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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.



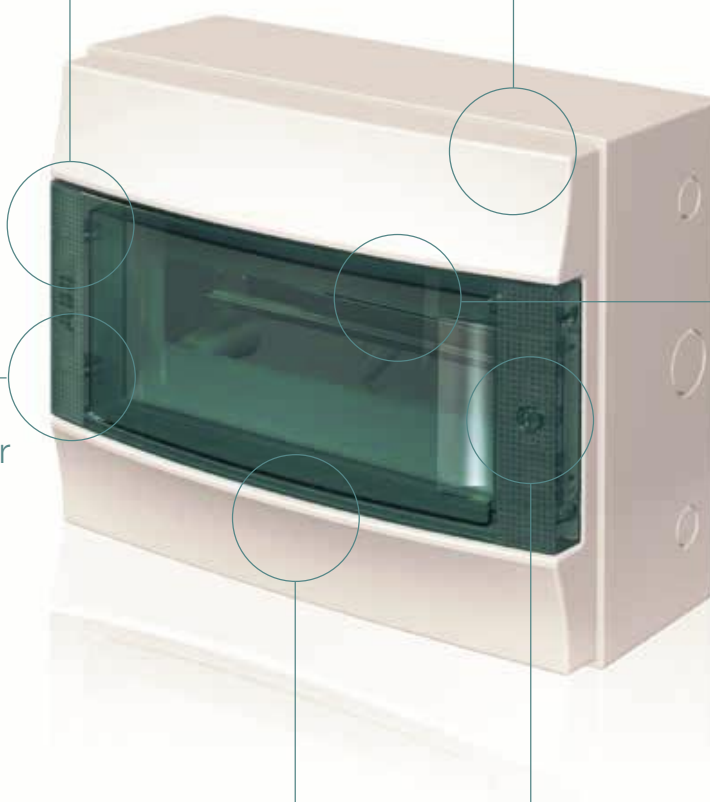
Innovating today does not just mean looking for functional and technologically advanced solutions. For ABB, being innovative means embracing a longer-term perspective by using eco-compatible materials for our products which respect the environment even at the end of their life cycle. For this reason, 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

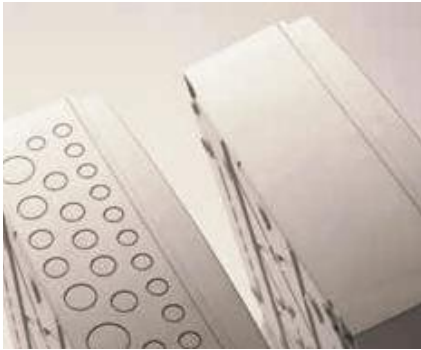


The decorative texture of the door underlines the attention to detail and the quality of the finish

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

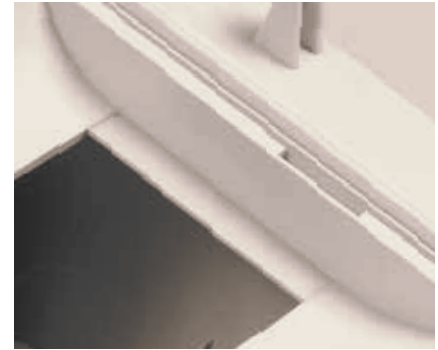
The door has an ergonomic handle with snap-on closing or a lock (optional)



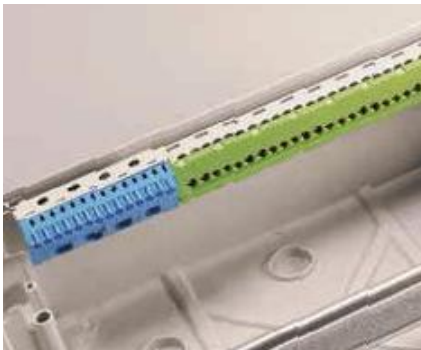
Aside from a series of side knockouts for cable entry and exit, the consumer units can be supplied, on request, with cable entries and exits both at the top and bottom.



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).



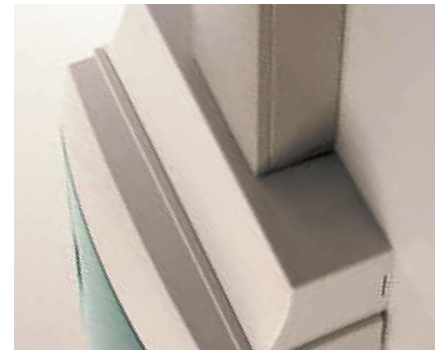
The possibility to add an additional module by removing two pre-trimmed elements is an extremely useful solution which allows additions to be managed easily and tidily when unforeseen installation requirements are called for.



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

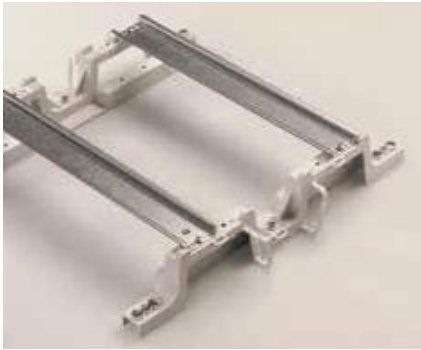


The side knockouts offer additional possibilities for the cables' path

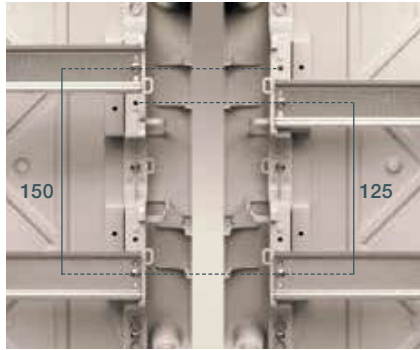
The dual gasket on the front panel module ensures an improved seal

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.

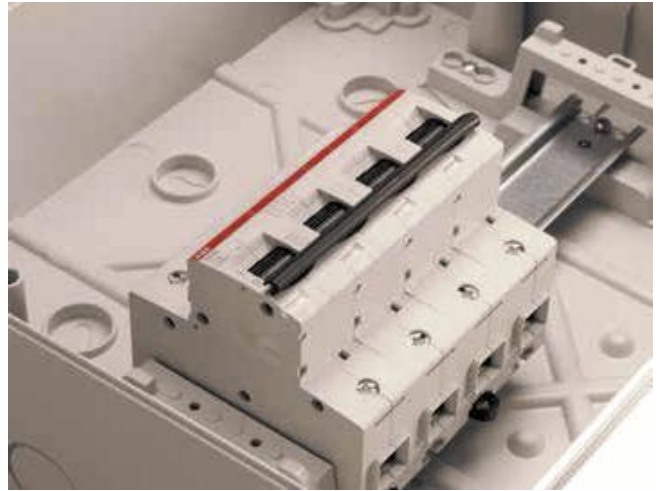
MCBs, MCCBs and devices installed in the front of the panel in an integrated, rational and functionally appropriate position.



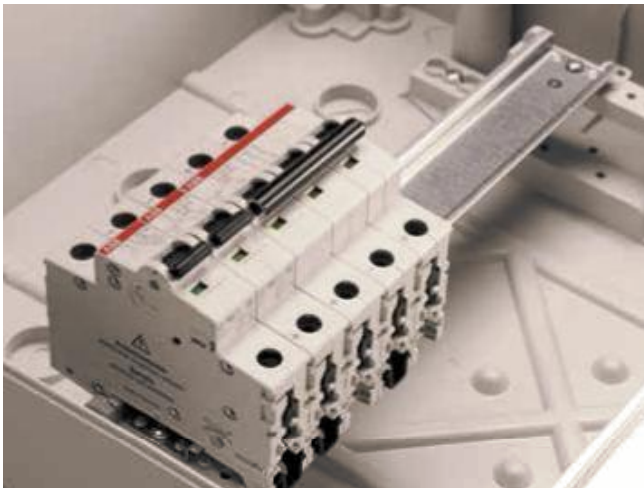




The frame allows for two different DIN rail positions. This allows products with different depths to be installed, for example MCCBs which, thanks to this solution, are perfectly aligned with other devices in the panel.



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.

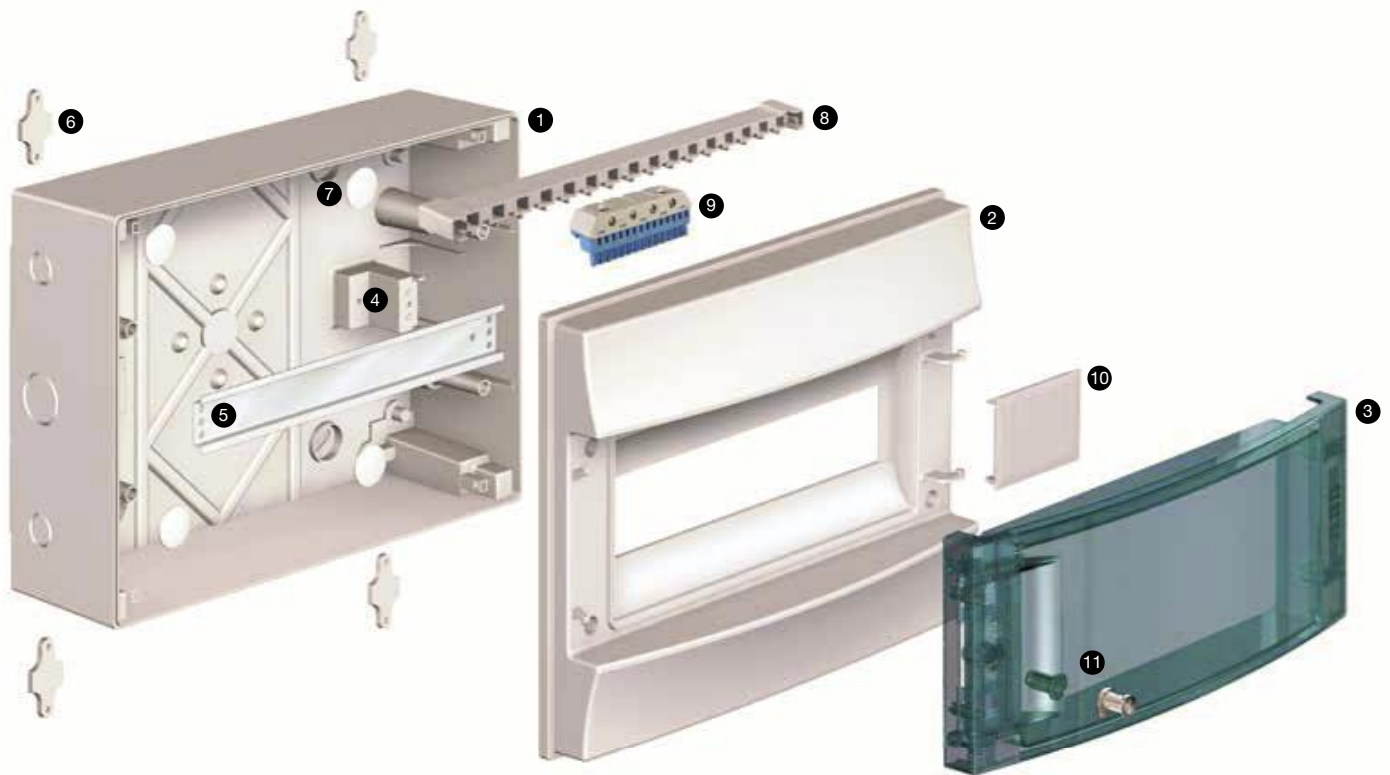


Among the accessories, the availability of blank panels and base plates allows non-modular equipment to be installed on the front of the consumer unit, such as control buttons and indicator lights.

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

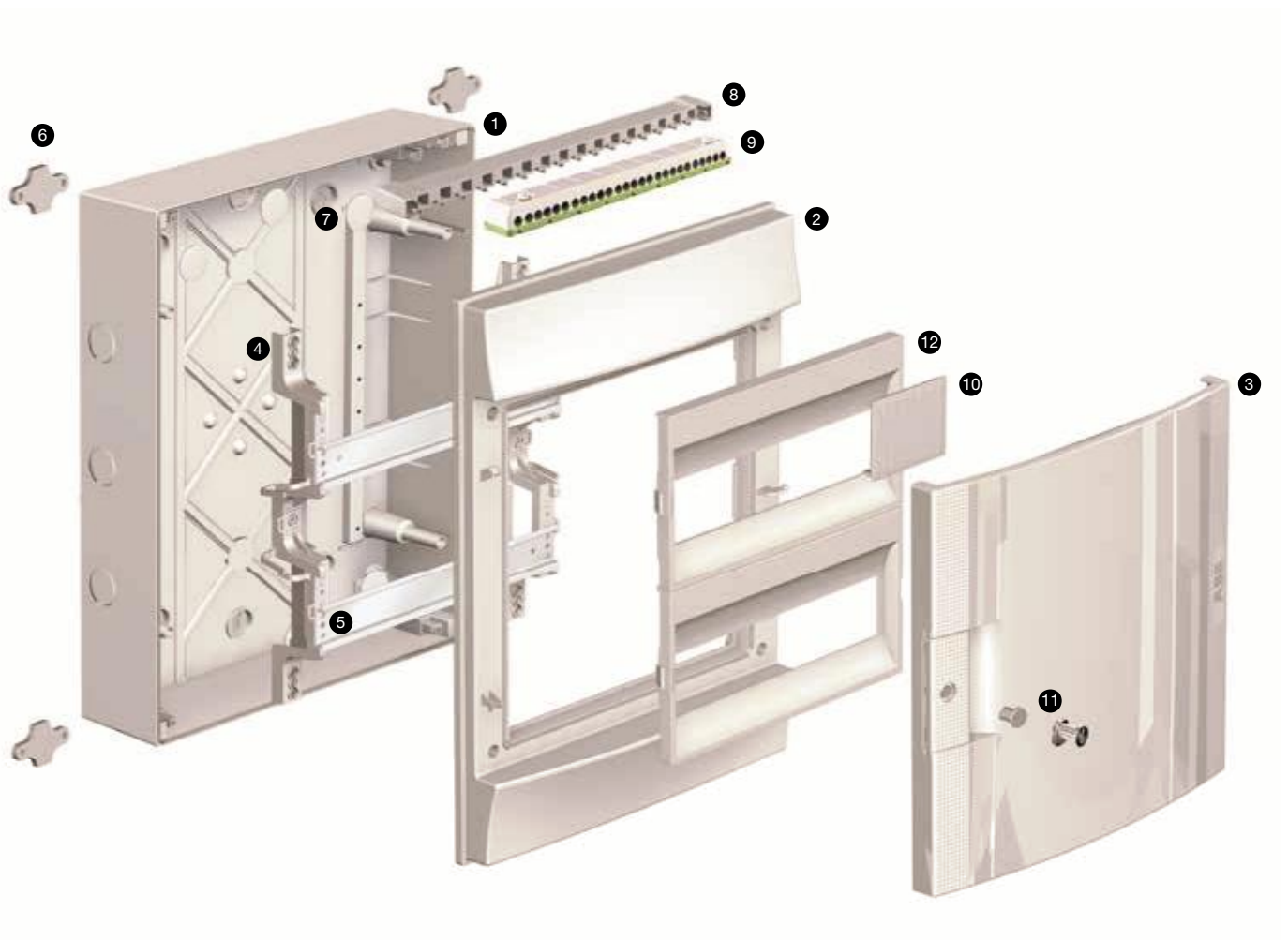
The simplicity of the consumer units makes adapting them to various system requirements easy.

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

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.

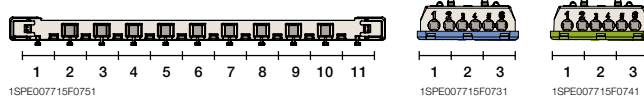


- |                               |   |
|-------------------------------|---|
| 1. Box for wall mounting      | 8. Jumper for terminals                                   |
| 2. Reversible front panel     | 9. Quick-coupling terminals                               |
| 3. RAL 7035 opaque door       | 10. Module cover  |
| 4. Fixed support for DIN rail | 11. Finish or closure elements<br>(lock and key optional) |
| 5. DIN rail                   | 12. Reversible panels                                     |
| 6. Wall fastening brackets    |   |
| 7. Plugs, protection class II |   |

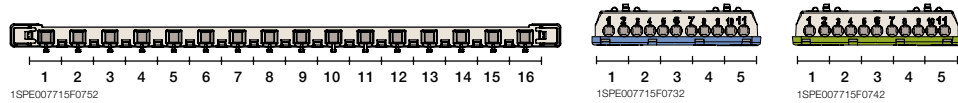
# Order codes



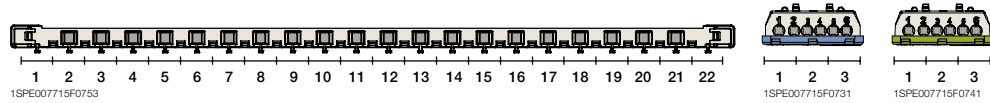
Description	GWT	N. modules	Dimensions	ABB code	Order code	Pack./ N. pieces
			WxHxD			
			[18 mm] : [mm]			
MISTRAL65 transparent door 8M 12SM	650	8	232x250x154	1SLM006501A1201	1SLM006501A1201	1/11



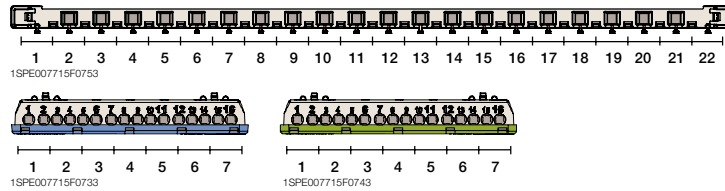
MISTRAL65 transparent door 12M 22SM	650	12	320x250x155	1SLM006501A1202	1SLM006501A1202	1/7
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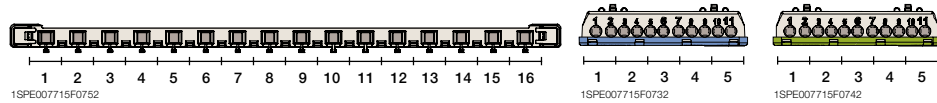
MISTRAL65 transparent door 18M 12SM	650	18	430x250x155	1SLM006501A1203	1SLM006501A1203	1/4
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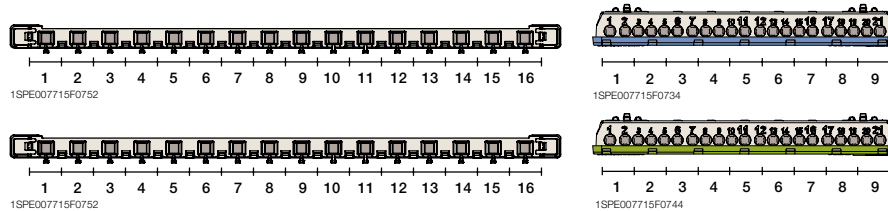
MISTRAL65 transparent door 18M 32SM	650	18	430x250x155	1SLM006502A1203	1SLM006502A1203	1/4
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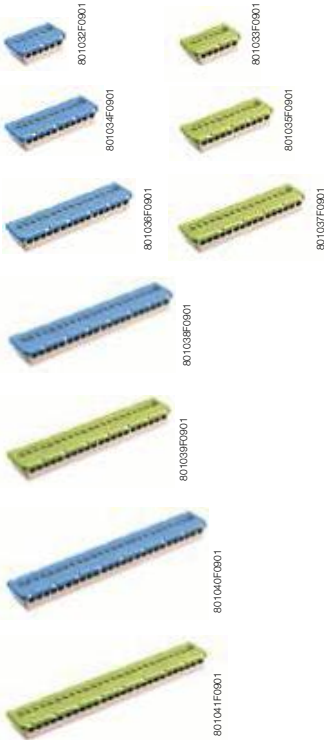
MISTRAL65 transparent door 24M 22SM	650	24	320x435x155	1SLM006501A1204	1SLM006501A1204	1/4
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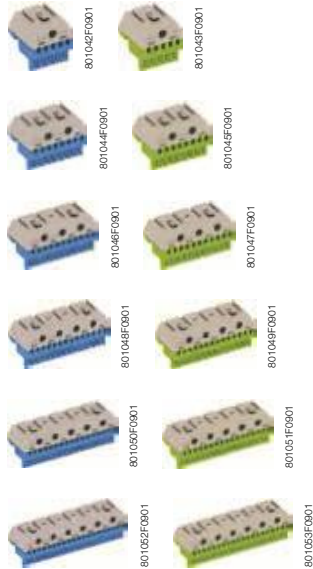
MISTRAL65 transparent door 24M 42SM	650	24	320x435x155	1SLM006502A1204	1SLM006502A1204	1/4
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# Order codes



**Terminal block**

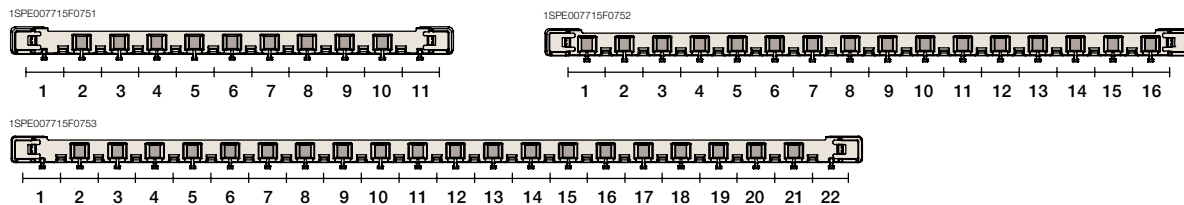


**Terminal block screwless**

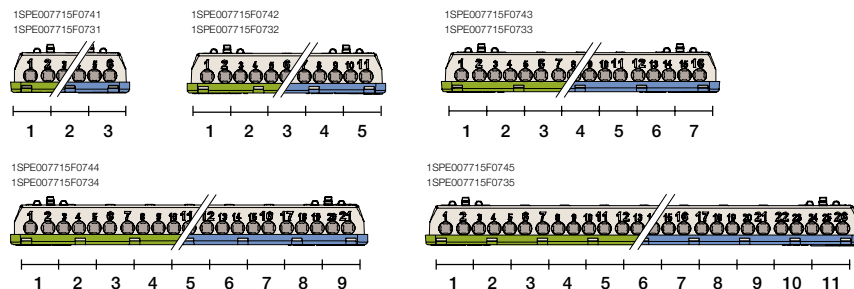
Description	Maximum current	ABB code	Order code	Pack./ N. pieces
<b>Terminal block</b>				
Terminal block N 3x16mm <sup>2</sup> +3x6mm <sup>2</sup>	100 A	1SPE007715F0731	1SPE007715F0731	5/270
Terminal block N 5x16mm <sup>2</sup> +6x6mm <sup>2</sup>	100 A	1SPE007715F0732	1SPE007715F0732	5/150
Terminal block N 7x16mm <sup>2</sup> +9x6mm <sup>2</sup>	100 A	1SPE007715F0733	1SPE007715F0733	5/120
Terminal block N 9x16mm <sup>2</sup> +12x6mm <sup>2</sup>	100 A	1SPE007715F0734	1SPE007715F0734	5/90
Terminal block N 11x16mm <sup>2</sup> +15x6mm <sup>2</sup>	100 A	1SPE007715F0735	1SPE007715F0735	5/90
Terminal block PE 3x16mm <sup>2</sup> +3x6mm <sup>2</sup>	100 A	1SPE007715F0741	1SPE007715F0741	5/270
Terminal block PE 5x16mm <sup>2</sup> +6x6mm <sup>2</sup>	100 A	1SPE007715F0742	1SPE007715F0742	5/150
Terminal block PE 7x16mm <sup>2</sup> +9x6mm <sup>2</sup>	100 A	1SPE007715F0743	1SPE007715F0743	5/120
Terminal block PE 9x16mm <sup>2</sup> +12x6mm <sup>2</sup>	100 A	1SPE007715F0744	1SPE007715F0744	5/90
Terminal block PE 11x16mm <sup>2</sup> +15x6mm <sup>2</sup>	100 A	1SPE007715F0745	1SPE007715F0745	5/90
<b>Terminal block screwless</b>				
Terminal block screwless N 5x1,5-4mm <sup>2</sup>	63 A	1SPE007715F9701	1SPE007715F9701	5/280
Terminal block screwless N 5x1,5-4mm <sup>2</sup> +1x25mm <sup>2</sup>	63 A	1SPE007715F9702	1SPE007715F9702	5/180
Terminal block screwless N 8x1,5-4mm <sup>2</sup> +2x25mm <sup>2</sup>	63 A	1SPE007715F9703	1SPE007715F9703	5/150
Terminal block screwless N 11x1,5-4mm <sup>2</sup> +3x25mm <sup>2</sup>	63 A	1SPE007715F9704	1SPE007715F9704	5/120
Terminal block screwless N 14x1,5-4mm <sup>2</sup> +4x25mm <sup>2</sup>	63 A	1SPE007715F9705	1SPE007715F9705	5/90
Terminal block screwless N 17x1,5-4mm <sup>2</sup> +5x25mm <sup>2</sup>	63 A	1SPE007715F9706	1SPE007715F9706	5/70
Terminal block screwless N 20x1,5-4mm <sup>2</sup> +6x25mm <sup>2</sup>	63 A	1SPE007715F9707	1SPE007715F9707	5/60
Terminal block screwless PE 5x1,5-4mm <sup>2</sup> +1x25mm <sup>2</sup>	63 A	1SPE007715F9712	1SPE007715F9712	5/180
Terminal block screwless PE 8x1,5-4mm <sup>2</sup> +2x25mm <sup>2</sup>	63 A	1SPE007715F9713	1SPE007715F9713	5/150
Terminal block screwless PE 11x1,5-4mm <sup>2</sup> +3x25mm <sup>2</sup>	63 A	1SPE007715F9714	1SPE007715F9714	5/120
Terminal block screwless PE 14x1,5-4mm <sup>2</sup> +4x25mm <sup>2</sup>	63 A	1SPE007715F9715	1SPE007715F9715	5/90
Terminal block screwless PE 17x1,5-4mm <sup>2</sup> +5x25mm <sup>2</sup>	63 A	1SPE007715F9716	1SPE007715F9716	5/70
Terminal block screwless PE 20x1,5-4mm <sup>2</sup> +6x25mm <sup>2</sup>	63 A	1SPE007715F9717	1SPE007715F9717	5/60

# Terminal blocks

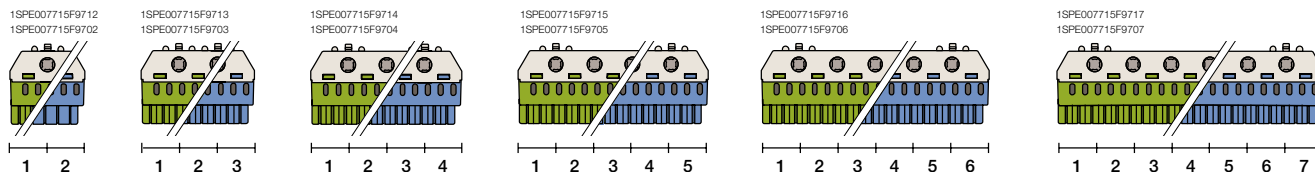
## Terminal carriers



## Terminal block



## Terminal block screwless



## Assembly examples

