

Grounding monitoring devices

Series 8146 made of polyester resin
without object recognition

STAHL



- Continuous monitoring of correct grounding
- Robust design
- Plastic enclosure (IP66)
- One potential-free change-over contact for signalling to the distributed control system or external signalling devices
- Insulated suspension point

A7

MY R. STAHL 8146H



The grounding monitoring device ensures that tank containers, barrels, road tankers, rail vehicles and IBCs are electrostatically grounded while combustible liquids and powders are being loaded. The device simultaneously monitors electrostatic grounding.

This guarantees that an electrostatic charge remains at a safe level and that there is no explosion hazard caused by the uncontrolled discharge of this energy.

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






Selection Table


Grounding monitoring device						
Product description	Nominal voltage range AC	Nominal voltage range DC	Limit contact	Product Type	Art. No.	Weight
	96 – 253 V	–	Change-over contact	8146/5075	136216	5.8 kg
	–	18 – 31.2 V	Change-over contact	8146/5-V73	273441	5.8 kg

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), IECEx (PTB), India (PESO), SIL (exida)
Declaration of conformity	ATEX (EUK)	ATEX (EUK), China (CCC)
Safety Data		
Safety-related max. voltage	253 V	253 V
Electrical Data		
Frequency range		48 – 62Hz
Auxiliary Power		
Nominal current	100 mA	27 mA
Power consumption	3 W	3 W

Technical Data		
Variant	8146/5-V73	8146/5075
Output		
Min. output load condition	1 V / 100 µA	12 V / 100 µA
Max. output DC load condition	125 V / 1 A	250 V / 2 A
Max. output AC load condition	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
Grounding clamp with cable			
	10 m oil- and petrol-resistant cable with robust, ergonomic grounding clamp made from stainless steel, and fast-action plug Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 °C to +70 °C Certificates: ATEX, IECEx	247673	2.9 kg
Grounding clamp with spiral cable			
	10 m oil- and petrol-resistant spiral cable with robust, ergonomic grounding clamp made from stainless steel, and fast-action plug Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 °C to +70 °C Certificates: ATEX, IECEx	247674	4 kg
	5 m oil- and petrol-resistant spiral cable with robust, ergonomic grounding clamp made from stainless steel, and fast-action plug Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 °C to +70 °C Certificates: ATEX, IECEx	247672	1.5 kg
Grounding clamp with automatic retractor for cable			
	Self retracting reel with 20 m oil- and petrol-resistant cable with robust, ergonomic grounding clamp made from 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 °C to +70 °C Degree of protection (IP): IP43 Certificates: ATEX, IECEx	247671	14.5 kg
	Self retracting reel with 12 m oil- and petrol-resistant cable with robust, ergonomic grounding clamp made from 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 °C to +70 °C Degree of protection (IP): IP42 Certificates: ATEX, IECEx	269915	6.2 kg
	Self retracting reel with 9 m oil- and petrol-resistant cable with robust, ergonomic grounding clamp made from stainless steel, and fast-action plug, plastic enclosure Roofing must be provided when installing the unit outside. Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -20 °C to +70 °C Degree of protection (IP): IP42 Certificates: ATEX, IECEx	247660	4.5 kg

Spare Parts			
Figure	Description	Art. No.	Weight
Grounding clamp with fast-action plug			
	Robust, ergonomic grounding clamp with 150 mm cable and fast-action plug Spare part for self retracting reels (247660, 269915 and 247671), cable and spiral cable	247675	600 g

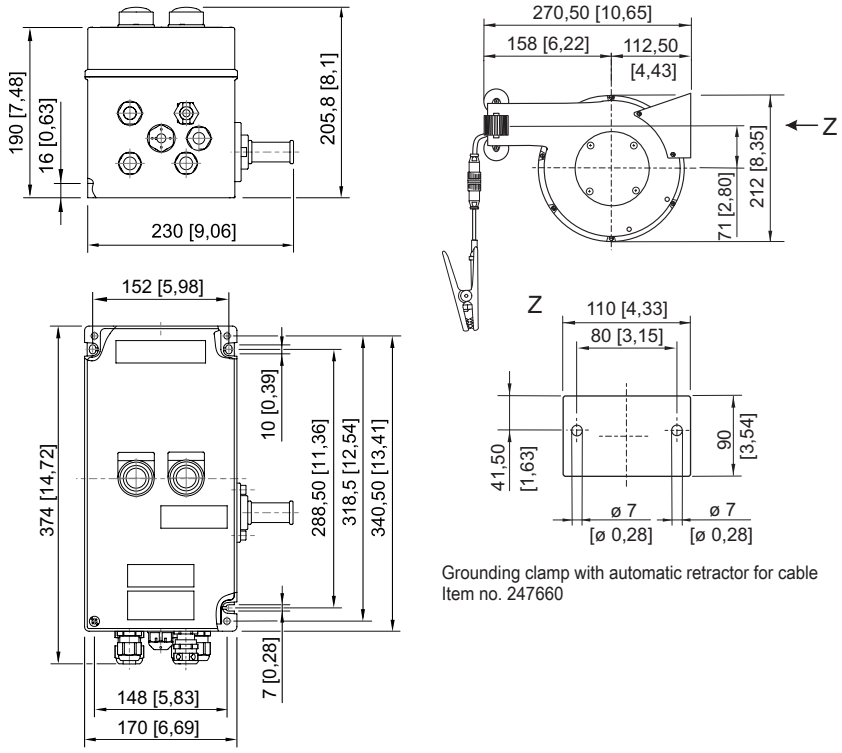
Grounding monitoring devices

Series 8146 made of polyester resin
without object recognition



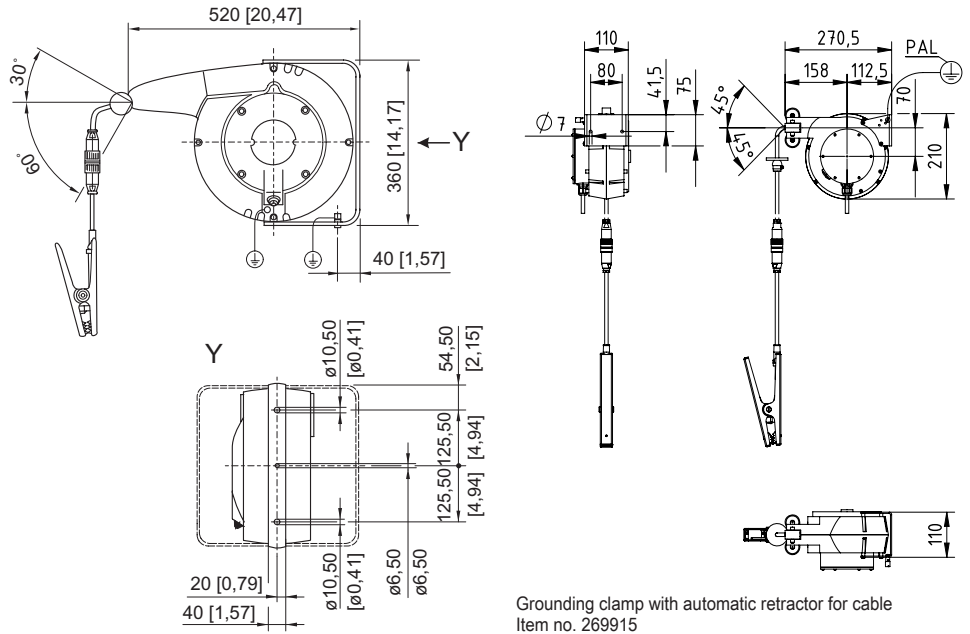
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations

A7



Grounding clamp with automatic retractor for cable
Item no. 247660

Type 8146/5075, 8146/5-V73



Grounding clamp with automatic retractor for cable
Item no. 269915

Grounding clamp with automatic retractor for cable
Item no. 247671