



- Continuous monitoring of correct earthing
- Potential operator errors are prevented thanks to object detection (on truck)
- Water-jet-proof IP65 stainless steel or aluminum enclosure
- Up to four potential-free change-over contacts for signaling
- Ambient temperature -55 °C to +60 °C
- Auxiliary power: 24 V DC – 230 V AC
- Parameterisation when enclosure is closed

A7

WebCode **8485A**



The grounding monitoring device ensures the electrostatic grounding of road tankers, rail cars and Big Bag (Rev. C) while loading 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.

The following recommendation requires grounding during loading and recommends interrupting loading in case of incorrect grounding:




- CLC/TR 60079-32-1 recommendation for avoiding ignition hazards due to electrostatic charges.
- TRBS 727 rules for avoiding ignition hazards as a result of electrostatic charges.

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





Selection Table					
Product Description		Grounding monitoring device			
Figure	Enclosure material	Product Type		Art. No.	Weight kg
	Aluminium	8485/111-42		263091 ▲	12.100

Technical Data	
Explosion Protection	
IECEX gas explosion protection	Ex db ib [ib] IIB T4 Gb
IECEX dust explosion protection	Ex ib [ib] tb IIIC T130 °C Db
ATEX gas explosion protection	Ex II 2 G Ex db ib [ib] IIB T4 Gb
ATEX dust explosion protection	Ex II 2 D Ex ib [ib] tb IIIC T130 °C Db
EAC gas explosion protection	Ex 1 Ex db ib [ib] IIB T4 Gb X
EAC dust explosion protection	Ex Ex ib [ib] tb IIIC T130°C Db X
Certificates	ATEX (FTZU), EAC (ENDCE), IECEX (FTZU), India (PESO)
Notes	UKCA certificate available from 2022 onward

Technical Data	
Safety Data	
Max. voltage U _i signalling contacts	50 V DC
Max. current I _i signalling contacts	200 mA
Electrical Data	
Connections	Maximum diameter, single-wire - rigid 2.5 mm ² - flexible 2.5 mm ² - flexible, cable end sleeves with plastic cover 1.5 mm ² - flexible, cable end sleeves without plastic cover 2.5 mm ²
Operating mode selection	Road tanker, rail car and Big Bag recognition Selection via DIP switch
Frequency range	47 – 63 Hz
Auxiliary Power	
Nominal voltage range AC	20 – 230 V
Nominal voltage range DC	20 – 300 V
Nominal current	50 mA
Power consumption	10 VA
Output	
Limit contact	Up to 4 change-over contacts
Min. output load condition	10 V DC/100 mA
Max. output AC load condition	230 V AC / 3 A
Max. output DC load condition	230 V DC / 0.25 A, 40 V DC / 3 A
Ambient Conditions	
Ambient temperature	-55 °C ... +60 °C
Storage temperature	-55 °C ... +60 °C
Mechanical Data	
Degree of protection (IP)	IP65
Enclosure version	Flameproof enclosure (Ex d)
Terminal range of cable glands	6.1 – 11.7 mm

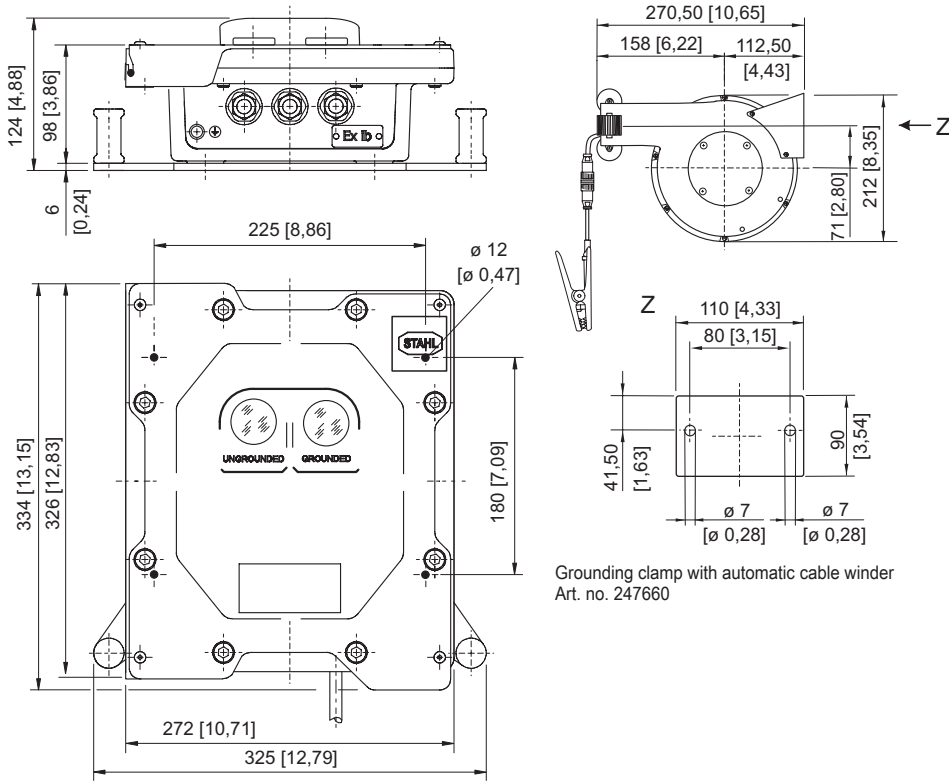
Accessories			
Figure	Description	Art. No.	Weight kg
Earth clamp with spiral cable			
	10 m ÖLFLEX with cable gland for 8485/111-42 Clamp made of stainless steel 1.4301 Ambient temperature: -30 ... +60 °C	263025 ▲	4.000
Earth clamp with cable			
	10 m ÖLFLEX with cable gland for 8485/111-42 Clamp made of stainless steel 1.4301 Ambient temperature: -40 ... +60 °C	263023 ■	2.900
	10 m SIHF-J with cable gland for 8485/121-42 Rev. C Clamp made of stainless steel 1.4404 Ambient temperature: -55 ... +60 °C	263095	2.900

Accessories

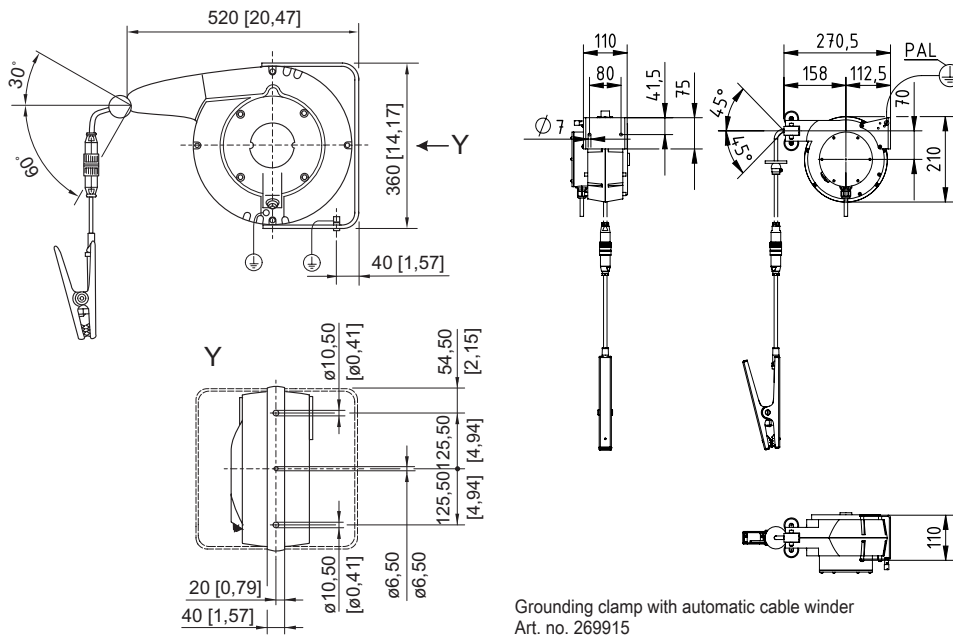
Figure	Description	Art. No.	Weight kg
Earth clamp with automatic cable winder			
	Automatic winder with 9 m of oil and petrol resistant cable with robust ergonomic grounding clamp of stainless steel and fast-action plug, plastic enclosure Installation in Zone 1, IIC, T6; Zone 21, IIIC, 135 °C Temperature range: -40 ... +70 °C Certificates: ATEX, IECEx	247660 ▲	4.500
	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
Configuration set			
	Configuration set consisting of infrared adapter with USB port and USB stick with configuration software	263097 ▲	1.000

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 and spiral cables	247675	0.600



Type 8485/111-42



Grounding clamp with automatic cable winder
Art. no. 247671