

GRD-4200 Electronic earthing system

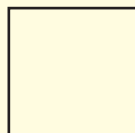
The GRD-4200 series electronic earthing system ensures grounding of tankers and tank trucks during the transfer of flammable liquids, preventing the formation of electrostatic charges.

During the entire loading and unloading phase, the device checks that the equipotentiality of the earthing system is maintained.

In fact, the electronic system is equipped with a protection circuit that checks the resistance value and compares it to the set parameter and, if this value falls within the preset range, closes the electrical circuit between the two systems that are equipotential. Vice versa, it removes the operating consent from the loading pump and closes the loading valve.

The GRD-4200 electronic earthing system has obtained SIL (Safety Integrity Level) Level 2 certification in compliance with IEC-61508 and EN-50495 standards, which guarantees that the system is able to perform its safety function.

Manufacturer applies a tamper-evident holographic security label to its products, complete with a unique authentication numeric code, to combat the illegal sale of imitations and counterfeits, as well as guarantee the authenticity of its products. Failure to observe international standards creates serious risks for the environment and, above all, for the personnel who work with the systems on a daily basis.



Sectors of application:



Petroleum refineries



Chemical and petrochemical facilities



Onshore facilities



Offshore facilities



Petroleum loading/unloading pontoons



Agribusiness facilities



Fuel storage facilities



CERTIFICATION DATA

| | | | | |
|----------------------------------|--|--------------------------|---|--|
| Classification: | Group II | Category 2GD | | |
| Installation: EN 60079.14 | zone 1 - zone 2 (Gas) | zone 21 - zone 22 (Dust) | | |
| Marking: | CE 0722 Ex II 2(1) G - Ex d [ia Ga] ia IIB T6 Gb | | | |
| | CE 0722 Ex II 2(1) D - Ex tb [ia Da] ia IIIC T85°C Db | | | |
| Certificate: | ATEX | CESI 04 ATEX 129 | | |
| | IEC Ex | IECEX CES 14.0035X | For all IEC Ex certification data, download the certificate from www.cortemgroup.com | |
| Standards: | CENELEC EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-11: 2012, EN 60079-31:2009 and the European Directive 2014/34/UE. IEC 60079-0: 2011, IEC 60079-1: 2007, IEC 60079-11: 2011, IEC 60079-31: 2008 RoHS Directive 2002/95/EC. | | | |
| Temperature class: | 85°C (T6) | | | |
| Ambient Temperature: | -20°C +55°C | | | |
| Degree of protection: | IP66 | | | |



A QR reader is required to access the information contained in the QRCode.

Centre the QR code in the frame of your Smartphone camera. Your Smartphone will open the corresponding address.



ATEX Certificate



IECEx Certificate



Use and maintenance instructions

GRD-4200 Electronic earthing system



MECHANICAL FEATURES

| | |
|------------------------------------|--|
| Body and lid: | Low copper content aluminium alloy |
| Gasket: | Acid, hydrocarbon and high temperature resistant silicone positioned between the body and the lid |
| Certificate label: | Riveted aluminium on lid |
| Screws, bolts and nuts: | Stainless steel |
| Earthing screw: | Stainless steel M6. Stainless steel M6. Inside and outside the body and on the lid, complete with anti-rotation brackets |
| Fastening brackets: | Electrolytically galvanized steel |
| Lever on lid: | In coated aluminium |
| Warning lights: | Impact and UV resistant polycarbonate |
| Coating: | Polyester RAL 7035 (Light grey) |
| Resistenza alla corrosione: | The STANDARD of the aluminium alloy used by manufacturer has passed the tests required by standards EN60068-2-30 (hot-humid cycles) and EN60068-2-11 (salt fog test) |
| Inputs: | 2 3/4" fittings. Complete with a PLG2G plug |
| Cable gland: | For non-armored cable, internally sealed, thread Ø 3/4" ISO7/1 |
| Cable: | Yellow with trim in rubber resistant to oil and chemical substances. Suitable for extremely high mechanical stresses. Length 8 m. |
| Pliers: | Bipolar, casting with aluminium with handles in neoprene, jaws with steel tips, auto-releasing. 16 mm opening. |
| Bracket for pliers: | In stainless steel. |

ELECTRICAL FEATURES

| | |
|-------------------------|-------------------------------|
| Rated voltage: | 230 Vca o 110 Vac o 24 Vac dc |
| Rated frequency: | max. 50/60 Hz |

| GRD-4200 | | |
|---------------|--------|---------|
| Status: | Block | Consent |
| Current draw: | 12 mA | 24 mA |
| Power: | 1.64 W | 4.32 W |
| Power factor: | 0.57 | 0.82 |

| GRD-4200/110 | | |
|---------------|--------|---------|
| Status: | Block | Consent |
| Current draw: | 22 mA | 45 mA |
| Power: | 1.52 W | 4.18 W |
| Power factor: | 0.62 | 0.84 |

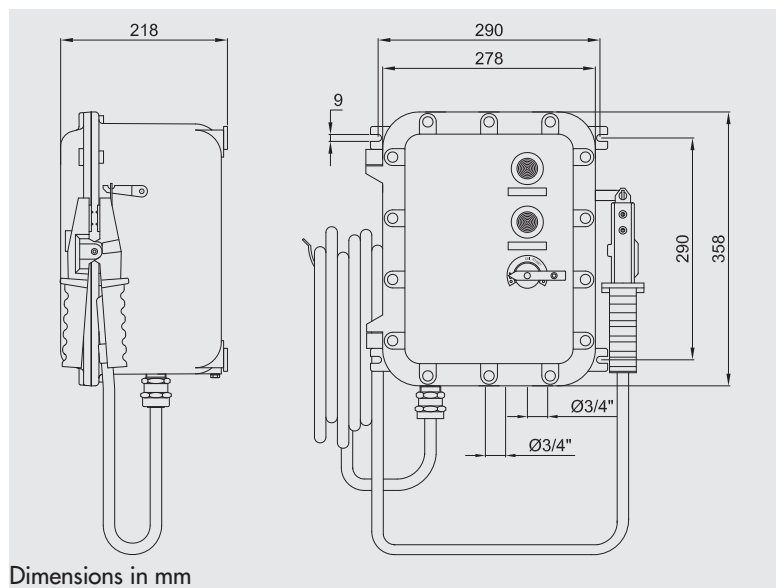
| GRD-4200/24 | | | | |
|---------------|--------|--------|---------|--------|
| Status: | Block | | Consent | |
| | 24 Vac | 24 Vdc | 24 Vac | 24 Vdc |
| Current draw: | 64 mA | 24 mA | 64 mA | 24 mA |
| Power: | 1.64 W | 4.32 W | 1.64 W | 4.32 W |
| Power factor: | 0.57 | 0.82 | 0.57 | 0.82 |

ACCESSORIES UPON REQUEST / SPECIAL REQUESTS

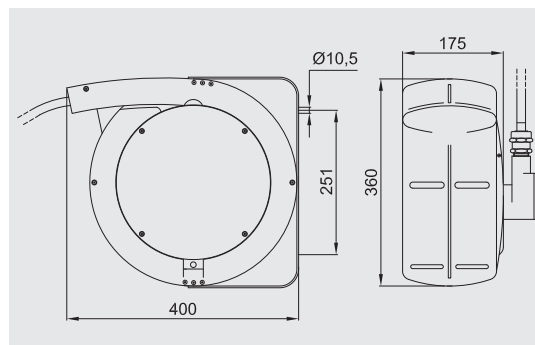
Cable gland
Cable reel
Pliers PMT-B2

GRD-4200 Electronic earthing system

DIMENSIONAL DRAWING



Dimensions in mm



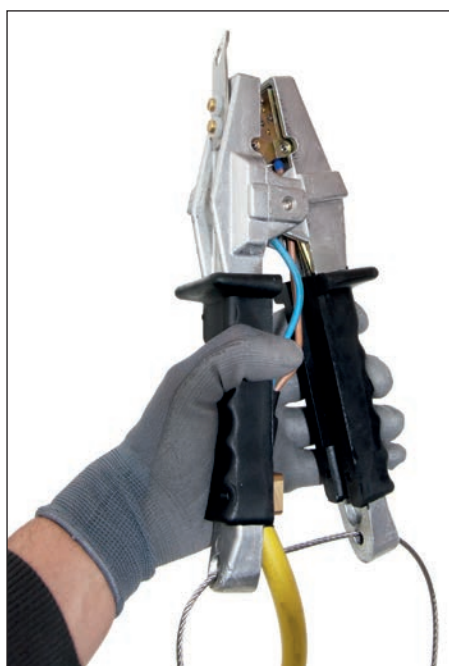
The cable reel is a suitable accessory for the GRD-4200 earthing system.

The cable reel in reinforced die-cast aluminium is resistant to impact, temperature peaks and atmospheric agents.

SELECTION TABLE

| Code | Power supply | Rated frequency | Weight Kg |
|--------------|--------------|-----------------|-----------|
| GRD-4200 | 230 Vac | 50 - 60 Hz | 20 |
| GRD-4200/110 | 110 Vac | 50 - 60 Hz | 20 |
| GRD-4200/24 | 24 Vac dc | 0 / 50 - 60 Hz | 20 |

Detail of connection pliers



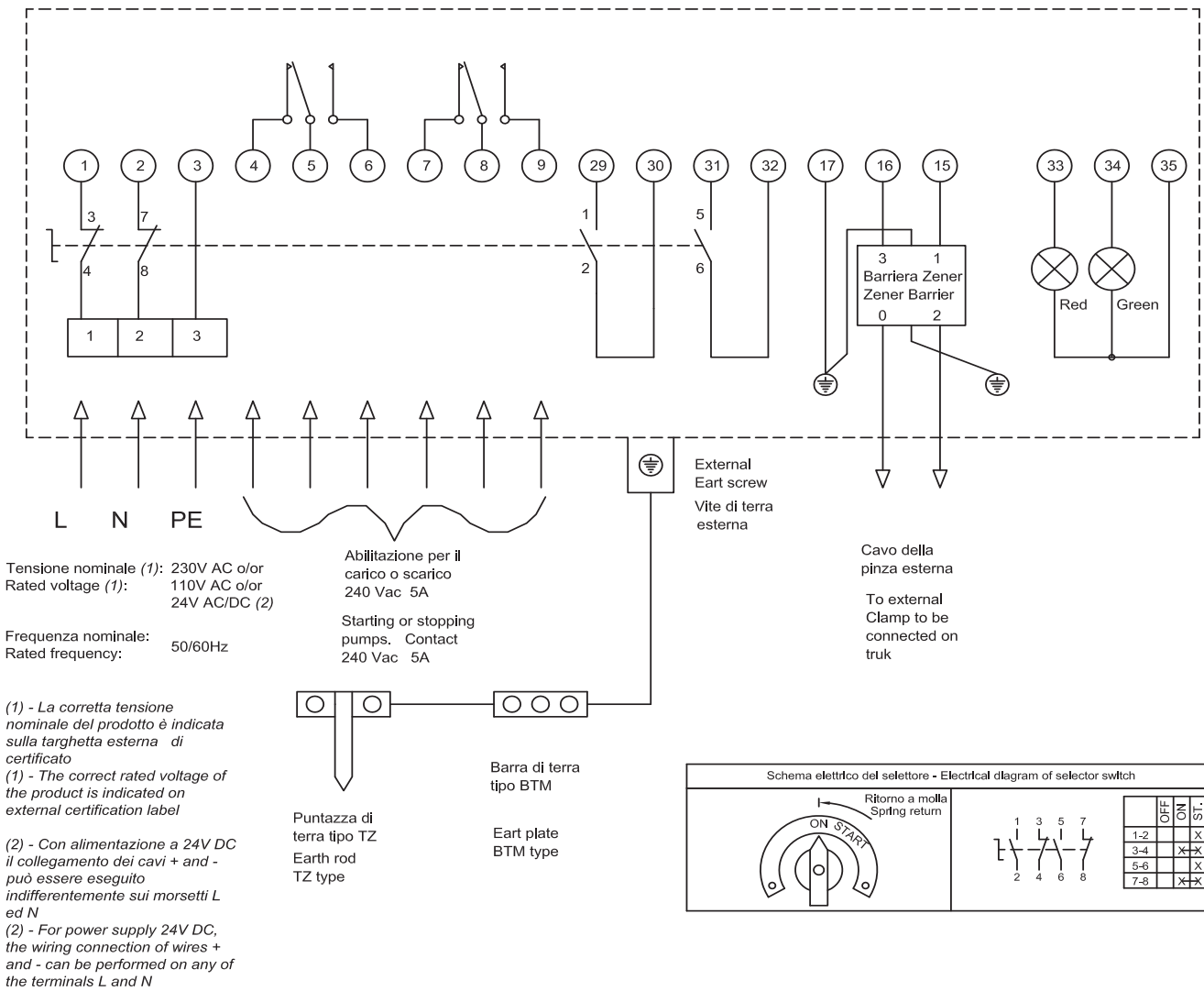
GRD-4200 Accessories upon request and spare parts

| ILLUSTRATION | DESCRIPTION | MODEL | CODE | LEGEND |
|---|----------------------------------|--------------|-----------------|---|
|  | Special switch | GRD... | SEA10X2/12EZ16R |  |
|  | Monitoring logic | GRD-4200 | LC-4200S |  |
| | | GRD-4200/110 | LC-4200S/110 | |
| | | GRD-4200/24 | LC-4200S/24 | |
|  | Zener barrier | GRD... | BZ-4200 |  |
|  | Earthing pliers | GRD... | PZCC-4209 |  |
|  | Yellow cable Length: 8 metres | GRD... | NSSHOU-02X2,5 |  |
|  | Barrier cable gland | GRD... | FB2BK/3 |  |

comm@antideflagrantigce.com

GRD-4200 Electronic earthing system

WIRING DIAGRAM



Internal view GRD-4200

