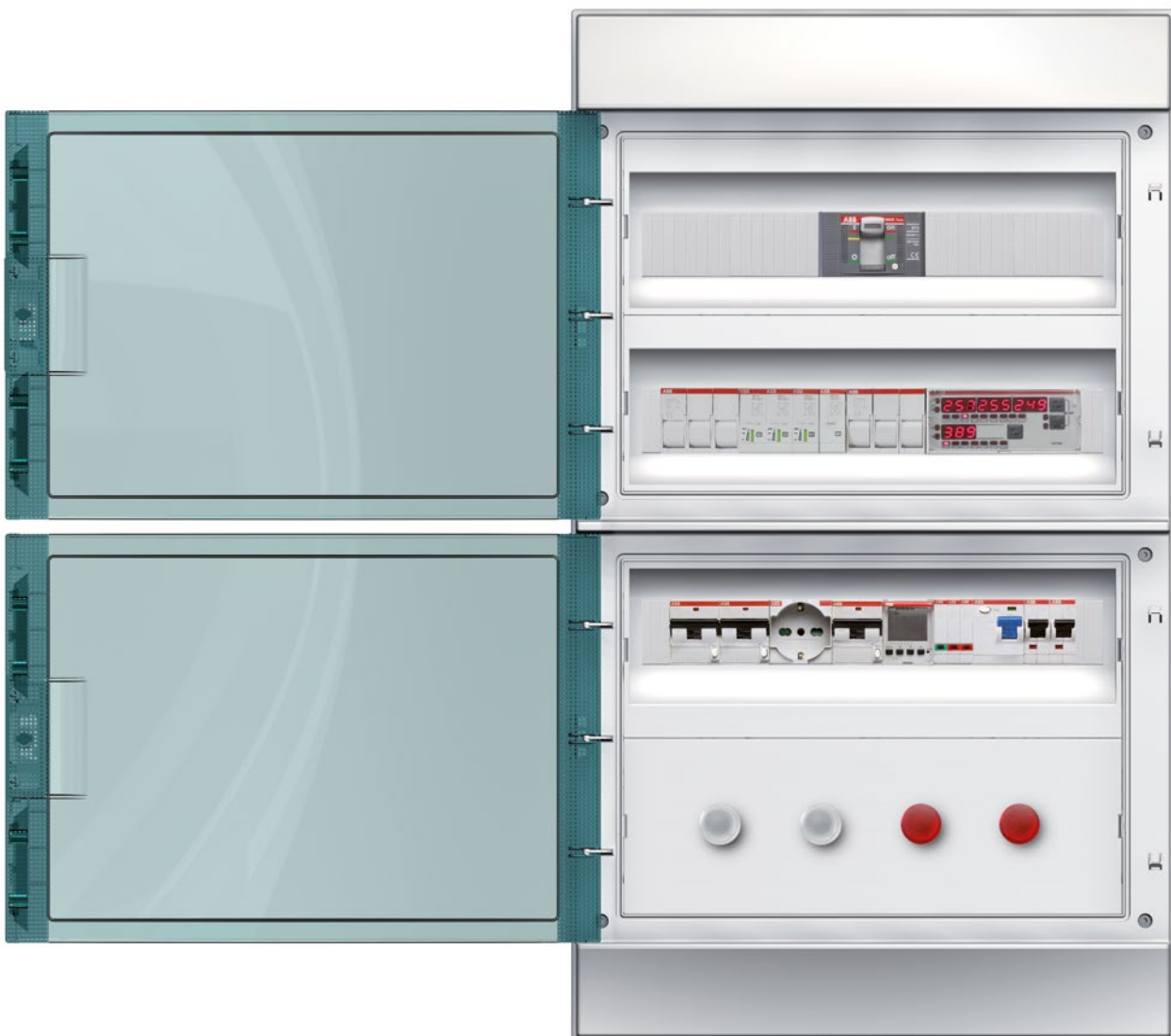
The accessories include blind panels and base plates allowing installation of other types of devices aside from modular DIN rail products such as contactors, manual motor starters or devices on the front of the panel.

MISTRAL65 / 65H

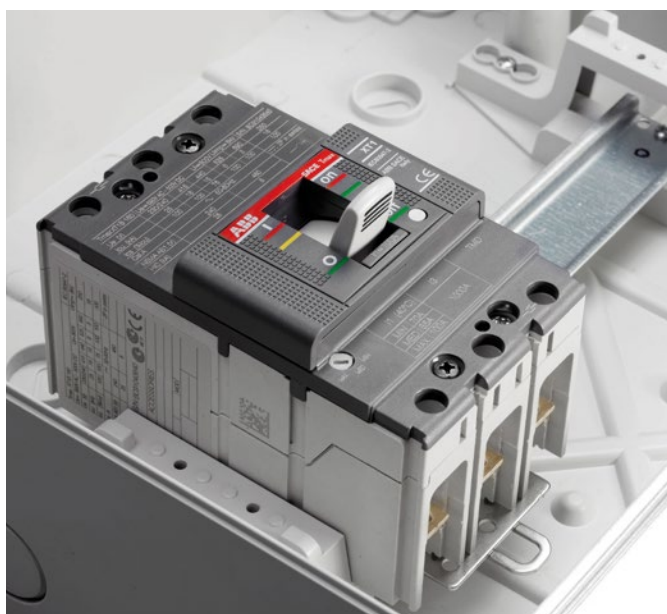
Endless installation possibilities

Our product development was inspired by the objective of allowing a wide range of products and solutions with different functions and dimensions to be installed in a single IP65 consumer unit, thus meeting the widest range of needs even in small commercial or industrial applications.

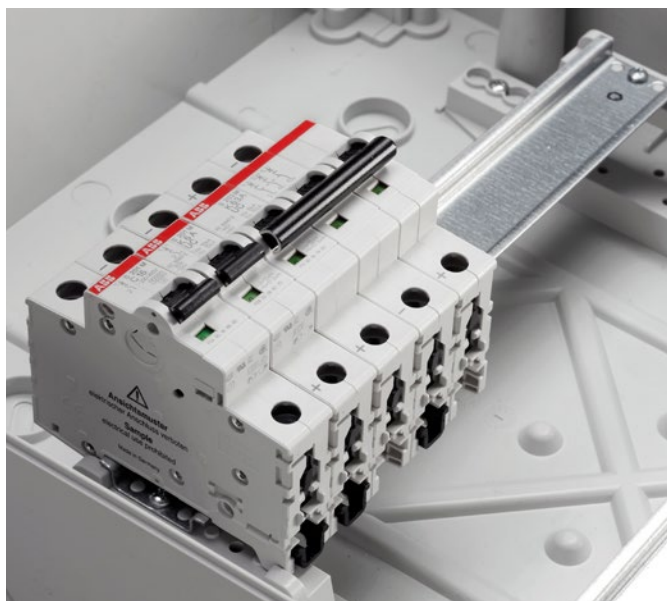
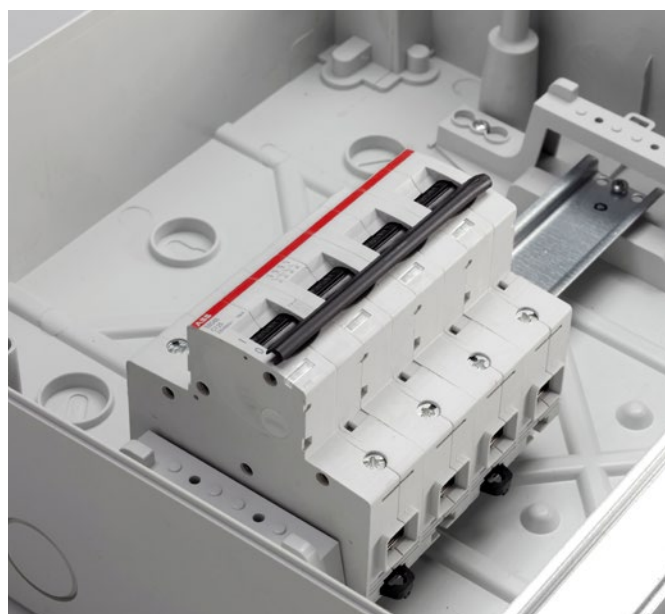
MCBs, MCCBs and devices installed in the front of the panel in an integrated, rational and functionally appropriate position.



The frame allows for two different DIN rail positions. This allows products with different depths to be installed, for example MCCBs which, thanks to this solution, are perfectly aligned with other devices in the panel



Among these components with greater depth dimensions which can benefit from this flexibility of the frame, we must remember high-performance MCBs with greater than standard depth.



The first depth level allows standard products to be housed; these include most modular products currently available on the market.



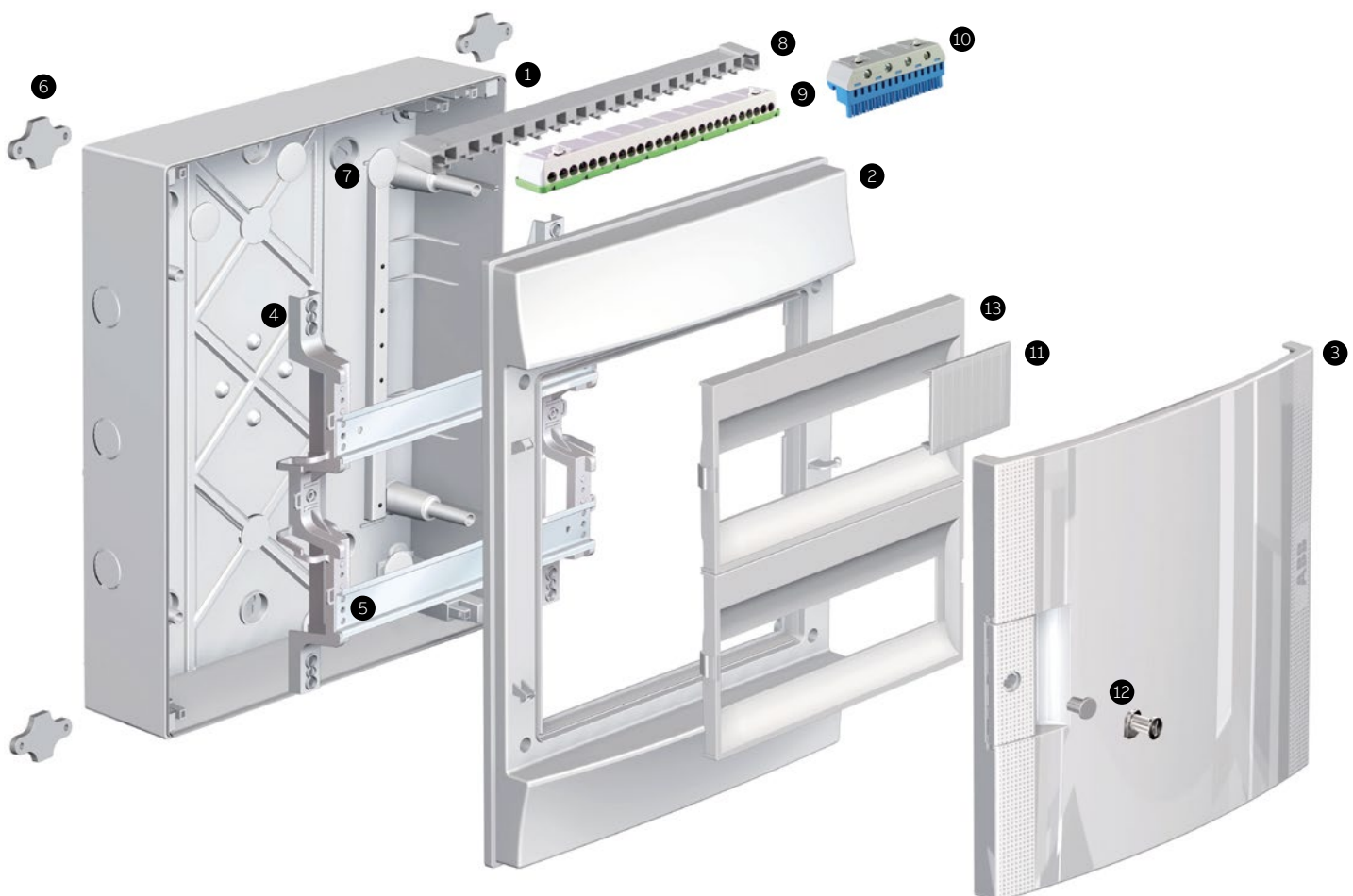
Among the accessories, the availability of blank panels and base plates allows non-modular equipment to be installed on the front of the consumer unit, such as control buttons and indicator lights.

MISTRAL65 / 65H

All details at a glance

The simplicity of the consumer units makes adapting them to various system requirements easy.

Optional terminal blocks which can be installed in the top or bottom of the consumer unit allow the cabling to be performed in a tidy manner and their different colors facilitate recognition of any separate circuits.



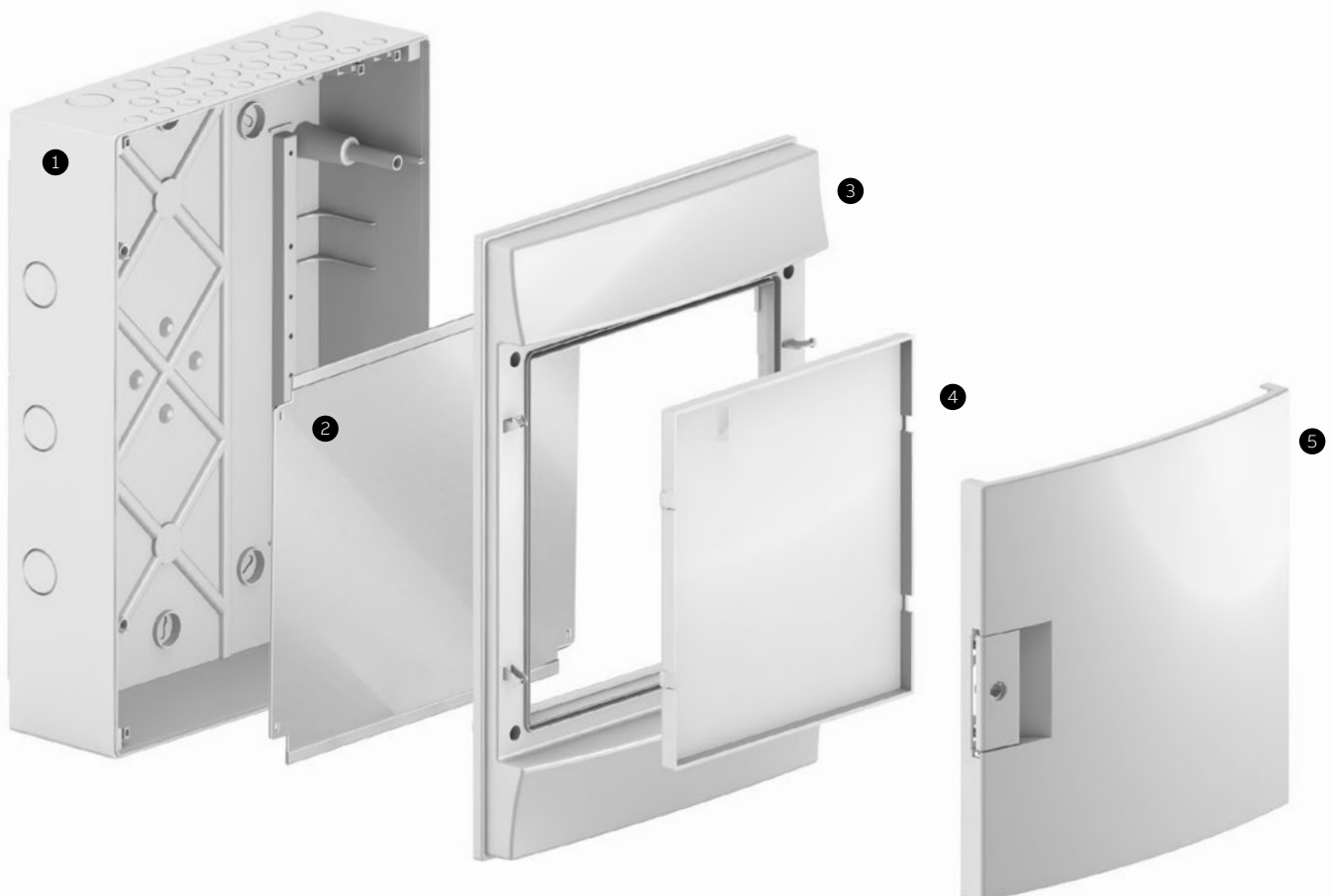
- 1. Box for wall mounting
- 2. Reversible front panel
- 3. RAL 7035 opaque door
- 4. Fixed support for DIN rail
- 5. DIN rail

- 6. Wall fastening brackets
- 7. Plugs, protection class II
- 8. Terminal block carriers
- 9. Terminal blocks with screw coupling
- 10. Terminal blocks with screwless coupling

- 11. Module cover
- 12. Finish or closure elements (lock and key optional)
- 13. Reversible panels

The switchboards consist of an empty box and a door to integrate all your interior fittings. A full closing panel is available (snap mounting), which works as an inner door in a typical automation application.

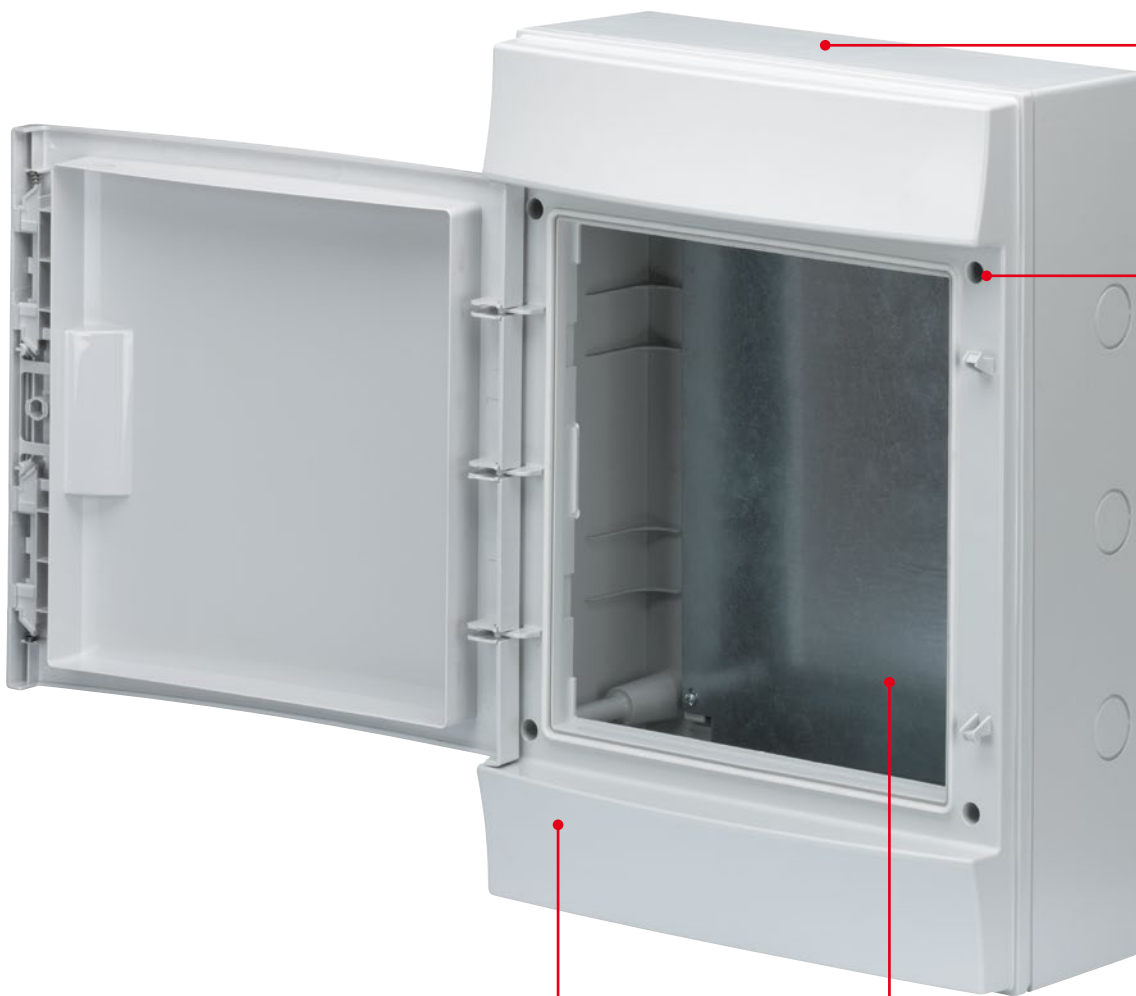
Specific metal plates designed to host Tmax XT MCCBs are available for all the enclosure sizes.



- 1. Box for wall mounting
- 2. Metal plate
- 3. Reversible front panel
- 4. Inner door
- 5. RAL 7035 opaque door

MISTRAL65H Switchboard

Harsh environment series



Smooth surface on one side, knock-outs for cable entries on the other

Every front panel is supplied with captive screws, giving practical and safety advantages

The perfect symmetry of the front allows the opening to be completely reversed

MISTRAL65H switchboards have been designed for heavy duty applications

Resistance to salt, dust and UV rays.



Mistral65H is equipped on one side with knockouts for cable glands, the other side with a smooth surface.



Tmax XT kits are available to install XT1 and XT2 breakers.



MISTRAL65H switchboards offer a wide, safe space to integrate all your interior fittings.



Wide range of accessories.















Inner doors allow integration of signaling devices and push buttons for automation applications.



Consumer units



MISTRAL65H: Ordering details wall-mounted IP65

MISTRAL65H – IP65


MISTRAL65H – 1 row		Description	N° of modules [18 mm]	GWT	Dimensions W×H×D [mm]	Order code	Type code	Packaging
 	Mistral65H opaque door 4M	4	750	152×202×117	1SLM006500A2110	H65P04X110750	1/24	
	Mistral65H 750 transparent door 4M	4	750	152×202×117	1SLM006500A2210	H65P04X120750	1/24	
 	Mistral65H opaque door 8M	8	750	232×250×154	1SLM006500A2111	H65P08X110750	1/11	
	Mistral65H 750 transparent door 8M	8	750	232×250×154	1SLM006500A2211	H65P08X120750	1/11	
 	Mistral65H opaque door 12M	12	750	320×250×155	1SLM006500A2112	H65P12X110750	1/7	
	Mistral65H 750 transparent door 12M	12	750	320×250×155	1SLM006500A2212	H65P12X120750	1/7	
 	Mistral65H opaque door 18M	18	750	430×250×155	1SLM006500A2113	H65P18X110750	1/4	
	Mistral65H 750 transparent door 18M	18	750	430×250×155	1SLM006500A2213	H65P18X120750	1/4	
MISTRAL65H – 2 rows		Description	N° of modules [18 mm]	GWT	Dimensions W×H×D [mm]	Order code	Type code	Packaging
 	Mistral65H opaque door 24M	24	750	320×435×155	1SLM006500A2114	H65P12X210750	1/4	
	Mistral65H 750 transparent door 24M	24	750	320×435×155	1SLM006500A2214	H65P12X220750	1/4	
 	Mistral65H opaque door 36M 2F	36	750	430×435×155	1SLM006500A2115	H65P18X210750	1/2	
	Mistral65H 750 transparent door 36M 2F	36	750	430×435×155	1SLM006500A2215	H65P18X220750	1/2	

MISTRAL65H – IP65

MISTRAL65H – 3 rows	Description	N° of modules [18 mm]	GWT	Dimensions W×H×D [mm]	Order code	Type code	Packaging
	Mistral65H opaque door 36M 3F	36	750	320×600×155	1SLM006500A2116	H65P12X310750	1/3
	Mistral65H 750 transparent door 36M 3F	36	750	320×600×155	1SLM006500A2216	H65P12X320750	1/3
	Mistral65H opaque door 54M	54	750	430×600×155	1SLM006500A2118	H65P18X310750	1/1
	Mistral65H 750 transparent door 54M	54	750	430×600×155	1SLM006500A2218	H65P18X320750	1/1

MISTRAL65H – 4 rows	Description	N° of modules [18 mm]	GWT	Dimensions W×H×D [mm]	Order code	Type code	Packaging
							
	Mistral65H opaque door 48M	48	750	320×735×155	1SLM006500A2117	H65P12X410750	1/1
	Mistral65H 750 transparent door 48M	48	750	320×735×155	1SLM006500A2217	H65P12X420750	1/1
							
	Mistral65H opaque door 72M	72	750	430×735×155	1SLM006500A2119	H65P18X410750	1/1
	Mistral65H 750 transparent door 72M	72	750	430×735×155	1SLM006500A2219	H65P18X420750	1/1

Mistral65H switchboard*

Mistral65H switchboard*		Dimensions W×H×D [mm]	Order code	Type code	Packaging
	MISTRAL65 switchboard 2×12 module size opaque door	320×435×155	1SLM006500A3114	S65P12X210750	1/4
	MISTRAL65 switchboard 3×12 module size opaque door	320×600×155	1SLM006500A3116	S65P12X310750	1/3
	MISTRAL65 switchboard 2×18 module size opaque door	430×435×155	1SLM006500A3115	S65P18X210750	1/2
	MISTRAL65 switchboard 3×18 module size opaque door	430×600×155	1SLM006500A3118	S65P18X310750	1/1

* For the switchboards, modules indicate size


Please find a wide range of suitable accessories on page 66 – 67


All units on this page will be delivered without connection terminals


Consumer units


MISTRAL65H: Ordering details accessories

MISTRAL65 / 65H / 65H Switchboards – Common accessories


Opaque door	Description	N° of modules [18 mm]	Order code	Type code	Packaging
	Opaque door 4M	4	1SL1900A00	1SLM006500A1900	1/15
	Opaque door 8M	8	1SL1902A00	1SLM006500A1902	1/20
	Opaque door 12M	12	1SL1904A00	1SLM006500A1904	1/10
	Opaque door 18M	48	1SL1906A00	1SLM006500A1906	1/20
	Opaque door 24M/48M	24/48	1SL1908A00	1SLM006500A1908	1/6
	Opaque door 36M	36	1SL1910A00	1SLM006500A1910	1/10
	Opaque door 36M/72M	36/72	1SL1912A00	1SLM006500A1912	1/14
	Opaque door 54M	54	1SL1914A00	1SLM006500A1914	1/8





Transparent door	Description	N° of modules [18 mm]	Order code	Type code	Packaging
	Transparent door 4M	4	1SL1901A00	1SLM006500A1901	1/15
	Transparent door 8M	8	1SL1903A00	1SLM006500A1903	1/20
	Transparent door 12M	12	1SL1905A00	1SLM006500A1905	1/10
	Transparent door 18M	48	1SL1907A00	1SLM006500A1907	1/20
	Transparent door 24M/48M	24/48	1SL1909A00	1SLM006500A1909	1/6
	Transparent door 36M	36	1SL1911A00	1SLM006500A1911	1/10
	Transparent door 36M/72M	36/72	1SL1913A00	1SLM006500A1913	1/14
	Transparent door 54M	54	1SL1915A00	1SLM006500A1915	1/8


Base plates	Description	N° of modules [18 mm]	Order code	Type code	Packaging
	Metal base plate 12M	12	1SL1920A00	1SLM006500A1920	1/12
	Metal base plate 2×12M	2×12	1SL1921A00	1SLM006500A1921	1/4
	Metal base plate 18M	18	1SL1922A00	1SLM006500A1922	1/8
	Metal base plate 2×18M	2×18	1SL1923A00	1SLM006500A1923	1/4
	Metal base plate 3×12	3×12	1SLM006500A1951	41Z125	1/5
	Metal base plate 3×18	3×18	1SLM006500A1952	41Z126	1/5
	Plastic base plate 2×12	2×12	1SLM006500A1953	41Z127	1/5
	Plastic base plate 2×18	2×18	1SLM006500A1954	41Z128	1/5
	Plastic base plate 3×12	3×12	1SLM006500A1955	41Z129	1/5
	Plastic base plate 3×18	3×18	1SLM006500A1956	41Z130	1/5

Kits for Tmax XT	Description	N° of modules [18 mm]	Order code	Type code	Packaging
	Kit for Tmax XT 3×12 size MISTRAL65H switchboard	3×12	1SLM006500A1959	41Z133	1
	Kit for Tmax XT 3×18 size MISTRAL65H switchboard	3×18	1SLM006500A1960	41Z134	1
	Kit for Tmax XT 2×12 size MISTRAL65H switchboard	2×12	1SLM006500A1969	41Z131	1
	Kit for Tmax XT 2×18 size MISTRAL65H switchboard	2×18	1SLM006500A1970	41Z132	1

MISTRAL65 / 65H – Other accessories

Blind panel	Description	N° of modules [18 mm]	Order code	Type code	Packaging
	Central blind panel 12M *	12	1SL1945A00	1SLM006500A1945	1/15
	Blind panel 12M	12	1SL1946A00	1SLM006500A1946	1/20
	Central blind panel 18M **	18	1SL1947A00	1SLM006500A1947	1/30
	Blind panel 18M	18	1SL1948A00	1SLM006500A1948	1/30

Other accessories	Description	N° of modules [18 mm]	Order code	Type code	Packaging
	Wall fixing brackets (4 pcs)		1SL1927A00	1SLM006500A1927	1/30
	Module cover 12M MISTRAL65 / 65H	12	1SL1929A00	1SLM006500A1929	5/180
	Sealing kit		1SL1950A00	1SLM006500A1950	1/50
	Lock with key		1SL1931A00	1SLM006500A1931	1/10
	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 for trunking		1SL1942A00	1SLM006500A1942	1/10
	Junction unit Ø 28,5		1SL1949A00	1SLM006500A1949	10/400

Inner doors	Description	N° of modules [18 mm]	Order code	Type code	Packaging
	Inner door for 2x12 size MISTRAL65H switchboard	2x12	1SLM006500A1961	41Z135	1
	Inner door for 2x18 size MISTRAL65H switchboard	2x18	1SLM006500A1962	41Z136	1
	Inner door for 3x12 size MISTRAL65H switchboard	3x12	1SLM006500A1963	41Z137	1
	Inner door for 3x18 size MISTRAL65H switchboard	3x18	1SLM006500A1964	41Z138	1

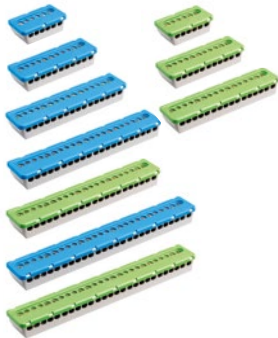
* MISTRAL65 panels 3 rows – 36 modules

** MISTRAL65 panels 3 rows – 54 modules

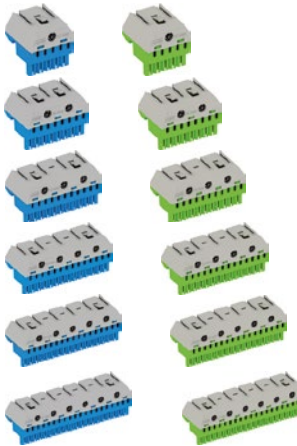
Consumer units

MISTRAL65H: Ordering details terminal blocks


MISTRAL65 – Terminal blocks

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

MISTRAL65 – Terminal blocks screwless

Terminal block screwless	Description	Maximum current [A]	Order code	Type code	Packaging
	Terminal block screwless N 5×1.5–4 mm ²	63	1SPE007715F9701	41Z70	5/280
	Terminal block screwless N 5×1.5–4 mm ² +1×25 mm ²	63	1SPE007715F9702	41Z71	5/180
	Terminal block screwless N 8×1.5–4 mm ² +2×25 mm ²	63	1SPE007715F9703	41Z72	5/150
	Terminal block screwless N 11×1.5–4 mm ² +3×25 mm ²	63	1SPE007715F9704	41Z73	5/100
	Terminal block screwless N 14×1.5–4 mm ² +4×25 mm ²	63	1SPE007715F9705	41Z74	5/90
	Terminal block screwless N 17×1.5–4 mm ² +5×25 mm ²	63	1SPE007715F9706	41Z75	5/70
	Terminal block screwless N 20×1.5–4 mm ² +6×25 mm ²	63	1SPE007715F9707	41Z76	5/60
	Terminal block screwless PE 5×1.5–4 mm ² +1×25 mm ²	63	1SPE007715F9712	41Z77	5/180
	Terminal block screwless PE 8×1.5–4 mm ² +2×25 mm ²	63	1SPE007715F9713	41Z78	5/150
	Terminal block screwless PE 11×1.5–4 mm ² +3×25 mm ²	63	1SPE007715F9714	41Z79	5/100
	Terminal block screwless PE 14×1.5–4 mm ² +4×25 mm ²	63	1SPE007715F9715	41Z80	5/90
	Terminal block screwless PE 17×1.5–4 mm ² +5×25 mm ²	63	1SPE007715F9716	41Z81	5/70
	Terminal block screwless PE 20×1.5–4 mm ² +6×25 mm ²	63	1SPE007715F9717	41Z82	5/60

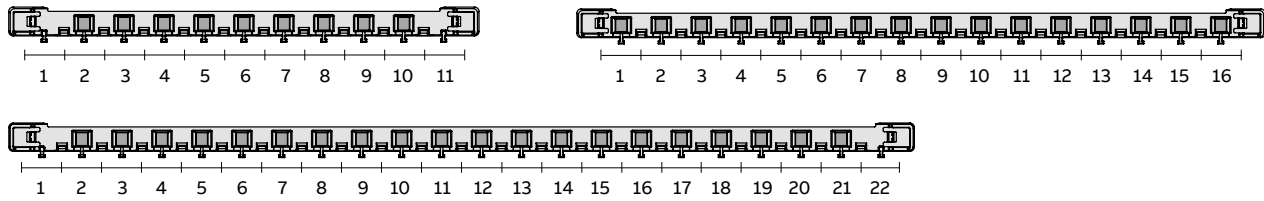
MISTRAL65 – Terminal block carriers

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

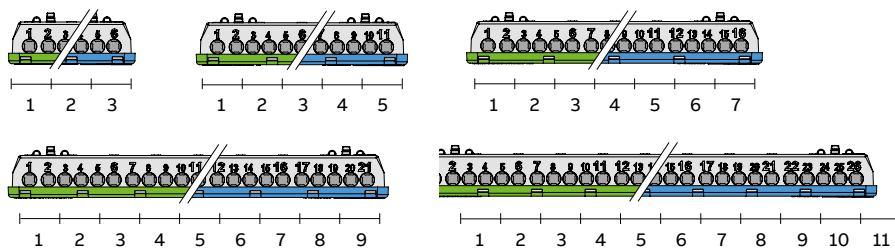
Consumer units

MISTRAL65H: Terminal blocks assembly examples

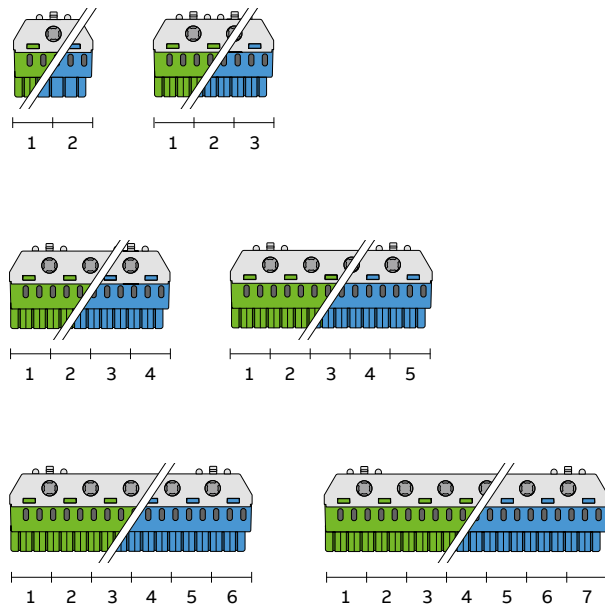
Terminal block carriers



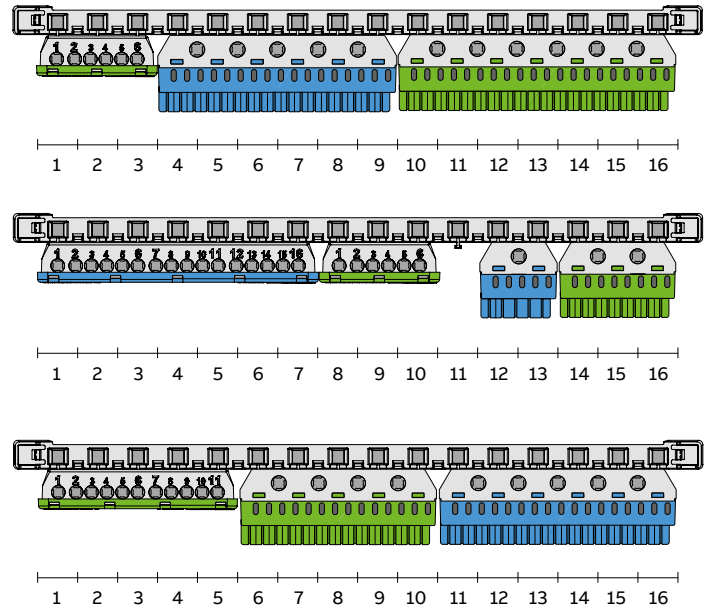
Terminal blocks



Terminal blocks screwless



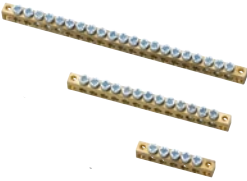
Assembly examples




Consumer units

MISTRAL65H: Ordering details terminal bars

MISTRAL65 – Terminal bars

Terminal bars	Description	Order code	Type code	Packaging
	Terminal bar 5 holes D.4.5 mm	M125310000	41Z28	1/20
	Terminal bar 10 holes D.4.5 mm and 3 holes D.5.6 mm	M125320000	41Z29	1/20
	Terminal bar 16 holes D.4.5 mm and 3 holes D.5.6 mm	M125330000	41Z30	1/20
	Terminal bar 15 holes D.4.5 mm and 6 holes D.5.6 mm	M125340000	41Z31	1/20
	Terminal bar 19 holes D.4.5 mm and 6 holes D.5.6 mm	M125350000	41Z32	1/20

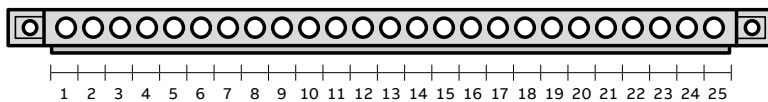
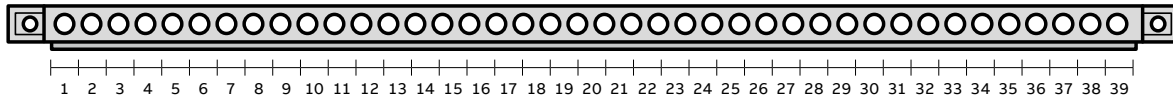
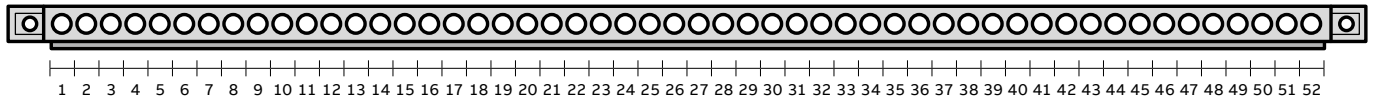
MISTRAL65 – Terminal bar carriers

Terminal carrier	Description	Order code	Type code	Packaging
	Carrier for 8 moduls	1SLM004100A1953	41Z25	1/24
	Carrier for 12 modules	1SLM004100A1954	41Z26	1/24
	Carrier for 18 modules	1SLM004100A1955	41Z27	1/24

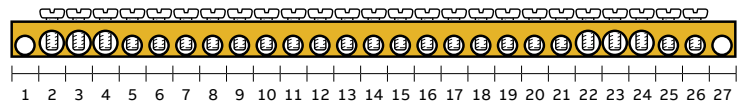
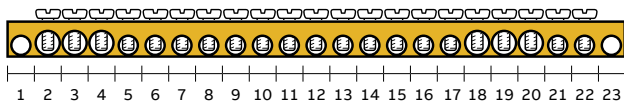
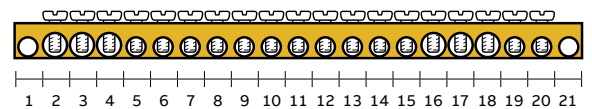
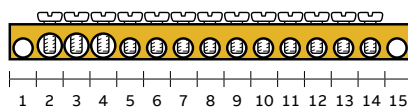
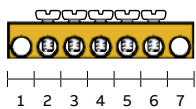
Consumer units

MISTRAL65H: Terminal bars assembly examples

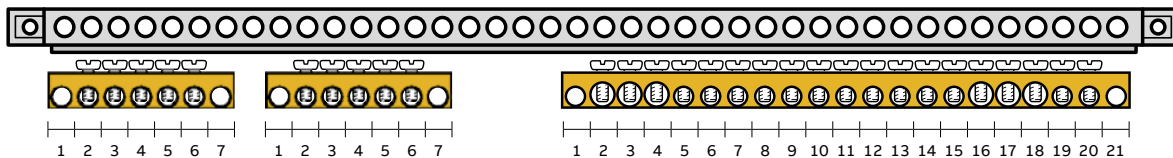
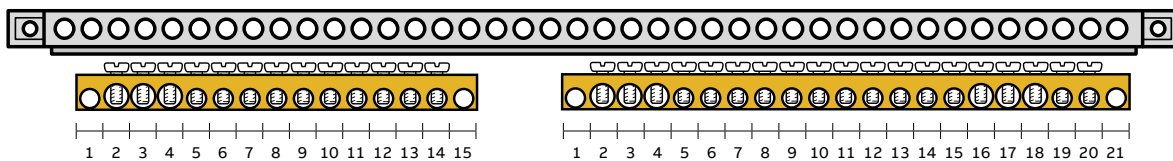
Terminal bar carriers



Terminal bars








Assembly examples







Consumer units

MISTRAL65H: Technical details

MISTRAL65 – Technical details

Codes					
	1SL1100A00 1SL1200A00	1SL1101A00 1SL1201A00 1SLM006501A1101 1SLM006501A1201	1SL1102A00 1SL1202A00 1SLM006501A1102 1SLM006501A1202	1SL1103A00 1SL1203A00 1SLM006501A1103 1SLM006501A1203 1SLM006502A1103 1SLM006502A1203	1SL1104A00 1SL1204A00 1SLM006501A1104 1SLM006501A1204 1SLM006502A1104 1SLM006502A1204
Number of modules	4	8	12	18	24
Dimensions (W×H×D) in mm	152×202×117	232×250×154	320×250×155	430×250×155	320×435×155
Color	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
Door type	Opaque / Transparent	Opaque / Transparent	Opaque / Transparent	Opaque / Transparent	Opaque / Transparent
Protection class	II 	II 	II 	II 	II 
Fire resistance	GWT 650°C	GWT 650 °C	GWT 650 °C	GWT 650 °C	GWT 650 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK09	IK09	IK09	IK09	IK09
Installation temperature	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C
Resistance to heat	BPT 70°C	BPT 70°C	BPT 70°C	BPT 70°C	BPT 70°C
IP rating	IP65	IP65	IP65	IP65	IP65
Max. dissipation power	12 W	20 W	27 W	32 W	34 W
Maximum current	63 A	63 A	63 A	125 A	125 A
Extractable frame	no	no	no	no	yes
Additional module	no	no	yes	yes	yes
Installation of MCCBs	no	yes	yes	yes	yes
DIN rail centre distance	–	–	–	–	150 – 125 mm
Halogen free	yes	yes	yes	yes	yes
Cable entry finish	Smooth	Smooth	Smooth	Smooth	Smooth

Codes					
	1SL1105A00 1SL1205A00 1SLM006501A1105 1SLM006501A1205	1SL1106A00 1SL1206A00 1SLM006501A1106 1SLM006501A1206	1SL1107A00 1SL1207A00 1SLM006501A1107 1SLM006501A1207	1SL1108A00 1SL1208A00 1SLM006501A1108 1SLM006501A1208	1SL1109A00 1SL1209A00 1SLM006501A1109 1SLM006501A1209
Number of modules	36	36	48	54	72
Dimensions (W×H×D) in mm	430×435×155	320×600×155	320×735×155	430×600×155	430×735×155
Color	RAL 7035 grey		RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
Door type	Opaque / Transparent	Opaque / Transparent	Opaque / Transparent	Opaque / Transparent	Opaque / Transparent
Protection class	II 		II 	II 	II 
Fire resistance	GWT 650°C	GWT 650°C	GWT 650°C	GWT 650°C	GWT 650°C
Material	Thermoplastic		Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK09		IK09	IK09	IK09
Installation temperature	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C
Resistance to heat	BPT 70°C	BPT 70°C	BPT 70°C	BPT 70°C	BPT 70°C
IP rating	IP65	IP65	IP65	IP65	IP65
Max. dissipation power	43 W	51 W	64 W	63 W	81 W
Maximum current	125 A	125 A	125 A	125 A	125 A
Extractable frame	yes	yes	yes	yes	yes
Additional module	yes	yes	yes	yes	yes
Installation of MCCBs	yes	yes	yes	yes	yes
DIN rail centre distance	150 – 125 mm	150 – 125 mm	150 – 125 mm	150 – 125 mm	150 – 125 mm
Halogen free	yes	yes	yes	yes	yes
Cable entry finish	Smooth	Smooth	Smooth	Smooth	Smooth

MISTRAL65H – Technical details

Codes	1SLM006500A2110	1SLM006500A2111	1SLM006500A2112	1SLM006500A2113	1SLM006500A2114
	1SLM006500A2210	1SLM006500A2211	1SLM006500A2212	1SLM006500A2213	1SLM006500A2214
					1SLM006500A3114*
Number of modules	4	8	12	18	24
Dimensions (W×H×D) in mm	152×202×117	232×250×154	320×250×155	430×250×155	320×435×155
Color	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
Door type	Transparent	Transparent	Transparent	Transparent	Transparent
Protection class	II □	II □	II □	II □	II □
Fire resistance	GWT 750 °C	GWT 750 °C	GWT 750 °C	GWT 750 °C	GWT 750 °C
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK10	IK10	IK10	IK10	IK10
Installation temperature	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C
Resistance to heat	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP65	IP65	IP65	IP65	IP65
Max. dissipation power	12 W	20 W	27 W	32 W	34 W
Maximum current	63 A	63 A	63 A	125 A	125 A
Extractable frame	no	no	no	no	yes
Additional module	no	no	yes	yes	yes
Installation of MCCBs	no	yes	yes	yes	yes
DIN rail centre distance	–	–	–	–	150 – 125 mm
Halogen free	no	no	no	no	no
Cable entry finish	Precut	Precut	Precut	Precut	Precut

Codes	1SLM006500A2115	1SLM006500A2116		1SLM006500A2118	
	1SLM006500A2215	1SLM006500A2216	1SLM006500A2117	1SLM006500A2218	1SLM006500A2119
	1SLM006500A3115*	1SLM006500A3116*	1SLM006500A2217	1SLM006500A3118*	1SLM006500A2219
Number of modules	36	36	48	54	72
Dimensions (W×H×D) in mm	430×435×155	320×600×155	320×735×155	430×600×155	430×735×155
Color	RAL 7035 grey		RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
Door type	Transparent	Transparent	Transparent	Transparent	Transparent
Protection class	II □		II □	II □	II □
Fire resistance	GWT 750 °C	GWT 750 °C	GWT 750 °C	GWT 750 °C	GWT 750 °C
Material	Thermoplastic		Thermoplastic	Thermoplastic	Thermoplastic
Resistance to mechanical impacts	IK10		IK10	IK10	IK10
Installation temperature	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C	-25 °C / + 60 °C
Resistance to heat	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C	BPT 70 °C
IP rating	IP65	IP65	IP65	IP65	IP65
Max. dissipation power	43 W	51 W	64 W	63 W	81 W
Maximum current	125 A	125 A	125 A	125 A	125 A
Extractable frame	yes	yes	yes	yes	yes
Additional module	yes	yes	yes	yes	yes
Installation of MCCBs	yes	yes	yes	yes	yes
DIN rail centre distance	150 – 125 mm	150 – 125 mm	150 – 125 mm	150 – 125 mm	150 – 125 mm
Halogen free	no	no	no	no	no
Cable entry finish	Precut	Precut	Precut	Precut	Precut

* For the switchboards, modules indicate size

Consumer units

MISTRAL65H: Technical details

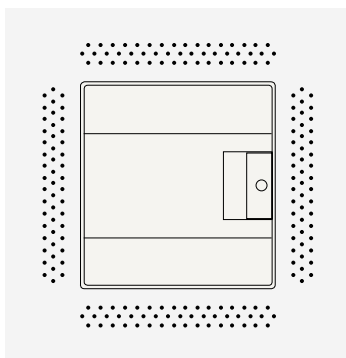
Table of resistance to chemical agents

	Cold water	Hot water	Sulphuric acid	Hydrochloric acid	Acetic acid	Petroleum	Benzene	Acetone	Ethyl alcohol	Ammonia	Dichloromethane	Diesel oil - Naptha	Mineral oil	Food oils	Tetrachloroethylene	Trichloroethylene	Ether	Ozone	Toluene	Methyl alcohol	Alcohol	Milk	Fruit juices	Fluorocarbons	Deterives	Detergents	Potassium nitrate	Hydrogen peroxide
MISTRAL65	■	■	▲	●	■	●	●	●	▲	■	●	▲	■	■	●	●	●	■	●	▲	■	■	■	●	■	■	▲	■
MISTRAL65H	■	■	▲	●	■	●	●	●	▲	■	●	▲	■	■	●	●	●	■	●	▲	■	■	■	●	■	■	▲	■
MISTRAL65H switchboards	■	■	▲	●	■	●	●	●	▲	■	●	▲	■	■	●	●	●	■	●	▲	■	■	■	●	■	■	▲	■
■ resistant ▲ partially resistant ● non resistant																												

Ingress protection rating IP65

6

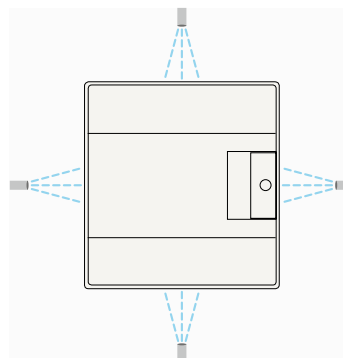
First number:
Protection against the penetration
of solid bodies
No dust can penetrate



5

Second number:
Protection against the penetration of water

Water projected with a nozzle from all directions
must not cause damage



Shock resistance (IK) – MISTRAL65: IK09 and MISTRAL65H: IK10

Code IK	00	01	02	03	04	05	06	07	08	09	10
Shock energy (Joule)	not protected	0.15	0.2	0.35	0.5	0.7	1	2	5	10	20

Consumer units

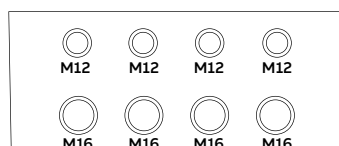
MISTRAL65H: Upper and lower knockouts

Cable glands

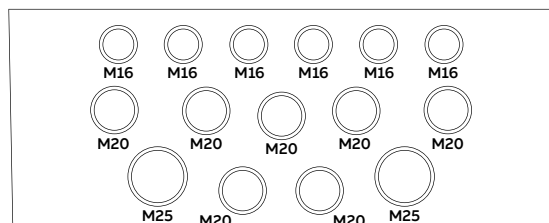
Modules		diam. 16	diam. 20	diam. 25
4	04×1	2	–	–
8	08×1	3	3	–
12	12×1	2	2	2
24	12×2	5	5	2
36	12×3	5	5	2
48	12×4	5	5	2
18	18×1	2	2	2
36	18×2	5	5	2
54	18×3	5	5	2
72	18×4	5	5	2

Holes

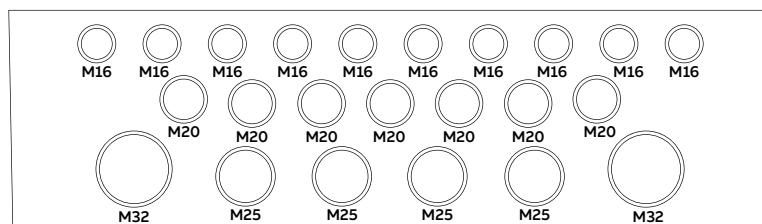
Modules		diam. 12	diam. 16	diam. 20	diam. 25	diam. 32
4	04×1	4	4	–	–	–
8	08×1	–	6	7	2	–
12	12×1	–	10	7	4	2
24	12×2	–	10	7	4	2
36	12×3	–	10	7	4	2
48	12×4	–	10	7	4	2
18	18×1	–	14	9	4	2
36	18×2	–	14	9	4	2
54	18×3	–	14	9	4	2
72	18×4	–	14	9	4	2



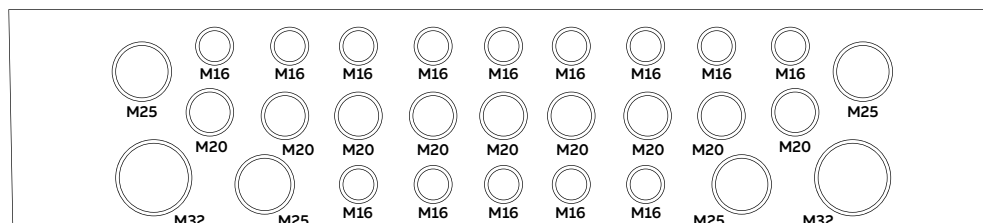
4 modules – top and bottom



8 modules – top and bottom



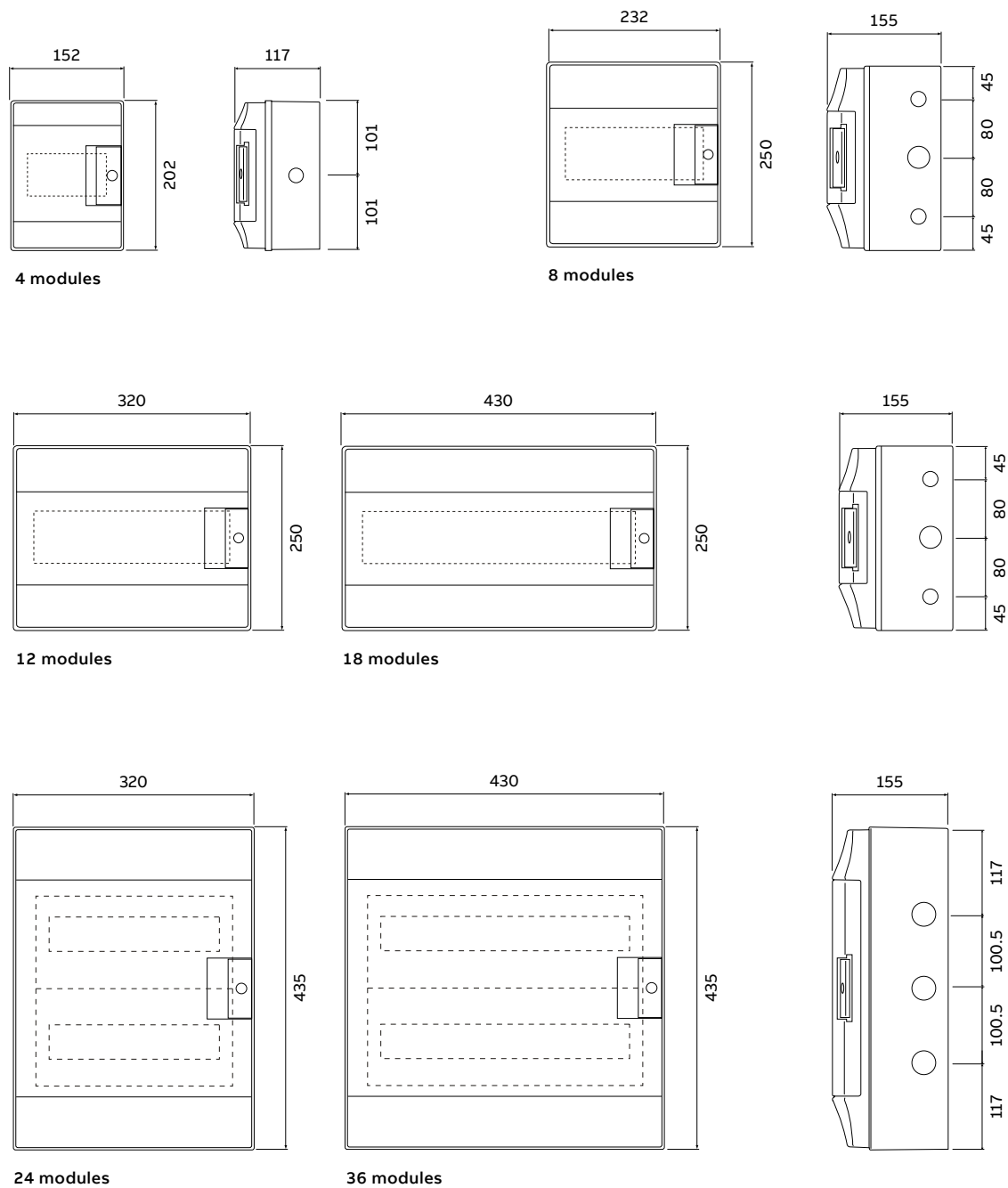
12 modules – top and bottom



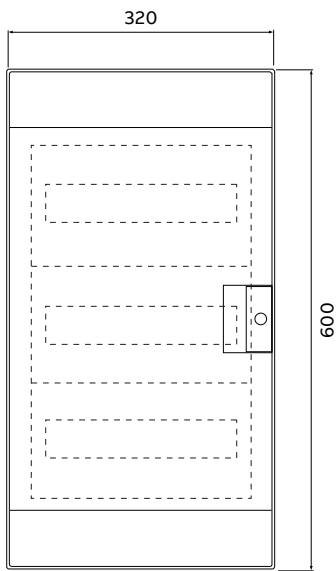
18 modules – top and bottom

Consumer units

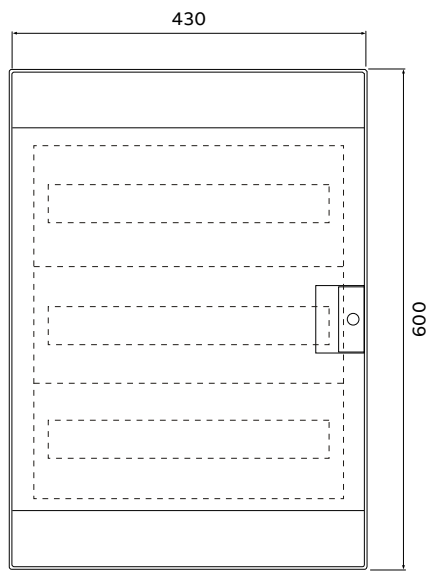
MISTRAL65H: Overall dimensions



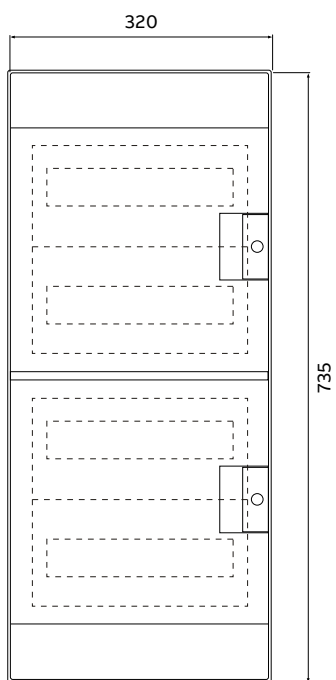
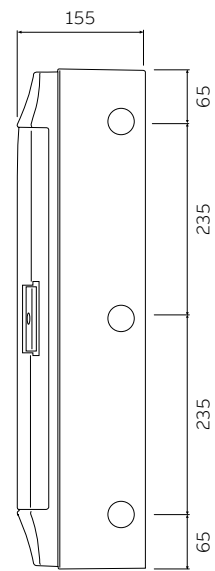
Dimensions in mm



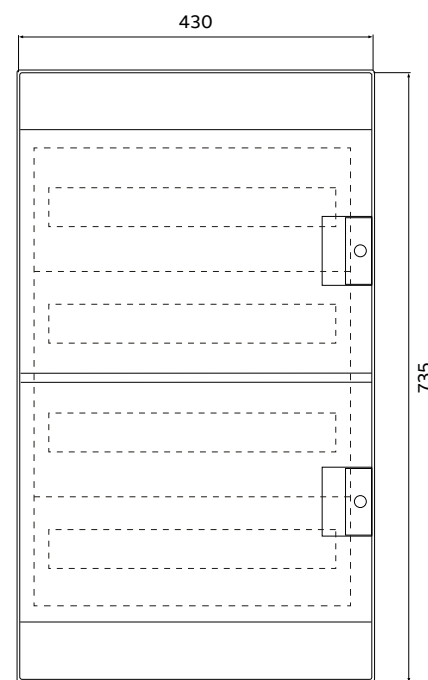
36 modules



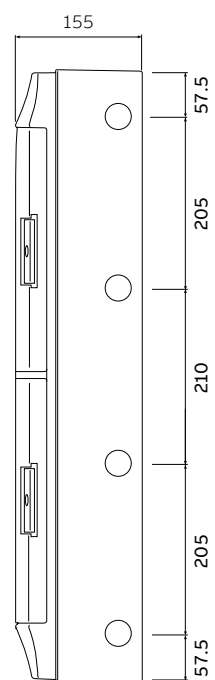
54 modules



48 modules



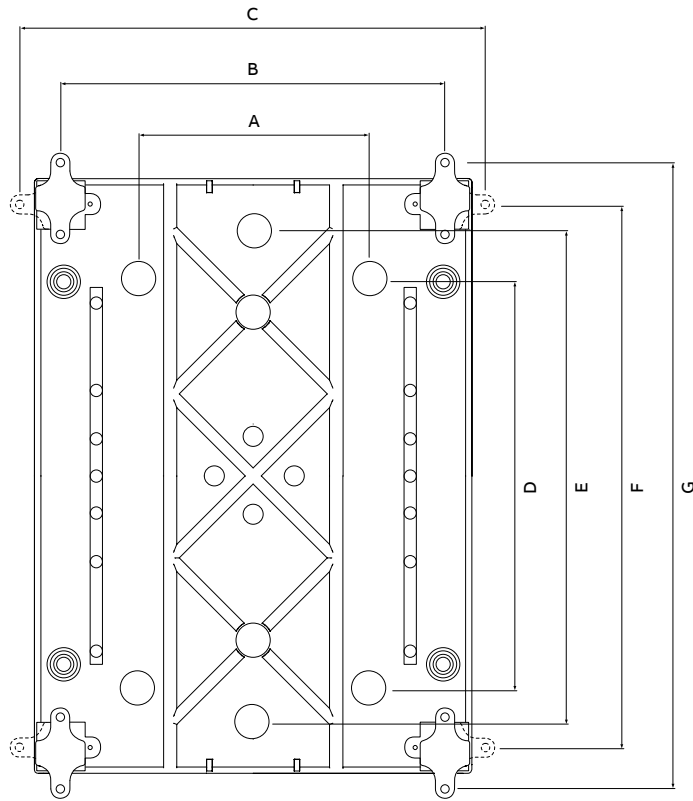
72 modules



Dimensions in mm

Consumer units

MISTRAL65H: Fixing template



	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
4 PLE	–	113	173	–	140	163	223.5
8 PLE	90	194	254.5	180	–	212	272.5
12 PLE	170	282.5	343	180	–	212	272.5
18 PLE	280	392	452.5	125	175	212	272.5
24 PLE	170	282.5	343	310	360	397	457.5
36 PLE – 2 F	280	392	452.5	310	360	397	457.5
36 PLE – 3 F	170	282.5	343	475	525	562	622.5
48 PLE	170	282.5	343	610	660	697	757.5
54 PLE	280	392	452.5	475	525	562	622.5
72 PLE	280	392	452.5	610	660	697	757.5



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