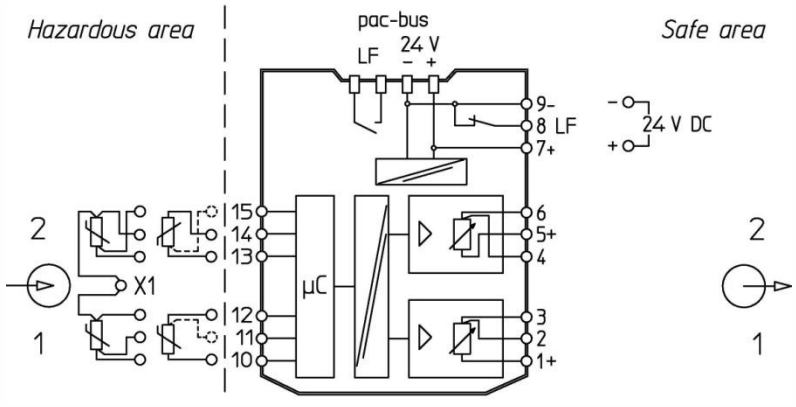
Type 9180/**-77-11



Hazardous area: Class I, II, III; DIV 1; Group A-G or Class I; Zone 0; Group IIC/IIB Hazardous Locations
Safe area: Non-Hazardous; Division 2 or Zone 2 Hazardous (Classified) Locations

The Resistance Isolator Type 9180 is an associated apparatus as well as a nonincendive apparatus providing intrinsically safe connections for one (or two) field devices located in Class I, II, III, Division 1, Group A-G or Class I, Zone 0 [AEx ia] Group IIC, Hazardous Locations according to NEC Article 504/505 as listed below.

Resistance Isolator Type 9180/ab-77-11
a = numeral 1 or 2 for number of channels
b = numeral 0 or 1 for measuring range

Entity parameters for wiring configurations are as follows:

Terminal 10 - 15	V_{OC} [V]	I_{SC} [mA]	P_O [mW]	L_o CL I, DIV 1, A,B / Zone 0, GP IIC	L_o CL I, DIV 1, C-G/ Zone 0, GP IIB	C_o CL I, DIV 1, A,B / Zone 0, GP IIC	C_o CL I, DIV 1, C-G/ Zone 0, GP IIB	V_{max}	I_{max}
Any combination	6,5	16,5	27	120 mH	450 mH	25 µF	570 µF	-	-

Notes:

1. Intrinsically safe apparatus may be switches, thermocouples, LEDs, RTDs or an FM Approved System or Entity device connected in accordance with the manufacturer´s installation instructions.
2. For Entity concept use the appropriate parameters to ensure the following:
   V_t or $V_{OC} \leq V_{max}$ $C_o, C_a \geq C_i + C_{leads}$ $P_o \leq P_i$
   I_t or $I_{SC} \leq I_{max}$ $L_o, L_a \geq L_i + L_{leads}$
3. Electrical apparatus connected to an intrinsically safe system should not use or generate voltages > 250 V (U_{max}).
4. Installation should be in accordance with Article 504/505 of the National Electrical Code, ANSI/NFPA 70 and ANSI/ISA RP 12.06.01.
5. Installation in Canada should be in accordance with the Canadian Electrical Code, CSA C22.1, Part 1, Appendix F.
6. Use a general purpose enclosure meeting the requirements of IEC 61010-1 for use in Non-Hazardous or Class I, Division 2, Hazardous (Classified) Locations.
7. Use an FM Approved Dust-ignition proof enclosure appropriate for environmental protection in Class II, Division 1, Groups E, F and G; and Class III, Hazardous (Classified) Locations.
8. These modules are to be mounted on DIN rail, DIN rail with pac-Bus (type 9194) or pac-Carrier (type 9195). The field wiring in any case is connected to the ISpac device terminals.
9. Ambient temperature: -20°C … +70°C (any mounting position)

WARNING: Do not disconnect equipment when a flammable or combustable atmosphere is present.
AVERTISSEMENT: Ne pas débrancher l'équipement en présence d'atmosphère inflammable ou combustible.

The safety relevant statements of this document may be transferred into the operating instructions.
Transferring the text, editorial changes of equivalent meaning are allowed.

			2006	Date	Name	Certification drawing	Scale none
			drawn	24.05.	Einsiedler	Resistance Isolator Type 9180/**-77-11	
			checked		Kaiser		Sheet 1 of 1
					STAHL		
03	22.10.12	Reistle				9180 6 031 001 1	Agency FM
02	24.08.11	Reistle					
01	19.09.06	Einsiedler					
Version	Date	Name				Ers. f. / Ers. d.	A4

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