## **DATASHEET - CS-54/250**



### Wall enclosure with mounting plate, HxWxD=500x400x250mm

Powering Business Worldwide\*

Part no. CS-54/250 Catalog No. 111690

EL-Nummer (Norway) 2466114

## **Delivery program**

zemer, 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	400
Height		mm	500
Depth		mm	250
Locks	Number		2
Hinges	Number		2
Door profile molding	Number		2
Flange plates	Width x Depth	mm	172 x 332
Max. F3A flanges	Number		1
Mounting plates			
Height		mm	470
Width		mm	350
Weight		kg	11.9
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 62208
RoHS			in accordance with Directive 2015/863/EU 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	-25 - +40
Degree of Protection			IP66 IP23 (with ventilating plates)
Installation conditions			Indoor 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	39
Starting enclosure for wall mounting	$P_{V}$	W	36
Middle enclosure for wall mounting	$P_{V}$	W	33
Material characteristics			
Material			Steel plate

Surface treatment

Structured powder spray polyester based paint finish

Locks	Number		2
door opening angle Door interlock			Standard closure 3 mm double-ward key
			can be converted by user  120°
Door hinges Type Door			On the right, can be converted by user  Door hinges right
Donkings			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.
Information about equipment supplied			Lock, 3 mm double ward key Including M6 threaded welded studs for earth conductor connections in the door
Door, Engineering			Including M6 threaded welded studs for earth conductor connections in the door:
Mounting plate, material			Sheet steel, hot-galvanized
Bottom plate			Enclosed, foamed gasket, can be unscrewed for F3A flanges or for assembly by user
Top plate			Without apertures
Side plates			Without apertures
Back plate			9 mm drilling dimensions for wall mounting
Construction			Canted and seam welded, including two M6 threaded bolts for earth conductor connections inside 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.
Door		kg	25
Mounting plate		kg	200
Total of Weight of fitted components		kg	225
max. assembly weights			
Impact resistance			IK09 according to EN 62262
Material properties Mechanical			
Bottom plate		mm	2
Door		mm	1.2
Mounting plate		mm	2
Body		mm	1.2
Material thickness		mm	
Finish			Gloss
Colour			light gray (RAL 7035)
Surface finish			Semi-textured

# 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 in top of the enclosure, calculated as per IEC 60890			
Individual enclosure for wall mounting	$P_{V}$	W	39
Starting enclosure for wall mounting	$P_V$	W	36
Middle enclosure for wall mounting	$P_{V}$	W	33
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	$P_V$	W	80
Starting enclosure for wall mounting	$P_{V}$	W	74
Middle enclosure for wall mounting	$P_{V}$	W	69
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
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) (EC0002	261)		
Electric engineering, automation, process control engineering / Electrical cabin	net, housing, rack / Ele	ctrica	al cabinet (empty) / Electrical cabinet (ecl@ss10.0.1-27-18-01-01 [AGZ056016])
Width	mr	m	400
Height	mr	m	500
Depth	mr	m	250
Material			Steel
Material quality			Other
Surface finishing			Powder coating
Colour			Grey
RAL-number			7035
With mounting plate			Yes
Mounting plate depth-adjustable			No
Number of locks			2
Floor installation possible			Yes
Nall fastening possible			Yes
Nall build in			Yes
Pole fastening			Yes
Tackable			No
Number of doors			1
Suitable for metrical mounting			Yes
Suitable for outdoor set-up			No
Pitched roof			No
EMC-version			No
With glazed door			No
Nith ventilation door			No
Nith 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 62208; 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; UL/CSA Types 1, 12, indoor only.

# **Dimensions**

