

SYMEGA.PRO - One device for all applications

Application

The SYMEGA.PRO was developed for grounding when filling or emptying mobile containers such as tank trucks, IBCs, FIBCs, drums and etc. Grounding systems from the SYMEGA series are used in the chemical, food, pharmaceutical, cosmetics, oil and gas as well as wood industries.

Mechanism

Electrostatic charges can build up as a result of the friction when flammable liquids, gases or solids are being loaded. The resulting electrostatic discharges (sparks) can be a risky ignition source for explosive atmospheres under the appropriate conditions. The SYMEGA.PRO continuously dissipates the electrostatic potentials to prevent these discharges.

The grounding clamp is connected up to the object that has to be grounded (truck, drum, IBC, BigBags, etc.). If the SYMEGA.PRO detects the truck, the pumps, valves or mechanical conveyors connected to the grounding relay are activated for the filling process.

The connection between the clamp and the object is permanently monitored. If a fault occurs or if the clamp's connection becomes disconnected, then the grounding relay will generate a corresponding signal and the filling process will be stopped.

Advantages

- ✓ One intelligent system for all applications
- ✓ Capacity check of connected objects enables tamper protection
- √ 24 VDC and 230 VAC power supply
- ✓ Monitors the connection to the main ground
- ✓ No loading fault due to loose contact
- ✓ Safe grounding due to time limitation



Visit rembe.de for detailed information and your personal contact.

REMBE® GmbH Safety+Control

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Explosion Prevention SYMEGA.PRO



Extended range of functionality

Timer function

If a container filling or emptying process takes 10 minutes, for example, this period can be limited using the timer function. After the specified time, the SYMEGA.PRO is no longer enabled and the operator must reset and check the grounding connection. This prevents long-term bridging.

Protection against loading faults due to loose contact

If the connection is briefly interrupted during truck grounding (capacity check on), the SYMEGA.PRO can bridge the time of the loose contact and keeps the release active. This allows loading to continue safely and the process does not have to be restarted.

Monitoring the connection to the main ground

The SYMEGA.PRO can not only monitor the connection to the object to be grounded, but also to the main connection.

All these functions can be customised via a menu on the device display.

Applications

Truck	✓
Railway vehicles	\checkmark
Drums	✓
IBC	✓
BigBags type C	✓
Pumps	✓

Technical data

Ambient temperature	-20°C up to +40°C
Process	Filling and emptying containers
Dimensions (W x H x D)	200 x 200 x 81 mm
Protection rating	IP66
Housing material	stainless steel V2A
Weight	2-3 kg
Supply voltage	10-30 VDC 115/230 VAC (+-10%) at 50-60Hz
Power Consumption	<2W
Interfaces	2x potential-free change- over contacts (load per contact) 4A (AC) 2A (DC)
Authorisation	Monitoring device: Zone 1 Zone 21 Intrinsically safe measuring circuit (Zone 0 Zone 20)
Labelling according to directive	≅ II (1) 2G≅ II (1) 2D
Labelling according to standard	Ex eb ib (ia Ga) IIC T4 Gb Ex ib (ia Da) tb IIIC T120°C

Certifications



ATFX





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