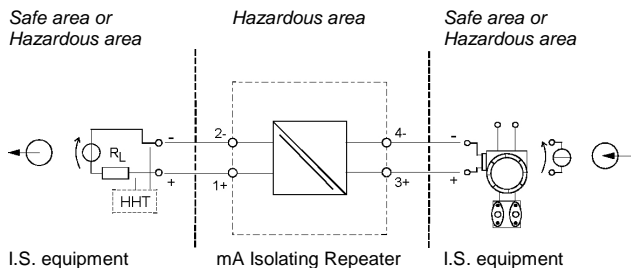
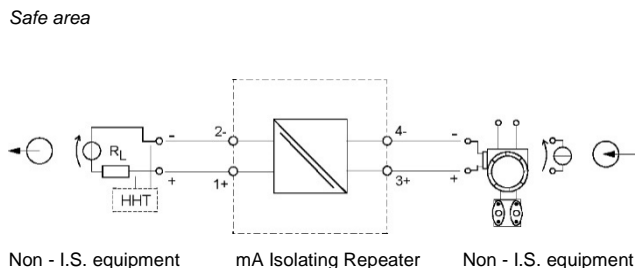


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Type 9164/13-20-08



Type 9164/13-20-55



The mA Isolating Repeater Type 9164/13-20-08 is designed for galvanic separation between two Intrinsically Safe circuits. It is an I.S. apparatus for installation in Hazardous Classified Locations, Class I, II, III, Division 1, Groups A-G or Class I, Zone 0, Group IIC/IIB. It provides intrinsically safe connections for Class I, Division 1, Group A-G or Class I, Zone 0 [AEx/Ex ia] Group IIC/IIB, Hazardous Locations according to NEC Article 504/505 as listed below.

The mA Isolating Repeater Type 9164/13-20-55 is designed for galvanic separation between two Non-Intrinsically Safe circuits. It is a nonincendive apparatus for installation in Non-Hazardous Locations or Class I, Division 2, Groups A-D or Class I, Zone 2, Group IIC/IIB.

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

Entity parameters for wiring configurations are as follows:

Type 9164/13-20-08	V_i / V_{max}	I_i / I_{max}	P_i	C_i	L_i	V_{oc}	I_{sc}	P_o
output (terminals 1, 2)	30 V DC	150 mA	1 W	0 nF	0 mH	0 V	0 mA	0 mW
input (terminals 3, 4)	30 V DC	150 mA	1 W	0 nF	0 mH	-	-	-

Electrical parameters for wiring configurations are as follows:

Type 9164/13-20-55	V_n	I_n
output (terminals 1, 2)	30 V DC	30 mA
input (terminals 3, 4)	30 V DC	30 mA

Notes:

- 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_t or $V_{oc} \leq V_{max}$ $C_o, C_a \geq C_i + C_{leads}$ $P_o \leq P_i$
 I_t or $I_{sc} \leq I_{max}$ $L_o, L_a \geq L_i + L_{leads}$
- 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.
- Ambient temperature: -40°C ... +75°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.

		2015	Date	Name	Certification drawing	Scale
		drawn	13.11.	S. Reistle		none
		checked		Kaiser		Sheet
					mA Isolating Repeater Type 9164/13-20-**	1 of 1
02	14.06.16	Reistle				Agency
01	15.04.16	Reistle			91 646 01 31 1	FM
Version	Date	Name			Ers. f.	Ers. d.



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