Zone

1 21 2 22

GGCD

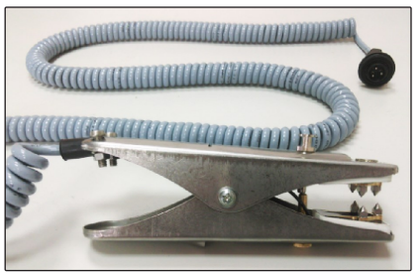
IP 66

IK08

T_a -20 +50

ATEX

- Active grounding system for static grounding and permanent monitoring
- Permanent removal of electrostatic charge during filling or emptying tanks (road tracks, railcar tanks, barrels)
- Two output contacts (1 NO & 1 NC)



CONSTRUCTION

Enclosure: polyester plastic reinforced with glass fiber, color - black
Cover: with integrated thermoplastic elastomer gasket, closes with four M6 stainless steel screws.

TECHNICAL DATA

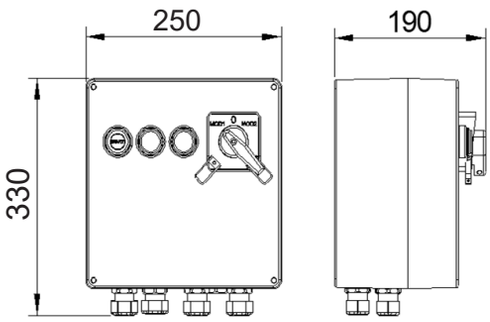
Certificate:	Ex FIDI 19 ATEX 0050
Marking:	CE 0722
Apparatus category:	II 2GD
Marking of explosion protection:	Ex Ex eb db [ib] mb IIC T5 Gb Ex tb [ib] IIIC T80C° Db
Ambient temperature:	-20ºC ≤ T_a ≤ +50ºC
Degree of protection:	IP 66
Resistance to shock:	IK 08
Protection class :	I (protective earthing)
Rated voltage:	230 V± 10% (other voltage on request)
Rated current:	50 mA
Frequency:	50 Hz
Output circuit:	2 NO/NC Un=250 VAC, In=8 A / 230 V, 4 A at cosφ=0.4
Cable entry:	3 x M25 - power supply, two output circuit 4 x M25 - 2x connection clamp , 2x wire to equipotential busbar or grounding
Weight:	6 kg (without clamp and cable) weight of clamps with 10 m cable ca. 2,5 kg
Packing:	The packing contains: 1 pcs 430x350x230 mm

MODEL CODE

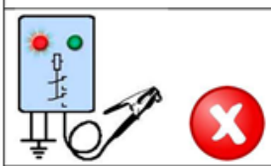
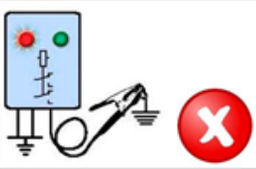
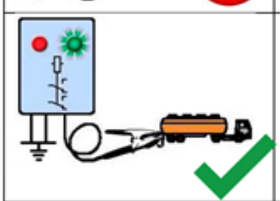
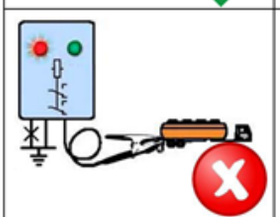
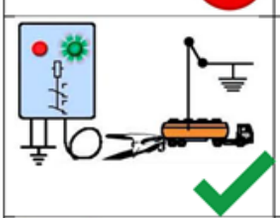
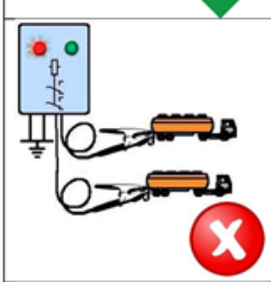
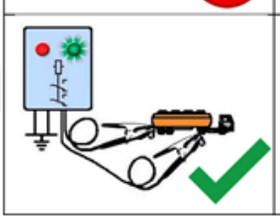
GGCD 01 / . . - .

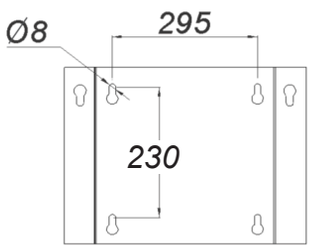
Basic product code
Product version:
K1 - type with one clamp K1, with 10 m cable*
K2 - type with two clamps K2, with 2x10 m cable*
*cables up to 50 m are available on customer's request
Nominal voltage:
1 - 24 V ± 10 % DC
2 - 230 V ± 10 % AC

DIMENSION DRAWING (mm)



Principle of work for GGCD-01/..

State of earthing process		Reaction of the earthing monitoring device
	GGCD 01/K1 is not correct connected and turned ON. Clamp is not connected, grounding equipment not in use	Earthing incorrect • Red indicating lamp ON • Green indicating lamp OFF • Contact OPEN
	GGCD 01/K1 is correct connected and turned ON, but clamp is directly grounded, e.g. via the loading platform	Earthing incorrect (only MOD 2) • Red indicating lamp ON • Green indicating lamp OFF • Contacts OPEN
	GGCD 01/K1 is correct connected and turned ON. Clamp connected to tank vehicle.	Earthing OK • Red indicating lamp OFF • Green indicating lamp ON • Contacts CLOSED
	GGCD 01/K1 is correct connected and turned ON, but cable to the grounding is disconnected.	Earthing incorrect • Red indicating lamp ON • Green indicating lamp OFF • Contacts OPEN
	GGCD 01/K1 is correct connected and turned ON. Clamp connected to tank vehicle. Tank vehicle is grounded subsequently (e.g. via the loading arm).	Earthing OK • Red indicating lamp OFF • Green indicating lamp ON • Contacts CLOSED
	GGCD 01/K2 is correct connected and turned ON. Two clamps are connected on two separate object grounding.	Earthing incorrect • Red indicating lamp ON • Green indicating lamp OFF • Contacts OPEN
	GGCD 01/K2 is correct connected and turned ON. Two clamps are connected on one object grounding.	Earthing OK • Red indicating lamp OFF • Green indicating lamp ON • Contacts CLOSED



All technical data is relevant at the time of print.

GGCD

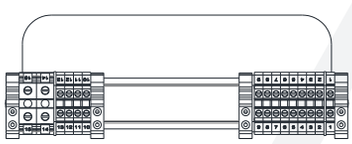
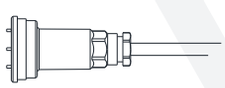
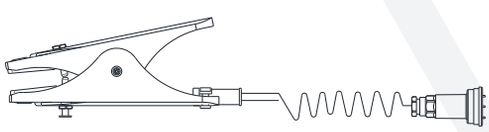
OPERATING PRINCIPLE

Each version of GGCD device has two operating modes (which can be selected with control switch):

MOD 1 - in the presence of main supply at the time of connection of the clamps to the earthing object, the device recognizes total earthing resistance, for instance is the resistance between the earthing object and the grounding less than 10 Ω. The total ground resistance of RZuk is the replacement resistance of the combination RZ + RC1 + RC2 + RPAL1 + RPAL2. If RZuk < 10 Ω object is considered to be electrostatically grounded.
It is used when the earthing object cannot be isolated from the ground in a controlled manner (e.g. rail vehicles, underground reservoirs, etc.).

MOD 2 - in the presence of main supply within the control time of approx. 10 s after activating the START button, the device recognizes whether the earthing object is already earthed in another uncontrolled manner with RZ < 5 Ω and device recognizes total earthing resistance, for instance is the resistance between the earthing object and the grounding less than 10 Ω. The total earthing resistance of RZuk is the replacement resistance of the combination RZ + RC1 + RC2 + RPAL1 + RPAL2. If RZ UK < 10 Ω object is considered to be electrostatically grounded.
It is used when the earthing object is insulated from the ground in a controlled way (e.g. tank trucks, etc.).

SPARE PARTS AND ACCESSORIES

SKETCH	DESCRIPTION	CODE
	Control module GGCD 01	GGCD 01 10-110
	Connecting cable 0,5m with a coupler (for GGCD 01/K1 - .. model only)	GGCD 01 10-120
	Connecting cable 0,5m with a coupler (for GGCD 01/K2 - .. model only)	GGCD 01 10-130
	Clamp K1 with a 10m cable and plug (for GGCD 01/K1 - .. model only)	GGCD 01 10-140
	Clamp K2 with a 10m cable and plug (for GGCD 01/K2 - .. model only)	GGCD 01 10-150
Tailored to customer's needs	Cable storage box	GGCD 01 10-160

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