### DATASHEET - CS-86/300



Wall enclosure with mounting plate, HxWxD=800x600x300mm

CS-86/300

0002466132

111708





EL-Nummer (Norway)

### **Delivery program**

| Product range                        |               |    | Wall-mounting housing CS  |
|--------------------------------------|---------------|----|---|
| Product function                     |               |    | Wall-mounting housing with mounting plate   |
| Degree of Protection                 |               |    | IP66<br>IP23 (with ventilating plates)  |
| Description                          |               |    | Foamed polyurethane sealing throughout.<br>Impact resistance category IK09 to EN 62262.<br>Sheet steel mounting plate<br>Bottom plate with foamed gasket.<br>Single door, door stop on the right, door opening angle 120°<br>Door hinge pins with quick change technology.<br>Standardized locking system with sash fastener.<br>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<br>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) $\label{eq:council}$ |                |    | yes  |
| Climatic proofing  |                |    | Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclical, to IEC 60068-2-30   |
| Ambient temperature  |                | °C | -25 - +40  |
| Degree of Protection   |                |    | IP66<br>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.<br>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  | 82   |
| Starting enclosure for wall mounting   | P <sub>V</sub> | W  | 76   |
| Middle enclosure for wall mounting   | P <sub>V</sub> | 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 | 01055  |
| Body                                 |        |    | 1.5  |
| •                                    |        | mm |  |
| Mounting plate                       |        | mm | 3  |
| Door                                 |        | mm | 1.5  |
| Bottom plate Material properties     |        | mm | 2  |
| 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<br>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- $\ldots$ 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<br>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<br>protective ground contactor connection must be established with a protective<br>ground cable. The threaded welded studs on the door and on the cabinet side wall<br>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  |
| Locks                                | Number |    | 2  |
|                                      |        |    |  |

## 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 <sub>V</sub> | W | 82   |
| Starting enclosure for wall mounting  | PV             | W | 76   |
| Middle enclosure for wall mounting  | P <sub>V</sub> | 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 <sub>V</sub> | W | 134  |
| Starting enclosure for wall mounting  | P <sub>V</sub> | W | 145  |
| Middle enclosure for wall mounting  | P <sub>V</sub> | W | 135  |
| 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) (EC000261)

| Electric engineering, automation, process control engineering / Electrical cabinet, housing | 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



