



MPGAMMA

STEEL FACTOR

www.mpgamma.com

JUNCTION BOXES

BOXES

PUSH-BUTTON PANELS



MPGAMMA



STEEL FACTOR

Knowledge and continuous learning: factors that feel and live at any time of the day, to ensure and increase the commitment to look beyond the borders.

MPGAMMA, with a strong industrial tradition, is one of the most significant production companies of stainless steel boxes within the national and European panorama.

The continuous research and the constant orientation to new manufacturing technologies materialize in the realization of each single product.

Investment, company and product certification are the business card of an organized and solid company.

All of our logistics and production processes place themselves one goal: **the balance.**

The perfect interplay between investments, technology and experience generates a quality product.

The qualitative certifications are the key to ensure the highest safety to our customers.



MPGAMMA

STEEL FACTOR

QUALITY
TECHNOLOGY
EXPERIENCE





QUALITY CERTIFICATION: UNI EN ISO 9001: 2008

QUALITY OF SERVICE

- customization of the product, drilling and pre-processing
- special products on customer's drawing
- high flexibility
- short delivery times
- wide availability of stock
- direct distribution in the whole national and international territory
- ability to meet all customer needs.



PRODUCT QUALITY

- AISI 304L stainless steel DIN EN 1.4307 X 2 CrNi 18-09 / AISI 316L DIN EN 1.4404 X2 CrNiMo 17-12-2
- TIG, MIG, CMT welding with a high level of finishing
- all stainless steel accessories
- scratch-resistant protection of the sheet metal and safe packaging
- in compliance with the latest sanitary guidelines for the food industry.

QUALITY OF ORGANIZATION

- production carried out in accordance with international standards UNI EN ISO 9001
- process management in total quality
- qualification of the raw material
- broad and flexible production program
- fully automated production systems
- advanced production technologies.





OUR PRODUCT CERTIFICATIONS



STANDARD UL 508A; UL 50 ENCLOSURE TYPE

UL Underwriter Laboratory is an independent American organization of Certification and Control.

Among his "STANDARD" regulations the one that is applied on enclosures is UL 508A and 50.

Canadian standards CSA C22.2 No. 14-2005 and C22.2 No 94-M91 are harmonized to UL 508A and 50 so cULus logo applies to both the countries.

The performance level (accordingly the degree of protection from external agents) is classified by type according to NEMA as the below list:

Type	1	12	4	4X
Access to dangerous parts	X	X	X	X
Fall of dirt	X	X	X	X
Water entry and light splashes		X	X	X
Circulating dust, lint, fibers and flying objects		X	X	X
Dust, lint, fibers and flying objects		X	X	X
Infiltrations of oil and coolant		X		
Water splashes and watering			X	X
Water entry (rain, snow, hail)			X	X
Dust and objects carried by the wind			X	X
Water entry			X	X
Corrosive agents				X

The compliance with UL 508A and 50 does not require the application of a serial number, but has no certification value it means only that the manufacturer has undertaken independently to verify that his own construction standards comply with the relevant regulations.

It is not possible to self-certify a type, but to produce only a declaration. Only the official UL serial number (which must be applied inside the box) and the relative file number attest the authenticity of the certification. There is not the possibility of a specific comparison between UL type and IP indexes.



ATEX DIRECTIVE 2014/34/EU: PROTECTION EQUIPMENTS AND SYSTEMS FOR AREAS POTENTIALLY EXPLOSIVE

The enclosures of our production can be used in area with risk of explosion classified according to ATEX Directive 2014/34 / EU.

They are suitable for electric or non-electric use, empty or wired, in the presence of dust or of explosive gases.

For any information contact our technical department.



EN 62208 STANDARD: EMPTY ENCLOSURES FOR LOW TENSION HOUSINGS

The added value of the empty housing guarantees more protection on its contents.

The protection levels are regulated by EN 62208 and are classified in degrees.

The degrees are identified by letters IP followed by two numbers to which can be added 2 letters indicating the degree of protection against people or other characteristics there is a variation in the application of degrees 7, 8 and 9 relating to the penetration of liquids: not always these degrees imply the suitability also for the lower ones (which occurs from the IP degree x 6 towards the lower levels).



IP PROTECTION DEGREE ACCORDING TO EN 60529 EN ISO 20653
 PROTECTION AGAINST IMPACTS IK DEGREE ACCORDING TO EN 62208

IP GRADE: 1 st DIGIT PENETRATION OF SOLIDS			IP GRADE: 2 nd DIGIT PENETRATION OF LIQUIDS			IK GRADE: PROTECTION AGAINST EXTERNAL MECHANICAL IMPACTS		
0	Not protected		0	Not protected		IK00	Not protected	
1	Protected against solid bodies with a diameter of more than 50 mm Ø		1	Protected against vertically falling drops		IK01	Protected against impact energy 0,15 J	
2	Protected against solid bodies with a diameter of more than 12 mm Ø		2	Protected against drops at an angle of up to 15° from the vertical		IK03	Protected against impact energy 0,35 J	
3	Protected against solid bodies with a diameter of more than 2,5 mm Ø		3	Protected against rain at an angle of up to 60° from the vertical		IK05	Protected against impact energy 0,7 J	
4	Protected against solid bodies with a diameter of more than 1 mm Ø		4	Protected against splashes of water		IK06	Protected against impact energy 1 J	
5	Protected against dust		5	Protected against jets of water from any direction		IK07	Protected against impact energy 2 J	
6	Totally protected against dust		6	Protected against waves		IK08	Protected against impact energy 5 J	
ADDITIONAL LETTER**			7	Protected against the effects of immersion		IK09	Protected against impact energy 10 J	
A Protected against access with the back of the hand.			8	Protected against the effects of long term immersion		IK10	Protected against impact energy 20 J	
B Protected against access with finger.			9K	Protected against high pressure washing jets or water vapor from all directions				
C Protected against access with a tool.								
D Protected against access with a wire.								

** Optional letter indicating the protection rating against persons. To be used only if the protection against access to hazardous parts is above those indicated by the first digit or if only protection against access to hazardous parts is indicated and the first digit is replaced by an X.



METAL FEATURES

SURFACE ROUGHNESS

The roughness surface of a material is, together with its chemical composition, key element in the corrosion resistance and for its cleanliness.

The standard surface finish of MPGAMMA products is obtained from subsequent processes that make less wrinkled the surface, until to reach a level of Ra coefficient <0.35 microns.

The technical and commercial definition of this finish is "Fine Scotch-brite finish".

Other surface finishes are available on request with different levels of roughness among which the most used are:

- 240-grit paper (or other grit paper) Finish.
- Mirror polished Finish (or BA).
- Micropeened Finish.
- Electropolished Finish.



RESISTANCE OF BOXES TO CORROSION

	F430 type ferritic Cr-steel	304 type austenitic Cr-Ni	316 type austenitic Cr-Ni-Mo steel
acetylene (commercial)	●	●	●
vinegar	●	●	●
vinegar (vapours)	●	●	●
acetone 100% at 100°C	●	●	●
acetic acid up to 20%	●	●	●
boric acid 5%	●	●	●
butyric acid 5%	●	●	●
hydrocyanic acid 100%	○	●	●
citric acid 5%	●	●	●
hydrochloric acid (all concentrations)	○	○	○
chromic acid 5%	●	●	●
hydrofluoric acid (all concentrations)	○	○	○
phosphoric acid 5%	●	●	●
lactic acid 5%	●	●	●
linoleic acid 100% up to 100°C	●	●	●
malic acid 10-40% up to 50°C	●	●	●
muratic acid (commercial)	○	○	○
nitric acid up to 10% at 80°C	●	●	●
oleic acid 100%	●	●	●
oxalic acid 5%	●	●	●
picric acid (all concentrations)	●	●	●
wet sulphidic acid 100% (hydrogen sulphide)	○	●	●
boiling sulphuric acid 5%	○	○	○
fuming sulphuric acid (oleum) 50°C	●	●	●
sulphurous acid 100%	○	●	●
stearic acid 100% up to 100°C	●	●	●
tartaric acid 10% at 100°C	●	●	●
soft water	●	●	●
hydrogen dioxide 10-30%	●	●	●
white spirit	●	●	●
ethyl alcohol (all concentrations)	●	●	●
methyl alcohol 100%	●	●	●
melted aluminium	○	○	○
ammonia 100% (dry)	●	●	●
acetic anhydride 100%	○	●	●
carbon dioxide 100% (dry)	●	●	●
sulphur dioxide 90%	○	○	●
aniline 100%	●	●	●
tanning bath	●	●	●
chromium plating bath	●	●	●
fixing bath	○	○	○
developer bath	●	●	●
gasoline	●	●	●
cold and hot benzol	●	●	●
sodium bicarbonate (all concentrations)	●	●	●
beer	●	●	●
sodium disulphate 15% at 85°C	○	○	○
carbon bisulphide 100%	●	●	●
hot borax 5%	●	●	●
butane	●	●	●
boiling coffee	●	●	●
saturated chlorine water	○	○	●
camphor	●	●	●
sodium carbonate 5% up to 65°C	●	●	●
hot and cold sodium citrate (all concentrations)	●	●	●
chloroform 100%	●	●	●
ammonium chloride 1%	●	●	●
ferric chloride 5-50%	○	○	○
ferrous chloride 10-20%	○	○	○
magnesium chloride up to 20%	●	●	●
mercury chloride 10%	○	○	○
nickel chloride 10-30%	○	○	○
potassium chloride 1-5%	●	●	●
sodium chloride 5% (not agitated)	●	●	●

- No corrosion in optimal conditions of use in contact with the substances considered.
- Possibility of corrosion when in contact with the substances considered.
- Corrosion when in contact with the substances considered.

	F430 type ferritic Cr-steel	304 type austenitic Cr-Ni	316 type austenitic Cr-Ni-Mo steel
zinc chloride	●	●	●
sulphur chloride 100% at boiling temperature	○	●	●
coca cola (pure syrup)	●	●	●
ether 100%	●	●	●
formaldehyde 100%	●	●	●
ammonium phosphate 10%	●	●	●
sodium phosphate at all concentrations	●	●	●
furfural 100% at boiling temperature	●	●	●
wet chloride gas	○	○	○
coke-oven gas	●	●	●
gelatine	●	●	●
glycerol at all concentrations	●	●	●
ethyl glycol 100%	●	●	●
glucose	●	●	●
shellac	●	●	●
ammonium hydroxide up to 40%	●	●	●
calcium hydroxide up to 10% up to 100°C	●	●	●
magnesium hydroxide 10% up to 100°C	●	●	●
potassium hydroxide up to 50%	●	●	●
sodium hydroxide up to 20%	●	●	●
calcium hypochlorite 100%	○	●	●
sodium hypochlorite 100%	○	●	●
milk (fresh or acid)	●	●	●
yeast	●	●	●
mayonnaise	●	●	●
molasses	●	●	●
mustard	●	●	●
ammonium nitrate 10-50%	●	●	●
sodium nitrate 10-40%	●	●	●
hot and cold mineral oil	●	●	●
hot and cold vegetable oil	●	●	●
hot and cold paraffin	●	●	●
sodium perborate 10% up to 100°C	●	●	●
hydrogen peroxide 10%	●	●	●
sodium peroxide 10% up to 100°C	●	●	●
melted lead	○	●	●
propane	●	●	●
soap	●	●	●
sugar syrup at all concentration	●	●	●
whey	●	●	●
sodium silicate up to 100% up to 100°C	●	●	●
aluminium sulphate 10%	●	●	●
ammonium sulphate 10%	●	●	●
ferric sulphate 10%	●	●	●
ferrous sulphate 10-40%	●	●	●
magnesium sulphate 10-40%	●	●	●
nickel sulphate 30%	●	●	●
potassium sulphate 10% up to 100°C	●	●	●
copper sulphate 10%	●	●	●
sodium sulphate 10%	●	●	●
zinc sulphate 10%	●	●	●
sodium sulphide 10%	○	●	●
concentrated orange juice	●	●	●
concentrated lemon juice	●	●	●
carbon tetrachloride 10%	○	○	○
sodium thiosulphate 10-60% up to 100°C	●	●	●
toluol	●	●	●
trichloroethylene 100% up to 100°C	●	●	●
paints	●	●	●
wine	●	●	●
whisky	●	●	●
melted zinc	○	○	○
melted sulphur	●	●	●

SOLID DOOR BOX

CPN SERIES



Watertight boxes in AISI 304L (1.4301) complete of:

- Body with welded and finished corners.
- 120° minimum door opening with stainless steel inner hinges, locks with stainless steel double wing insert, welded and finished corners. (Model CPN1206030 is supplied with No. 02 reversible hinged doors without central upright).
- Polyurethane sealing gasket with robotized application.
- Galvanized mounting plate 20/10 thick.
- Stainless steel screws.
- M6x16 stainless steel inner threaded stud bolts for earthing on the door on the body of the box.
- M6 inner threaded spacers on the body for wiring plate fixing.
- Fine satin external finishing medium scotch Brite type.
- Sheet metal thickness of body and door between 12/10mm and 20/10mm depending on box dimensions.
- Rear prearrangement for wall fixing with M6 blind threaded holes.
- **Protection degree IP 66 IP67 IP69K IK10 certified by TUV in accordance with EN62208** (for 1-door boxes).
- Protection degree Type 1, 12, 4, 4X (cULus mark) in accordance with UL50, 508A, 746C and CSA 22,2 no. 14,94 (on demand) for 1-door boxes.
- Suitable for using in potentially explosive atmosphere (Group -II-, Category-3-, Zone-22,2-) with the application of the accessory KIT-ATEX-CPN-2-22.

Item	External dimensions			Wiring plate		Features		
	W	H	D	X	Y	Closing points No.	Fixing points No	Hinges No.
CPN303021	300	300	210	240	266	1	4	2
CPN303821	300	380	210	240	346	1	4	2
CPN304521	300	450	210	240	416	2	4	2
CPN383021	380	300	210	346	240	1	4	2
CPN383821	380	380	210	320	346	1	4	2
CPN386021	380	600	210	320	566	2	4	2
CPN405021	400	500	210	340	466	2	4	2
CPN453021	450	300	210	416	240	1	4	2
CPN454521	450	450	210	390	416	2	4	2
CPN454525	450	450	250	390	416	2	4	2
CPN456021	450	600	210	390	566	2	4	2
CPN456025	450	600	250	390	566	2	4	2
CPN507025	500	700	250	440	666	2	4	2
CPN603821	600	380	210	566	320	1	4	2
CPN604525	600	450	250	566	390	2	4	2
CPN606021	600	600	210	540	566	2	4	2
CPN606025	600	600	250	540	566	2	4	2
CPN606030	600	600	300	540	566	2	4	2
CPN607521	600	750	210	540	716	2	4	2
CPN607525	600	750	250	540	716	2	4	3
CPN607530	600	750	300	540	716	2	4	2
CPN609030	600	900	300	540	866	2	4	3
CPN6012030	600	1200	300	540	1166	2	6	3
CPN757530	750	750	300	690	716	2	4	3
CPN7510030	750	1000	300	690	966	2	6	3
CPN8012030	800	1200	300	740	1166	2	6	3
CPN906030	900	600	300	866	540	2	6	3
CPN10010030	1000	1000	300	940	966	2	6	3
CPN10012030	1000	1200	300	940	1166	2	6	3
CPN1206030*	1200	600	300	1166	540	2	6	2

* No. 02 hinged doors version



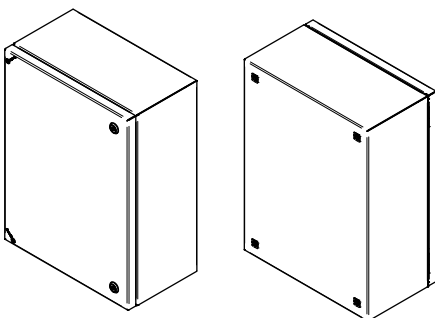
Certifications and marks



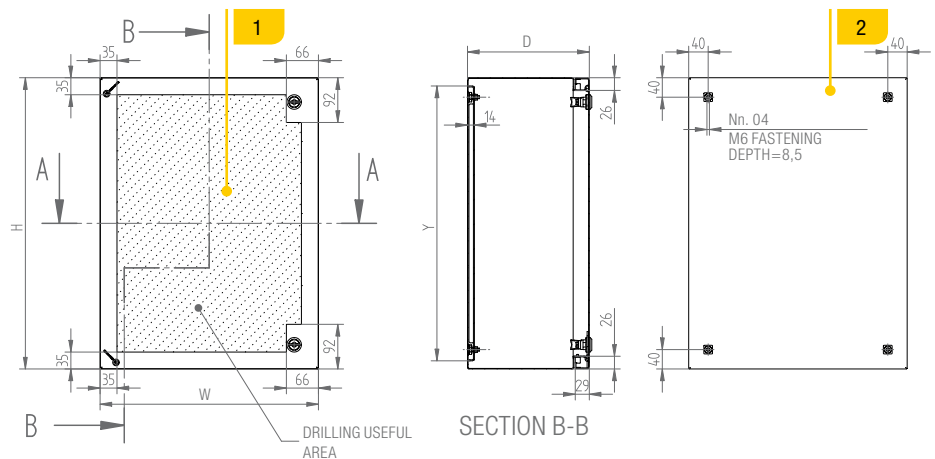
TYPE 1, 12, 4, 4X IP66-IK10
IP67-IK10
IP69K-IK10

Material

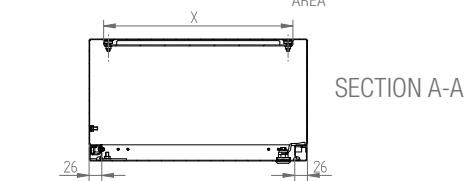
AISI 304L (WNR 1.4307)
AISI 316L (WNR 1.4404) on demand



1. Front View.
2. Rear View.

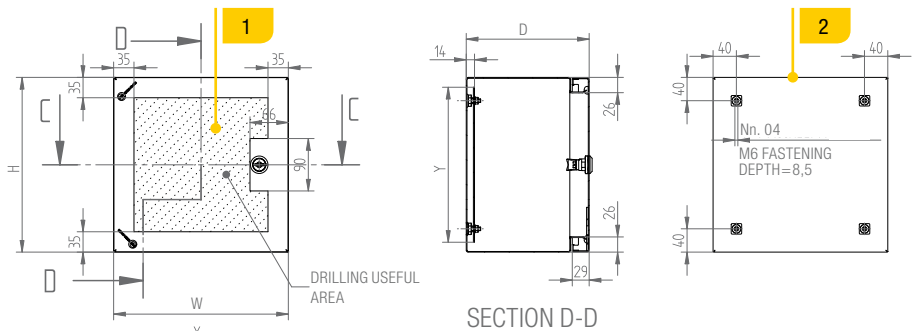


SECTION B-B

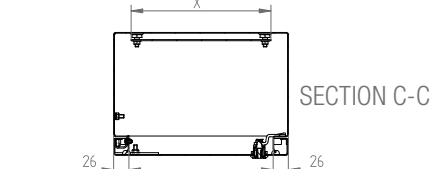


SECTION A-A

NO. 02 CLOSING POINTS VERSION



SECTION D-D



SECTION C-C

NO. 01 CLOSING POINT VERSION

TRANSPARENT DOOR BOX

CLN SERIES



Watertight boxes in AISI 304L (1.4301) complete of:

- Body with welded and finished corners.
- 120° minimum door opening with transparent panel in shockproof Lexan.
- External door with stainless steel inner hinges, locks with stainless steel double wing insert, welded and finished corners.
- Polyurethane sealing gasket with robotized application.
- Galvanized mounting plate 20/10 thick.
- Stainless steel screws.
- M6x16 stainless steel inner threaded stud bolts for earthing on the door on the body of the box.
- M6 inner threaded spacers on the body for wiring plate fixing.
- Fine satin external finishing medium scotch Brite type.
- Sheet metal thickness of body and door between 12/10mm and 20/10mm depending on box dimensions
- Prearrangement for inner door mounting kit
- Prearrangement for modular switches mounting kit.
- Without inner door kit (Part no. KCP to be ordered separately).
- Without panels for modular switches (part no. KCPM to be ordered separately).
- Rear prearrangement for wall fixing with M6 blind threaded holes.
- **Protection degree IP 66 IP69K IK10 certified by TUV in accordance with EN62208.**
- Protection degree Type 1, 12, 4, 4X (cULus mark) in accordance with UL50, 508A, 746C and CSA 22,2 no. 14,94 (on demand) for 1-door boxes.
- ATEX-CPN-2-22 kit for using in potentially explosive atmosphere (Group-II-, Category-3-, Zone-22,2) to use with laminated glass window.

Item	External dimensions			Wiring plate		Features		
	W	H	D	X	Y	Closing points No.	Fixing points No	Hinges No.
CLN303021	300	300	210	240	266	1	4	2
CLN303821	300	380	210	240	346	1	4	2
CLN304521	300	450	210	240	416	2	4	2
CLN383021	380	300	210	346	240	1	4	2
CLN383821	380	380	210	320	346	1	4	2
CLN386021	380	600	210	320	566	2	4	2
CLN405021	400	500	210	340	466	2	4	2
CLN453021	450	300	210	416	240	1	4	2
CLN454521	450	450	210	390	416	2	4	2
CLN454525	450	450	250	390	416	2	4	2
CLN456021	450	600	210	390	566	2	4	2
CLN456025	450	600	250	390	566	2	4	2
CLN507025	500	700	250	440	666	2	4	2
CLN603821	600	380	210	566	320	1	4	2
CLN604525	600	450	250	566	390	2	4	2
CLN606021	600	600	210	540	566	2	4	2
CLN606025	600	600	250	540	566	2	4	2
CLN606030	600	600	300	540	566	2	4	2
CLN607521	600	750	210	540	716	2	4	2
CLN607525	600	750	250	540	716	2	4	2
CLN607530	600	750	300	540	716	2	4	2
CLN609030***	600	900	300	540	866	2	4	3
CLN6012030***	600	1200	300	540	1166	2	6	3
CLN757530***	750	750	300	690	716	2	4	3
CLN7510030***	750	1000	300	690	966	2	6	3
CLN8012030***	800	1200	300	740	1166	2	6	3
CLN906030***	900	600	300	866	540	2	6	3



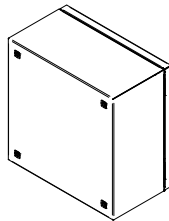
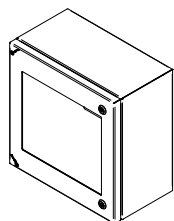
Certifications and marks



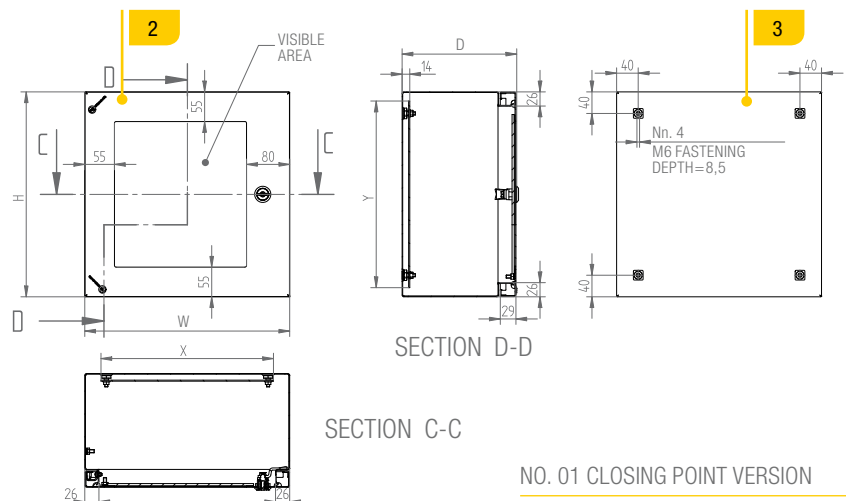
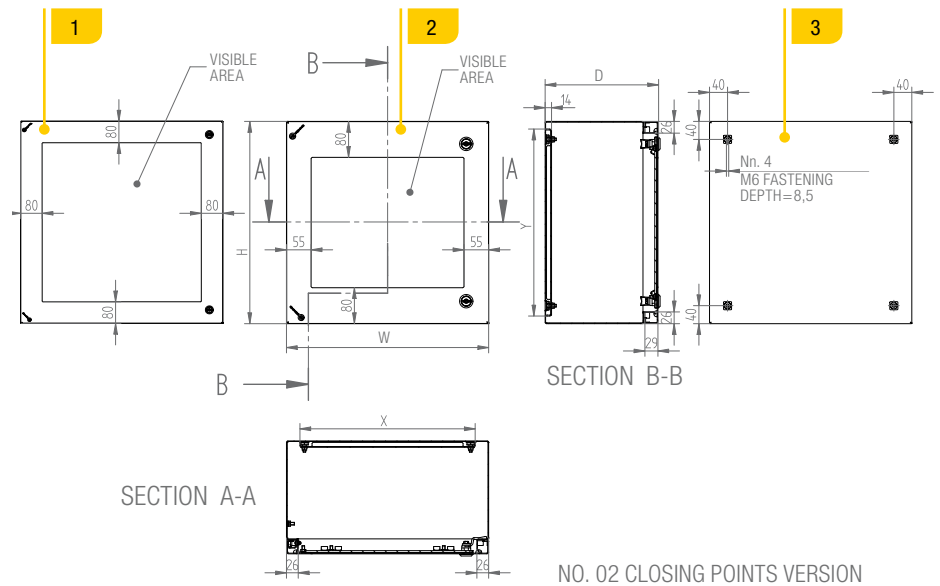
TYPE 1, 12, 4, 4X IP66-IK10
IP69K-IK10

Material

AISI 304L (WNR 1.4307)
AISI 316L (WNR 1.4404) on demand



- 1. Models Front View. ***
- 2. Front View.
- 3. Rear View.





ACCESSORIES CPN/CLN SERIES

ACCESSORIES FOR CPN SERIES

- Standard wall fixing kit part no. CACPNO13 composed by no. 04 brackets and stainless steel screws.
- ATEX-CPN-2-22 kit for using in potentially explosive atmosphere (Group-II-, Category-3-, Zone-22,2-).
- Body and door drilling on drawing.
- Conductive or silicone seals resistant from -50°C to +180°C.
- Special dimensions.
- Made of AISI 316L or other special steels.
- cULus mark as per UL50, 508A, 746C and CSA 22,22 no. 14,94 (on demand).
- "Standard", "vip" or "Hygienic" rain protection roof.
- Removable flanges for cable inlet.
- Gas springs for upwards opening.
- Door blocking system in open position.
- Transparent protective door with whole or partial sizes.
- Aeration systems with plastic and S/S grids with protection level up to IP55.
- Hinged inner door kit.
- Modular switches mounting kit.
- Kit pair of supporting DIN bar brackets with depth adjustable, part no. KSDIN.
- Plastic diagram pocket.
- Other types of inserts or closing handles.
- Generic accessories (bolts and screws, nuts, earth stickers, yellow-green earth wires).
- Sanitary locks without gaps in accordance to DIN EN1672-2 and DIN EN14159.

ACCESSORIES FOR CLN SERIES

- Standard wall fixing kit part no. CACPNO13 composed by no. 04 brackets and stainless steel screws.
- Drilling on drawing.
- Laminated glass instead of LEXAN panel.
- Conductive or silicone seals resistant from -50°C to +180°C.
- Special dimensions.
- Made of AISI 316L or other special steels.
- cULus mark as per UL50, 508A, 746C and CSA 22,22 no. 14,94 (on demand).
- "Standard", "vip" or "Hygienic" rain protection roof.
- Removable flanges for cable inlet.
- Door blocking system in open position.
- Aeration systems with plastic and S/S grids with protection level up to IP55.
- Plastic diagram pocket.
- Other types of inserts or closing handles.
- Generic accessories (bolts and screws, nuts, earth stickers, yellow-green earth wires).
- Sanitary locks without gaps in accordance to DIN EN1672-2 and DIN EN14159.
- Hinged inner door Kit part no. KCPN.
- Modular switches mounting kit part no. CLNMOD.
- Pair of supporting DIN bar brackets with depth adjustable, part no. KSDIN.
- ATEX-CPN-2-22 kit for using in potentially explosive atmosphere (Group-II-, Category-3-, Zone-22,2) to use with laminated glass window.



ACC016 - ACC018



ACC016_Q



ACC016_T



ACC016_IG



IP66 Wall fixing kit



Plastic diagram pocket



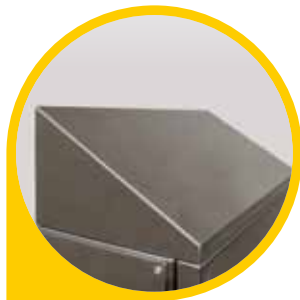
Lexan transparent protection door



Rain protection roof "vip" series



Rain protection roof "standard" series



Rain protection roof "hygienic" series



Labyrinth Filter systems with stainless steel cap



Inner door kit



Door blocking device for door in open position



Couple of support brackets DIN rail



Modular switches mounting kit



Watertight flanges



ACC020



ACC017_1



ACC017_1_C



Axial electric fan

JUNCTION BOXES

SDN SERIES



Watertight boxes in AISI 304L (1.4301) complete of:

- Body with welded and finished corners.
- Cover with welded and finished corners and screwed to the box body.
- Polyurethane sealing gasket with robotized application.
- M4 S/S leak-proof cover-body's clamping screws.
- M5x15 stainless steel inner threaded stud bolts for earthing on the cover.
- M5 inner threaded spacers on the body for wiring plate or DIN bar fixing.
- Fine satin external finishing medium scotch Brite type.
- Sheet metal thickness of body and cover between 10/10mm and 12/10mm depending on box dimensions.
- Rear prearrangement for wall fixing with M5 blind threaded holes.
- **Protection degree IP 66 IP67 IP69K IK10 certified by TUV in accordance with EN62208.**
- Protection degree Type 1, 12, 4, 4X (cULus mark) in accordance with UL50, 508A, 746C and CSA 22,2 no. 14,94 (on demand).
- Suitable for using in potentially explosive atmosphere (Group -II-, Category-3-, Zone-22,2-) with the application of the accessory KIT-ATEX-SDN-2-22.

Item	External dimensions			Wiring		Features	
	W	H	D	X	Y	Closing points No.	No. Holes for wall fixing
SDN997	90	90	75	-	-	4	2
SDN10109	100	100	90	-	-	4	2
SDN10169	100	160	90	70	135	4	2
SDN10229	100	220	90	70	195	4	2
SDN151612	150	160	120	120	135	4	2
SDN152212	150	220	120	120	195	4	2
SDN152812	150	280	120	120	255	4	2
SDN202212	200	220	120	170	195	4	2
SDN202812	200	280	120	170	255	4	2
SDN252812	250	280	120	220	255	4	2
SDN253415	250	340	150	220	315	4	2
SDN303415	300	340	150	270	315	4	2
SDN304015	300	400	150	270	375	6	4
SDN404015	400	400	150	370	375	6	4

ACCESSORIES FOR SDN SERIES

- Galvanized mounting plate 20/10 thin part no. PDFN.
- Standard wall fixing kit part no. CASDN013 composed by no. 02 brackets and stainless steel screws.
- ATEX-SDN-2-22 kit for using in potentially explosive atmosphere (Group-II-, Category-3-, Zone-22,2-).
- Body and door drilling on drawing.
- Conductive or silicone seals resistant from -50°C to +180°C.
- Special dimensions.
- Made of AISI 316L or other special steels.
- cULus mark as per UL50, 508A, 746C and CSA 22,22 no. 14,94 (on demand).



IP66 Wall fixing kit



Mounting plate



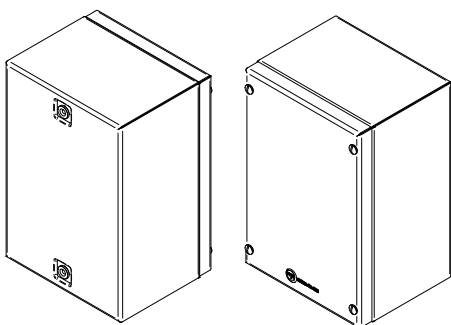
Certifications and marks



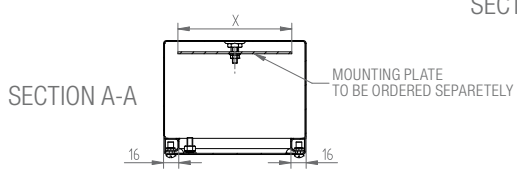
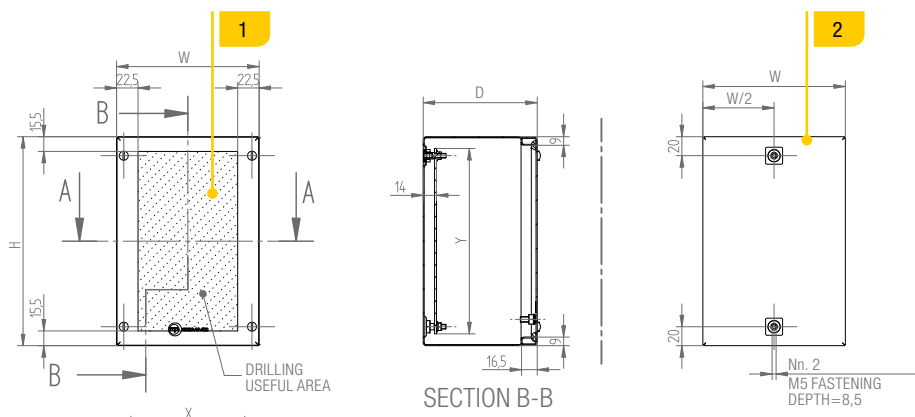
TYPE 1, 12, 4, 4X IP66-IK10
IP67-IK10
IP69K-IK10

Material

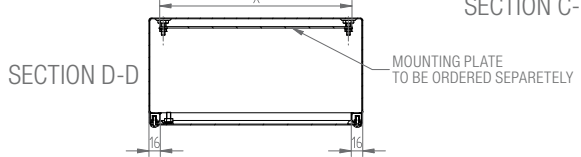
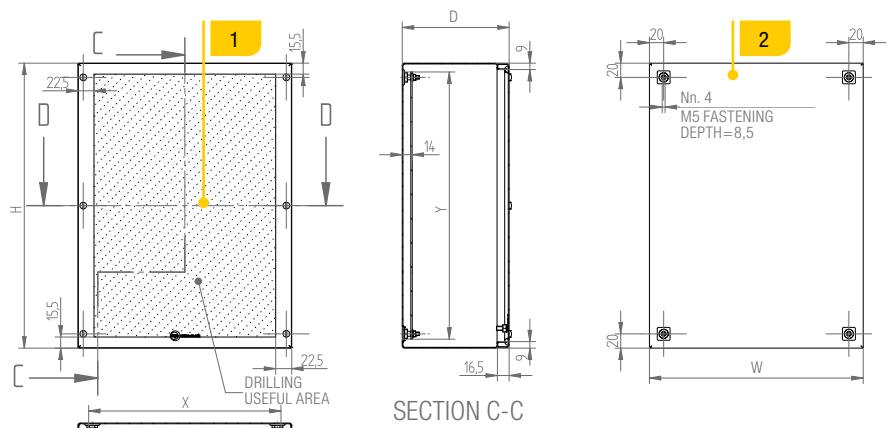
AISI 304L (WNR 1.4307)
AISI 316L (WNR 1.4404) on demand



- 1. Front View.
- 2. Rear View.



NO. 04 CLOSING POINTS
AND NO. 02 FIXING POINTS VERSION



NO. 06 CLOSING POINTS AND
NO. 4 FIXING POINTS VERSION

PUSH-BUTTON PANELS

SPN SERIES



Watertight boxes in AISI 304L (1.4301) complete of:

- Body with welded and finished corners.
- Cover with welded and finished corners and screwed to the box body.
- Diam. 22,5mm Drillings on the cover for push-button panel mounting.
- Polyurethane sealing gasket with robotized application.
- M4 S/S leak-proof cover-body's clamping screws.
- M5x15 stainless steel inner threaded stud bolts for earthing on the cover.
- M5 inner threaded spacers on the body for wiring plate or DIN bar fixing.
- Fine satin external finishing medium scotch Brite type.
- Sheet metal thickness of body and cover between 10/10mm and 12/10mm depending on box dimensions.
- Rear prearrangement for wall fixing with M5 blind threaded holes.
- **Protection degree IP 66 IP67 IP69K IK10 certified by TUV in accordance with EN62208** (in combination with equipments with equivalent certification).
- Protection degree Type 1, 12, 4, 4X (cULus mark) in accordance with UL50, 508A, 746C and CSA 22,2 no. 14,94 (on demand) boxes.
- Suitable for using in potentially explosive atmosphere (Group -II-, Category-3-, Zone-22,2-) with the application of the accessory KIT-ATEX-SPN-2-22. (in combination with equipments with equivalent certification).

Item	External dimensions			Wiring plate		Features		
	W	H	D	X	Y	Closing points No.	No. Holes for wall fixing	Holes
SPN997	90	90	75	-	-	2	2	1
SPN10109	100	100	90	-	-	4	2	1
SPN10169	100	160	90	70	135	4	2	2
SPN10229	100	220	90	70	195	4	2	3
SPN151612	150	160	120	120	135	4	2	4
SPN152212	150	220	120	120	195	4	2	6

ACCESSORIES FOR SPN SERIES

- Galvanized mounting plate 20/10 thin part no. PDFN.
- Standard wall fixing kit part no. CASDN013 composed by no. 02 brackets and stainless steel screws.
- ATEX-SPN-2-22 kit for using in potentially explosive atmosphere (Group- II-, Category-3-, Zone-22,2-).
- Body and door drilling on drawing.
- Conductive or silicone seals resistant from -50°C to +120°C.
- Special dimensions.
- Made of AISI 316L or other special steels.
- cULus mark as per UL50, 508A, 746C and CSA 22,22 no. 14,94 (on demand).



IP66 Wall fixing kit



Mounting plate



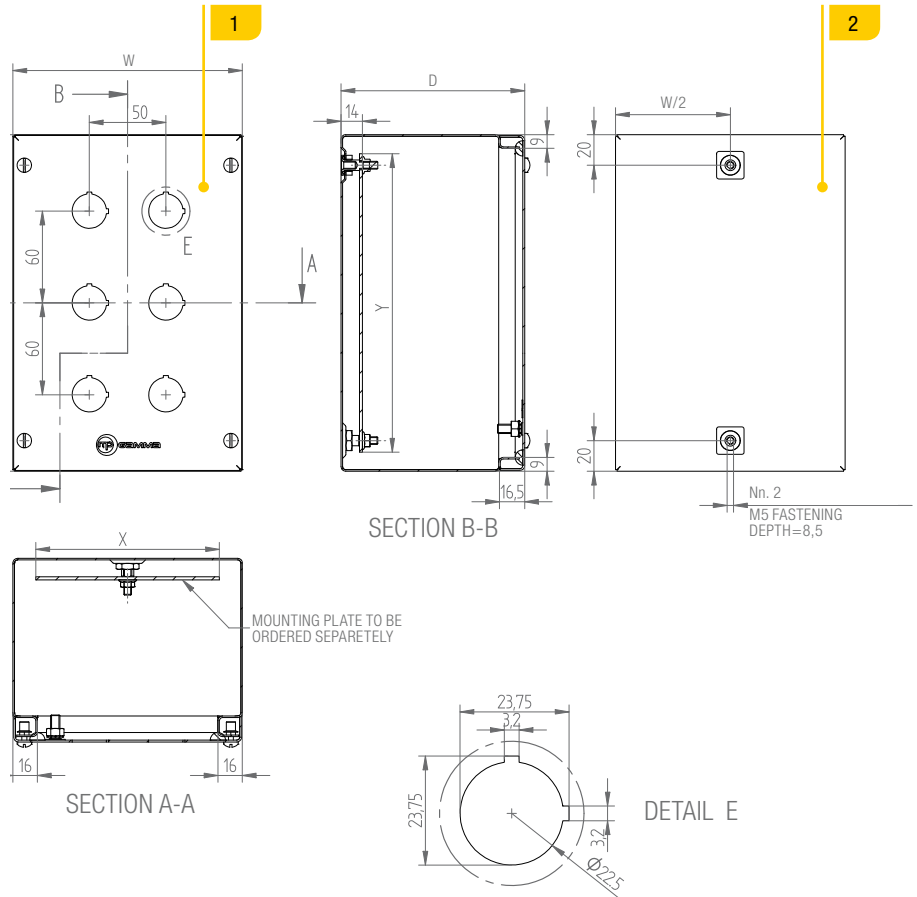
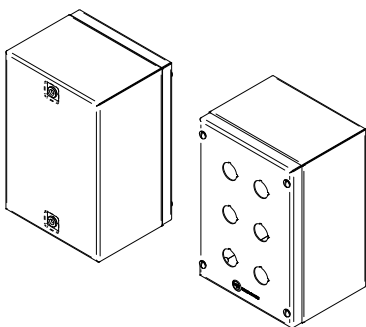
Certifications and marks



TYPE 1, 12, 4, 4X IP66-IK10
IP67-IK10
IP69K-IK10

Material

AISI 304L (WNR 1.4307)
AISI 316L (WNR 1.4404) on demand



1. Front View.
2. Rear View.



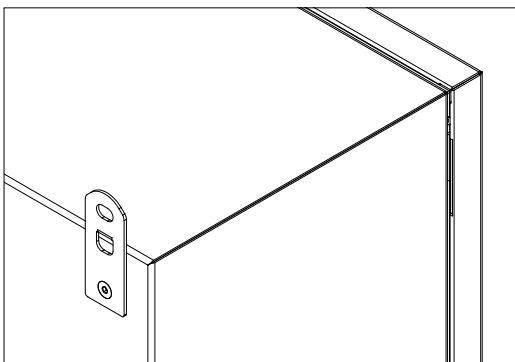
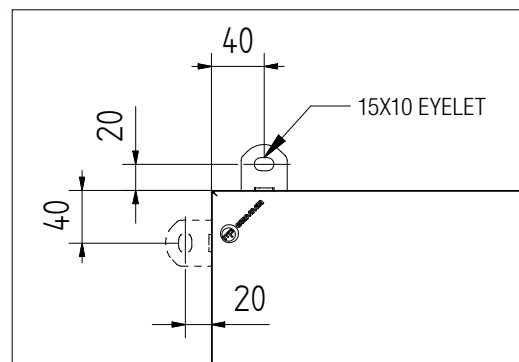
WALL MOUNTING KIT FOR “CPN” AND “CLN” BOXES SERIES

All standard boxes of CPN and CLN series have drillings on the rear panel for wall mounting, this to facilitate the installation and thanks to an innovative system, the aesthetics and the protection degree remain unchanged.

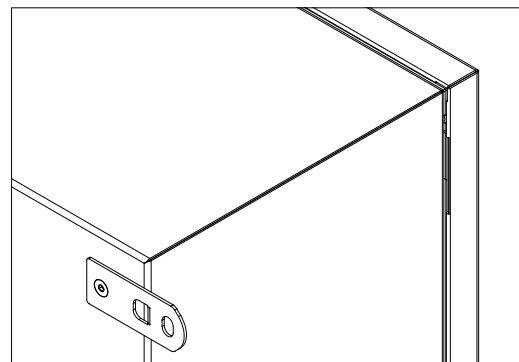
For boxes wall mounting it is necessary to use the CACPNO13 item consisting of 4 flat brackets and stainless steel screws.

The 4 holes on the rear side of the box are M6 threaded, blind and with thickness 8 mm.

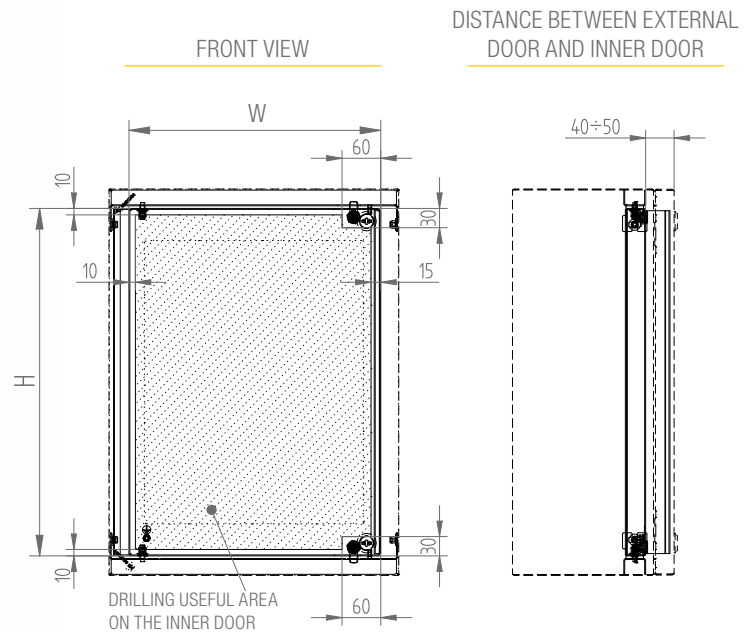
The CACPNO13 kit is suitable for all sizes of boxes.



BOX REAR DETAIL WITH VERTICAL BRACKET



BOX REAR DETAIL WITH HORIZONTAL BRACKET



INTERNAL INNER DOOR KIT FOR “CPN” AND “CLN” BOXES SERIES

Hinged internal doors made in AISI 304 L (WNR 1.4307) stainless steel scotch-brite type fine satin finish to be used on boxes series CPN and CLN.

They can be fixed internally at variable distances from 40 mm to 50 mm from the external door (other fixing depth on request).

The locks are at 1/4 turn with a slotted screwdriver insert.

Drillings to drawing can be requested as well as drillings on the blind external door.

The opening direction can be reversed (reversible door) in relation to the external door.

The maximum weight to be applied to the internal door varies in function of the size, but it is not recommended to exceed 20 kg.

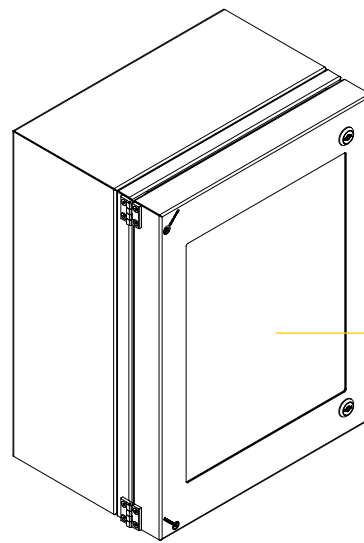
They are supplied in assembly kit or pre-assembled (on request).

Attention: always specify in the order if the box has to be prepared for the inner door kit so to add some mounting stud bolts.

Item	Description
KCPN3030	INNERDOOR KIT FOR BOX W=300 H=300
KCPN3038	INNERDOOR KIT FOR BOX W=300 H=380
KCPN3045	INNERDOOR KIT FOR BOX W=300 H=450
KCPN3830	INNERDOOR KIT FOR BOX W=380 H=300
KCPN3838	INNERDOOR KIT FOR BOX W=380 H=380
KCPN3860	INNERDOOR KIT FOR BOX W=380 H=600
KCPN4050	INNERDOOR KIT FOR BOX W=400 H=500
KCPN4530	INNERDOOR KIT FOR BOX W=450 H=300
KCPN4545	INNERDOOR KIT FOR BOX W=450 H=450
KCPN4560	INNERDOOR KIT FOR BOX W=450 H=600
KCPN5070	INNERDOOR KIT FOR BOX W=500 H=700
KCPN6038	INNERDOOR KIT FOR BOX W=600 H=380
KCPN6045	INNERDOOR KIT FOR BOX W=600 H=450
KCPN6060	INNERDOOR KIT FOR BOX W=600 H=600
KCPN6075	INNERDOOR KIT FOR BOX W=600 H=750
KCPN6090	INNERDOOR KIT FOR BOX W=600 H=900
KCPN60120	INNERDOOR KIT FOR BOX W=600 H=1200
KCPN7575	INNERDOOR KIT FOR BOX W=750 H=750
KCPN75100	INNERDOOR KIT FOR BOX W=750 H=1000
KCPN80120	INNERDOOR KIT FOR BOX W=800 H=1200
KCPN9060	INNERDOOR KIT FOR BOX W=900 H=600
KCPN100100	INNERDOOR KIT FOR BOX W=1000 H=1000
KCPN100120	INNERDOOR KIT FOR BOX W=1000 H=1200



BOXES ACCESSORIES



TRANSPARENT
LEXAN PANEL

OVERDOOR IN TRANSPARENT LEXAN FOR “SCS” “EMP” “SPEED” CABINETS SERIES AND FOR “CPN” BOXES SERIES

Transparent doors made in AISI 304L (WNR 1.4307) stainless steel scotch-brite type fine satin finish can be mounted on EMP, SCS, SPEED cabinets on CPN boxes or on any product where there is a large enough area to allow their fixing.

They are used to protect with an IP66 and IP69K degree of protection, drillings or tools.

The transparent shock-resistant Lexan panel allows to see the devices mounted under the overdoor.

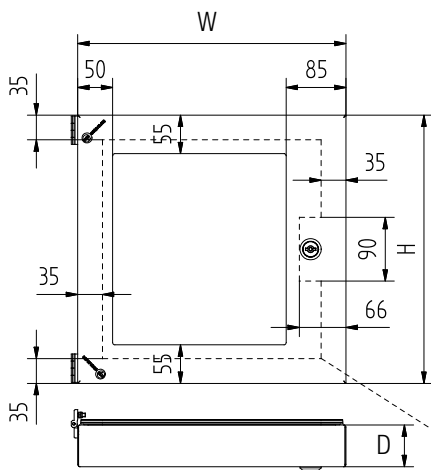
The opening of the door is reversible and can be 90 ° to 180 ° depending on the application.

It is supplied in assembly kit with the corresponding template for drilling on site or pre-assembled on request.

Item	Description	Closing points No.
SVPN30306U	OVERDOOR IN TRANSPARENT LEXAN W=300 H=300	1
SVPN30386U	OVERDOOR IN TRANSPARENT LEXAN W=300 H=380	1
SVPN30456U	OVERDOOR IN TRANSPARENT LEXAN W=300 H=450	2
SVPN38306U	OVERDOOR IN TRANSPARENT LEXAN W=380 H=300	1
SVPN38386U	OVERDOOR IN TRANSPARENT LEXAN W=380 H=380	1
SVPN38606U	OVERDOOR IN TRANSPARENT LEXAN W=380 H=600	2
SVPN40506U	OVERDOOR IN TRANSPARENT LEXAN W=400 H=500	2
SVPN45306U	OVERDOOR IN TRANSPARENT LEXAN W=450 H=300	1
SVPN45456U	OVERDOOR IN TRANSPARENT LEXAN W=450 H=450	2
SVPN45606U	OVERDOOR IN TRANSPARENT LEXAN W=450 H=600	2
SVPN50706U	OVERDOOR IN TRANSPARENT LEXAN W=500 H=700	2
SVPN60386U	OVERDOOR IN TRANSPARENT LEXAN W=600 H=380	2
SVPN60456U	OVERDOOR IN TRANSPARENT LEXAN W=600 H=450	2
SVPN60606U	OVERDOOR IN TRANSPARENT LEXAN W=600 H=600	2
SVPN60756U	OVERDOOR IN TRANSPARENT LEXAN W=600 H=750	2
SVPN60906U***	OVERDOOR IN TRANSPARENT LEXAN W=600 H=900	2
SVPN601206U***	OVERDOOR IN TRANSPARENT LEXAN W=600 H=1200	2
SVPN75756U***	OVERDOOR IN TRANSPARENT LEXAN W=750 H=750	2
SVPN751006U***	OVERDOOR IN TRANSPARENT LEXAN W=750 H=1000	2
SVPN801206U***	OVERDOOR IN TRANSPARENT LEXAN W=800 H=1200	2
SVPN90606U***	OVERDOOR IN TRANSPARENT LEXAN W=900 H=600	2

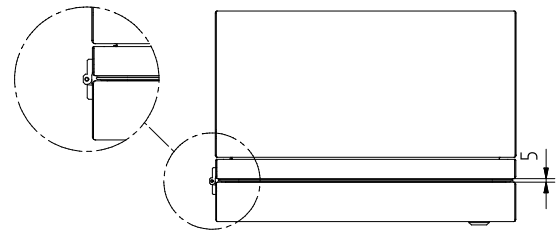


No. 1 CLOSING POINT VERSION

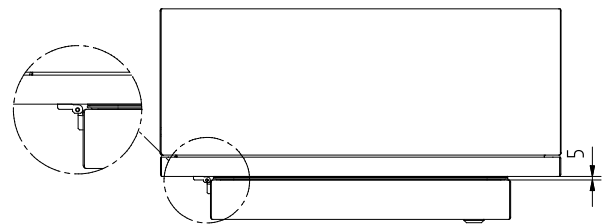


DRILLING USEFULL AREA ON CABINET DOOR WITH PROTECTION WINDOW

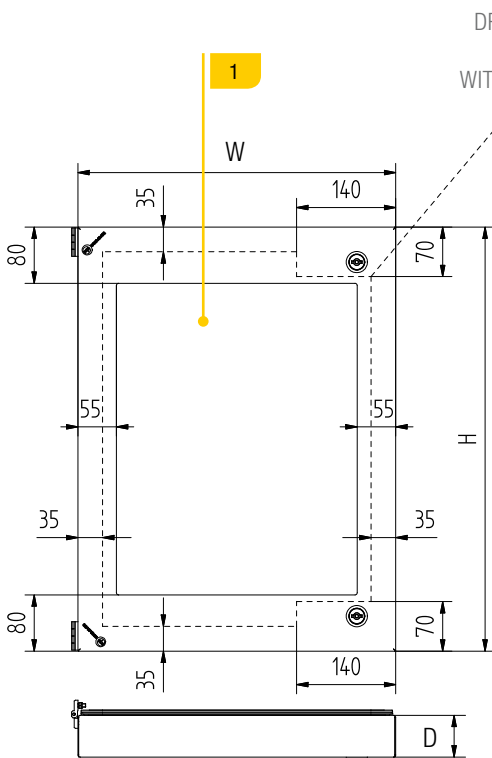
HINGES MOUNTING WITH 180° PROTECTION WINDOW OPENING



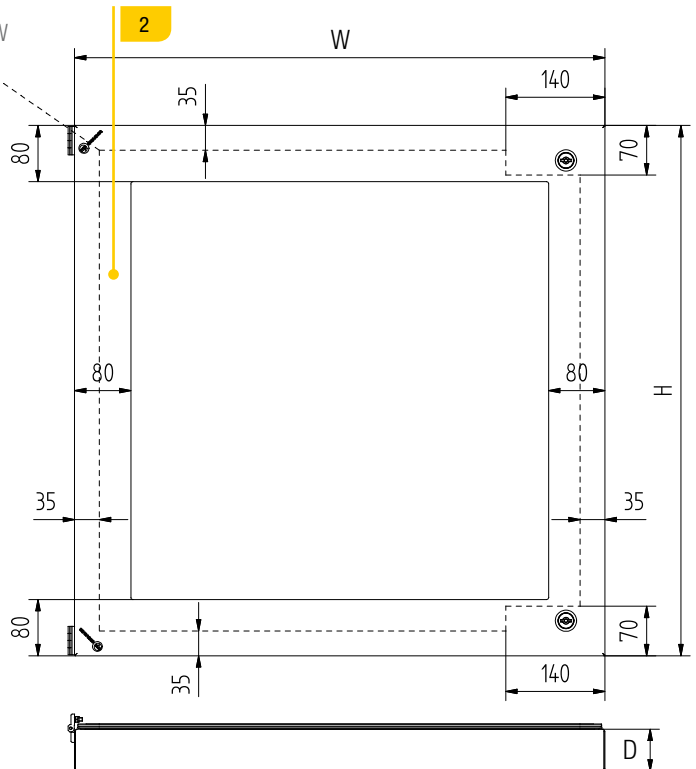
HINGES MOUNTING WITH 90° PROTECTION WINDOW OPENING



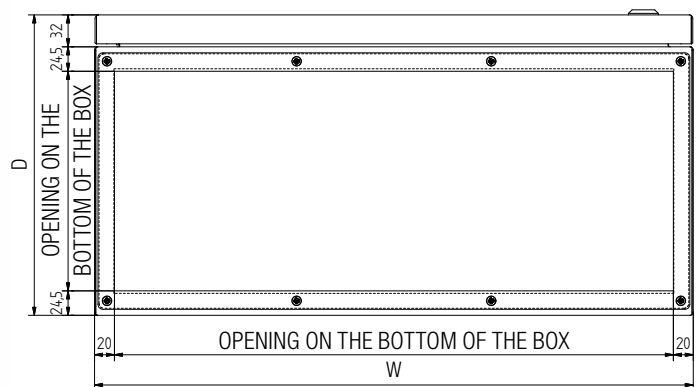
No. 2 CLOSING POINTS VERSION



DRILLING USEFULL AREA ON CABINET DOOR WITH PROTECTION WINDOW



- 1. Front view.
- 2. Front view models(***)



WATERTIGHT FLANGES FOR “CPN” AND “CLN” BOXES SERIES

CPN and CLN boxes can be supplied on request with removable sealed flanges on any side and of any size compatible to the geometry of box.

The flanges of the series are mainly designed to be positioned in the lower part of the box, they occupy the largest possible area without influencing the degree of protection and the robustness of the box and are supplied with a sealing gasket and screws for mounting.

The flange must be ordered together with the box as the cut-out and blind threaded holes for assembly are made on the box in the factory.

Item	Description
ACPN054_3021	FLANGE FOR CPN/CLN BOX W=300 D=210
ACPN054_3821	FLANGE FOR CPN/CLN BOX W=380 D=210
ACPN054_4021	FLANGE FOR CPN/CLN BOX W=400 D=210
ACPN054_4521	FLANGE FOR CPN/CLN BOX W=450 D=210
ACPN054_4525	FLANGE FOR CPN/CLN BOX W=450 D=250
ACPN054_5025	FLANGE FOR CPN/CLN BOX W=500 D=250
ACPN054_6021	FLANGE FOR CPN/CLN BOX W=600 D=210
ACPN054_6025	FLANGE FOR CPN/CLN BOX W=600 D=250
ACPN054_6030	FLANGE FOR CPN/CLN BOX W=600 D=300
ACPN054_7530	FLANGE FOR CPN/CLN BOX W=750 D=300
ACPN054_8030	FLANGE FOR CPN/CLN BOX W=800 D=300
ACPN054_9030	FLANGE FOR CPN/CLN BOX W=900 D=300
ACPN054_10030	FLANGE FOR CPN/CLN BOX W=1000 D=300
ACPN054_12030	FLANGE FOR CPN/CLN BOX W=1200 D=300



“STANDARD” RAIN ROOF FOR “CPN” AND “CLN” BOXES SERIES

Roofs made in AISI 304L (WNR 1.4307) stainless steel scotch-brite type fine satin finish can be mounted on CPN or CLN boxes and on any product where there is a large enough area to allow the fixing.

They are used to protect boxes exposed to atmospheric agents protecting the seals from aging and the surface of the box from direct sunlight.

Their construction is simple and effective: they have a small slanted edge on all sides and protrude of 25 mm on the front and on the sides, while the back is flush with the box to allow wall fixing.

They are supplied in assembly kit with the corresponding template for drilling on site or pre-assembled on request.

For assembly the roof on site 4 holes of 8 mm of diameter have to be drilled on the upper side.

Item	Description
TTPN3021	RAIN ROOF FOR CPN/CLN W=300 D=210
TTPN3821	RAIN ROOF FOR CPN/CLN W=380 D=210
TTPN4021	RAIN ROOF FOR CPN/CLN W=400 D=210
TTPN4521	RAIN ROOF FOR CPN/CLN W=450 D=210
TTPN4525	RAIN ROOF FOR CPN/CLN W=450 D=250
TTPN5025	RAIN ROOF FOR CPN/CLN W=500 D=250
TTPN6021	RAIN ROOF FOR CPN/CLN W=600 D=210
TTPN6025	RAIN ROOF FOR CPN/CLN W=600 D=250
TTPN6030	RAIN ROOF FOR CPN/CLN W=600 D=300
TTPN7530	RAIN ROOF FOR CPN/CLN W=750 D=300
TTPN8030	RAIN ROOF FOR CPN/CLN W=800 D=300
TTPN9030	RAIN ROOF FOR CPN/CLN W=900 D=300
TTPN10030	RAIN ROOF FOR CPN W=1000 D=300
TTPN12030	RAIN ROOF FOR CPN W=1200 D=300



BOXES ACCESSORIES



“VIP” RAIN ROOF FOR “CPN” AND “CLN” BOXES SERIES

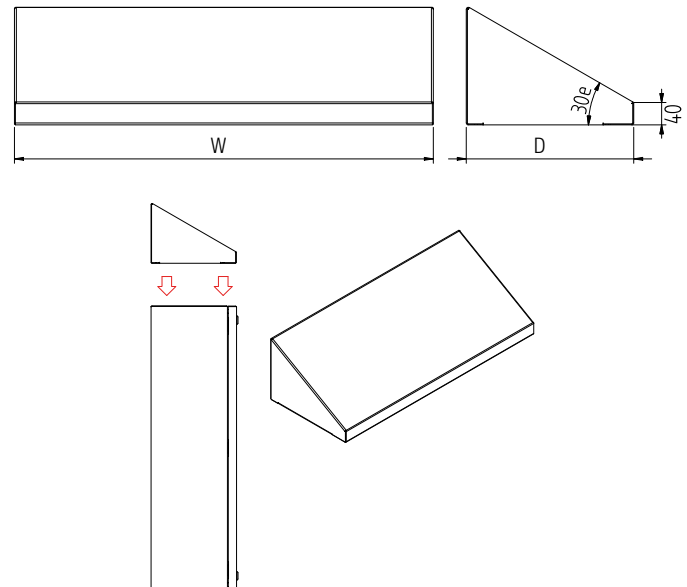
Roofs made in AISI 304L (WNR 1.4307) stainless steel scotch-brite type fine satin finish can be mounted on CPN or CLN boxes, they are used to protect boxes exposed to atmospheric agents protecting the seals from aging and the surface of the box from direct sunlight.

Contoured design and inclined towards the rear; the protrusion is 35 mm on the front, 10 mm on the sides, while the back is flush with the box to allow wall mounting.

They are supplied in assembly kit with the corresponding template for drilling on site or pre-assembled on request.

To assemble the roof on site, 4 holes of 8 mm of diameter need to be drilled on the upper side.

Item	Description
TTPN3021V	RAIN ROOF FOR CPN/CLN W=300 D=210
TTPN3821V	RAIN ROOF FOR CPN/CLN W=380 D=210
TTPN4021V	RAIN ROOF FOR CPN/CLN W=400 D=210
TTPN4521V	RAIN ROOF FOR CPN/CLN W=450 D=210
TTPN4525V	RAIN ROOF FOR CPN/CLN W=450 D=250
TTPN5025V	RAIN ROOF FOR CPN/CLN W=500 D=250
TTPN6021V	RAIN ROOF FOR CPN/CLN W=600 D=210
TTPN6025V	RAIN ROOF FOR CPN/CLN W=600 D=250
TTPN6030V	RAIN ROOF FOR CPN/CLN W=600 D=300
TTPN7530V	RAIN ROOF FOR CPN/CLN W=750 D=300
TTPN8030V	RAIN ROOF FOR CPN/CLN W=800 D=300
TTPN9030V	RAIN ROOF FOR CPN/CLN W=900 D=300
TTPN10030V	RAIN ROOF FOR CPN W=1000 D=300
TTPN12030V	RAIN ROOF FOR CPN W=1200 D=300



“SANITARY” RAIN ROOF FOR “CPN” AND “CLN” BOXES SERIES

Roofs made in AISI 304L (WNR 1.4307) stainless steel scotch-brite type fine satin finish can be mounted on CPN or CLN boxes. They are used to protect boxes exposed to frequent washing or in areas that require frequent cleaning protecting the seals from aging and reduce the chances of dirt and especially prevent objects to be placed upon.

Contoured design and inclined at 30° towards the front.

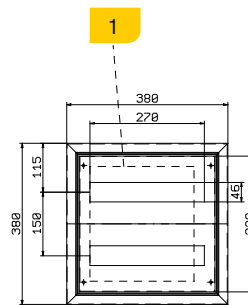
They are supplied in assembly kit with the corresponding template for drilling on site or pre-assembled on request.

To assemble the roof on site, 4 holes of 8 mm of diameter need to be drilled on the upper side.

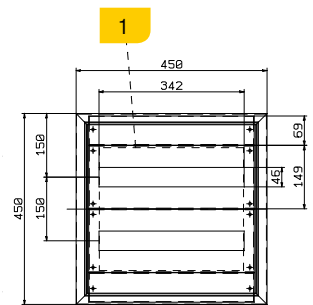
Item	Description
TTPN3021H	RAIN ROOF FOR CPN/CLN W=300 D=210
TTPN3821H	RAIN ROOF FOR CPN/CLN W=380 D=210
TTPN4021H	RAIN ROOF FOR CPN/CLN W=400 D=210
TTPN4521H	RAIN ROOF FOR CPN/CLN W=450 D=210
TTPN4525H	RAIN ROOF FOR CPN/CLN W=450 D=250
TTPN5025H	RAIN ROOF FOR CPN/CLN W=500 D=250
TTPN6021H	RAIN ROOF FOR CPN/CLN W=600 D=210
TTPN6025H	RAIN ROOF FOR CPN/CLN W=600 D=250
TTPN6030H	RAIN ROOF FOR CPN/CLN W=600 D=300
TTPN7530H	RAIN ROOF FOR CPN/CLN W=750 D=300
TTPN8030H	RAIN ROOF FOR CPN/CLN W=800 D=300
TTPN9030H	RAIN ROOF FOR CPN/CLN W=900 D=300
TTPN10030H	RAIN ROOF FOR CPN W=1000 D=300
TTPN12030H	RAIN ROOF FOR CPN W=1200 D=300



BOXES ACCESSORIES



CLNMOD3838
30 MODULES



CLNMOD4545
38 MODULES

INTERNAL CONFIGURATION KIT FOR “CPN” “CLN” BOXES SERIES FOR MODULAR SWITCH PANELS

Kit for configuring CPN and CLN boxes series in order to house inside batteries of modular switches.

All components of the kit are made in AISI 304L (WNR 1.4307) stainless steel scotch-brite type fine satin finish.

The assembly is foreseen on 9 different sized boxes, and the capacity is from 30 to 266 modules.

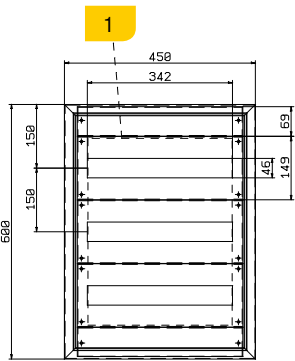
The frame is designed to fix the KSDIN item (pair of depth sliding din bar supporting brackets) that has to be ordered separately in the same number of rows you wish to use.

The slotted panels (or blind panels on request) are screwed to the frame.

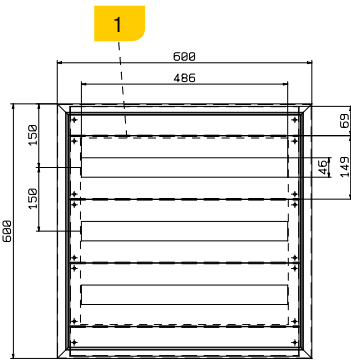
The supply is in an assembly kit, or on request pre-assembled on the box.

Attention: always specify in the order if the box has to be prepared for modular switches.

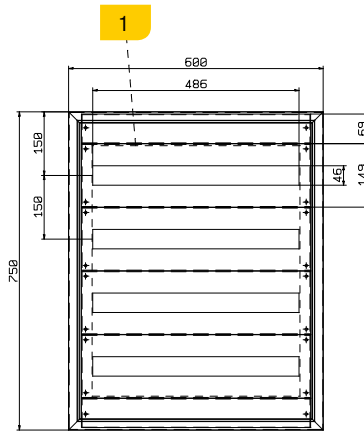
Item	Description
CLNMOD3838	MODULAR PANELS CONFIGURATION FOR CPN / CLN W=380 H=380
CLNMOD4545	MODULAR PANELS CONFIGURATION FOR CPN / CLN W=450 H=450
CLNMOD4560	MODULAR PANELS CONFIGURATION FOR CPN / CLN W=450 H=600
CLNMOD6060	MODULAR PANELS CONFIGURATION FOR CPN / CLN W=600 H=600
CLNMOD6075	MODULAR PANELS CONFIGURATION FOR CPN / CLN W=600 H=750
CLNMOD6090	MODULAR PANELS CONFIGURATION FOR CPN / CLN W=600 H=900
CLNMOD60120	MODULAR PANELS CONFIGURATION FOR CPN / CLN W=600 H=1200
CLNMOD75100	MODULAR PANELS CONFIGURATION FOR CPN / CLN W=750 H=1000
CLNMOD80120	MODULAR PANELS CONFIGURATION FOR CPN / CLN W=800 H=1200



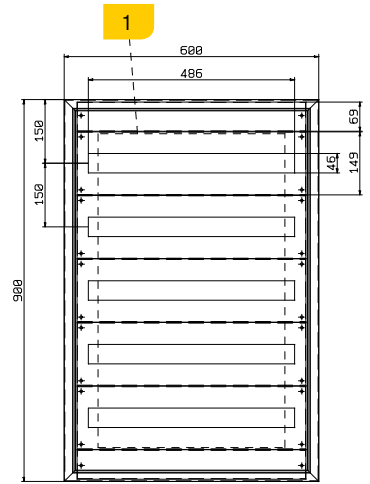
CLNMOD4560
57 MODULES



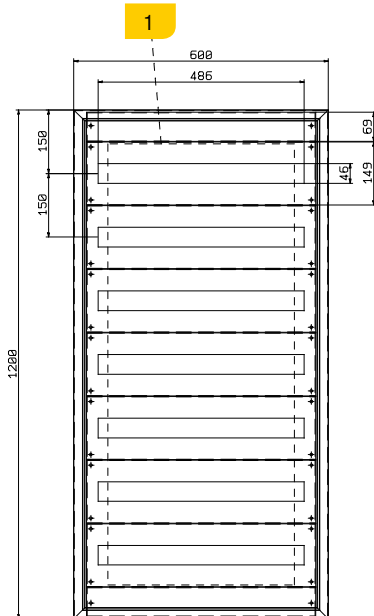
CLNMOD6060
81 MODULES



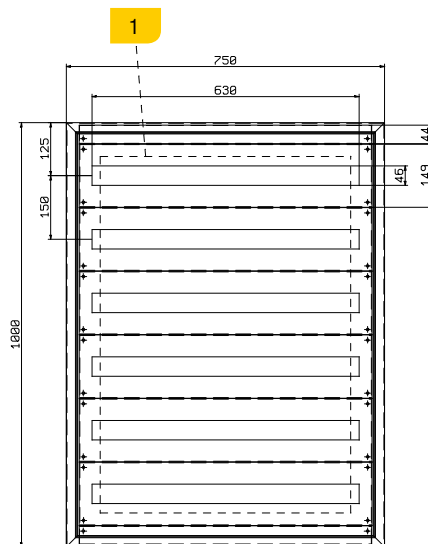
CLNMOD6075
108 MODULES



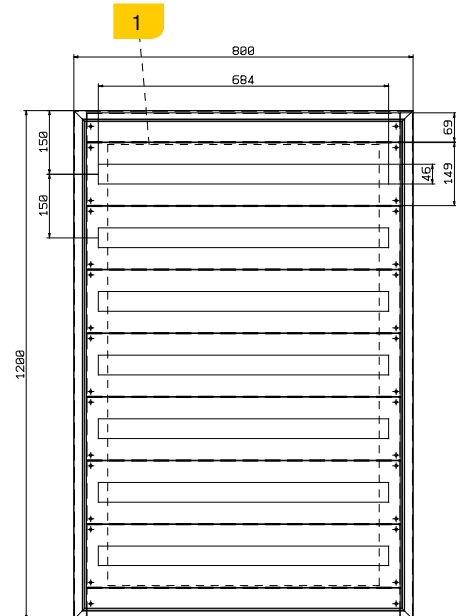
CLNMOD6090
135 MODULES



CLNMOD60120
189 MODULES



CLNMOD75100
210 MODULES



CLNMOD80120
266 MODULES

1. Visible area on CLN door.



BOXES ACCESSORIES

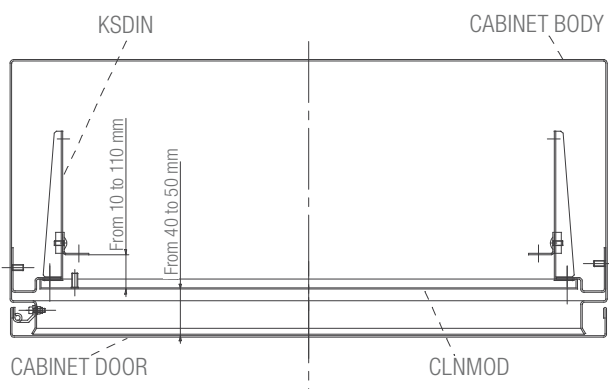


PAIR OF DIN BAR SUPPORTING BRACKETS “KSDIN” SERIES

Pair of depth adjustable din bar supporting brackets made in AISI 304L (WNR 1.4307) stainless steel for modular switches fixing.

It is recommended the use of a pair of brackets for each slotted row of the frame kit for modular switches.

Supplied in an assembly kit.



SECTION VIEW CABINET WITH ACCESSORIES



DEVICE FOR LOCKING THE DOOR OPEN FOR “CPN-CLN” BOXES SERIES

Device that locks the door of CPN and CLN boxes series in the open position avoiding accidental closing.

It can be supplied in assembly kit or pre-assembled on request.

For mounting on site it might be necessary some drillings or the application of electrowelded stud bolts.

Item	Description
ACC048_CPN	LOCKING DOOR DEVICE IN OPEN POSITION FOR CPN/CLN



MOST WIDELY USED LOCKS AND KEYS FOR BOXES

Most widely used keys and locks for CPN and CLN boxes.

Optional locks and keys can be supplied with any type of insert either with a standard EK333 or customized coding.

Item	Description	Picture
ACC016	304 S/S DOUBLE-BIT LOCK (WITHOUT KEY)	1
ACC016_Q	304 S/S 8MM. SQUARE INSERT LOCK (WITH KEY)	2
ACC016_T	304 S/S 8MM. TRIANGLE INSERT LOCK (WITH KEY)	3
ACC016_IG	316 S/S SANITARY LOCK (WITH KEY)	4
ACC017_1	WING LOCK WITH EK333 KEY	5
ACC017_1_C	CHROME-PLATED WING LOCK WITH EK333 KEY	6
ACC018	DOUBLE-BIT KEY IN BLACK ZAMAK	7
ACC020	GH18MM "T" HANDLE IN POLYAMIDE WITH EK333 KEY	8



BOXES ACCESSORIES



GAS SPRINGS KIT “CPN” AND “CLN” SERIES

Gas springs Kit provided with screw and accessories for the mounting of various strengths and dimensions.

They can be mounted on CPN series, on some models of CLN boxes and for special applications.

It is recommended to carry out the assembly in the factory and always to inform our technical department about the types and methods of use and application.

Item	Description
ACC070_100_C_CPN	KIT OF A PAIR OF SHORT GAS SPRINGS F=100N EACH WITH ACCESSORIES AND ASSEMBLY
ACC070_200_C_CPN	KIT OF A PAIR OF SHORT GAS SPRINGS F=200N EACH WITH ACCESSORIES AND ASSEMBLY
ACC070_300_C_CPN	KIT OF A PAIR OF SHORT GAS SPRINGS F=300N EACH WITH ACCESSORIES AND ASSEMBLY
ACC070_400_C_CPN	KIT OF A PAIR OF SHORT GAS SPRINGS F=400N EACH WITH ACCESSORIES AND ASSEMBLY
ACC070_200_L_CPN	KIT OF A PAIR OF LONG GAS SPRINGS F=200N EACH WITH ACCESSORIES AND ASSEMBLY
ACC070_300_L_CPN	KIT OF A PAIR OF LONG GAS SPRINGS F=300N EACH WITH ACCESSORIES AND ASSEMBLY
ACC070_400_L_CPN	KIT OF A PAIR OF LONG GAS SPRINGS F=400N EACH WITH ACCESSORIES AND ASSEMBLY
ACC070_600_L_CPN	KIT OF A PAIR OF LONG GAS SPRINGS F=600N EACH WITH ACCESSORIES AND ASSEMBLY

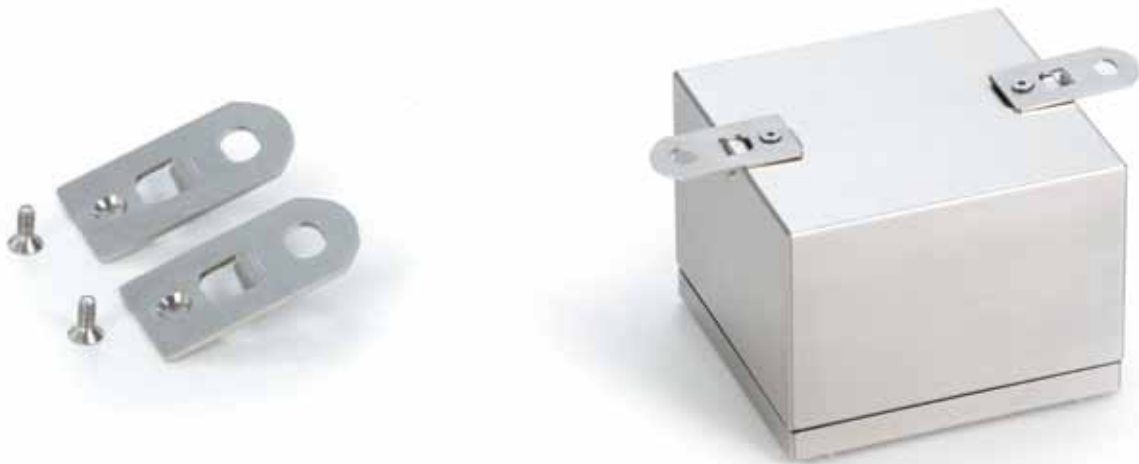


MOUNTING PLATE FOR JUNCTION BOXES “SDN” AND PUSH BUTTON PANELS “SPN” (OPTIONAL)

Galvanized mounting plate for standard SDN series junction boxes and SPN series control panels.

For features and dimensions see drawings on pages. 15-17 in the sections dedicated to SDN series boxes and SPN series pushbuttons.

Item	Description
PDFN1016	MOUNTING PLATE 100X160
PDFN1022	MOUNTING PLATE 100X220
PDFN1516	MOUNTING PLATE 150X160
PDFN1522	MOUNTING PLATE 150X220
PDFN1528	MOUNTING PLATE 150X280
PDFN2022	MOUNTING PLATE 200X220
PDFN2028	MOUNTING PLATE 200X280
PDFN2528	MOUNTING PLATE 250X280
PDFN2534	MOUNTING PLATE 250X340
PDFN3034	MOUNTING PLATE 300X340
PDFN3040	MOUNTING PLATE 300X400
PDFN4040	MOUNTING PLATE 400X400

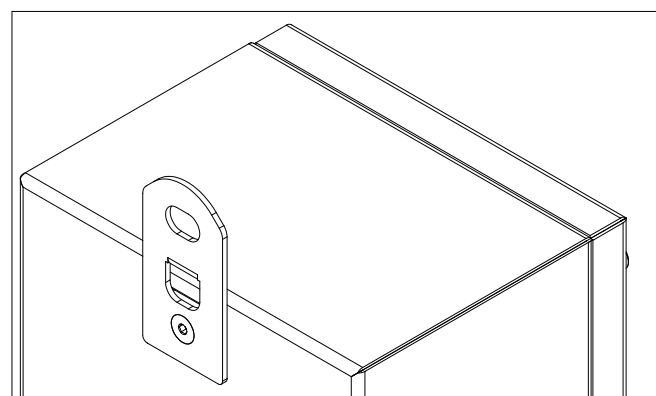
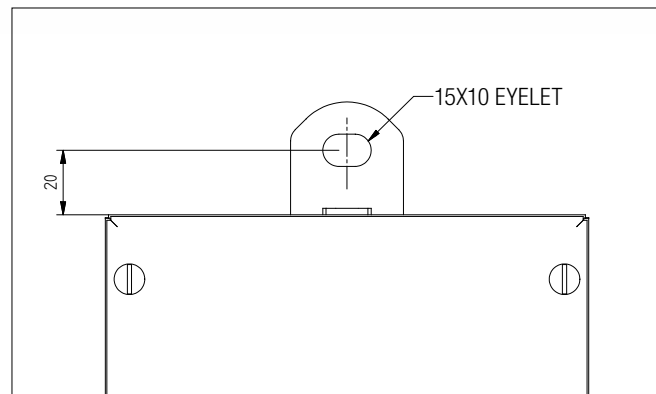


WALL MOUNTING KIT FOR IP66 “SDN” AND “SPN” BOXES SERIES

Standard SDN and SPN series have drillings on the rear panel for wall mounting, this to facilitate the installation and thanks to an innovative system, the aesthetics and the protection degree remain unchanged.

For boxes and wall push-button wall mounting it is necessary to use the CASDN013 item consisting of two flat brackets and stainless steel screws.

The CASDN013 kit is suitable for all sizes of SDN and SPN, except for SDN303415 and SDN304015 models for which No. 4 wall mounting brackets are needed, so you need to order n° 2 pieces of the CASDN013 item.



BOX REAR DETAIL WITH BRACKET



GENERIC ACCESSORIES



LABYRINTH FILTER SYSTEMS WITH STAINLESS STEEL CAP AND RELATED VENTILATION SYSTEMS

The filtering systems fully made in AISI 304L (WNR 1.4307) stainless steel with labyrinth spray protection system are mounted completely outside the structure (box, cabinet, sloped-top cabinet, etc.), allow the replacement of the filter cloth without accessing inside the panel and, if properly mounted, guarantee a degree of protection IP54 (ACC038) or IP55 (ACC014 and ACC036).

They are all designed to be coupled with MPGAMMA ventilation systems (fans have to be mounted inside the panel).

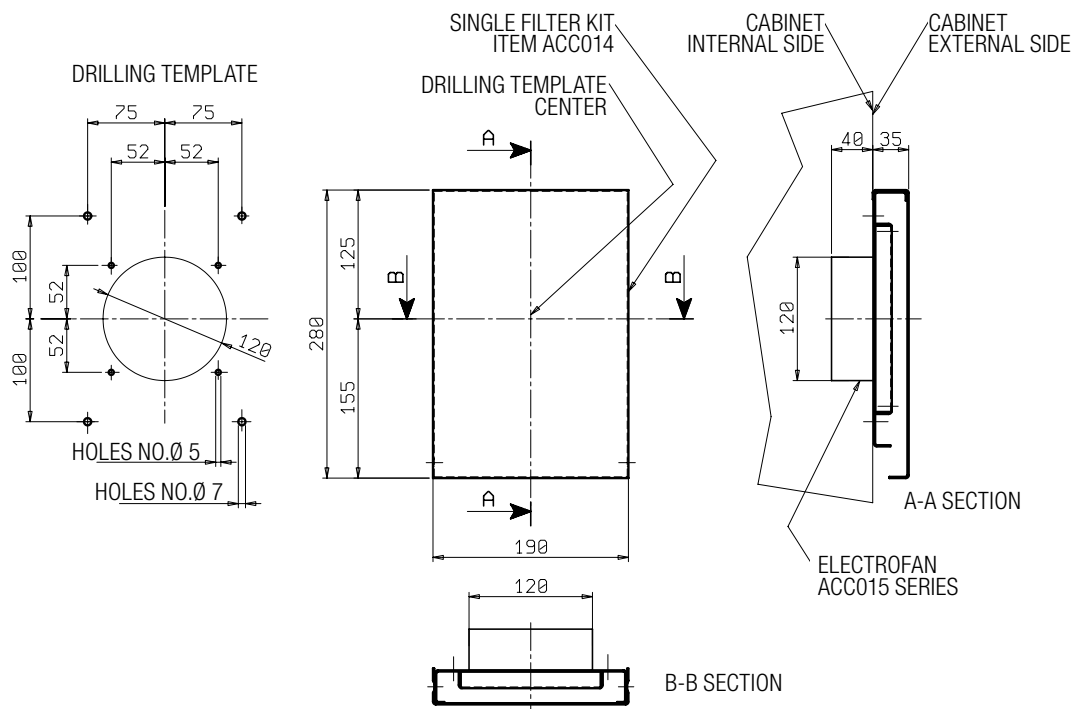
They are supplied in kit (with drilling template) and on request the drillings on the carpentry are carried out in the factory.

It is not recommended to assemble in the factory the filtering system on the structure because, as any protruding accessory, it could be damaged during the transport.

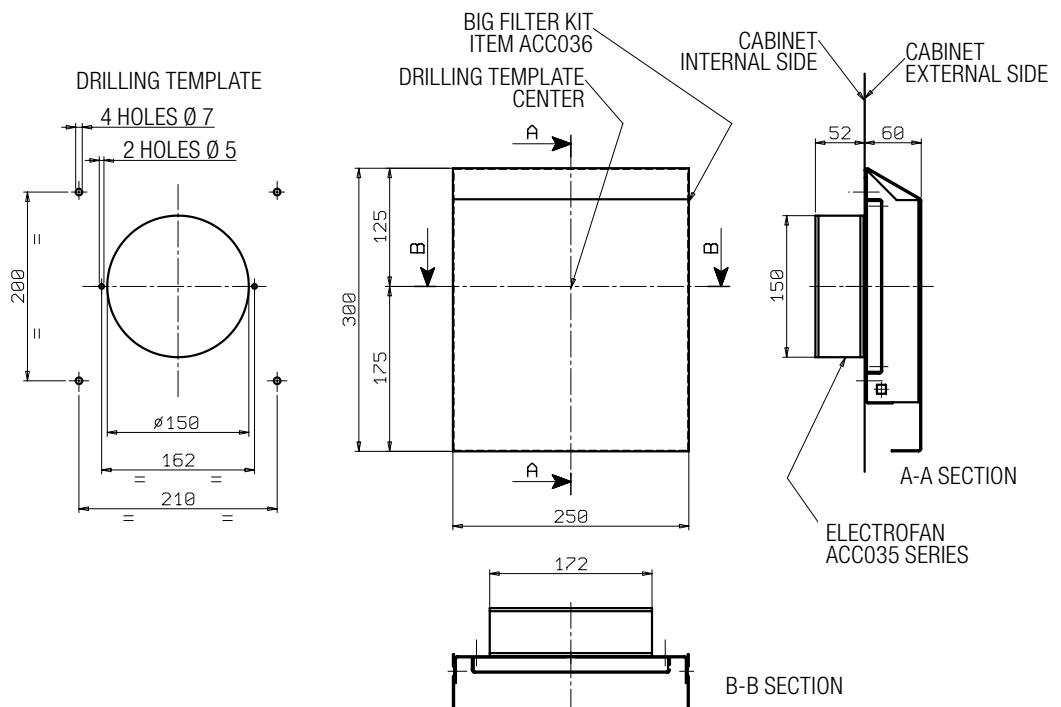
Item	Description
ACC014	SINGLE STAINLESS STEEL LABYRINTH FILTER UNIT W=190 H=280 D=40 (PREPARED FOR ACC015)
ACC036	LARGE STAINLESS STEEL LABYRINTH FILTER UNIT W=250 H=300 D=60 (PREPARED FOR ACC035)
ACC038	STAINLESS STEEL LABYRINTH AERATION TOWER W=300 H=300 D=80 (PREPARED FOR ACC035)
ACC015	AXIAL ELECTRIC FAN 230V 50/60 HZ DIM.120X120 WITH INTERNAL PROTECTION GRID RATED AIR FLOW 156 M3/H AT 50 HZ (EFFICIENCY 75% FOR MOUNTING WITH ACC014)
ACC015_120VAC	AXIAL ELECTRIC FAN 120VAC 50/60 HZ DIM.120X120 WITH INTERNAL PROTECTION GRID RATED AIR FLOW 156 M3/H AT 50 HZ (EFFICIENCY 75% FOR MOUNTING WITH ACC014)
ACC015_24V DC	AXIAL ELECTRIC FAN 24V DC 50/60 HZ DIM.120X120 WITH INTERNAL PROTECTION GRID RATED AIR FLOW 156 M3/H (EFFICIENCY 75% FOR MOUNTING WITH ACC014)
ACC035	AXIAL ELECTRIC FAN 230V 50/60 HZ DIAM.150 WITH INTERNAL PROTECTION GRID RATED AIR FLOW 324 M3/H AT 50 HZ (EFFICIENCY 75% FOR MOUNTING WITH ACC036)
ACC035_120VAC	AXIAL ELECTRIC FAN 120VAC 50/60 HZ DIAM.150 WITH INTERNAL PROTECTION GRID RATED AIR FLOW 324 M3/H AT 50 HZ (EFFICIENCY 75% FOR MOUNTING WITH ACC036)
ACC035_24V DC	AXIAL ELECTRIC FAN 24V DC 50/60 HZ DIAM.150 WITH INTERNAL PROTECTION GRID RATED AIR FLOW 324 M3/H (EFFICIENCY 75% FOR MOUNTING WITH ACC036)



COD. ACC014



COD. ACC036





GENERIC ACCESSORIES

As far as the factory arrangement it is definitely more manageable to drill the door (lower costs and shorter delivery time) rather than the sides.

A complete heat exchange system is usually composed by 2 filtering units or by a filtering unit and a roof-mounted fan and if necessary by a fan.

A filter must be installed at the bottom and another at the top, possibly at the opposite sides of the panel.

We recommend to mount the fan on the filter positioned at the bottom in order that the air can enter from below, put the panel slightly in overpressure and facilitate the heat exchange through the heating of the air rising naturally upwards and to exit from filter positioned on the top (or from the roof-mounted fan).

Sometimes this type of application does not give good results because some heat pockets may create due to the geometry and the arrangement of devices on the mounting plate, in this case it is necessary to increase the number of filters and fans, or choose an air conditioning system from the wide range offered by MPGAMMA.

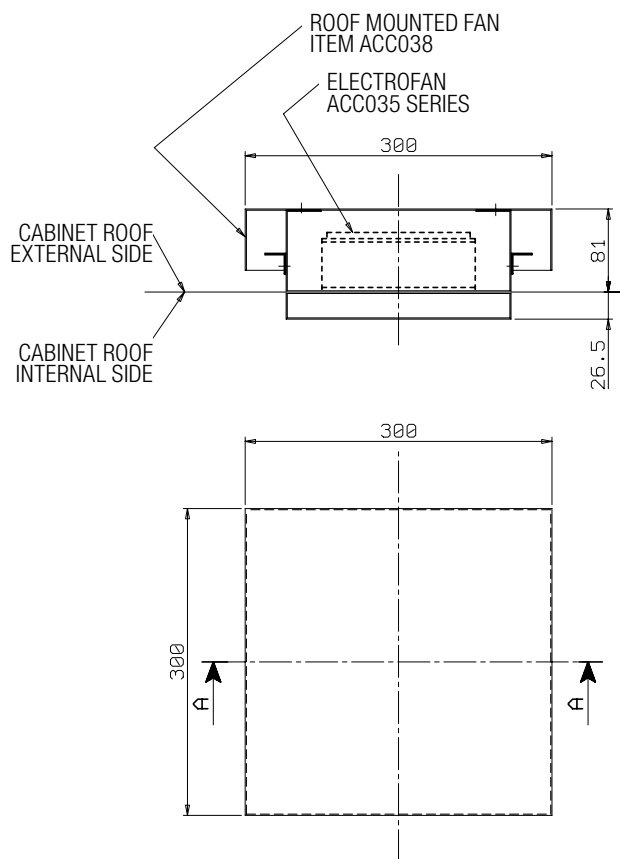
If the most warming devices are positioned at the top of the panel, it is recommended to add a fan on the filter at the top (or on the roof-mounted fan) set so to expel the hot air.

To reverse the airflow of a fan just turn it symmetrically.

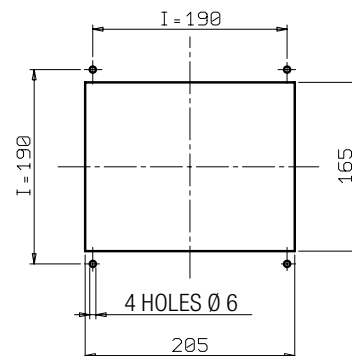
The ventilation systems matching with MPGAMMA stainless steel filters are available in various voltages and capacities and don't need additional drillings besides those for the filters.

The filter-fan coupling (with filtering elements in good cleaning conditions) reduces the air flow of 25-30%.

COD. ACC038

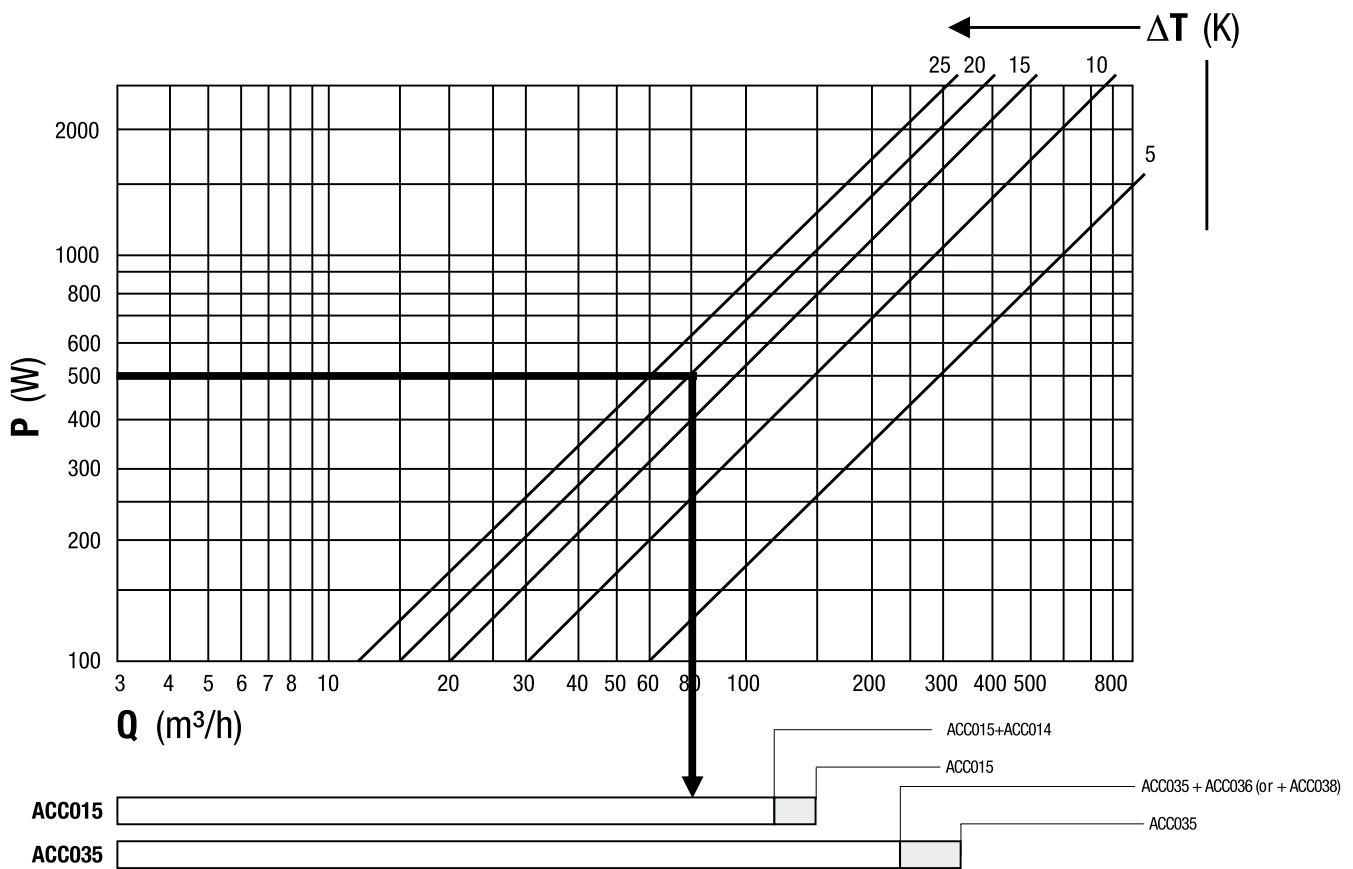


DRILLING TEMPLATE





SELECTION DIAGRAM OF VENTILATION UNITS WITH FILTER



The capacity in the graphic refer to standard filters

Q = Air capacity
P = Power dissipated in the cabinet
ΔT = Difference of temperature

Example:
 Dissipated power 500 W
 Difference of temperature 20 K
 Necessary air capacity 80 m³/h } Unit selection
ACC015 + ACC014



GENERIC ACCESSORIES



STAINLESS STEEL PROTECTION CAPS FOR PLASTIC FAN / FILTER SYSTEMS

The protections in AISI 304L (WNR 1.4307) stainless steel allow to increase the degree of protection of ventilation and filtering systems in plastic of FAN_____MPX and FIL_____MPX series.

They are designed to resist the direct powerful jets of water or cleaning liquids which are normally used for sanitizing food and pharmaceutical plants.

For the assembly is enough to drill some holes on the carpentry at the sides cut-outs of the filtering / ventilation systems.

Item	Description
HPS115	STAINLESS STEEL GUARD FOR FILTER/FAN DIMENSIONS 115x115
HPS150	STAINLESS STEEL GUARD FOR FILTER/FAN DIMENSIONS 150x150
HPS250	STAINLESS STEEL GUARD FOR FILTER/FAN DIMENSIONS 250x250
HPS325	STAINLESS STEEL GUARD FOR FILTER/FAN DIMENSIONS 325x325



PAIR OF TELESCOPIC GUIDES

Telescopic guides in nickel-plated to be used for extracting shelves and drawers in special products made on customer specifications.

They allow the total extraction of the whole length of the guide itself and provide a strong support even for weights up to 30 kg.

Item	Description
ACC068_300	PAIR OF TELESCOPIC RUNNERS L300/628
ACC068_500	PAIR OF TELESCOPIC RUNNERS L500/1021



PLASTIC DIAGRAM POCKET

Universal pocket in self-adhesive orange coloured plastic which can hold A4 format diagrams.

Item	Description
ACC028	LARGE DIAGRAM POCKETS (260X240X30) IN ORANGE COLOURED PLASTIC

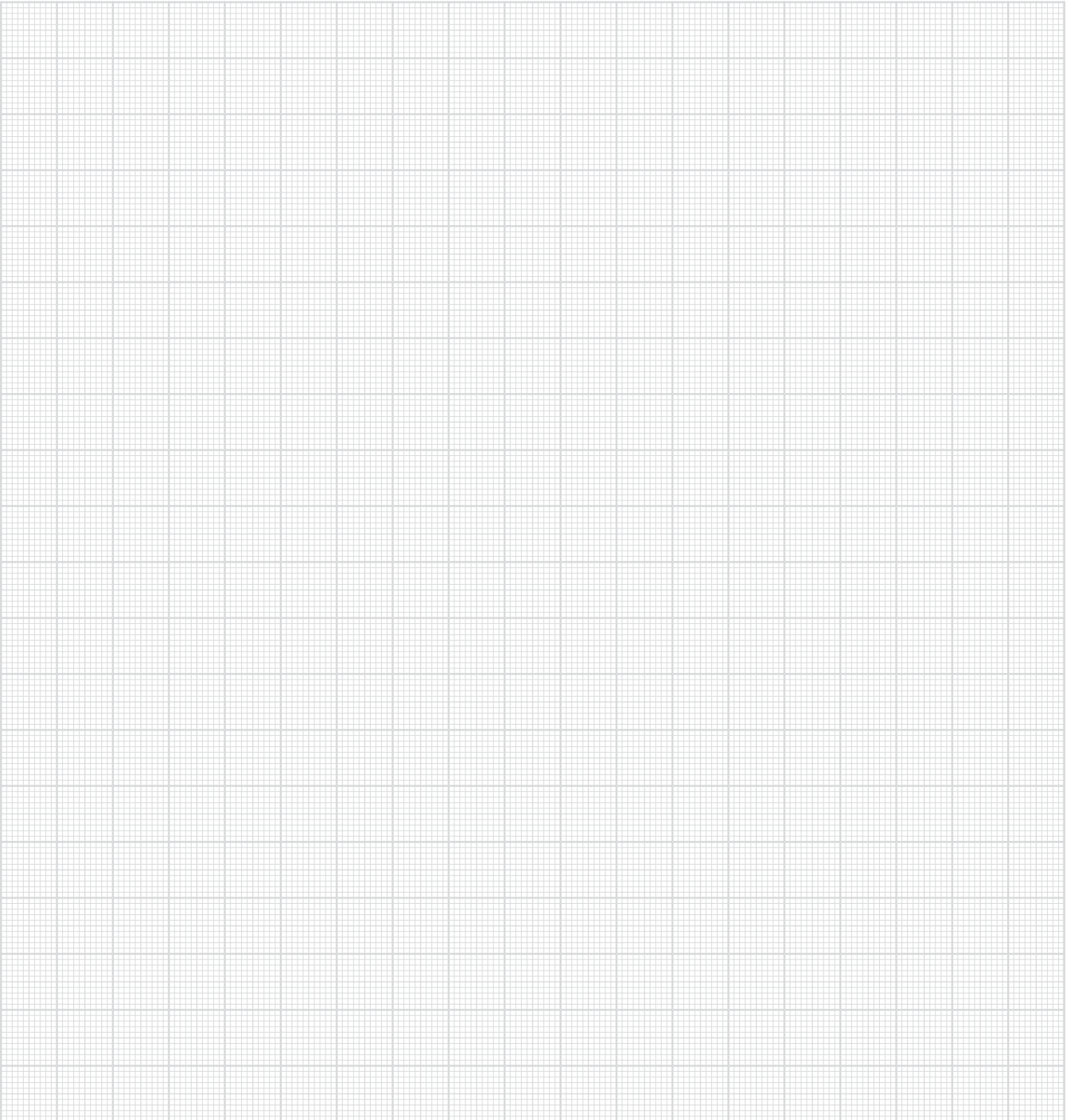


CONDUCTIVE SEALS

Suitable for the realization of boxes and special cabinets where it is necessary to smooth the effects of electromagnetic waves.

They are available in the self-adhesive sealing version to be mounted on a straight edge of sheet metal and in the adhesive version.

Item	Description
ACC027_1	SEAL IN EMC COVERED WITH SATMET FABRIC (EURO/METRE FITTED)
ACC027_2	ADHESIVE SEAL 10X4 COVERED WITH SATMET FABRIC (EURO/METRE)





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