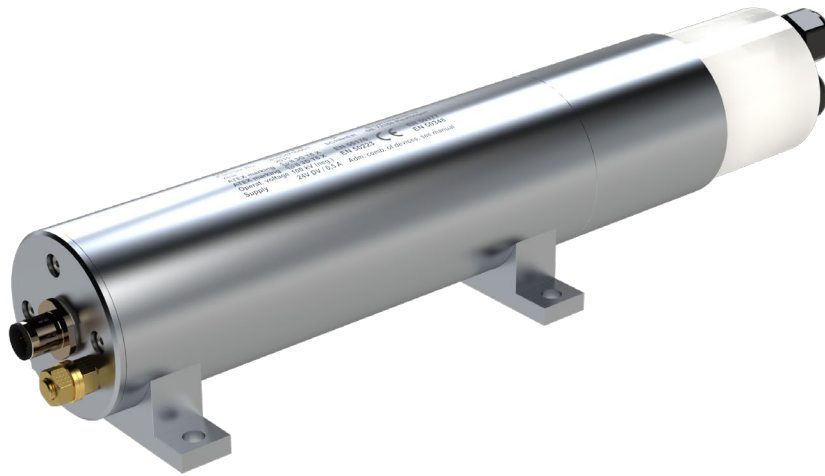


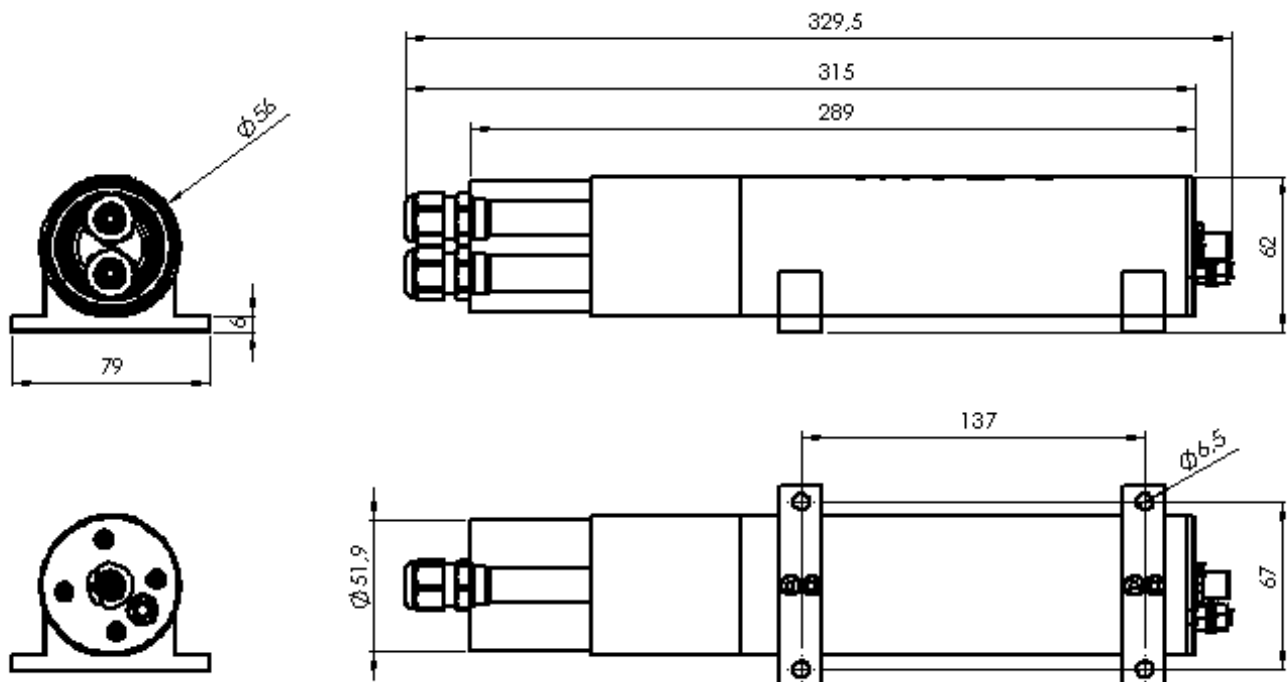
Designation: Elektronischer Entlader, Typ smart-D 210
Part. N°.: 810547



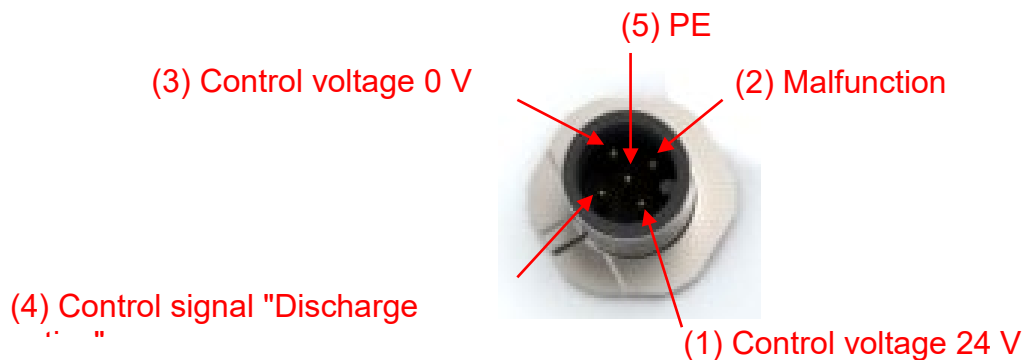
Technical data

Rated voltage	100 kV DC
Test voltage	120 kV DC
Max.operating current	1 mA (HV- Circuit)
High-voltage connection	4 mm socket
Number of hv-connections	2
Insertion depth	≥ 70 mm (grease filling required)
Diameter HV cable	6 - 9,5 mm
Ground connection	M6 bolt
Permissible leakage current	≤ 10 µA at 100 kV
Discharge time for 100kV/2nF	≤ 1 s
Switching cycles	> 1 Mio.
Signal level and permissible current consumption according to PLC standard IEC61131	
Control voltage	24 V DC -15% / +20%
Drive current	≤ 500 mA
Reverse polarity protection	60 V
Signal level HIGH	11 – 30 V DC
Signal level LOW	-3 – 5 V DC
Discharge control signal	LOW / HIGH (aktive / inactive)
Fault feedback	HIGH / LOW (no fault / fault)
Connector type	M12 5-pin A-coded circular connector
Ambient conditions	+5° C to +70° C max. 90 % r.H.
Max. storage conditions	-10° C to +70° C
Dimensions	See dimension sheet
Weight	Approx. 1,5 kg
Control unit protection class	IP 54
ATEX	Kat. 3GD

Dimension sheet



Pin assignment



Description

The electronic discharger is used as part of the high-voltage-supply of electrostatic painting systems within the painting environment. Its main function is to discharge the energy stored in the system. The process should be as fast and trouble-free as possible.

The discharger is connected in parallel to the HV generator, so it has 2 HV connections, a) from the high-voltage generator and b) to the spray system. The two high-voltage connections are electrically connected to each other. In normal operation (not activated), only a small leakage current of max. $10\mu\text{A}$ flows via the electronic discharger. If the discharger is activated, a constant discharge current flows through it, which discharges a high-voltage system with 2 nF and 100 kV within one second.

The high-voltage part of the electronic discharger is completely encapsulated in epoxy resin, which means that it works in any position and can be used on a robot arm.