

8146/5-V73 Art. No. 273441



- Monitored electrostatic grounding of tank containers, drums, road tankers, rail cars, IBCs and helicopters during loading
- 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

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.

### Technical Data

#### Explosion Protection

Application range (zones)	1 2 21 22
Ex interface zone	1 2 21 22
ATEX gas certificate	PTB 01 ATEX 1024
ATEX gas explosion protection	⊕ II 2 (1) G Ex db eb [ia Ga] IIC T4 Gb
ATEX dust certificate	PTB 01 ATEX 1024
ATEX dust explosion protection	⊕ II 2 (1) D Ex tb [ia Da] IIIC T80 °C Db
Certificates	ATEX (PTB)

#### Safety Data

Maximum voltage $U_o$	9.6 V
Maximum current $I_o$	10 mA
Maximum power $P_o$	24 mW
Max. permissible external capacitance $C_o$ for IIC	3.6 $\mu$ F
Max. permissible external capacitance $C_o$ for IIB	26 $\mu$ F
Max. permissible external capacitance $C_o$ for I	99 $\mu$ F
Max. permissible external inductance $L_o$ for IIC	350 mH
Max. permissible external inductance $L_o$ for IIB	1000 mH

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### Safety Data

Max. permissible external inductance $L_o$ for I	1000 mH
Internal capacitance $C_i$	2,42 nF
Internal inductance $L_i$	negligible
Safety-related maximum voltage	253 V

### Electrical Data

Number of channels	1
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### Auxiliary Power

Nominal voltage range DC	18 – 31.2 V
Nominal current	100 mA
Power consumption	3 W

### Output

Limit contact	1
Output min. load	1 V / 100 $\mu$ A
Output max. load DC	125 V / 1 A
Output max. load AC	125 V / 1 A
Output switching capacity	25 W / 50 VA

### Ambient Conditions

Ambient temperature	-20 °C ... +55 °C
Ambient temperature	-4°F ... +131°F
Storage temperature	-40 °C ... +80 °C
Storage temperature	-40°F ... +176°F
Use at the height of	<2000m

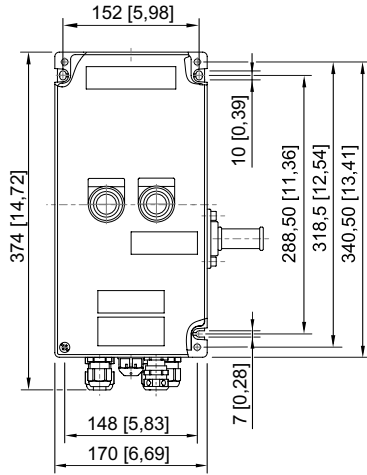
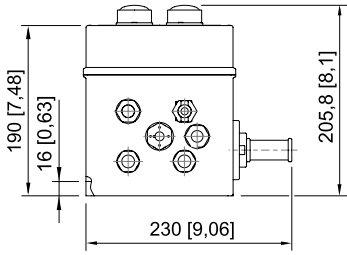
### Mechanical Data

Degree of protection (IP)	IP66
Enclosure material	Glasfaserverstä. Polyesterharz
Cable diameter range of cable glands	4 – 13 mm
Terminal range cable glands inches	0.15 – 0.51 in
Width	374 mm
Width inches	14.72 in
Height	230 mm
Height inches	9.06 in
Depth	190 mm
Mounting depth inches	7.48 in
Weight	5.8 kg
Weight	12.79 lb

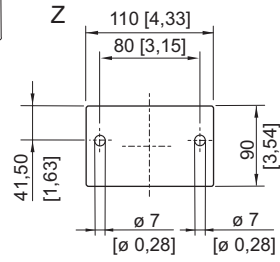
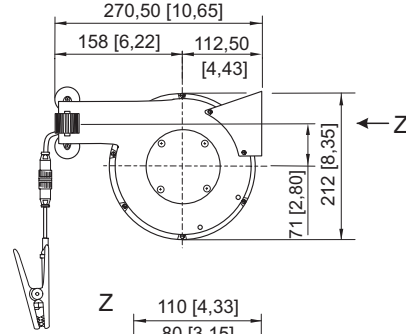
Connection		grey & green-yellow	blue
	Single-wire connection		
	- rigid	0.2 ... 6 mm <sup>2</sup>	0.2 ... 4 mm <sup>2</sup>
	- flexible	0.2 ... 4 mm <sup>2</sup>	0.2 ... 2.5 mm <sup>2</sup>
	- flexible with core end sleeves with plastic sleeve	0.25 ... 2.5 mm <sup>2</sup>	0.25 ... 1.5 mm <sup>2</sup>
	- flexible with core end sleeves without plastic sleeve	0.25 ... 4 mm <sup>2</sup>	0.25... 2.5 mm <sup>2</sup>

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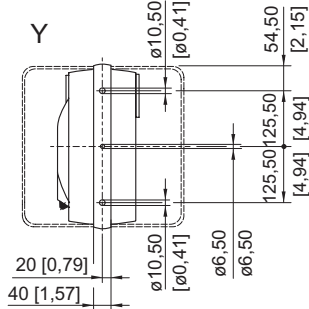
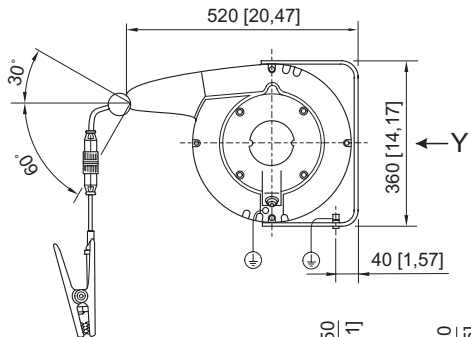
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



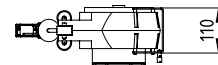
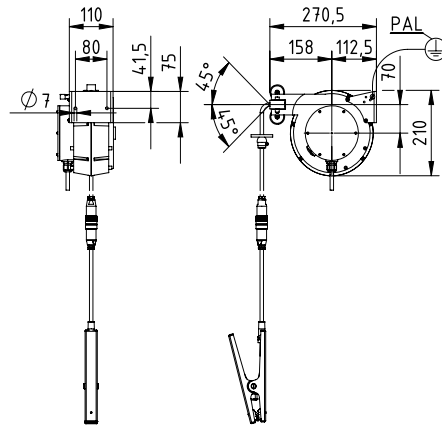
Type 8146/5075, 8146/5-V73



Grounding clamp with automatic cable winder  
Art. no. 247660




Grounding clamp with automatic cable winder  
Art. no. 247671





Grounding clamp with automatic cable winder  
Art. no. 269915


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### Accessories

Grounding clamp with cable		Art. No.
	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


Grounding clamp with spiral cable		Art. No.
	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
	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

Earth clamp with automatic cable winder		Art. No.
	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

		Art. No.
	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

Earth clamp with automatic cable winder		Art. No.
	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

### Spare Parts

Earth clamp with fast-action plug		Art. No.
	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

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.