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A point of reference. For simplicity and effectiveness
A complete series, versatile and easy to install

Efficiency, safety, integration: the new System pro *E* comfort MISTRAL65 series rests on the strengths which have consolidated ABB's image over the years for its expertise and reliability in the area of products for protection, control, monitoring, measurement, safety and energy efficiency. These innovative IP65 rated consumer units complete ABB's wide product range for the industrial sector, but also the range for the commercial and residential sectors, in which ABB is represented in the market with the Élos and Chiara ranges of cabling accessories, the integrated Mylos system for home and building automation, the 2Line Musa & Zenith intercom and video intercom systems, and the wireless home automation system DomusTech.
The result of constant research and constant attention paid to technological development, the System pro *E* comfort MISTRAL65 series consumer units are designed to satisfy all requirements electrical installers might have.

The new range of System pro *E* comfort MISTRAL65 consumer units allows almost any type of electrical distribution system to be implemented in industrial, commercial and residential environments. The consumer units are manufactured in a halogen-free thermoplastic which is completely recyclable.

The range includes solutions with transparent or opaque doors which open up to 180°, and a choice of between 4 and 72 modules, meeting the most recent regulatory requirements and ensuring an enormous variety of application types are covered.

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.

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 eyeholes on the frame.

The consumer units are designed to house optional dedicated terminal blocks in two different colour 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.

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 switchboards.

Innovating today does not just mean looking for functional and technologically advanced solutions. For ABB, being innovative means embracing a longer-term perspective by using eco-compatible materials for our products which respect the environment even at the end of their life cycle. For this reason, 100% recyclable halogen-free thermoplastics have been used for the consumer units.
Their environmental compatibility has been assessed using the Life Cycle Assessment (LCA) method, an objective tool for analysing energy and environmental impact which analyses the energy and materials used and the emissions released during production.

A point of arrival. For functions and applications
The benefits of a product range designed to last

The 180° door opening facilitates total accessibility to the interior of the consumer unit

The minimalistic simplicity of the new design combines technological reliability with the most innovative aesthetic trends
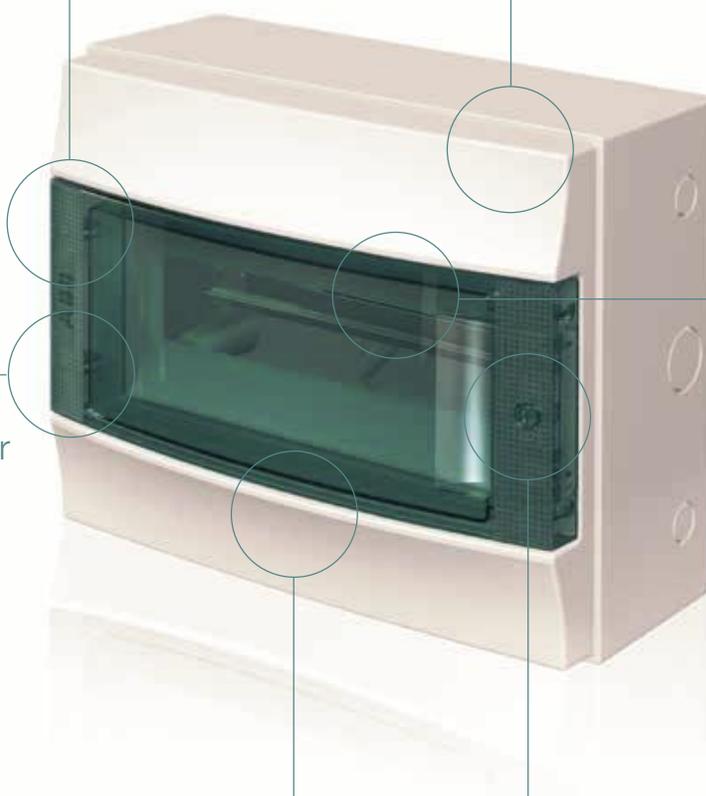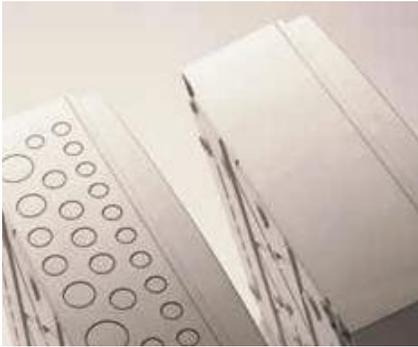
The decorative texture of the door underlines the attention to detail and the quality of the finish

The transparent door in the exclusive new petrol blue colour ensures an elegant and original look

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

The door has an ergonomic handle with snap-on closing or a lock (optional)

Aside from a series of side knockouts for cable entry and exit, the consumer units can be supplied, on request, with cable entries and exits both at the top and bottom.

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.

To speed up cabling and make it neater, various snap-on terminal blocks can be installed (optional and in two different colours), both in the upper and the lower part of the consumer unit. The terminals come in two versions: screw and quick-coupling, for easy and effective cabling with any type of conductor.

The standard door with ergonomic handle and snap-on closure can be supplied with a lock and key on request, ensuring only authorised persons have access and avoiding tampering or incorrect operations.
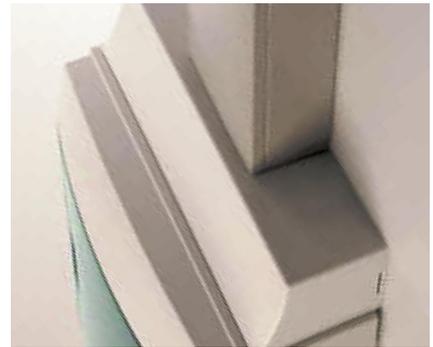
The new polycarbonate accessory for trunking entry can be positioned at the top or bottom of the consumer unit, connecting and protecting the conductor bundles. A series of internal knockouts allows it to house any type of trunking.

A point of view. Never seen before
The technical characteristics and installation possibilities

Practical rear brackets provide practical and stable wall fastening

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

The side knockouts offer additional possibilities for the cables' path

The dual gasket on the front panel module ensures an improved seal

All accessories and the slightest details have been designed and developed in order for the consumer unit to maintain double insulation properties at all times
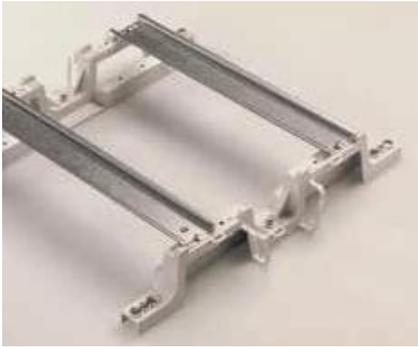
The extractable frame simplifies and speeds up bench cabling operations. The slotted holes in the frame allow it to be quickly fixed inside the enclosure.
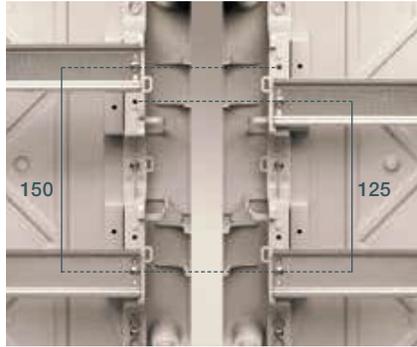
In order to create space at the top or bottom of the consumer unit, the centre distance of the DIN rails can be modified from the standard distance of 150 mm to 125 mm. The closure panels, which are completely reversible, can be unhooked, reversed and reinstalled with a simple click.

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.

If the consumer unit must be made completely inaccessible, it is possible to use accessories to seal the front panel.

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.

A point of contact with the world of ABB
## Perfect coordination with all products

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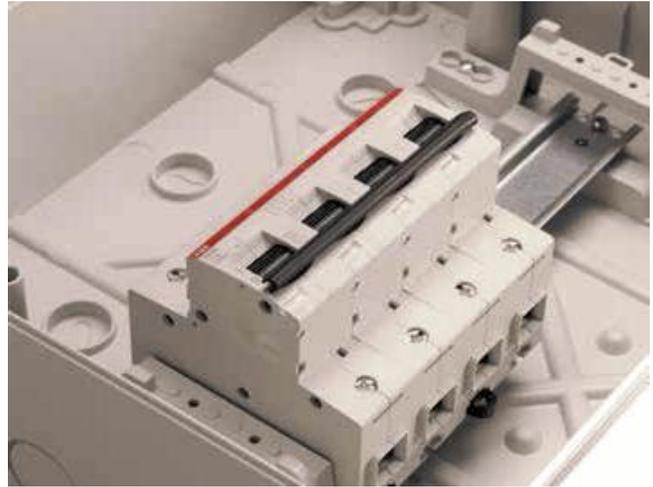
Among these components with greater depth dimensions which can benefit from this flexibility of the frame, we must remember high-performance MCBs with greater than standard depth.

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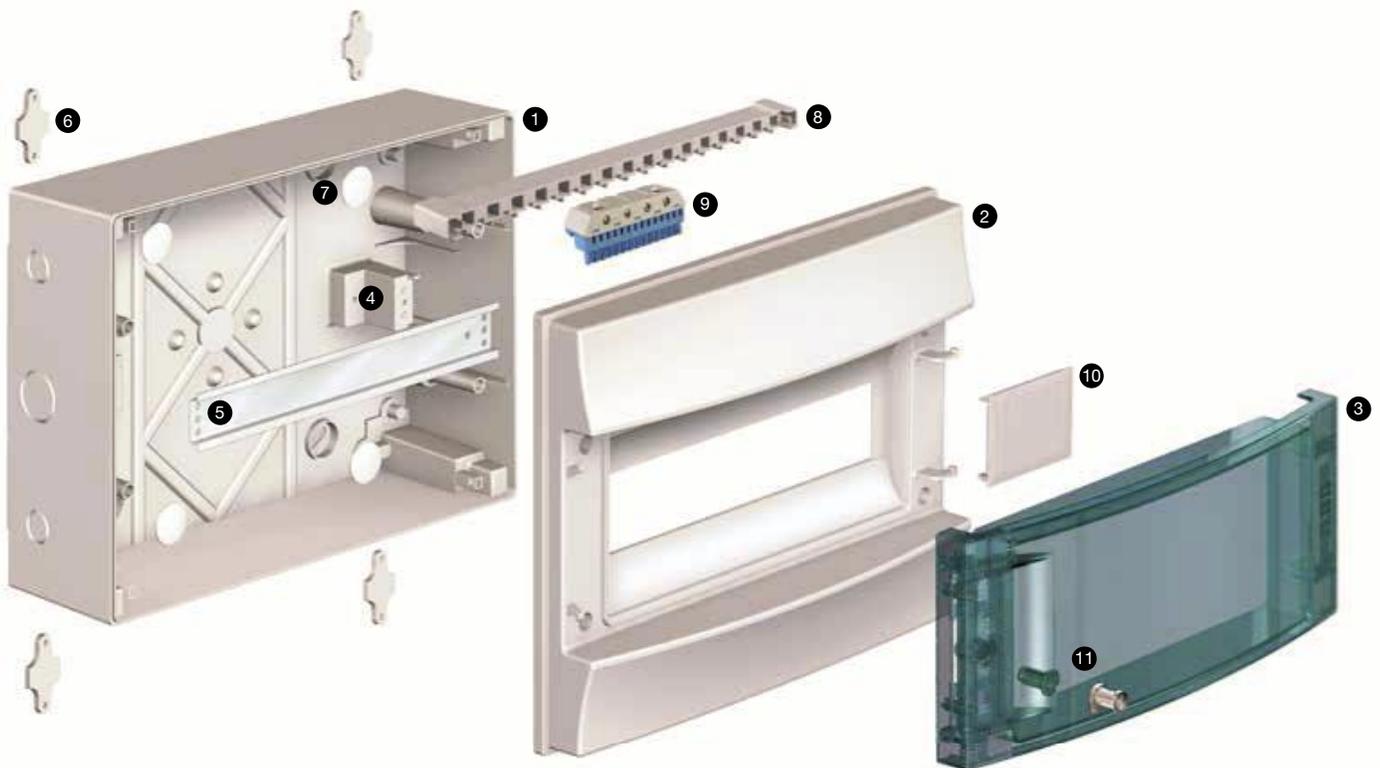

Among the accessories, the availability of blank panels and base plates allows non-modular equipment to be installed on the front of the consumer unit, such as control buttons and indicator lights.

A point of departure for made-to-measure solutions
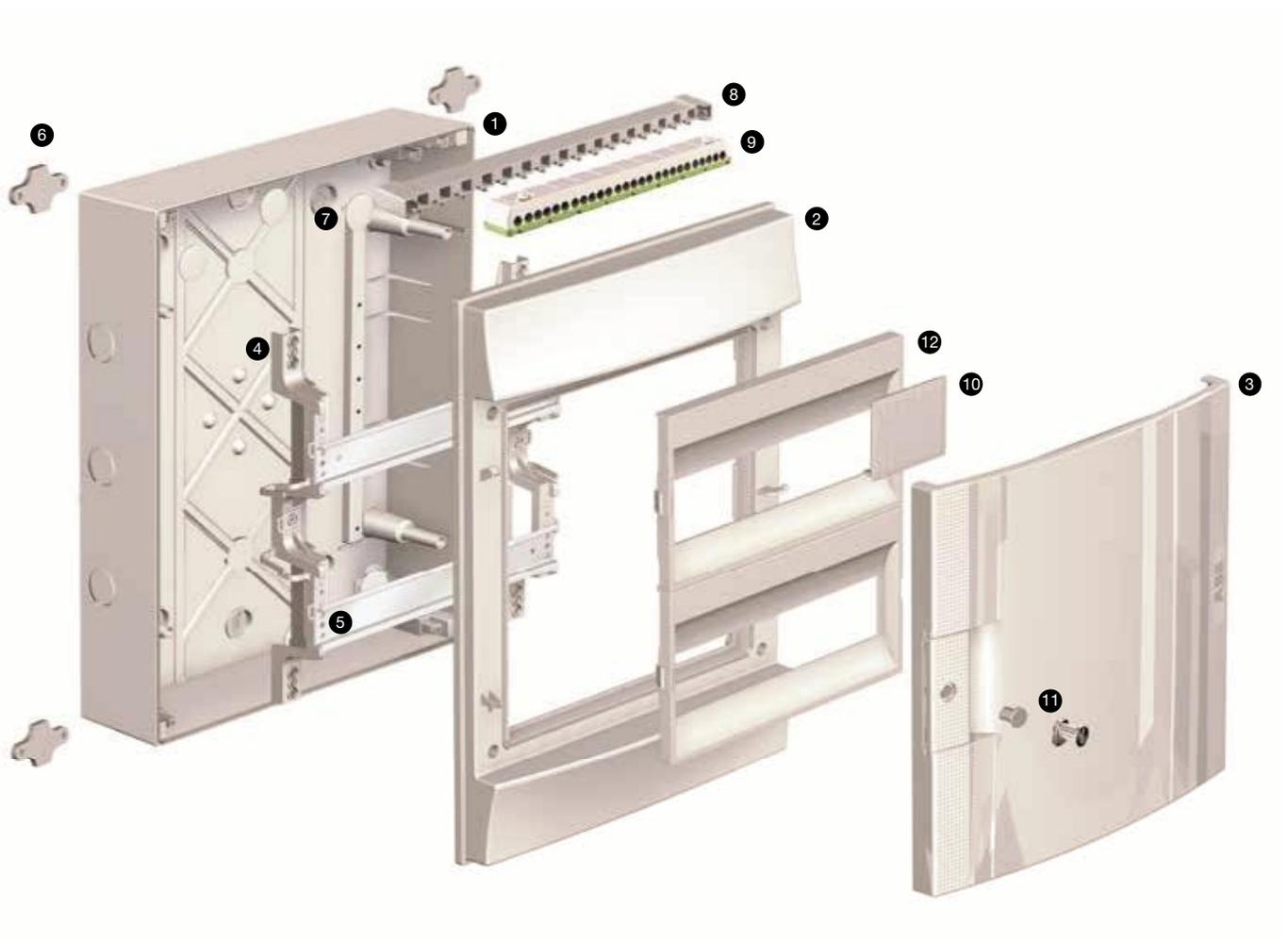## The flexibility of a range designed for every application

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 colours facilitate recognition of any separate circuits.

1. Box for wall mounting
2. Reversible front panel
3. Transparent door
4. Fixed support for DIN rail
5. DIN rail
6. Wall fastening brackets
7. Plugs, protection class II
8. Jumper for terminals
9. Quick-coupling terminals
10. Module cover
11. Finish or closure elements
    (lock and key optional)

The perfectly symmetrical design of the front panel makes the choice of opening direction for the door simple – this can be changed just by rotating the whole structure, without having to perform risky separation of parts. The extractable doors also facilitate access to the various components installed in the consumer unit.

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. Jumper for terminals
9. Quick-coupling terminals
10. Module cover
11. Finish or closure elements
    (lock and key optional)
12. Reversible panels

Order codes

4 modules

8 modules

12 modules

18 modules

Description	GWT	N. modules	Dimensions WxHxD	ABB code	Order code	Pack./ N. pieces
		[18 mm]	[mm]			
1 Row						
Consumer units MISTRAL65 750 transparent door 4M	750	4	152x202x117	1SLM006500A1210	1SL1210A00	1/24
Consumer units MISTRAL65 750 transparent door 8M	750	8	232x250x154	1SLM006500A1211	1SL1211A00	1/11
Consumer units MISTRAL65 750 transparent door 12M	750	12	320x250x155	1SLM006500A1212	1SL1212A00	1/7
Consumer units MISTRAL65 750 transparent door 18M	750	18	430x250x155	1SLM006500A1213	1SL1213A00	1/4

24 modules

36 modules

Description	GWT	N. modules	Dimensions WxHxD	ABB code	Order code	Pack./ N. pieces
		[18 mm]	[mm]			
2 Rows						
Consumer units MISTRAL65 750 transparent door 24M	750	24	320x435x155	1SLM006500A1214	1SL1214A00	1/4
Consumer units MISTRAL65 750 transparent door 36M 2F	750	36	430x435x155	1SLM006500A1215	1SL1215A00	1/2

Codes	1SL1210A00	1SL1211A00	1SL1212A00	1SL1213A00	1SL1214A00
Number of modules	4	8	12	18	24
Dimensions (WxHxD) in mm	152 x 202 x 117	232 x 250 x 154	320 x 250 x 155	430 x 250 x 155	320 x 435 x 155
Colour	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	IK09	IK09	IK09	IK09	IK09
Knockout resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08
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	63A	63A	63A	125A	125A
Exctractable 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	1SL1215A00	1SL1216A00	1SL1217A00	1SL1218A00	1SL1219A00
Number of modules	36	36	48	54	72
Dimensions (WxHxD) in mm	430 x 435 x 155	320 x 435 x 155	320 x 735 x 155	430 x 600 x 155	430 x 735 x 155
Colour	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	IK09	IK09	IK09	IK09	IK09
Knockout resistance to mechanical impacts	IK08	IK08	IK08	IK08	IK08
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	125A	125A	125A	125A	125A
Exctractable 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

**Reference standards IEC60670 - EN60439-3**

Technical details

Table of resistance to chemical agents

	Cold water	Hot water	Sulphuric acid	Hydrochloric acid	Acetic acid	Petroleum	Benzine	Acetone	Ethyl alcohol	Ammonia	Dichloromethane	Diesel oil - Naptha	Mineral oil	Food oils	Tetrachloroethylene	Trichloroethylene	Ether	Ozone	Toluene	Methyl alcohol	Alcohol	Milk	Fruit juices	Fluorocarbons	Detersives	Detergents	Potassium nitrate	Hydrogen peroxide
MISTRAL65 - IP65 consumer unit	■	■	▲	●	■	●	●	●	▲	■	●	▲	■	■	●	●	■	●	■	▲	■	■	■	●	■	■	▲	■

■ resistant   ▲ partially resistant   ● non resistant

Ingress protection rating IP65

6 First number:
Protection against the penetration of solid bodies
No dust can penetrate
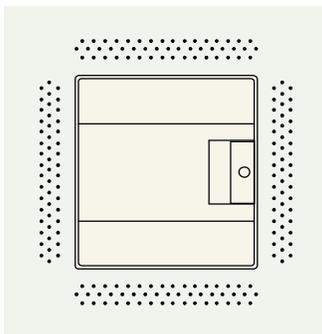
5 Second number:
Protection against the penetration of water
Water projected with a nozzle from all directions must not cause damage
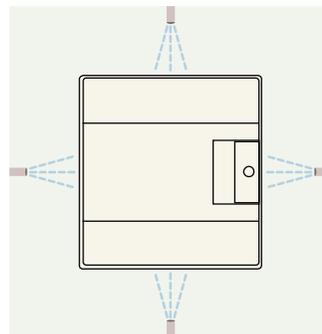
Upper and lower knockouts

Modules		Cable Glands		
		diam. 16	diam. 20	diam. 25
4	04x1	2	-	-
8	08x1	3	3	-
12	12x1	2	2	2
24	12x2	5	5	2
36	12x3	5	5	2
48	12x4	5	5	2
18	18x1	2	2	2
36	18x2	5	5	2
54	18x3	5	5	2
72	18x4	5	5	2

Modules		Holes				
		diam. 12	diam. 16	diam. 20	diam. 25	diam. 32
4	04x1	4	4	-	-	-
8	08x1	-	6	7	2	-
12	12x1	-	10	7	4	2
24	12x2	-	10	7	4	2
36	12x3	-	10	7	4	2
48	12x4	-	10	7	4	2
18	18x1	-	14	9	4	2
36	18x2	-	14	9	4	2
54	18x3	-	14	9	4	2
72	18x4	-	14	9	4	2
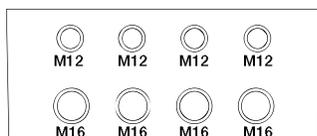
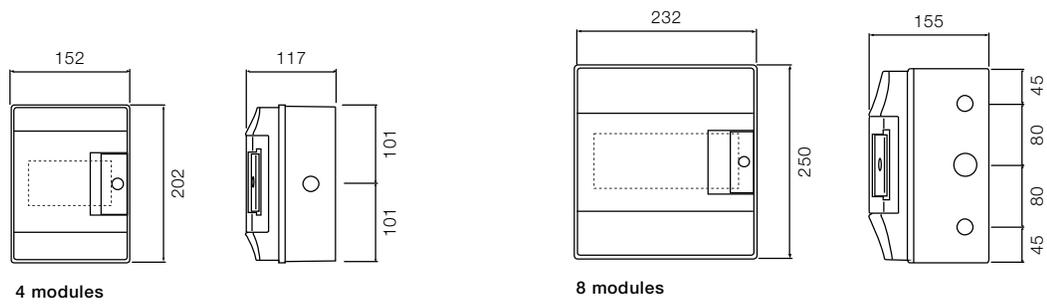**4 modules - top and bottom**
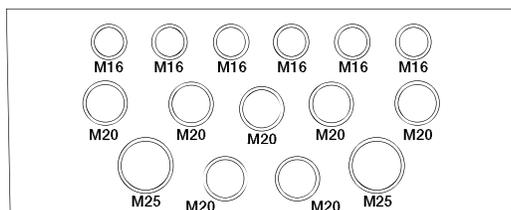
8 modules - top and bottom
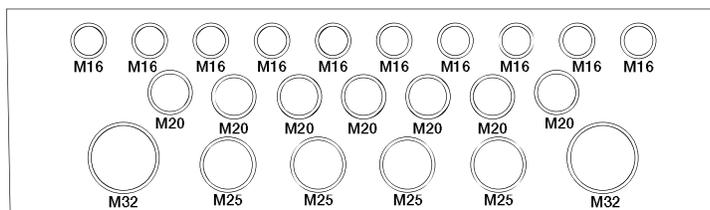
12 modules - top and bottom
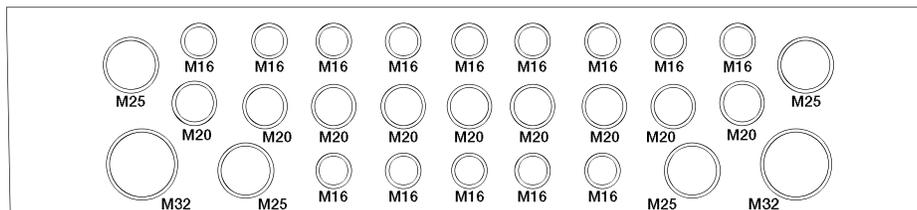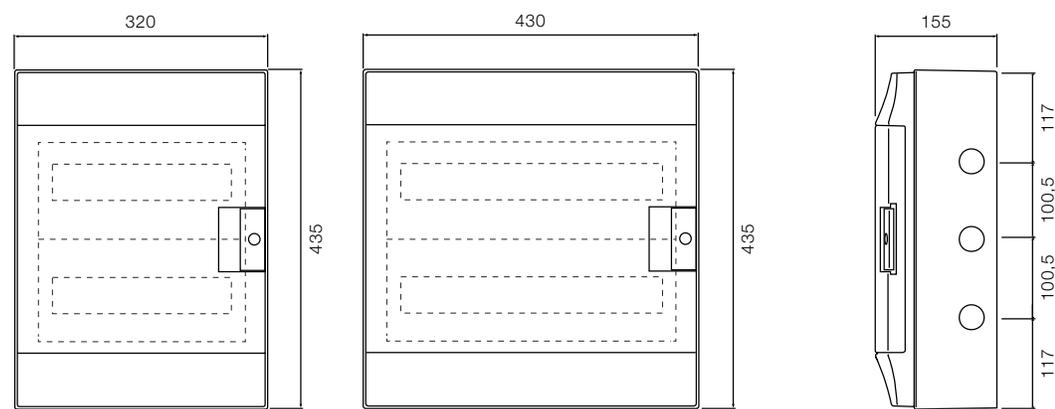

18 modules - top and bottom

Overall dimensions

4 modules
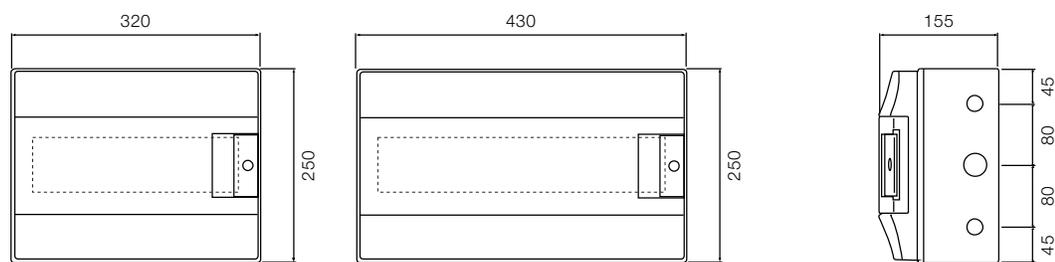
152 · 202 · 117 · 101 · 101

8 modules

232 · 250 · 155 · 45 · 80 · 80 · 45

12 modules

320 · 250

18 modules

430 · 250 · 155 · 45 · 80 · 80 · 45

24 modules

320 · 435

36 modules

430 · 435 · 155 · 117 · 100,5 · 100,5 · 117

Dimensions in mm

320

600

36 modules

430

600

54 modules

155

65

235

235

65

320

735

48 modules

430

735

72 modules

155

57,5

205

210

205

57,5
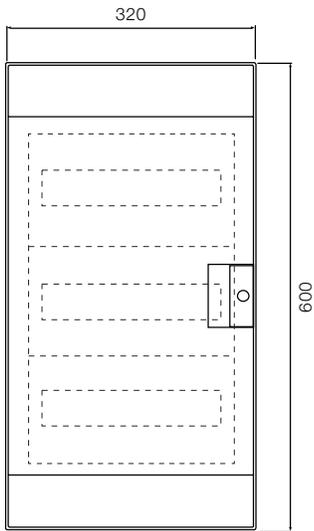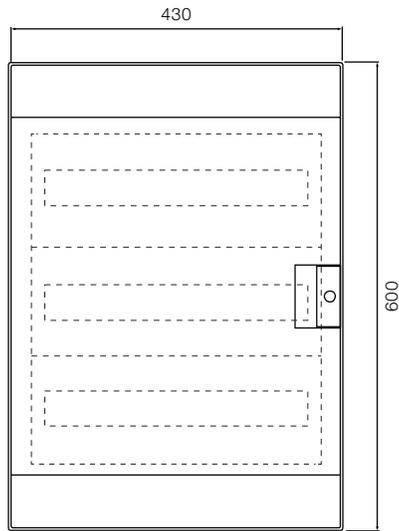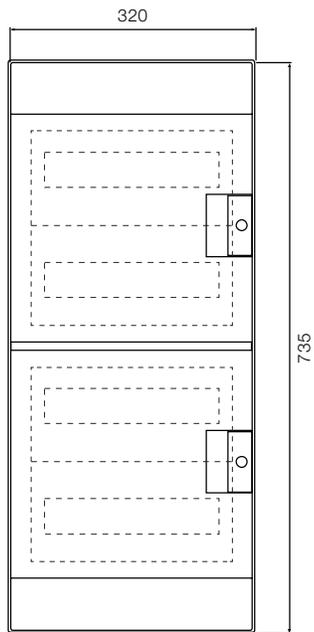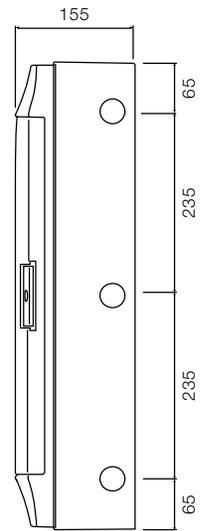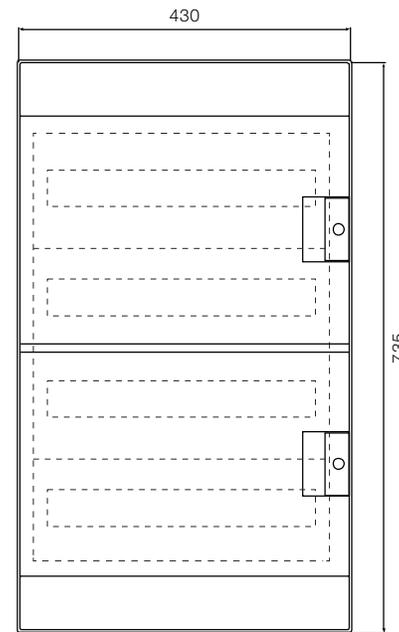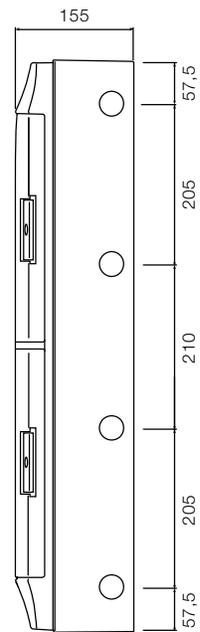
Dimensions in mm

Overall dimensions

Consumer unit fixing template
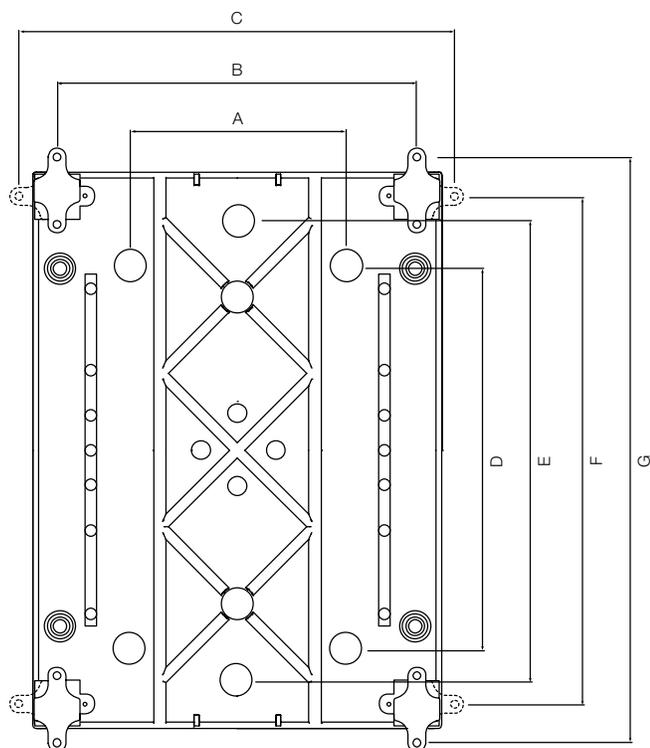
	A	B	C	D	E	F	G
4 Modules		113	173		140	163	223,5
8 Modules	90	194	254,5	180		212	272,5
12 Modules	170	282,5	343	180		212	272,5
18 Modules	280	392	452,5	125	175	212	272,5
24 Modules	170	282,5	343	310	360	397	457,5
36 Modules - 2 F	280	392	452,5	310	360	397	457,5
36 Modules - 3 F	170	282,5	343	475	525	562	622,5
48 Modules	170	282,5	343	610	660	697	757,5
54 Modules	280	392	452,5	475	525	562	622,5
72 Modules	280	392	452,5	610	660	697	757,5

Dimensions in mm