- Controlled electrostatic grounding of extremely versatile objects
- One potential-free change-over contact per channel for signaling to the distributed control system or external signalling devices
- Compact dual-channel device
- 24 V DC supply
- LED status indicator

WebCode 9170B

The device ensures electrostatic grounding of objects and automatically detects defective or interrupted earth connections in the system and disconnects the process. This guarantees that an electrostatic charge remains at a safe level and that there is no risk of explosion caused by the uncontrolled discharge of this energy.

NEC® 500 CEC Appendix J	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface	•		•		•	
Installation in		•*				

CEC Section 18 NEC® 505 Class I / NEC® 506	Zone	0	1	2	20	21	22
Zone	0	1	2	20	21	22
Ex interface	•					
Installation in			•			

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

Selection Table

Number of channels	2				
Auxiliary power	Output per channel	Product Type	Art. No.	Weight lb
24 V DC	1 change over - signal relay	**9170/21-30-10s**	169318	0.39

Technical Data

Explosion Protection	
USA certificate FM	FM16US0122X
CAN certificate FM	FM16CA0067X
USA gas explosion protection FM	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, GP IIC, T4
USA marking FM	CL I, DIV 2, GP A,B,C,D; CL I, ZONE 2, GP IIC; AIS CL I,II,III, DIV 1, GP A,B,C,D,E,F,G; CL I, ZONE 0, [AEx ia] IIC; T4 at Ta = 70ºC; SEE DOC. 91 706 02 31 1
CAN gas explosion protection FM	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, GP IIC, T4
CAN marking FM	CL I, DIV 2, GP A,B,C,D; CL I, ZONE 2, GP IIC; AIS CL I,II,III, DIV 1, GP A,B,C,D,E,F,G; CL I, ZONE 0, [Ex ia] IIC; T4 at Ta = 70ºC; SEE DOC. 91 706 02 31 1
IECEx gas explosion protection	Ex nA nC [ia Ga] IIC T4 Gc
IECEx dust explosion protection	[Ex ia Da] IIIC
Certificates	ATEX (BVS), Brazil (ULB), Canada (FM), IECEx (BVS), India (PESO), Korea (KGS), USA (FM)
Ship approval	CCS, DNV GL
Installation	Zone 2, Zone 22
Further information	see respective certificate and operating instructions

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▲ Preferred products – in stock or available at short notice

Switching Repeater
Series 9170

Technical Data

Safety Data	
Max. voltage U_o/V_{oc}	9.6 V
Max. current I_o/I_{sc}	10 mA
Max. power P_o	24 mW
Safety-related maximum voltage	253 V
Electrical Data	
Signal types	Digital input
LFD relay	No
Input	
Resistor for ON	≤ 20 kΩs
Resistor for OFF	≥ 50 kΩs
Ambient Conditions	
Ambient temperature °F	-4°F ... +158°F (Single device) -4°F ... +140°F (Group assembly)
Ambient temperature °C	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)
Storage temperature °F	-40°F ... +176°F
Storage temperature °C	-40 °C ... +80 °C
Mounting / Installation	
Mounting type	NS35/15, NS35/7.5 DIN rail

Technical Drawings – Subject to Alterations

Hazardous Location | Nonhazardous Location

Division 1 Zone 0 / 1   pac-Bus 24V   Division 2 Zone 2

Field device   ISpac Isolator   Control system
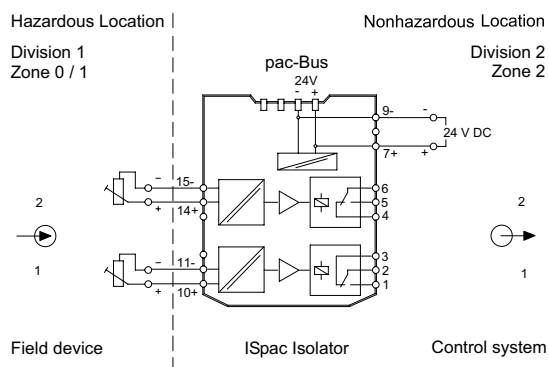
Connection diagram 9170/21-30-10

Accessories

Figure	Description	Art. No.	Weight lb
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	6.39
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, aluminum enclosure, protected cable duct with stopper	247671	31.97

▲ Preferred products – in stock or available at short notice
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Accessories

| Figure	Description	Art. No.	Weight lb
Grounding clamp with cable			
	Automatic winder with 12 m of oil and petrol resistant cable with robust ergonomic grounding clamp of stainless steel, and fast-action plug, aluminum enclosure, protected cable duct with stopper	269915	13.67
	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,	247660	9.92
Grounding clamp with spiral cable			
	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,	247672	3.31
	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	8.82

Spare Parts

Figure	Description	Art. No.	Weight lb
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	1.32

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations
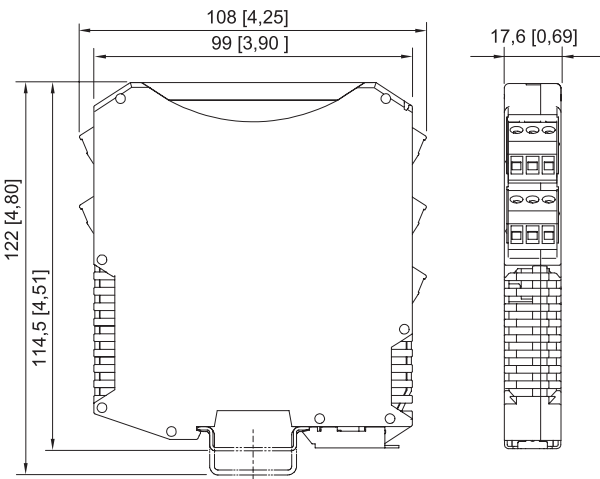
ISpac Series 9146, 9147, 9160, 9162, 9163, 9165, 9167, 9170, 9172, 9175, 9176, 9180, 9182, 9193 with screw terminal

▲ Preferred products – in stock or available at short notice
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