## **DATASHEET - CS-86/300**



## Wall enclosure with mounting plate, HxWxD=800x600x300mm

Powering Business Worldwide

CS-86/300 Part no. Catalog No. 111708

**EL-Nummer** (Norway)

2466132

### **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	600
Height		mm	800
Depth		mm	300
Locks	Number		2
Hinges	Number		3
Door profile molding	Number		2
Flange plates	Width x Depth	mm	172 x 532
Max. F3A flanges	Number		2
Mounting plates			
Height		mm	770
Width		mm	550
Weight		kg	34.9
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	82
Starting enclosure for wall mounting	$P_V$	W	76
Middle enclosure for wall mounting	$P_{V}$	W	70
Material characteristics			

Material	Steel plate
Surface treatment	Structured powder spray polyester based paint finish

Surface finish		Semi-textured
Colour		light gray (RAL 7035)
Finish		Gloss
Material thickness	mm	
Body	mm	1.5
Mounting plate	mm	3
Door	mm	1.5
Bottom plate	mm	2
Material properties		
Mechanical		
Impact resistance		IK09 according to EN 62262
max. assembly weights		
Total of Weight of fitted components	kg	325
Mounting plate	kg	300
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		closed
door opening angle		120°
Door interlock		Standard closure 3 mm double-ward key

## **Design verification as per IEC/EN 61439**

Locks

Fechnical 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	82
Starting enclosure for wall mounting	$P_{V}$	W	76
Middle enclosure for wall mounting	$P_{V}$	W	70
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	134
Starting enclosure for wall mounting	$P_{V}$	W	145
Middle enclosure for wall mounting	$P_{V}$	W	135
EC/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.

Number

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) (EC000261)	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	mm	600	
Height	mm	800	
Depth	mm	300	
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	
Wall fastening possible		Yes	
Wall 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	
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 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**

