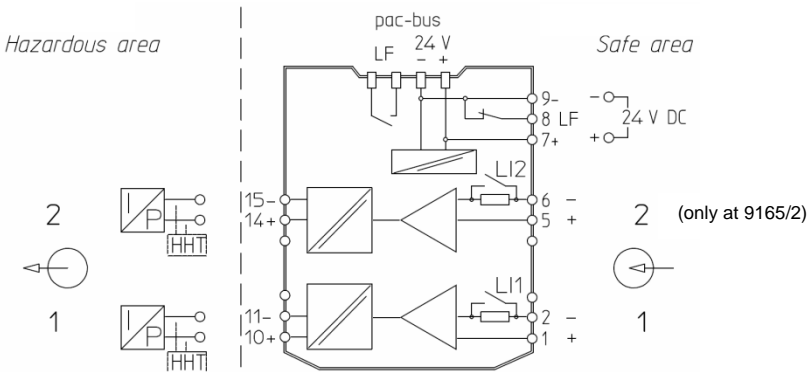


Type 9165/**-11-1*



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 Isolating Repeater Type 9165/**-11-1* is an associated apparatus as well as a nonincendive apparatus for installation in non-hazardous or Class I, Division 2 or Zone 2 Hazardous (Classified) Locations and provides 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.

Isolating Repeater Type 9165/ab-11-1f
 a = numeral 1 or 2 for number of channels
 b = numeral 1 or 6 for signal (without / with HART)
 f = numeral 1 or 0 for special inputs (open- / short-circuit detection)

Entity parameters for wiring configurations are as follows:

	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}
Type 9165/**-11-1*	25.6	96	605	1.9 mH	11 mH	103 nF	800 nF	-	-

- Notes:
- For Connections refer to chapter Commissioning of Operating Instruction Id-No. 91 656 12 31 0.
 - 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.
 - For Entity concept use the appropriate parameters to ensure the following:
 V_i or $V_{OC} \leq V_{max}$ $C_o, C_a \geq C_i + C_{leads}$ $P_o \geq P_i$
 I_i or $I_{SC} \leq I_{max}$ $L_o, L_a \geq L_i + L_{leads}$
 - Electrical apparatus connected to an intrinsically safe system should not use or generate voltages > 250 V (U_{max}).
 - Installation should be in accordance with Article 504/505 of the National Electrical Code ANSI/NFPA 70 and ANSI/ISA RP 12.06.01.
 - Installation in Canada should be in accordance with the Canadian Electrical Code, CSA C22.1, Part 1, Appendix F.
 - 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.
 - 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.
 - These modules are to be mounted on DIN rail, DIN rail with pac-Bus (type 9194) or pac-Carrier (type 9195). The I.S. field wiring in any case is connected to the ISpac device terminals.
 - Ambient temperature: -20°C ... +70°C (any mounting position)

WARNING: Do not disconnect equipment when a flammable or combustible 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.

			2007	Date	Name	Certification drawing	Scale
			drawn	04.05.	Einsiedler		none
			checked		Kaiser		Sheet 1 of 1
02	22.10.12	Reistle	STAHL			91 656 01 31 1	Agency FM
01	15.04.11	Reistle					
Version	Date	Name	Ers. f.			Ers. d.	A4