

Grounding Monitoring Device

Series 8146 made of Polyester Resin



- Continuous monitoring of correct grounding
- Robust design
- Plastic enclosure (IP66)
- Potential-free change-over contact for signalling to the process control system and external control devices
- Insulated point of suspension
- For use up to SIL 2 (IEC 61508)

A7

WebCode **8146H**



The grounding monitoring device ensures that tank containers, drums, road tankers, rail cars and IBCs are correctly electrostatically grounded during the loading of flammable liquids and powder. The device provides a conductive connection to the ground and monitors in parallel the quality of the electrostatic grounding. This guarantees that the electrostatic charge remains at a safe level and that no explosion hazard is generated by uncontrolled energy discharge.

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Ex interface		•	•		•	•
Installation in		•	•		•	•

Selection Table						
Product Description		Grounding monitoring device				
Nominal voltage range AC	Nominal voltage range DC	Limit contact	SIL	Product Type	Art. No.	Weight kg
96 – 253 V	–	changeover contact	2	8146/5075	136216 ▲	5.800
–	18 – 31.2 V	changeover contact	–	8146/5-V73	273441	5.800

Technical Data		
Variant	8146/5-V73	8146/5075
Explosion Protection		
IECEx gas explosion protection		Ex db eb [ia Ga] IIC T4 Gb
IECEx dust explosion protection		Ex tb [ia Da] IIIC T80 °C Db
ATEX gas explosion protection	Ⓜ II 2 (1) G Ex db eb [ia Ga] IIC T4 Gb	Ⓜ II 2(1) G Ex db eb [ia Ga] IIC T4 Gb
ATEX dust explosion protection	Ⓜ II 2 (1) D Ex tb [ia Da] IIIC T80 °C Db	Ⓜ II 2 (1) D Ex tb [ia Da] IIIC T80 °C Db
Certificates	ATEX (PTB)	ATEX (PTB), Brazil (ULB), China (NEPSI), EAC (LPE), IECEx (PTB), SIL (exida)
Safety Data		
Safety-related maximum voltage	253 V	253 V
Electrical Data		
Frequency range		48 – 62 Hz
Auxiliary Power		
Nominal current	100 mA	27 mA

Technical Data		
Variant	8146/5-V73	8146/5075
Auxiliary Power		
Power consumption	3 W	3 W
Output		
Output min. load	1 V / 100 µA	12 V / 100 µA
Output max. load DC	125 V / 1 A	250 V / 2 A
Output max. load AC	125 V / 1 A	250 V / 4 A
Ambient Conditions		
Ambient temperature	-20 °C ... +55 °C	-20 °C ... +55 °C
Storage temperature	-40 °C ... +80 °C	-40 °C ... +80 °C
Mechanical Data		
Degree of protection (IP)	IP66	IP66
Enclosure material	Glass fibre reinforced polyester resin	Glass fibre reinforced polyester resin

Accessories			
Figure	Description	Art. No.	Weight kg
Grounding clamp with cable			
	10 m oil and petrol resistant cable with robust ergonomic grounding clamp of stainless steel and fast-action plug Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 ... +70 °C Certificates: ATEX, IECEx	247673	2.900
Grounding clamp with spiral cable			
	10 m oil and petrol resistant spiral cable with robust ergonomic grounding clamp of stainless steel and fast-action plug Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 ... +70 °C Certificates: ATEX, IECEx	247674 ▲	4.000
	5 m oil and petrol resistant spiral cable with robust ergonomic grounding clamp of stainless steel and fast-action plug Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 ... +70 °C Certificates: ATEX, IECEx	247672 ▲	1.500
Earth clamp with automatic cable winder			
	Automatic winder with 20 m of oil and petrol resistant cable with robust ergonomic grounding clamp of stainless steel, and fast-action plug, aluminium enclosure, protected cable duct with stopper Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 ... +70 °C Certificates: ATEX, IECEx	247671 ▲	14.500
	Automatic winder with 12 m of oil and petrol resistant cable with robust ergonomic grounding clamp of stainless steel, and fast-action plug, aluminium enclosure, protected cable duct with stopper Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 ... +70 °C Certificates: ATEX, IECEx	269915	6.200
	Automatic winder with 9 m of oil and petrol resistant cable with robust ergonomic grounding clamp of stainless steel, and fast-action plug, plastic enclosure Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 ... +70 °C Certificates: ATEX, IECEx	247660 ▲	4.500

Spare Parts			
Figure	Description	Art. No.	Weight kg
Earth clamp with fast-action plug			
	Robust ergonomic grounding clamp with 150 mm of cable and fast-action plug Spare part for automatic retractors (247660, 269915 and 247671), regular cables (247673) and spiral cables (247674 and 247672)	247675	0.600

