## **DATASHEET - CS-2520/150**



### Wall enclosure, +mounting plate, HxWxD=250x200x150mm

Powering Business Worldwide\*

Part no. CS-2520/150 Catalog No. 111646

EL-Nummer (Norway)

0002466100

## **Delivery program**

Delivery program			
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	200
Height		mm	250
Depth		mm	150
Locks	Number		1
Hinges	Number		2
Door profile molding	Number		1
Flange plates	Width x Depth	mm	112 x 182
Max. F3A flanges	Number		
Mounting plates			
Height		mm	220
Width		mm	150
Weight		kg	3.4
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

Material

Surface treatment

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)			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	$P_{V}$	W	11
Starting enclosure for wall mounting	$P_{V}$	W	10
Middle enclosure for wall mounting	$P_{V}$	W	9
Material characteristics			

Steel plate

Structured powder spray polyester based paint finish

Surface finish		Semi-textured
Colour		light gray (RAL 7035)
Finish		Gloss
Material thickness	mm	
Body	mm	1.2
Mounting plate	mm	2
Door	mm	1
Bottom plate	mm	1.5
Material properties		
Mechanical		
Impact resistance		IK09 according to EN 62262
max. assembly weights		
Total of Weight of fitted components	kg	150
Mounting plate	kg	125
Door	kg	25
		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		
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
		If electrical apparatus is to be installed in 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 wall must be used as connecting points for the ground leads.
Door hinges		On the right, can be converted by user
Type Door		Door hinges right can be converted by user
door opening angle		120°
Door interlock		Protection insulated turn-buckle Standard closure 3 mm double-ward key

# Design verification as per IEC/EN 61439

Locks

Technical data for design verification  Heat dissipation, at an ambient temperature of 35°C, delta T: 20 degrees in top of the enclosure, calculated as per IEC 60890  Individual enclosure for wall mounting Pv W 12  Middle enclosure for wall mounting Pv W 11  Heat dissipation, at an ambient temperature of 35°C, delta T: 35 degrees in top of the enclosure, calculated as per IEC 60890  Individual enclosure for wall mounting Pv W 25  Starting enclosure for wall mounting Pv W 23  Middle enclosure for wall mounting Pv W 21  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects	<del>-</del>			
of the enclosure, calculated as per IEC 60890  Individual enclosure for wall mounting Pv W 13  Starting enclosure for wall mounting Pv W 12  Middle enclosure for wall mounting Pv W 11  Heat dissipation, at an ambient temperature of 35°C, delta T: 35 degrees in top of the enclosure, calculated as per IEC 60890  Individual enclosure for wall mounting Pv W 25  Starting enclosure for wall mounting Pv W 23  Middle enclosure for wall mounting Pv W 21  IEC/EN 61439 design verification 10.2 Strength of materials and parts 10.2.2 Corrosion resistance 10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.2 Verification of resistance of insulating materials to abnormal heat  Meets the product standard's requirements.	Technical data for design verification			
Starting enclosure for wall mounting  Pv W 12  Middle enclosure for wall mounting  Pv W 11  Heat dissipation, at an ambient temperature of 35°C, delta T: 35 degrees in top of the enclosure, calculated as per IEC 60890  Individual enclosure for wall mounting  Pv W 25  Starting enclosure for wall mounting  Pv W 23  Middle enclosure for wall mounting  Pv W 21  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat  Meets the product standard's requirements.				
Middle enclosure for wall mounting  Po W 11  Heat dissipation, at an ambient temperature of 35°C, delta T: 35 degrees in top of the enclosure, calculated as per IEC 60890  Individual enclosure for wall mounting  Po W 25  Starting enclosure for wall mounting  Po W 23  Middle enclosure for wall mounting  Po W 21  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat  Meets the product standard's requirements.	Individual enclosure for wall mounting	$P_{V}$	W	13
Heat dissipation, at an ambient temperature of 35°C, delta T: 35 degrees in top of the enclosure, calculated as per IEC 60890  Individual enclosure for wall mounting Pv W 25  Starting enclosure for wall mounting Pv W 23  Middle enclosure for wall mounting Pv W 21  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance 10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat  Meets the product standard's requirements.	Starting enclosure for wall mounting	$P_{V}$	W	12
of the enclosure, calculated as per IEC 60890  Individual enclosure for wall mounting P <sub>V</sub> W 25  Starting enclosure for wall mounting P <sub>V</sub> W 23  Middle enclosure for wall mounting P <sub>V</sub> W 21  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.	Middle enclosure for wall mounting	$P_{V}$	W	11
Starting enclosure for wall mounting  Pv W 23  Middle enclosure for wall mounting  Pv W 21  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  Meets the product standard's requirements.				
Middle enclosure for wall mounting  P <sub>V</sub> W  21  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat  Meets the product standard's requirements.	Individual enclosure for wall mounting	$P_{V}$	W	25
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.	Starting enclosure for wall mounting	$P_{V}$	W	23
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.	Middle enclosure for wall mounting	$P_{V}$	W	21
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.	IEC/EN 61439 design verification			
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.  Meets the product standard's requirements.	10.2 Strength of materials and parts			
10.2.3.2 Verification of resistance of insulating materials to normal heat  Meets the product standard's requirements.  Meets the product standard's requirements.	10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat  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.
				Meets the product standard's requirements.

Number

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.

## **Technical data ETIM 7.0**

Cabinet enclosures (EG000011) / Enclosure/switchgear cabinet (empty) (EC000261)			
Electric engineering, automation, process control engineering / Electrical cabinet, housing, rack / Electrical cabinet (empty) / Electrical cabinet (ecl@ss10.0.1-27-18-01-01 [AGZ056016])			
Width	n	mm	200
Height	n	mm	250
Depth	r	mm	150
Material			Steel
Material quality			Other
Surface finishing			Powder coating
Colour			Grey
RAL-number			7035
With mounting plate			Yes
Mounting plate depth-adjustable			Yes
Number of locks			1
Floor installation possible			Yes
Wall fastening possible			Yes
Wall build in			Yes
Pole fastening			Yes
Tackable			Yes
Number of doors			1
Suitable for metrical mounting			Yes
Suitable for outdoor set-up			No
Pitched roof			No
EMC-version			Yes
With glazed door			No
With ventilation door			No
With backside door			No
Impact strength			IK09
Degree of protection (IP)			IP66
Degree of protection (NEMA)			12

# Approvals

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	https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/25210414.pdf	
Declaration of conformity	$http://intranet.moeller.net/technik\_daten/file/produkt\_deklarationen/file/konformitaeten/00002/00002259.pdf$	