



System pro *E* comfort

**MICAL**

The new metal switchboards by ABB



## Details that make the difference

When you fight head-to-head with competitors, to be improved, the simplest details often decide the success of a project. That's why System pro *E* comfort MICAL switchboards have been designed to ensure a competitive advantage in terms of ultimate quality, versatility and ease of use.

Built in full sturdy metal, the wall mounting switchboards of the System pro *E* comfort MICAL series are available in 10 different sizes and are ready for use in any residential application up to 125 A.

The case and the door are made of durable steel sheet and they contribute to reach a resistance against mechanical impact among the highest on the market: IK09

The case and the door provide as well a simple and functional design aimed to grant versatility in the installation and ease of use. All in accordance with the latest International standard.

The degree of protection (IP30 without door, IP40 with door) and the ample space for the internal wiring combine with smart doors with reversible hinges that ensure maximum flexibility for residential installation.

The doors, equipped with a snap closure mechanism, open to 120 degrees and offer easy access to all the internal equipment.

Two different widths (13 or 18 modules) and 5 different heights allow to manage up to 5 rows, for a total of 90 internal units.

The DIN rails, fixed on the switchboard base with proper supports, maximize the space for the cables. The proven and reliable ABB terminal blocks are part of the standard equipment and are mounted on the left and right sides of the container.

The compact design of the terminal leaves plenty of room for the side cabling and for wiring of DIN Rail devices. The upper and lower part of the switchboard provide a cable entry opening protected by a steel cover secured by two screws. While on the back side of the case, a precut window provides a generous and discrete cables entry.

Overall, the new metal switchboard MICAL, together with the ample choice of ABB products for DIN-rail, offers the most complete and competitive solution to meet all the installation requirements.



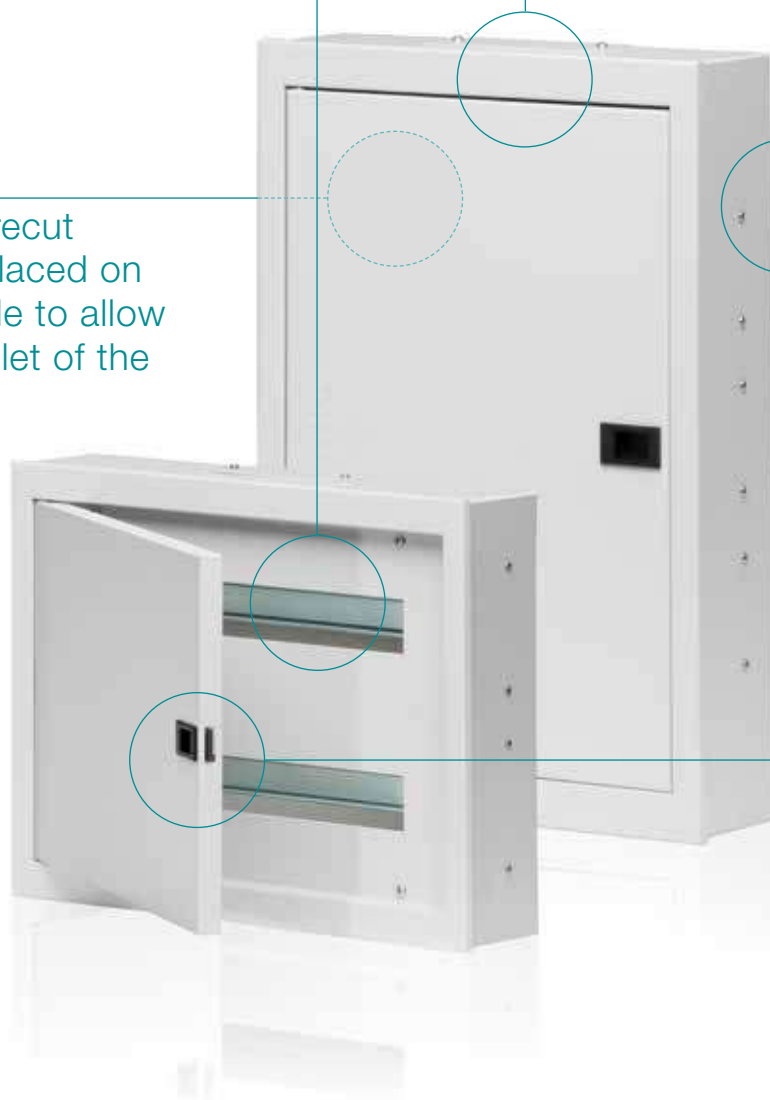
The devices are mounted on DIN rails: the 10 different versions offer a capacity ranging from 13 to 90 units.

The frame is extremely robust and it's rated IK09 against mechanical impacts.

An ample precut window is placed on the back side to allow a discrete inlet of the conduits.

Switchboard mounting uses four slots that guarantee solidity and tolerance of drilling.

The handle with snap closure ensures a perfect locking of the door.



# Details that make the difference



## Preconfigured cut-outs

The cut-outs for extra holes in the back of the cabinet are easy to remove and allow the routing of the power cables from the rear of the box.



## Handle

The handle with snap closure ensures the IP40 rating while the door is closed. The handle is placed higher and hence asymmetrically on sizes 13x1, 13x3, 13x5.



## Protection closure

The convenient and simple handle is in plastic material with snap closure. To open simply slide it inward. Adding the door with handle, the degree of protection increases at IP40. The reversibility of the door can be obtained by turning the complete front or only by disassembling the door.



## Ease of assembly

The modular design provides an outer frame fixed on the main box. The frame holds the door according to the desired direction of opening. The whole frame-door assembly can be easily removed thanks to the handy front screws.



## Cable entry

The rectangular cable entry is compatible with the installation of a cable duct and allows direct access to the harnesses from above or below. This solution is suitable for any installation need.



## Simplified wiring

The DIN rails and the versatile terminal blocks allow a simple and tidy wiring. The large interior space between each rail allows to use cable ducts for improved rationality in the electrical connections.

# Technical details

Codes	1SKM990000R1301	1SKM990000R1302	1SKM990000R1303	1SKM990000R1304	1SKM990000R1305
Number of modules	13	26	39	52	65
Dimensions (WxHxD) in mm	355 x 275 x 110	355 x 380 x 110	355 x 530 x 110	355 x 680 x 110	355 x 830 x 110
Colour	Matt Beige	Matt Beige	Matt Beige	Matt Beige	Matt Beige
Protection class	I ⊕	I ⊕	I ⊕	I ⊕	I ⊕
Power dissipation (w)	45	60	72	84	99
Rated current	In 125A	In 125A	In 125A	In 125A	In 125A
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
Rear precut window area (w+h)	150x116	150x150	150x250	150x300	150x300
IP rating	IP40	IP40	IP40	IP40	IP40
N terminals blocks (holes # x blocks #)	16x1	16x2	16x3	16x4	16x5
PE terminals blocks (holes # x blocks #)	16x1	16x2	16x3	16x4	16x5
DIN rail centre distance	150 mm	150 mm	150 mm	150 mm	150 mm

Codes	1SKM990000R1801	1SKM990000R1802	1SKM990000R1803	1SKM990000R1804	1SKM990000R1805
Number of modules	18	36	54	72	90
Dimensions (WxHxD) in mm	475 x 275 x 110	475 x 380 x 110	475 x 530 x 110	475 x 680 x 110	475 x 830 x 110
Colour	Matt Beige	Matt Beige	Matt Beige	Matt Beige	Matt Beige
Protection class	I ⊕	I ⊕	I ⊕	I ⊕	I ⊕
Power dissipation (w)	55	77	86	104	120
Rated current	In 125A	In 125A	In 125A	In 125A	In 125A
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
Rear precut window area (w+h)	150x116	150x150	150x250	150x300	150x300
IP rating	IP40	IP40	IP40	IP40	IP40
N terminals blocks (holes # x blocks #)	21x1	21x2	21x3	21x4	21x5
PE terminals blocks (holes # x blocks #)	21x1	21x2	21x3	21x4	21x5
DIN rail centre distance	150 mm	150 mm	150 mm	150 mm	150 mm

# Order codes



13M

18M

Description	Rated current	N. modules [18 mm]	Dimensions WxHxD [mm]		ABB code	Price	Pack./ N. pieces
<b>1 Row</b>							
MICAL 13 modules 1 row	125A	13	355x275x110		1SKM990000R1301		1/1
MICAL 18 modules 1 row	125A	18	475x275x110		1SKM990000R1801		1/1



26M

36M

<b>2 Row</b>							
MICAL 13 modules 2 rows	125A	26	355x380x110		1SKM990000R1302		1/1
MICAL 18 modules 2 rows	125A	36	475x380x110		1SKM990000R1802		1/1



39M

54M

<b>3 Row</b>							
MICAL 13 modules 3 rows	125A	39	355x530x110		1SKM990000R1303		1/1
MICAL 18 modules 3 rows	125A	54	475x530x110		1SKM990000R1803		1/1



52M

72M

<b>4 Row</b>							
MICAL 13 modules 4 rows	125A	52	355x680x110		1SKM990000R1304		1/1
MICAL 18 modules 4 rows	125A	72	475x680x110		1SKM990000R1804		1/1

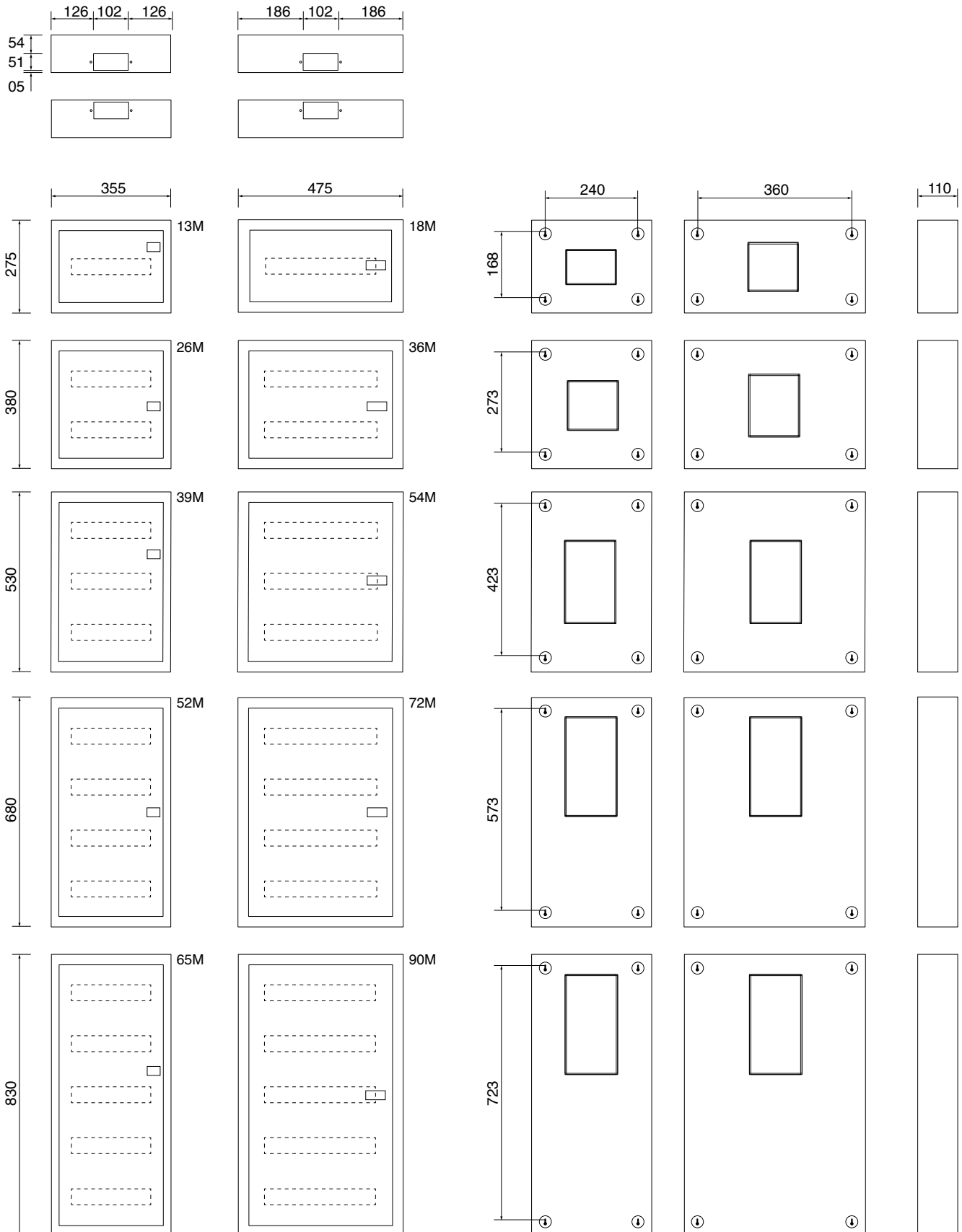


65M

90M

<b>5 Row</b>							
MICAL 13 modules 5 rows	125A	65	355x830x110		1SKM990000R1305		1/1
MICAL 18 modules 5 rows	125A	90	475x830x110		1SKM990000R1805		1/1

# Overall dimensions



# Contact us

**ABB Malaysia Sdn Bhd,**  
Level 2, Block A,  
Lot 608, Jalan Lagoon Selatan,  
Bandar Sunway,  
47500 Subang Jaya,  
Selangor Darul Ehsan,  
Malaysia

**<http://new.abb.com/my>**  
Office: +603 5628 4888  
Fax: +603 5635 8200

The data and illustrations are not binding. We reserve the right to modify the contents of this document on the basis of technical development of the products, without prior notice.

Copyright 2017 ABB. All rights reserved.

9AKK106930A6806 – 03/2017

