

EARTHING CONTROL MULTIPOINT SG/E-MGS01-V1 (EX) General data sheet

Scope

The MGS01-V1 earthing control system is suitable for simultaneous earthing of one to up to 10 objects. When loading or unloading flammable, liquids or powders, electrostatic charges can be generated. If the electrostatic energy generated is sufficiently large, a discharge spark may cause a fire or explosion. This risk is avoided by connecting all conductive parts to earth.

Benefits

Specially developed for the safe earthing of vessels and drums, among others, the StuvEx MGS01-V1 earthing control system offers the following advantages:

- ◆ Connection possibility for up to 10 objects to be grounded
- ◆ Safe electrostatic discharge of connected objects
- ◆ Low resistance ($< 10 \Omega$)
- ◆ Signalled (green) for local status indication
- ◆ Signal LEDs (red and green) for local release indication
- ◆ Potential-free contact release charging or discharging process
- ◆ ATEX and IECEx certified
- ◆ Complies with IEC/TS60079-32-1 and NFPA77
- ◆ Safety class SIL 2

Zoning

The MGS01-V1-RCB belongs to device group II category 2GD and can be used in an explosive atmosphere zone 1 or 2 (gas) or in a zone 21 or 22 (dust). The MGS01-V1-PB belongs to equipment group II category 3GD and may be used in zone 2 (gas) or zone 22 (dust).



SG/E-MGS01-V1 EX with spiral cable, earthing clamp and ReConn.



SG/E-MGS01-V1 EX PB



SG/E-MGS01-V1 EX RCB

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Operation

The MGS01 earthing system consists of an MGS01-V1-PB (Power Box) and one or more MGS01-V1-RCB (Resistance Control Box). The earthing system is designed to ground conductive objects in a safe and controlled way using an earthing clamp to ensure safe loading or unloading operations.

The earthing system is part of a preventive system in process installation.

Earthing control unit MGS01-V1

The MGS01-V1 earthing system consist of:

- ◆ One Power Box, type MGS01-PB
- ◆ One up to 10 Resistance Control Boxes, type MGS01-RCB
- ◆ One up to 10 loose cable(s) or coiled cable(s), type SPxx-HD
- ◆ One up to max. 10 earth clamp(s), type CSS1 or CMS1, supplied with or without connector set

Cable or spiral cable

You can choose between flat cable (10 m), or spiral cable (3 m - 5 m - 10 m) to connect the MGS01-V1 to the objects to the clamp.

Active earthing clamp

With active clamps, the two clamping jaws are isolated from each other as well as isolated from the clamping body itself. As long as the clamps are not connected to a conductive object, the circuit between the clamping jaws remain open and no current can flow. Once the clamp is attached to the vessel or drum, the circuit is closed.



SG/B-SP1-HD, clamp and connector



SG/B-CMS1-SCM, clamp with M connector