SR2 Fnclosures General characteristics

The range of SR2 enclosures is a complete offer of monobloc enclosures for constructing small and medium-sized electric automation, switching and control switchboards.

The SR2 enclosures come from the experience ABB has gained over the years in building IP65 metal structures (in accordance with the IEC 60529 Standard), together with the innovative new production process used for construction and patented by ABB. The typical use of SR2 Enclosures is to make switchgear and controlgear switchboards for a very wide variety of industrial machines: from large machinery with automated production lines or parts of these, down to the typical installations of on-board machine switchboards, boilers, heating plants and so on.

They conform to the EN 62208 Standard "Empty enclosures for low voltage protection switchgear and controlgear assemblies" and allow realization of electrical equipment conforming to the prescriptions of the IEC 60204-1 Standard "Safety of machinery. Electrical equipment of machines" and of the EN 60439-1 Standard and the new EN 61439-1-2 Standard "Low voltage protection switchgear and controlgear for assemblies". The degree of protection, in accordance with the IEC 60529 Standard "Degrees of protection of enclosures (IP Code)", is IP65. The SR2 enclosures have also passed the control required to obtain the UL (Underwriters Laboratories) and CSA (Canadian Standards Association) Type 12 marks.

The SR2 enclosures also allow secondary distribution switchboards to be made, thanks to the possibility, in the 400, 600 and 800 mm widths, of installing the whole range of apparatus and modular circuit-breakers on DIN rails combined with special pre-drilled and hinged modular front panels, thereby allowing construction of AS/ANS type electrical switchgear conforming to the IEC 60439-1 Standard and the new EN 61439-1-2 Standard. A single line of metalwork structures therefore allows construction of automation and secondary and end distribution electrical switchboards thanks to the availability of a series of accessories (modular panels, DIN rails) and to the possibility of stacking the enclosures.





The SR2 enclosures are available in two versions (blind door or glazed door) and in 23 different dimensions, as well as a further 19 combinations obtained by stacking the enclosures, up to a maximum height of 2000 mm, which guarantee ample selection possibilities for the various end applications.

The SR2 enclosures have been designed to fulfil all the typical needs of the builder or installer of switchgear in the best way possible and the user is presented with a unique ensemble of functional characteristics:

- wide dimensional range
- certified IP65 degree of protection
- internal galvanised sheet mounting plate with 20/10 thickness (made to allow threaded holes to be made easily), adjustable in depth by using a special accessory
- fairlead plate screwed on (at top and bottom) made of 15/10 thick galvanised sheet, with a sealing gasket applied inside
- complete reversibility of the enclosure, so the door can open either on the right or on the lefthand side
- possibility of installing all the apparatus and modular circuitbreakers on a DIN rail combined with a hinged modular panel.

The standard colour is RAL 7035 orange peel. On request, the SR2 enclosures can be ordered in a wide range of RAL colours (see page 7/12).

Both the enclosures with glazed door or blind door can be stacked:

stacking is done simply by removing the fairlead plates and inserting the IP65 sealing gasket (GZ....), made of neoprene with closed cells.

Assembly of the stacked enclosures is carried out by means of the same holes used for the fairlead plates.

The door is supplied with the enclosure (single code) so as to reduce the number of articles and assembly times.





SR2 Enclosures General characteristics

The range is completed with a series of accessories: brackets for wall assembly, rain shield top cover, locks of various types, internal document pocket, spacers, and spray paint for touching up. It is possible floor fixing by means plinth.



Plastic document pocket, RAL 7035, size A4, the pocket is apply within the solid doors wider than 400 mm, with stickers provided.



Many closure systems can replace the standard closures of the external doors. The inserts are interchangeable and easily replaced by loosening a nut.



The brackets for wall mounting allows installation of the boxes on the wall using the holes located on the back of the enclosure.



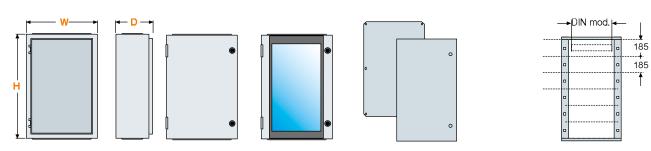
The bars, made of electrolytic copper with M6 threaded holes in 25 mm, can be mounted on mounting plates using the appropriate supports.

Technical characteristics

Conformity with Standard		IEC 62208, IEC 61439-1-2		
Degree of protection		IP65 (IEC 60529)		
		TYPE 12 (Normativa UL)		
Degree of mechanical strength		IK10 blind door		
		IK09 glazed door		
		(IEC 62262)		
Certifications		C Uus LISTED EX II 3 G D		
Type of material		Metallic		
Installation site		Indoors		
Fixing method		floor/wall		
Normal service conditions - ambient temperature		from -5 up to +40°C		
Operating climate (t°/Ur%)	costant	23°C/83% - 40°C/93%		
	variable	23°C/98% - 40°C/98%		

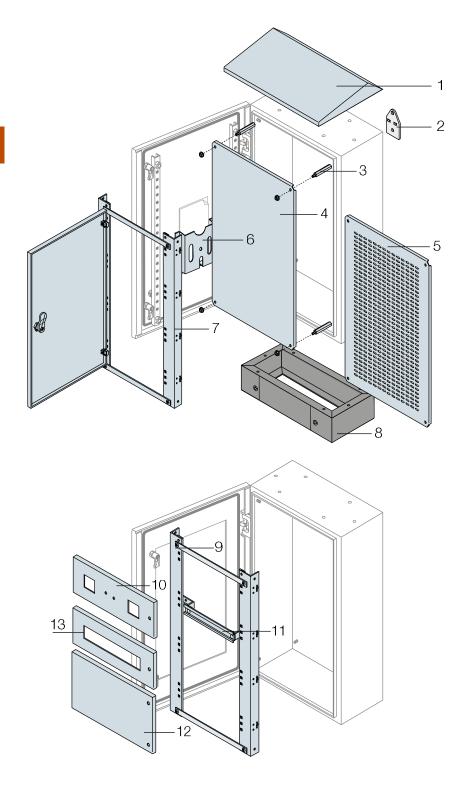
SR2 Enclosures Selection table

Quick selection table

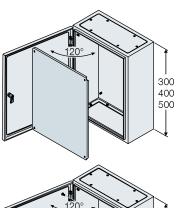


Overall dimensions		Enclosures		Kit for automa	tion		Kit for distribution Supports for mounting modular panels			
H mm	W mm	D mm	Enclosures with blind door + back plate	with glazed door *	Blind counterdoor	Back plate	No. vertical mod. H=185mm	No. DIN mod. per row	Total modules	DIN Supports
	200		SRN3215K							
300	300	150	SRN3315K							
	400		SRN3415K							
	300	150	SRN4315K							
400	300		SRN4320K							
400	400	200	SRN4420K							
	600		SRN4620K							
	300	200	SRN5320K							
500	400	200	SRN5420K	SRN5420VK*	KC5040K	PF5040	2	14	28	KD5040K
	400	250	SRN5425K	SRN5425VK*	KC5040K	PF5040	2	14	28	KD5040K
600	400	200	SRN6420K	SRN6420VK*	KC6040K	PF6040	3	14	42	KD6040K
	400	250	SRN6425K	SRN6425VK*	KC6040K	PF6040	3	14	42	KD6040K
	600	250	SRN6625K							
700	500	200	SRN7520K	SRN7520VK*	KC7050K	PF7050				
	500	250	SRN7525K	SRN7525VK*	KC7050K	PF7050				
300	600	250	SRN8625K	SRN8625VK*	KC8060K	PF8060	4	25	100	KD8060K
	600	300	SRN8630K	SRN8630VK*	KC8060K	PF8060	4	25	100	KD8060K
	800	300	SRN8830K							
1000	600	250	SRN10625K	SRN10625VK*	KC1060K	PF1060	5	25	125	KD1060K
	600	200	SRN10630K	SRN10630VK*	KC1060K	PF1060	5	25	125	KD1060K
	800	300	SRN10830K	SRN10830VK*	KC1080K	PF1080	5	36	180	KD1080K
1200	600	200	SRN12630K	SRN12630VK*	KC1260K	PF1260	6	25	150	KD1260K
	800	300	SRN12830K	SRN12830VK*	KC1280K	PF1280	6	36	216	KD1280K

^{*} The mounting plate must be ordered separately.



Spray protection roof Page
2 Wall-mounting brackets Page3/11
3 Spacers for back plates Page
4 Blind internal plate Page
5 Slotted internal plate Page
6 Document pocket Page3/16
7 Counterdoor Page
8 Plinth Page
9 Frame for DIN rail Page3/13
10 Modular panels for apparateus Page
11 DIN rail Page
12 Blind modular panels Page
13 Modular panel for DIN rail



SR2 Enclosures with blind door (internal plate included)

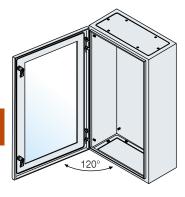
The enclosures with blind door, typically for making automation switchgear, are already fitted with the internal galvanised sheet mounting plate.

Englagues with	محجلة لمحتاليا	(internal	امسا مقمام	Alexandre
Enclosures with	i billiu door	unternar	DIALE IIICI	uueu

	nsions (mm)				Price	Package/
Н	W	D	Code	Article	EUR	No. of piece
300 (1)	200	150	SRN3215K			1/1
	300	150	SRN3315K			1/1
	400	150	SRN3415K			1/1
	300	150	SRN4315K			1/1
400 (300	200	SRN4320K			1/1
400	400	200	SRN4420K			1/1
	600	200	SRN4620K			1/1
	300	200	SRN5320K			1/1
500 (400	200	SRN5420K			1/1
	400	250	SRN5425K			1/1
	400	200	SRN6420K			1/1
600	400	250	SRN6425K			1/1
	600	250	SRN6625K			1/1
700	500	200	SRN7520K			1/1
700	500	250	SRN7525K			1/1
	600	250	SRN8625K			1/1
800	600	300	SRN8630K			1/1
	800	300	SRN8830K			1/1
	600	250	SRN10625K			1/1
1000*	* 600	300	SRN10630K			1/1
	800	300	SRN10830K			1/1
4000	600	300	SRN12630K			1/1
1200	800	300	SRN12830K			1/1

⁽¹⁾ The enclosures with height less or egual to 500mm hare only a closing box.

^{*} Plates height 1000 / 1200mm have six mounting points .



Enclosures with glazed door

The enclosures with glazed door are also used for distribution configurations. The internal equipment is made, alternatively, by selecting the special kits:

- KD... (Distribution Kit) consisting of a pair of functional uprights for assembly of the modular panels (to be ordered separately) and of any compensation panel (see page 2/8).

The modular panels, which can also be installed on the enclosures with blind door with the help of the KD.. kit itself, are all hinged and have vertical modularity of 185 mm.

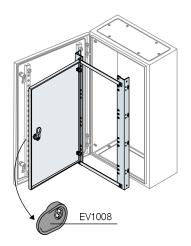
Enclosu	res with g	lazed door				
Dimensions (mm)				Price	Package/	
Н	W	D	Code	Article	EUR	No. of pieces
500 ⁽¹⁾	400	200	SRN5420VK			1/1
	400	250	SRN5425VK			1/1
600	400	200	SRN6420VK			1/1
	400	250	SRN6425VK			1/1
	500	200	SRN7520VK			1/1
700	500	250	SRN7525VK			1/1
000	600	250	SRN8625VK			1/1
800	600	300	SRN8630VK			1/1
	600	250	SRN10625VK			1/1
1000	600	300	SRN10630VK			1/1
	800	300	SRN10830VK			1/1
	600	300	SRN12630VK			1/1

⁽f) The enclosures with height less or egual to 500mm hare only a closing box.

SRN12830VK

300

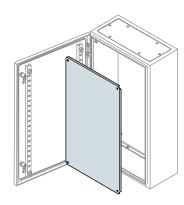
1200



Blind counterdoor

The internal counterdoor guarantees IP20 degree of protection. Made of steel sheet 15/10mm thick, galvanized and painted orange peel RAL 7035 colour, complete with the EV1008 ergonomic box and insert with double tongue.

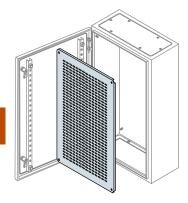
Blind counterdoor			
Dimensions (mm)	_		Package/
Н	W	Code	No. of pieces
500	400	KC5040K	1/1
600	400	KC6040K	1/1
700	500	KC7050K	1/1
800	600	KC8060K	1/1
1000	600	KC1060K	1/1
1000	800	KC1080K	1/1
1200	600	KC1260K	1/1
1200	800	KC1280K	1/1



Blind internal mounting plate

Internal galvanised sheet mounting plate 20/10mm thick complete with fixing with small items provided. Possibility of adjusting the depth with the help of a special spacer kit (to be ordered separately).

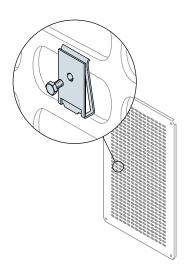
Dimensions (mn	n)		Package/
Н	W	Code	No. of piece
300	200	PF3020	1/1
300	300	PF3030	1/1
300	400	PF3040	1/1
400	300	PF4030	1/1
400	400	PF4040	1/1
400	600	PF4060	1/1
500	300	PF5030	1/1
500	400	PF5040	1/1
600	400	PF6040	1/1
600	600	PF6060	1/1
700	500	PF7050	1/1
800	600	PF8060	1/1
800	800	PF8080	1/1
1000	600	PF1060	1/1
1000	800	PF1080	1/1
1200	600	PF1260	1/1
1200	800	PF1280	1/1



Slotted internal mounting plate

Fixing with small items provided. Possibility of adjusting the depth with the help of a special spacer kit (to be ordered separately).

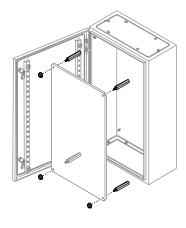
Dimensions (mr	n)		Package/
W	H	Code	No. of pieces
200	300	TQ3020	1/1
300	300	TQ3030	1/1
400	300	TQ3040	1/1
300	400	TQ4030	1/1
400	400	TQ4040	1/1
600	400	TQ4060	1/1
300	500	TQ5030	1/1
400	500	TQ5040	1/1
400	600	TQ6040	1/1
600	600	TQ6060	1/1
500	700	TQ7050	1/1
600	800	TQ8060	1/1
800	800	TQ8080	1/1
600	1000	TQ1060	1/1
800	1000	TQ1080	1/1
600	1200	TQ1260	1/1
800	1200	TQ1280	1/1



Clip nuts

For slotted plates with M6x10mm hexagonal head screws.

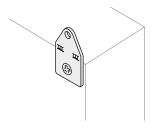
			Package/
Description	Code		No. of pieces
No.20 clip nuts	TQ6610		1/20



Spacer Kit for adjusting the depth of the back plates

Kit consisting of 12 spacers for fixing the back plate with the possibility of adjusting the depth with 25 mm pitch.

Description	Code		Package/ No. of pieces
Spacers 25mm long	AA8025		1/12
25 mm			
Spacers 50mm long	AA8050		1/12
50 mm			



Brackets for wall fixing

These allow wall installation of the enclosures and are mounted by using the special holes positioned on the rear of the enclosures.

Description	Code		Package/ No. of pieces
Brackets for wall fixing	AA1206		1/4



Accessories for stacking

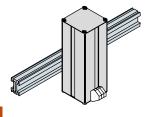
Dimensions (mm)			Package/
W	D	Code	Package/ No. of pieces
IP65 gasket			
400	200	GZ4020	1/1
400	250	GZ4025	1/1
	200	GZ6020	1/1
600	250	GZ6025	1/1
	300	GZ6030	1/1
800	300	GZ8030	1/1



Plinth

Steel plinth 25/10 thick grey RAL7012 color.

Plinth				
Dimensioni (mm)			Package/	
W	D	H	Code	No. of pieces
400	200	100	ZA4020	1/1
400	250	100	ZA4025	1/1
600	250	100	ZA6025	1/1
600	300	100	ZA6030	1/1
800	300	100	ZA8030	1/1



Temperature management

Heater for IP20 electrical switchboards

Their use prevents condensation in the electric cabinets. They consist of a heating element (PTC thermistor) inserted in an aluminium alloy ground plate. The PTC thermistor is a component which modifies its impedance according to the operating temperature. It is intrinsically stable and ensures primary safety features for the heater and service stability. The main qualities of the heaters using PTC are:

- electrical absorption (or dissipated power) which is almost constant in the range of power supply voltage between 100 and 250V;
- electrical absorption bound by inverse law to the trend of the ambient temperature.
- natural or forced ventilator with incorporated ventilator;
- ambient thermostad integrated in the heater (versions with forced ventilation).

Snap-on assembly on 35 mm DIN rail. Requires a thermostat.

	Dime	nsions	(mm)		Inrush	Fuse/		Package/
Description	Н	W	D	(kg)	current (A)		Code	No. of pieces
Anti-condensation heater 30W, 110-240 Vac-dc	125	42	42	0,30	1.0-1.5	2 / C6	VA7930	1/1
Anti-condensation heater 50W, 110-240 Vac-dc	150	42	42	0,40	1.0-1.5	2 / C6	VA7950	1/1
Anti-condensation heater 75W, 110-240 Vac-dc	150	42	42	0,40	2.0-2.5	2 / C6	VA7975	1/1
Anti-condensation heater 100W, 110-240 Vac-dc	150	42	51	0,45	2.0-3.0	2 / C6	VA7910	1/1
Anti-condensation heater 150W, 110-240 Vac-dc	150	82	51	0,55	5.0-6.0	4 / C10	VA7915	1/1
Anti-condensation heater with fan 300W, 110-240 Vac 50-60H	125	80	91	0,75	8.0-10	4 / C10	VA8300	1/1

All the heaters with PTC absorb a higher power than the rated one on inrush according to a transitory which lasts a few tenths of a second.

If the heaters are to be supplied by means of an auxiliary transformer, its apparent power must be sized taking 1.5 times the rated power of the heaters with natural aeration and twice those with forced ventilation into consideration.

IEC 890 method for calculating the effective cooling surface (CEI 17-43 method)

The total power dissipation P of an enclosure is linked to the exchange effective dissipating surface S, the ΔT difference between the inner and outer temperature and the k coefficient of heat exchange relative to the material of the enclosure:

 $P=k\ ^*\,\Delta T\ ^*\,S$

k = 5,5 for painted steel

 $\Delta T = T1-T2;$

 $T1 = \text{dew point temperature (on overage } 25^{\circ}\text{C})$

T2 = minimum ambient temperature.

The exchange surface S can be calculated using the following table taken from the CEI 17-43.

Disposition of the cabinet	Calculating the enclosure surface S (mm²)	Dimensions (m)
<u> </u>	S = 1,8 x H x (L+P) + 1,4 x L x P	
	S = 1,4 x L x (H+P) + 1,8 x P x H	
Left or right exposed structure	S = 1,4 x P x (H+L) + 1,8 x L x H	L = width
Left or right closed to a wall structure	S = 1,4 x H x (P+L) + 1,4 x L x P	H = height
Central exposed structure	$S = 1.8 \times L \times H + 1.4 \times L \times P + P \times H$	P = depth
Central closed to a wall structure	S = 1,4 x L x (H+P) + P x H	
Central closed to a wall structure, with covered roof	$S = 1,4 \times L \times H + 0,7 \times L \times P + P \times H$	

Using a SRN8630K box, in "for closed to a wall structures" case we will obtain:

T1 = 25 °C; T2 = 20 °C; K = 5,5; ΔT = (25-20) = 5 °C; S = 1,4 m^2

The total power dissipation P obtained will be:

 $P = k * \Delta T * S = 38.5 W$

The recommended heater is VA7950 (50W).

> Quick selection table page 3/5 > In-depth technical information page 7/1 > Overall dimensions page 8/1

Detached, exposed on all

For closed to a wall

Left or right exposed

Left or right closed to a wall structure

Central exposed

Central closed to a wall

Central closed to a wall

structure, with covered roof

structure

structures

structure



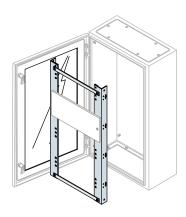
Temperature management

IP20 Thermostat

Conforms to EN 60730-1, CE and cURus standards, IP20 degree of protection. Grey RAL 7035 colour; electrical life 100,000 cycles. Dimensions (HxWxD) 68x29x45mm, can be mounted on DIN rail. The version with NO (normally open) contact allows closure of a circuit activating ventilation, air conditioning, or alarms. The version with NC (normally closed) contact allows opening of a circuit, disconnecting any anti-condensation resistances.

	Standard power supply V~/50-60Hz		Code		Package/ No. of pieces
NO ventilation thermostat	12-60 V d.c.; 110-250V a.c.	. 227	EN0101K		1/1
NC heating thermostat	12-60 V d.c.; 110-250V a.c.	<i>::U</i> 2:	EN0102K		1/1

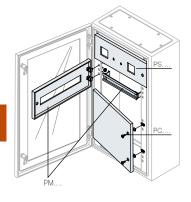
Standard power supply		Contact capacity		Temperature		
	V~/50-60Hz	Load Ω	Load L	scale	Type of contact	Weight
EN0101K	12-60 V d.c.; 110-250V a.c.	10A	2A	-10 +80 °C	NO	54g
EN0102K	12-60 V d.c.; 110-250V a.c.	10A	2A	-10 +80 °C	NC	54g



Frame for DIN rail

Internal supports for fixing modular panels and DIN rails, colour RAL 7035 orange peel.

	Dimensi	ons (mm)				Package/
Description	Н	W	Code	:		No. of pieces
Supports 14 mod. DIN x 2 rows	500	400	KD5040K			1/1
Supports 14 mod. DIN x 3 rows	600	400	KD6040K		; : :	1/1
Supports 25 mod. DIN x 4 rows	800	600	KD8060K			1/1
Supports 25 mod. DIN x 5 rows	1000	600	KD1060K			1/1
Supports 36 mod. DIN x 5 rows	1000	800	KD1080K		; : : :	1/1
Supports 25 mod. DIN x 6 rows	1200	600	KD1260K			1/1
Supports 36 mod. DIN x 6 rows	1200	800	KD1280K			1/1



Modular panels

Modular panels made of 12/10mm thick sheet steel painted RAL 7035 colour orange peel. The modular hinged panels can be mounted on the enclosures by using the special kit (KD...) consisting of functional uprights and compensation panel. The hinges patented by ABB, allow automatic earthing for panel contact when it is closed and are also suitable conventional earthing (with a cable). Each modular panel (PM) has a DIN rail provided (adjustable in depth), the fixing brackets and the relative small items. Modular and circuit-breakers and Tmax moulded-case circuit-breakers up to T3 can be placed side by side on the same DIN rail using the special depth adapter AP6001. To install moulded-case circuit-breakers, it is necessary to fix the DIN rail in a position towards the back. The fixing brackets of the DIN rail allow the wiring duct to be mounted up to a maximum size of 60 x 60 mm.

Modular ninged panels for modular	apparatus (L	JIN rall and 1	ixing brackets in	iciuaea)	
	Dimensions (mm)				Package/
Description	Н	W	Code		No. of pieces
14 mod. DIN + fixing bracket	185	400	PM1414K		1/1
25 mod. DIN + fixing bracket	185	600	PM1625K		1/1

PM1836K

Modular hinged panels for measuring instruments

185

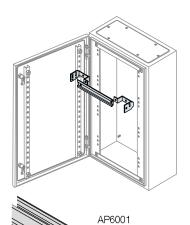
800

	Dimension	s (mm)			Package/
Description	Н	W	Code		No. of pieces
2 instruments 72 x 72mm	185	400	PS2476K		1/1
2 instruments 72 x 72mm	185	600	PS2676K		1/1
2 instruments 72 x 72mm	185	800	PS2876K		1/1

Modular hinged blind panels

36 mod. DIN + fixing bracket

	Dimensions (mm)				Package/
Description	Н	W	Code	; ;	No. of pieces
Blind panel	185	400	PC1406K		1/1
Blind panel	185	600	PC1606K		1/1
Blind panel	185	800	PC1806K		1/1
Blind panel	370	600	PC2606K		1/1
Blind panel	370	800	PC2806K		1/1



DIN rail and fixing brackets

Description	No. of modules	W (mm)	Code		Package/ No. of pieces
DIN rail and fixing brackets	14	400	GD4006		1/1
DIN rail and fixing brackets	25	600	GD6006		1/1
DIN rail and fixing brackets	36	800	GD8006		1/1
Depth adapter	•			•	
No.1 depth adapter for Tmax T1-T2-T3-XT1-XT3 W=600mm			AP6001		1/4

Polished flange for DIN-Rail mounting

Description	Code			Package/ No. of pieces
Polished flange for XT1 3P mounted on DIN rail	AD3301			1/1
Polished flange for XT1 4P mounted on DIN rail	AD3302	, , , , , , , , , , , , , , , , , , ,	;	1/1
Polished flange for XT3 3P mounted on DIN rail	AD3303			1/1
Polished flange for XT3 4P mounted on DIN rail	AD3304		<u>.</u>	1/1

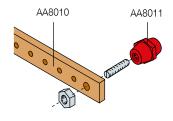
Already supplied in the DIN-Rail mounting kit for breakers in MCCBs catalogue



Door anti-closure device

It can't be mounted with the inner-door or with modular/blind panels mounted down in structure and hinged.

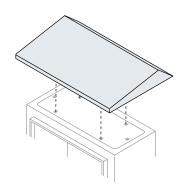
Description	Code	Package/ No. of pieces
Door anti-closure device	EV0015	1/4



Neutral or earthing busbars

The busbars, made of electrolytic copper with M6 threaded holes with 25 mm pitch, can be mounted on the back plates by means of the special supports. They must be sized according to the enclosure and the position they are installed in.

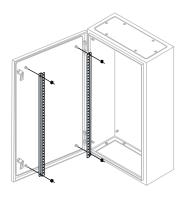
Description	W (mm)	Code		Package/ No. of pieces
No. 4 busbars sect. 20x5mm	1000	AA8010		1/4
No.5 support for busbar	•	AA8011		1/5



Spray protection roofs

To improve protection against entry of liquids and rain. Made of 15/10mm thick sheet steel, painted RAL 7035 colour orange peel.

Spray protection	ı roof		
Dimensions (mr			Package/
W	D	Code	Package/ No. of pieces
200	150	TT2015K	1/1
300	150	TT3015K	1/1
400	150	TT4015K	1/1
300	200	TT3020K	1/1
400	200	TT4020K	1/1
500	200	TT5020K	1/1
600	200	TT6020K	1/1
400	250	TT4025K	1/1
500	250	TT5025K	1/1
600	250	TT6025K	1/1
600	300	TT6030K	1/1
800	300	TT8030K	1/1



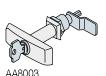
Shaped sections for accessories

These allow fixing of accessories (e.g. wiring ducts) inside the blind doors. They consist of a pair of vertical crosspieces made of 15/10mm thick white galvanised sheet, pre-drilled with 25 mm pitch. In the enclosures with 1000 and 1200 mm height with blind door, the shaped sections are already provided.

	Dimensions (mm)			Package/
Description	H	Code		No. of pieces
No. 2 shaped sections for door	600	TS6009		1/2
No. 2 shaped sections for door	700	TS7009		1/2
No. 2 shaped sections for door	800	TS8009		1/2





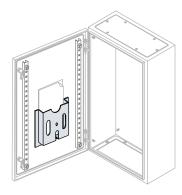




Closing systems

These can replace the standard closures of the external doors. The inserts are interchangeable and easily replaced by loosening a single nut.

Description	Code	Package/ No. of pieces
Box Ø 19 mm double tongue and plastic key (spare part)	AA8001	1/1
Box Ø 19 mm with security insert and Yale type key	AA8002	1/1
Box Ø 19 mm with handle and Yale type key	AA8003	1/1
Box Ø 19 mm with triangular insert	AA5200	1/1
Plastic key for triangular insert AA5200	AA5190	1/1
Ergonomic box complete with double tongue insert	EV1008	1/1
Single code Yale insert	EV1036	1/1
Ronis 455 insert for	EV1037	1/1
3mm Double tongue insert	EV1039	1/1



Document pocket RAL 7035

Made of plastic, RAL 7035 colour, A4 size. The pocket can be glued inside the blind door with a width of more than 400 mm, using the adhesives provided.

Description	Code	Package/ No. of pieces
Plastic document pocket for A4	EV1075K	1/1

Special Painting Service

Special painting service has to manage with code of enclosure SRN....SPEC (e.g. SRN4320SPEC VERNSR + note about color required). It is necessary specify the color required in the order. Minimum order quantity 4 pieces. For any other component or further information, please contact you local sales network.

Description	Code	7	Package/ No. of pieces
Extra cost for special SR painting	VERNSR		

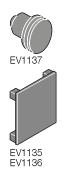
See page 8/13 for the colours available.

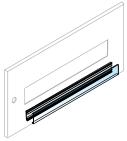


Accessories for DIN panel

Hole covering strip RAL7035 colour

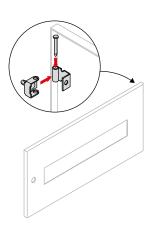
Description	Code		Package/ No. of pieces
No.10 hole covers W=2000mm, grey	AD1086		1/10
No.3 hole covers 24 DIN modules W=600mm	AD1088		1/3
No.3 hole covers 36 DIN modules W=800mm	AD1089		1/3





AD1101-AD1102 AD1103-AD1104





Closing plug for instrument holder panels

Description	Code		Package/ No. of pieces
No.10 closing plug for instrument holder panels 72x72mm	EV1135		1/10
No.5 closing plug for instrument holder panels 96x96mm	EV1136		1/5
No.50 tappi di chiusura per pulsanti Ø22mm	EV1137		1/50

Adhesive name label holders

Description	Dimensions (mm) W	Code		Package/ No. of pieces
No. 20 label holders 18 DIN mod	325	EH2118		1/20
No. 20 label holders 29 DIN mod	525	EH2129		1/20
No. 20 label holders 24 DIN mod	432	AD1600		1/20
No. 20 label holders 36 DIN mod	634	AD1800		1/20

Etichette scrivibili con sistema Grafoplast compatibile

Description	No. of DIN mod.	Code		Package/ No. of pieces
No. 288 labels 1 DIN mod.	1	AD1101		1/288
No. 192 labels 2 DIN mod.	2	AD1102		1/192
No. 96 labels 3 DIN mod.	3	AD1103		1/96
No. 96 labels 4 DIN mod.	4	AD1104		1/96

Hinges and quick closures for panels

Description	Code	:	Package/ No. of pieces
No. 10 hinges for panels	EH1889 (1)		1/10
No. 5 quick closures for front panels	EH1890		1/5

 $^{^{(1)}}$ Use No.2 hinges for panel H=150/200/300/400mm, No.3 hinges for panel H=500/600mm.





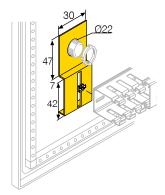


Marking

Description	Code		Package/ No. of pieces
No.5 adhesive labels ABB-IS2 W=1000mm	EV1157		1/5
No.490 adhesive labels Ø 12mm N symbol	EV1150		1/490
No.490 adhesive labels Ø 12mm L1symbol	EV1151		1/490
No.490 adhesive labels Ø 12mm L2 symbol	EV1152		1/490
No.490 adhesive labels Ø 12mm L3 symbol	EV1153		1/490
No.490 adhesive labels Ø 12mm T symbol	EV1154		1/490
No.10 triangular adhesive labels 125mm with 400V lightning arrow symbol	EV1155		1/10
No.100 triangular adhesive labels 50mm with light- ning arrow symbol	EV1156		1/100

Screws for apparatus

Description	Code		Package/ No. of pieces
No.1000 perforating screws 4.2x13mm cross slotted head	EV1100		1/1000
No.1000 perforating screws 4.2x19mm cross slotted head	EV1101		1/1000
No.50 trilobed screws M6 L=10mm	AD1033		1/50



Wiring duct support brackets

Description	Code	Package/ No. of pieces
No. 100 wiring duct support brackets on upright structure	EV1131	1/100

Spare parts

Description	Code	Package/ No. of pieces
Ergonomic box complete with double tongue insert (without tongue)	EV1008	1/1
N. 10 hings for SR2 enclosures + countersunk rivets	AA1204	1/1
N. 16 screws and nuts M6x14 for flange	AA1203	1/2
N. 2 fairlead plates for SRN3215K	FLN3215K	1/2
N. 2 fairlead plates for SRN3315K-SRN4315K	FLN3315K	1/2
N. 2 fairlead plates for SRN3415K	FLN3415K	1/2
N. 2 fairlead plates for SRN4320K-SRN5320K	FLN4320K	1/2
N. 2 fairlead plates for SRN4420K-SRN5420K-SRN6420K	FLN4420K	1/2
N. 2 fairlead plates for SRN5425K-SRN6425K	FLN4425K	1/2
N. 2 fairlead plates for SRN4620K	FLN4620K	1/2
N. 2 fairlead plates for SRN6625K-SRN8625K-SRN10625K	FLN6625K	1/2
N. 2 fairlead plates for SRN7520K	FLN7520K	1/2
N. 2 fairlead plates forr SRN7525K	FLN7525K	1/2
N. 2 fairlead plates for SRN8630K-SRN10630K-SRN12630K	FLN8630K	1/2
N. 2 fairlead plates for SRN8830K-SRN10830-SRN12830K	FLN8830K	1/2
Blind door 1000x600mm (hxl)	PRN1066K	1/1
Blind door 1000x800mm (hxl)	PRN1086K	1/1
Blind door 1200x600mm (hxl)	PRN1266K	1/1
Blind door 1200x800mm (hxl)	PRN1286K	1/1
Blind door 300x200mm (hxl)	PRN3026K	1/1
Blind door 300x300mm (hxl)	PRN3006K	1/1
Blind door 300x400mm (hxl)	PRN3046K	1/1
Blind door 400x300mm (hxl)	PRN4036K	1/1
Blind door 400x400mm (hxl)	PRN4046K	1/1
Blind door 400x600mm (hxl)	PRN4066K	1/1
Blind door 500x300mm (hxl)	PRN5036K	1/1
Blind door 500x400mm (hxl)	PRN5046K	1/1
Blind door 600x400mm (hxl)	PRN6046K	1/1
Blind door 600x600mm (hxl)	PRN6066K	1/1
Blind door 700x500mm (hxl)	PRN7056K	1/1
Blind door 800x600mm (hxl)	PRN8066K	1/1
Blind door 800x800mm (hxl)	PRN8086K	1/1
Glazed door 1000x600mm (hxl)	PTN1066K	1/1
Glazed door 1000x800mm (hxl)	PTN1086K	1/1
Glazed door 1200x600mm (hxl)	PTN1266K	1/1
Glazed door 1200x800mm (hxl)	PTN1286K	1/1
Glazed door 500x400mm (hxl)	PTN5046K	1/1
Glazed door 600x400mm (hxl)	PTN6046K	1/1
Glazed door 700x500mm (hxl)	PTN7056K	1/1
Glazed door 800x600mm (hxl)	PTN8066K	1/1



Painting Special Service

Description	Code	Package/ No. of pieces
Extra cost for special SR painting	VERNSR	

Standard size enclosures, standard colour

Special painting service with standard colour (for available colours, see page 8/13) for standard size enclosures in quantities equal to or greater than 4 units with single code to be managed with code SRN ... SPEC + VERNSR overprice equal to the number of enclosures + colour note to be specified in the order.

Example: SRN4320SPEC 4 VERNSR 4 **COLOUR NOTE**

Standard size enclosures, non-standard colour

Request feasibility of implementation by completing the relevant Form for special quotations and send it to the R&D ECS office.

Management is per offer.

If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer with the following features:

Example: SRN4320SPEC 4 VERNSR

OFFER REFERENCE IN THE ORDER

Non-standard size enclosures, standard colour

Request feasibility of implementation by completing the relevant Form for special quotations and send it to the R&D ECS office.

Management is per offer.

If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer, that will not be SRN...SPEC, but dummy ones:

Always remember to indicate the offer reference in the order.

Non-standard size enclosures, non-standard colour

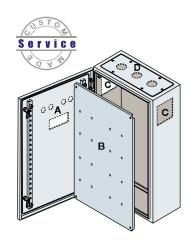
Request feasibility of implementation by completing the relevant Form for special quotations and send it to the R&D ECS office.

Management is per offer.

If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer, that will not be SRN...SPEC, but dummy ones:

Always remember to indicate the offer reference in the order.

Please note that the minimum quantity is four pieces with a single code.



Special Drilling Service

The overprice amount depends on the number of individual drilled parts and not on the number of holes. For single part it means: A-door B-plate; C-housing; D-top/bottom part.

Please note that the minimum quantity is 4 pieces with a single code.

The price of the special drilling service depends on the number of parts to be drilled and on the amount of enclosures to be drilled.

Description	Code	No. of enclosures to be drilled
Raise for single drilled part (A-B-C-D)	FORSR1	4-5-6
Raise for single drilled part (A-B-C-D)	FORSR2	7-8-9
Raise for single drilled part (A-B-C-D)	FORSR	≥ 10

Standard size enclosures with special drilling

The special drilling service for standard size enclosures in quantities equal to or greater than 4 units with a single code has to be managed with code SRN ... SPEC + overprice FORSR/FORSR1/FORSSR2 (see table) equal to the number of enclosures and the number of parts to be drilled + hole layout to be attached to the order (see useful drilling areas, page 9/49)

Example: Enclosure (4 pcs) with door to be drilled (1 part)

Example: Enclosure (4 pcs) with door and plate to be drilled (1 parts)

SRN4320SPEC FORSR1 4 DRAWINGS TO BE ATTACHED

Example: Enclosure (4 pcs) with door and plate to be drilled (2 parts)

SRN4320SPEC 4 FORSR1 8

DRAWINGS TO BE ATTACHED

Non-standard enclosure sizes, special drilling

Request feasibility of implementation by completing the relevant Form for special quotations and send it together with the drill layout to the R&D ECS office.

Management is per offer.

If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer, that will not be SRN...SPEC, but dummy ones.

Always remember to indicate the offer reference in the order.

Ricordarsi sempre di indicare nell'ordine il riferimento dell'offerta.

SR2 EMC Enclosures General characteristics and ordering codes

The range of SR2 Enclosures EMC (Electromagnetic Compatibility) version has undergone shielding efficiency tests with success according to the MIL STD 285: 1956 Standard.

This series of products is suitable for making small and mediumsized electric switchboards for automation, operation and control. The electromagnetic compatibility problem also requires attention when selecting enclosures and cabinets.

The increased number of components in the operation and regulation electronics and the high processing speeds of signals increasingly often leave a possibility of introducing errors which can be attributed to electromagnetic interference.

These interferences may be caused continuously, periodically or at random, from internal or external sources, which generate electric, magnetic or electromagnetic fields.

The suitability tests according to MIL STD 285: 1956 ("Attenuation measurements for enclosures, electromagnetic shielding, for electronic test purposes, method of") have confirmed conformity of the SR2 EMC enclosure with the requirements of the standard. The attenuation level (measured in dB) remains at high levels for a wide spectrum of frequencies (from 30MHz to 10GHz).

The SR2 EMC galvanized sheet enclosures are painted externally with orange peel RAL 7035 colour.

Furthermore, they do not have cable entry flanges on the roof and on the base.

Technical characteristics

Conformity with the Standard		IEC 62208
Degree of protection		IP54 (IEC 60529)
Degree of mechanical strength		IK10 blind door
		(IEC 62262)
Type of material		Metallic
Installation site		Indoors
Fixing method		floor/wall
Normal service conditions ambient temperature		from –5 up to +40°C
Operating climate (t°/Ur%)	costant	23°C/83% - 40°C/93%
	variable	23°C/98% - 40°C/98%