

### Insulated enclosure, top+bottom open, HxWxD=750x375x275mm

Powering Business Worldwide\*

Part no. C148-250 Article no. 083642

## **Delivery program**

Delivery program		
Dimensions	mm	S
Product range		Ci insulated enclosures
Basic function		Basic enclosures
Product function		Distribution board enclosure without cable gland plates
Single unit/Complete unit		Single unit
Degree of Protection		IP65
Description		Sealable cover fasteners Sides closed, but with full area knockout Open top and bottom
Type cover		Transparent
Width	mm	375
Height	mm	750
Depth	mm	275
Mounting depth with mounting plate	mm	250
Mounting depth for mounting rail 7.5 mm height	mm	242.5
Mounting depth for mounting rail 15 mm height	mm	235
Enclosure depth		
Legend for the graphic		Dimensions from top: Mounting depth with mounting plate Mounting depth for mounting rail 7.5 mm height Mounting depth for mounting rail 15 mm height Enclosure depth
Enclosure depth	mm	250 242.5 235 235 275

### Notes

#### Distribution board with/without gland plates fitted

Cover transparent, cover fasteners can be sealed

#### Ci distribution board enclosure without cable gland plates

Degree of protection IP65

Sides closed, but with full area knockout, open top and bottom

#### KST distribution board enclosure with cable gland plates fitted

- Degree of protection IP65 from below
- Sides closed, but with full area knockout, open at top
- Fitting of cable supports in the distribution board with wedge-lock fastner
   Gland plate can be split, cables can be inserted from the front

### **Technical data** General

General		
Standards		IEC/EN 60529 EN 50262 DIN 43656 DIN 43660 EN 60439-4 for CIX individual enclosures with combined distribution boards from Ci enclosures up to 680 A. Can thus be used for socket combinations and as component for construction site distribution boards.
Climatic proofing		Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature	°C	-40 - +80
Ambient temperature		
Mean value over 24 hours	°C	35
Limit values	°C	
Ambient temperature limit value min.	°C	-5
Ambient air temperature, limit values max.	°C	40
Degree of Protection		IP65
Protection type		IP65 (Enclosure) IP65 (KST cable entries from below) IP64 (KST cable entries from above) IP00 (Cable entry open)
Power loss		
Max. radiated heat dissipation with separate mounting, ambient air temperature +20 $^{\circ}\text{C}$	W	164
Max. radiated heat dissipation in distribution board combination to VDE 0660 Part 500	W	93
Notes		When calculating the heat dissipation, the quadratic relationship of current with the rated diversity factor a must be considered. $P_{v} = I_{2}  x  R$ $P_{v}' = P_{v}  x  a^{2}$ If no data is available concerning the load relationships of the individual circuits, the rated diversity factor is selected conform to VDE 0660 Part 500.
additional technical data for UL-/CSA- approved devices		see UL-report File No. E54120
Components		Switchgear assembly components are type-tested. They are available individually for the self-assembly of switchgear installations, distribution boards and control panels.
Devices that can be fitted		The reference values indicated in the table apply to the basic elements of the distribution board. As far as devices, terminals etc. fitted into the enclosures are concerned, their own specific technical data and rated values apply.
Standards		
TTA - Type Tested Assemblies		IEC/EN 60439-1, VDE 0660 Part 500
Low-voltage fuses		IEC/EN 60269, VDE 0636
Type test		VDE 0660 Part 500, IEC/EN 60439-1
Creepage and clearance distances		III/3 to IEC/EN 60439-1
Flammability characteristics - Glow rod test		VDE 0304 Part 3 level IIb, level IIb to IEC 60707
Regulation for the fire resistance tests of electrical products, their modules and components, glow wire test		VDE 0471 Part 2
Operating and ambient conditions to VDE 0660 Part 500		
Ambient temperature		
Mean value over 24 hours	°C	35
Limit values	°C	-5 40
Indoor installation		
Relative humidity		90 % (at 20°C) 50% (at 40°C)
Altitude	m	Max. 2000
Protection type		IP65 (Enclosure) IP65 (KST cable entries from below)

		IP64 (KST cable entries from above) IP00 (Cable entry open)
Mounting grid	mm	25 (DIN 43660)
Colour		
Base		RAL 7032, pebble grey
Housing body		Transparent, colourless or RAL 7032, pebble grey
		CINA: Transparent cover, opaque
Surface finish		Galvanized Passivated
Material characteristics		
Material		glass-fibre reinforced polycarbonate (base) non-reinforced polycarbonate (cover) Halogen free
Surface finish		Galvanized Passivated
Colour		RAL 7032, pebble grey (base) transparent, opaque (cover)
Colour		
Base		RAL 7032, pebble grey
Housing body		Transparent, colourless or RAL 7032, pebble grey
Material properties		
Electrical		
Track resistance		KB160, KC175 (base, to IEC 60112) KB100, KC200 (cover, to IEC 60112)
Surface resistance to IEC 60093	$\Omega \times 10^{13}$	1
Dielectric strength to IEC 60243-1	kV/mm	30
Thermal		
Temperature resistant		-40 °C - 120 °C (enclosure) 85 °C (enclosure bolt) 80 °C (gasket)
Mechanical		
Impact resistance		IK10 according to EN 50102
Loading capacity	kg/m <sup>2</sup>	40
Chemical resistance		
Chemical resistant		Resistant against: Acids < 10 %, mineral oil, alcohol, gasoline, greases, salt solutions Partly resistant to: Acids > 10 % Not resistant to: alkalis, benzene
Atmospheric		
Saline spray		IEC 60068-2-11
UV resistance		Beneath protective shield
Water consumption to DIN EN ISO 62	%	0.29
Flammability characteristics		

# Design verification as per IEC/EN 61439

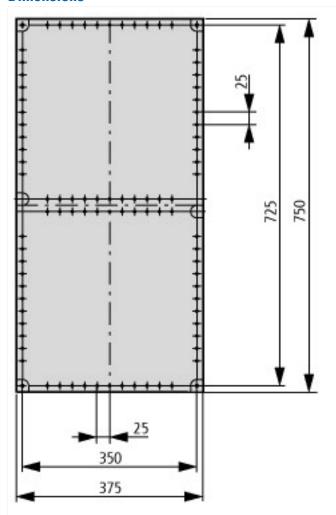
Flammability classification according to UL94

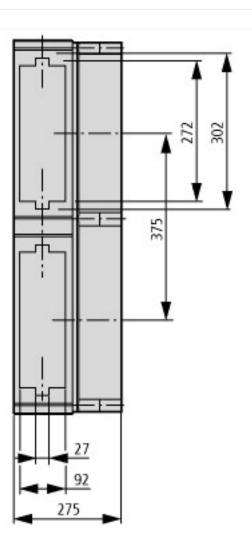
Technical data for design verification			
Heat dissipation, at an ambient temperature of 35°C, delta T: 20 degrees, calculated as per IEC 60890			
Individual enclosure for wall mounting	$P_{V}$	CO	52
Starting enclosure for wall mounting	$P_{V}$	CO	48
Middle enclosure for wall mounting	$P_{V}$	CO	44
Heat dissipation, at an ambient temperature of 35°C, delta T: 35 degrees, calculated as per IEC 60890			
Individual enclosure for wall mounting	$P_{V}$	CO	105
Starting enclosure for wall mounting	$P_{V}$	CO	96
Middle enclosure for wall mounting	$P_{V}$	CO	88
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.

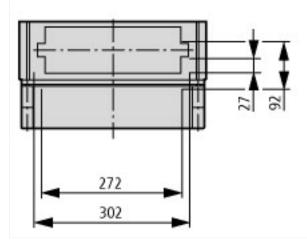
V1 (base) V2 (cover)

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	Lower part: 960 °C / cover: 850 °C; meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation	Not relevant to indoor installations.
10.2.5 Lifting	40 kg per enclosure with support frame and lifting aid met, assembled and secured as per the latest applicable instruction leaflet.
10.2.6 Mechanical impact	IK10
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES	IP65
10.4 Clearances and creepage distances	Is the panel builder's responsibility.
10.5 Protection against electric shock	Protection class 2, therefore not applicable.
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	8 kV
10.9.4 Testing of enclosures made of insulating material	Meets the product standard's requirements.
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.

# **Dimensions**







## **Additional product information (links)**

Manufacturer's Declaration CI-RoHS	ftp://ftp.moeller.net/DOCUMENTATION/PDF/2013-01-31_Ci_RoHS.pdf
Declaration of conformity	ftp://ftp.moeller.net/DOCUMENTATION/PDF/ci_ce.pdf