

Part no.
Article no.

CS-44/150 111683



## **Delivery programme**

Product range			Wall-mounting housing CS
Product function			Wall-mounting housing with mounting plate
Degree of Protection			IP66 IP23 (with ventilating plates)
Description			Foamed polyurethane sealing throughout. Impact resistance category IK09 to EN 62262. Sheet steel mounting plate Bottom plate with foamed gasket. Single door, door stop on the right, door opening angle 120° Door hinge pins with quick change technology. Standardized locking system with sash fastener. Powder coating RAL 7035 inside and outside
Material			Steel plate
Dimensions			
Width		mm	400
Height		mm	400
Depth		mm	150
Locks	Number		1
Hinges	Number		2
Door profile molding	Number		2
Flange plates	Width x Depth	mm	112 x 332
Max. F3A flanges	Number		
Mounting plates			
Height		mm	370
Width		mm	350
Weight		kg	8.7
Information about equipment supplied			Lock, 3 mm double ward key Including M6 threaded welded studs for earth conductor connections in the door

# Technical data

General			
Standards			IEC/EN 60529, IEC 62262, IEC/EN 62208
RoHS			In accordance with Directive 2002/95/EC of the European Parliament and Council
RoHS (in accordance with Directive 2002/95/EC of the European Parliament and Council) $\label{eq:council}$			yes
Climatic proofing			Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclical, to IEC 60068-2-30
Ambient temperature		°C	-40 - +70
Degree of Protection			IP66 IP23 (with ventilating plates)
Installation conditions			Indoor-/outdoor installation
Power loss			
			Power loss $P_v$ [W] for fully enclosed sheet steel enclosure CS without internal partitions for wall mounting. Example: max. ambient temperature 35°C; Overtemperature $\Delta T$ = 20 K; Relative humidity = 75%.
Max. heat dissipation			
Individual enclosure for wall mounting	P <sub>V</sub>	W	25
Starting enclosure for wall mounting	P <sub>V</sub>	W	24
Middle enclosure for wall mounting	P <sub>V</sub>	W	22
Material characteristics			
Material			Steel plate
Surface treatment			Structured powder spray polyester based paint finish
Surface finish			Semi-textured
Colour			light gray (RAL 7035)

Mechanical       Mechanical         Impact resistance       Model of fitted components         Total of Weight of fitted components       kg         Mounting plate       225         Mounting plate       kg         Door       kg         Stok payload, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.         Door       Stok plate         Door       Stok plate         Back plate       Stok plate         Stok plate       Stok plate         Top plate       Stok plate         Mounting plate, material       Stok plate         Door, Engineering       Stok stotel, hot-galvanized         Information about equipment supplied       Stok stotel, hot-galvanized         Information about equipment supplied       Stok stotel, hot-galvanized         Information about equipment supplied       Stok stotel, research conductor connections in the door.         Information about equipment supplied       Stok stokel, traned welded st	Finish			Gloss
Muniting plate         Muniting plate         mm         2           Botom         12           Botom plate         10         mm         12           Motiming plate         10         mm         12           Motiming plate         10         mm         12           Motiming plate         10         10         10         10           Motiming plate         10 <td>Material thickness</td> <td></td> <td>mm</td> <td></td>	Material thickness		mm	
Door         mm         1.2           Botom plate         mm         1.5           Material properties         Material properties         K80 accrding to EN 62262           max assembly weights         K90 accrding to EN 62262         K90 accrding to EN 62262           max assembly weights         K90 accrding to EN 62262         K90 accrding to EN 62262           max assembly weights         K90 accrding to EN 62262         K90 accrding to EN 62262           Mounting plate         K90 accrding to EN 62262         K90 accrding to EN 62262           Mounting plate         K90 accrding to EN 62262         K90 accrding to EN 62262           Mounting plate         K90 accrding to EN 62262         K90 accrding to EN 62262           Mounting plate         K90 accrding to EN 62262         K90 accrding to EN 62262           Door         K90 accrding to EN 62262         K90 accrding to EN 62262           Door         K90 accrding to EN 62262         K90 accrding to EN 62262           Door         K90 accrding to EN 62262         S00 kg payload, when horachers fitted in Ifour enclosure converse (weithelitter enclosure	Body		mm	1.2
Battom plate         methanical         Metha	Mounting plate		mm	2
Material properties         Machanical         Image of resistance         <	Door		mm	1.2
Mechanical       Impact resistance       Impact re	Bottom plate		mm	1.5
Impact resistance         KPB acording to EN 6252           max. assembly weights         kg         25           Mounting plate         kg         20           Door         kg         25           Door         500 kg paylod, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.           Dosr         500 kg paylod, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.           Dosr         500 kg paylod, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.           Dosr         500 kg paylod, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.           Dosr         500 kg paylod, when brackets fitted in all four enclosure corners (vertically or horizontally and the weights are symmetrically distributed within the enclosure.           Dost         500 kg paylod, when brackets fitted in all four enclosure corners (vertically or undersented by approximation to weight and the weights are symmetrically distributed within the enclosure.           Dost         500 kg paylod, when brackets fitted in all four enclosure corners (vertically or weight and the weights are symmetrically distributed within the enclosure.           Side plates         500 kg paylod, when brackets fitted in the door and or the conten	Material properties			
max. assembly weights         product of fitted components         kg         generation           Mounting plate         Kg         25           Mounting plate         S00 kg upd, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.           Door         S00 kg upd, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.           Description/standard features         S00 kg upd.           Description/standard features         S00 kg upd.           Back plate         S00 kg upd.           Side plates         S00 kg upd.           Top plate         S00 kg upd.           Mounting plate, material         S00 kg upd.           Door, Engineering         Including Mb threaded welded studs for earth conductor connections in the door.           Including Mb threaded welded studs for earth conductor connections in the door.         Including Mb threaded welded studs for earth conductor connections in the door.           Door, Engineering         Including Mb threaded welded studs for earth conductor connections in the door.           Including Mb threaded welded studs for earth conductor connections in the door.         Including Mb threaded welded studs for earth conductor connections in the door.           Door hinges         Including Mb threaded welded studs for earth conductor connections in	Mechanical			
Total of Weight of fitted components       Image: Second components       Image: Second components       Se	Impact resistance			IK09 according to EN 62262
Mounting plate         Ka         20           Door         Ka         25           Doscription/standard features         Sol kg payload, when brackets fitted in all four enclosure corners (vertically or noncontally) and the weights are symmetrically distributed within the enclosure.           Doscription/standard features         Sol kg payload, when brackets fitted in all four enclosure corners (vertically or noncontally) and the weights are symmetrically distributed within the enclosure.           Doscription/standard features         Sol kg payload, when brackets fitted in all four enclosure corners (vertically or noncontally) and the weights are symmetrically distributed within the enclosure.           Doscription/standard features         Sol kg payload, when brackets fitted in all four enclosure corners (vertically or noncontally) and the weights are symmetrically distributed within the enclosure.           Boto plate         Sol kg payload, when brackets fitted in all four enclosure corners (vertically or noncontally) and the weights are symmetrically distributed within the enclosure.           Mounting plate, material         Sol kg payload, when brackets for earth conductor connections in the door.           Nor, Engineering         Including Mb treaded weided studs for earth conductor connections in the door.           Information about equipment supplied         Including Mb treaded weided studs for earth conductor connections in the door.           Door hinges         Nor hinges inplication with a protective ground contactor connection must be established with a protective ground contractor connection must	max. assembly weights			
box         kg         5           Description/standard features         Sold g payload, when brackets fitted in all four enclosure corners (vertically or prizontally) and the weights are symmetrically distributed within the enclosure.           Description/standard features         Sold g payload, when brackets fitted in all four enclosure corners (vertically or prizontally) and the weights are symmetrically distributed within the enclosure.           Description/standard features         Sold g payload, when brackets fitted in all four enclosure corners (vertically or prizontally) and the weights are symmetrically distributed within the enclosure.           Bots plate         Sold g payload, when brackets fitted in all four enclosure corners (vertically or prizontally) and the weights are symmetrically distributed within the enclosure.           Bots plate         Sold g payload, when brackets fitted in all four enclosure.           Bots plate         Sold g payload, when brackets fitted in all four enclosure.           Bots plate         Sold g payload, when brackets fitted in the door.           Mounting plate, material         Sold g payload, when brackets for earth conductor connections in the door.           Norr, Engineering         Including M6 threaded welded studs for earth conductor connections in the door.           Information about equipment supplied         Sold g payload, when weight and bus experiment protective ground contactor comeetion must be established with a protective ground contactor comeetion must be established with a protective ground contactor connection must be established with a protective groun	Total of Weight of fitted components		kg	225
Description/standard features       500 kg payload, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.         Description/standard features       500 kg payload, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.         Construction       500 kg payload, when brackets fitted in all four enclosure corners (vertically or horizontally) and the weights are symmetrically distributed within the enclosure.         Back plate       500 kg payload, when brackets fitted in all four enclosure.         Top plate       9 mm drilling dimensions for wall mounting         Bottom plate       Without apertures         Mounting plate, material       Sheet steel, hot-galvanized         Door, Engineering       Sheet steel, hot-galvanized         Information about equipment supplied       Lock, 3 mm double ward key         Door hinges       Including M6 threaded welded studs for earth conductor connections in the door         Type Door       In the rajdt, can be converted by user         door opening angle       Door hinges right, can be converted by user         Door hinges       In the right, can be converted by user         Type Door       Door hinges right, can be converted by user         door opening angle       Io <sup>2</sup> Door interdock       Protection insulated turn-bucklé </td <td>Mounting plate</td> <td></td> <td>kg</td> <td>200</td>	Mounting plate		kg	200
Description/standard features         indicate law indicate a symmetrically distributed within the enclosure.           Construction         Image: Construction inside the enclosure.         connections inside the enclosure.           Back plate         Image: Construction inside the enclosure.         Milling dimensions for wall mounting           Side plates         Without apertures         Without apertures           Bottom plate         Enclosed, foamed gasket, can be unscrewed for F3A flanges or for assembly by user           Mounting plate, material         Image: Construction Milling M	Door		kg	25
Construction       Canted and seam welded, including two M6 threaded bolts for earth conductor connections inside the enclosure.         Back plate       9 mm drilling dimensions for wall mounting         Side plates       Without apertures         Top plate       Without apertures         Bottom plate       Enclosed, foamed gasket, can be unscrewed for F3A flanges or for assembly by user         Mounting plate, material       Sheet steel, hot-galvanized         Door, Engineering       Including M6 threaded welded studs for earth conductor connections in the door.         Information about equipment supplied       Lock, 3 mm double ward key Including M6 threaded welded studs for earth conductor connections in the door.         Door hinges       On the right, can be converted by user         Type Door       On the right, can be converted by user         door opening angle       Information insulted turn-buckle studs.         Door interlock       Information about equipment supplied				
a connections inside the enclosure.Back plate9 mm drilling dimensions for wall mountingSide plates9 mm drilling dimensions for wall mountingTop plateWithout aperturesBottom plateReclosed, foamed gasket, can be unscrewed for F3A flanges or for assembly by userMounting plate, material9 met all without aperturesDor, EngineeringIncluding M6 threaded welded studs for earth conductor connections in the door.Information about equipment suppliedIncluding M6 threaded welded studs for earth conductor connections in the door.Door hingesIncluding M6 threaded welded studs for earth conductor connections in the door.Door hingesIncluding M6 threaded welded studs for earth conductor connections in the door.Door hingesIncluding M6 threaded welded studs for earth conductor connections in the door.Door hingesIncluding M6 threaded welded studs for earth conductor connection sint the door.Door hingesIncluding M6 threaded welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side welded studs or the door and on the cabinet side w	Description/standard features			
Side plates       Without apertures         Top plate       Without apertures         Bottom plate       Enclosed, foamed gasket, can be unscrewed for F3A flanges or for assembly by user         Mounting plate, material       Sheet steel, hot-galvanized         Door, Engineering       Including M6 threaded welded studs for earth conductor connections in the door.         Information about equipment supplied       Lock, 3 mm double ward key Including M6 threaded welded studs for earth conductor connections in the door.         Door hinges       On the right, can be converted by user         Type Door       Door hinges right can be converted by user         door opening angle       Door hinges right can be converted by user         Door hinges right can be converted by user       Including M6 ture-buckle standard closure 3 mm double-ward key	Construction			
Top plate       Without apertures         Bottom plate       Enclosed, foamed gasket, can be unscrewed for F3A flanges or for assembly by user         Mounting plate, material       Sheet steel, hot-galvanized         Door, Engineering       Including M6 threaded welded studs for earth conductor connections in the door         Information about equipment supplied       Lock, 3 mm double ward key         Including M6 threaded welded studs for earth conductor connections in the door       Including M6 threaded welded studs for earth conductor connections in the door         Door hinges       If electrical appartus is to be installed in the door, a continuous, permanent sube used as connecting points for the ground leads.         Door hinges       On the right, can be converted by user         door opening angle       I20°         Door hinges right       I20°         Door interlock       Protection insulated turn-buckle standard closure 3 mm double-ward key	Back plate			9 mm drilling dimensions for wall mounting
Bottom plate       Including plate, material       Including plate, material         Mounting plate, material       Sheet steel, hot-galvanized         Door, Engineering       Including M6 threaded welded studs for earth conductor connections in the door.         Information about equipment supplied       Including M6 threaded welded studs for earth conductor connections in the door.         Door hinges       Including M6 threaded welded studs for earth conductor connections in the cabinet side walk         Door hinges       Including M6 threaded welded studs for earth conductor connections in the cabinet side walk         Door hinges       Including M6 threaded welded studs or the door, a continuous, permanent protective ground contactor connection must be established with a protective ground contactor connecting points for the ground leads.         Door hinges       Including M6 threaded welded studs on the door, and on the cabinet side walk         door opening angle       Including M6 threaded welded studs on the door and on the cabinet side walk         Door hinges right       Including M6 threaded welded studs on the door and on the cabinet side walk         door opening angle       Including M6 threaded turn-buckle         Door hinges right       Including M6 threaded turn-buckle         Door hinges right       Including M6 turn-buckle         Door hinges right       Including M6 turn-buckle         Door hinges right       Including M6 turn-buckle	Side plates			Without apertures
Image:	Top plate			Without apertures
Door, EngineeringIncluding M6 threaded welded studs for earth conductor connections in the door:Information about equipment suppliedIncluding M6 threaded welded studs for earth conductor connections in the doorInformation about equipment suppliedIncluding M6 threaded welded studs for earth conductor connections in the doorInformation about equipment suppliedIncluding M6 threaded welded studs for earth conductor connections in the doorInformation about equipment suppliedIncluding M6 threaded welded studs for earth conductor connections in the doorInformation about equipment suppliedIncluding M6 threaded welded studs on the door, a continuous, permanent protective ground contactor connection must be established with a protective ground cable. The threaded welded studs on the door and on the cabinet side well must be used as connecting points for the ground leads.Door hingesIncluding M6 threaded welded studs on the door and on the cabinet side well must be used as connecting points for the ground leads.Including M6 threaded welded studs on the door and on the cabinet side well must be used as connecting points for the ground leads.Including M6 threaded welded studs on the door and on the cabinet side well must be used as connecting points for the ground leads.Including M6 threaded welled studs on the door and on the cabinet side well must be used as connecting points for the ground leads.Including M6 threaded welled studs on the door and on the cabinet side well must be used as connecting points for the ground leads.Including M6 threaded welled studs on the door and on the cabinet side well can be converted by userIncluding M6 threaded welled studs on the door and on the cabinet side well<	Bottom plate			Enclosed, foamed gasket, can be unscrewed for F3A- $\ldots$ flanges or for assembly by user
Information about equipment supplied Information about equipment	Mounting plate, material			Sheet steel, hot-galvanized
Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor connections in the door         Including M6 threaded welded studs for earth conductor         Inclu	Door, Engineering			Including M6 threaded welded studs for earth conductor connections in the door:
Image: bit is a protective ground contactor connection must be established with a protective ground cable. The threaded welded studs on the door and on the cabinet side wal ground cable. The threaded welded studs on the door and on the cabinet side wal must be used as connecting points for the ground leads.Door hingesOn the right, can be converted by userType DoorDoor hinges right can be converted by userdoor opening angleImage: bit	Information about equipment supplied			
Type Door     Door hinges right can be converted by user       door opening angle     Image: Converted by user       Door interlock     Image: Converted by user				protective ground contactor connection must be established with a protective ground cable. The threaded welded studs on the door and on the cabinet side wall
door opening angle     Image: Converted by user       Door interlock     Image: Converted by user	Door hinges			On the right, can be converted by user
Door interlock Protection insulated turn-buckle Standard closure 3 mm double-ward key	Type Door			
Standard closure 3 mm double-ward key	door opening angle			120°
Locks Number 1	Door interlock			
	Locks	Number		1

## Design verification as per IEC/EN 61439

Technical data for design verification			
Heat dissipation, at an ambient temperature of 35°C, delta T: 20 degrees, calculated as per IEC 60890			
Individual enclosure for wall mounting	PV	C0	28
Starting enclosure for wall mounting	P <sub>V</sub>	C0	26
Middle enclosure for wall mounting	P <sub>V</sub>	C0	25
Heat dissipation, at an ambient temperature of 35°C, delta T: 35 degrees, calculated as per IEC 60890			
Individual enclosure for wall mounting	P <sub>V</sub>	C0	55
Starting enclosure for wall mounting	P <sub>V</sub>	C0	53
Middle enclosure for wall mounting	P <sub>V</sub>	C0	50
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply to enclosures without lifting aids.

10.2.6 Mechanical impact	IK09
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES	IP66_x
10.4 Clearances and creepage distances	Is the panel builder's responsibility.
10.5 Protection against electric shock	$<$ 0.1 $\Omega;$ meets the product standard's requirements.
10.6 Incorporation of switching devices and components	Is the panel builder's responsibility.
10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9 Insulation properties	
10.9.2 Power-frequency electric strength	U <sub>i</sub> = 1000 V AC
10.9.3 Impulse withstand voltage	Does not apply to basic enclosures as defined in EN 62208.
10.9.4 Testing of enclosures made of insulating material	Does not apply to metal enclosures.
10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility.
10.13 Mechanical function	Meets the product standard's requirements.

Δ	n	n	r	n	v	a	lc
A	Р	μ		U	V	α	19

Approvato	
Product Standards	UL 508A; CSA-C22.2 No.14; IEC/EN 60529; CE marking
UL File No.	E336299
UL Category Control No.	NITW
CSA File No.	-
CSA Class No.	-
North America Certification	Request filed for CSA
Conditions of Acceptability	Series CS may be provided with metal sub-panel. No back mounted components are allowed between sub-panel and the back sheet metal enclosure
Specially designed for North America	No
Suitable for	Industrial Control Panels
Degree of Protection	IEC: IP66, indoor and outdoor; UL/CSA Types 1, 12, indoor only.

#### **Dimensions**

Dimensions

### Additional product information (links)

#### AWA4300-2521 CS wall-mounted sheet steel enclosures with mounting plate

AWA4300-2521 CS wall-mounted sheet steel enclosures with mounting plate ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/25210414.pdf