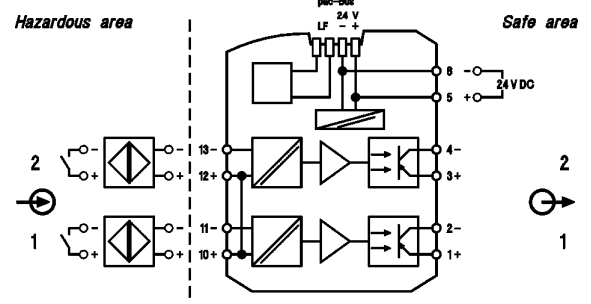
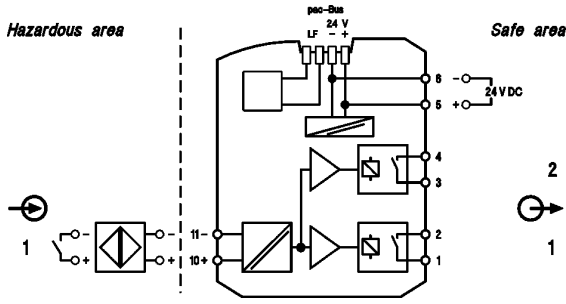


Types 9270/11-1*-1**

Types 9270/21-1*-1**



HAZARDOUS AREA:
SAFE AREA:

Class I, II, III, Division 1, Groups A-G & Class I, Zone 0, 1, 2, Groups IIC, IIB, IIA
Class I, Division 2, Groups A-D & Class I, Zone 2, Groups IIC, IIB, IIA & Non-hazardous

Type 9270/a1-1d-1f* with a = 1 or 2 (number of channels)
d = 4, 6, 7 or 9 (number for output design)
f = 4 or 5 (number for special function)
* = s or k (design of terminals)

Non- I.S. signal circuits: Terminal No.: 1, 2, 3, 4
Power supply circuits: Terminal No.: 5, 6 or pac-Bus
U_N = 24 V (19.2 ... 30 V DC)

Entity parameters for I.S. circuits:

Type and Terminal	Voc / Uo [Vdc]	Isc / Io [mA]	Po [mW]	Ci [nF]	Li [mH]	GP A,B or IIC		GP C or IIB	
						Ca / Co [nF]	La / Lo [mH]	Ca / Co [nF]	La / Lo [mH]
9270/11-1*-1** No. 10, 11	9.6	10	25	1.1	Negligible	510	100	2700	100
840						5	4400	5	
1200						1	6300	1	
3600						0.01	26000	0.01	

- The Entity Concept allows interconnection of intrinsically safe apparatus with associated apparatus not specifically examined in combination as a system. Selected Intrinsically Safe Equipment must be third party listed as intrinsically safe for the application and have intrinsically safe entity parameters conforming with the following:
 $V_{max} \text{ (or } U_i) \geq V_{oc} \text{ or } V_t \text{ (or } U_o)$ $C_i + C_{cable} \leq C_a \text{ (or } C_o)$
 $I_{max} \text{ (or } I_i) \geq I_{sc} \text{ or } I_t \text{ (or } I_o)$ $L_i + L_{cable} \leq L_a \text{ (or } L_o)$
 $P_{max} \text{ (or } P_i) \geq P_o$
- Capacitance and inductance of the field wiring from the intrinsically safe equipment to the associated apparatus shall be calculated and must be included in the system calculations as shown under 1. Where the cable capacitance and inductance per foot are not known, the following values shall be used: $C_{cable} = 60 \text{ pF / ft.}$, $L_{cable} = 0.2 \text{ } \mu\text{H / ft.}$
- The output current of this associated apparatus is limited by a resistor such that the output voltage-current plot is a straight line drawn between open-circuit voltage and short-circuit current.
- This associated apparatus has not been evaluated for use in combination with another associated apparatus.
- This associated apparatus may also be connected to simple apparatus as defined in Article 504.2 and installed and temperature classified in accordance with Article 504.10(B) of the National Electrical Code (ANSI/NFPA70), or other local codes applicable.
- Associated apparatus must be installed in an enclosure (which meets the requirements of ANSI/ISA S82) suitable for the application in accordance with the National Electrical Code (ANSI/NFPA 70) for installation in the United States, the Canadian Electrical Code for installation in Canada, or other local codes, as applicable.
- When using as non-incendive device for Class I, Division 2 or Class I, Zone 2 do not snap equipment onto or off the pac-Bus 9294, or connect and disconnect non-intrinsically safe-lines unless power has been removed or the area is known to be non hazardous.
- Intrinsically safe circuits must be wired separately in according with Article 504.20 of the National Electrical Code (ANSI/NFPA 70) for installation in the United States, the Canadian Electrical Code Part 1, Appendix F for installation in Canada, or other local codes, as applicable.
- When multiple circuits extend from the same piece of associated apparatus, they must be installed in separate cables or in one cable having suitable insulation. Refer to Article 504.30(B) of the National Electrical Code (ANSI/NFPA 70) and Instrument Society of America Recommended Practice ISA RP12.6 for installing intrinsically safe equipment.
- Electrical apparatus connected to an intrinsically safe system shall not use or generate voltages > 253 V AC resp. > 125 V DC. (U_{max})
- For 9270/**-d** with d = 6 or 7: When using as non-incendive device for Class I, Division 2 or Class I, Zone 2 with exposure to some chemicals a periodically inspect of the relays for any degradation of properties and a replacement if degradation is found is recommended.
- Ambient temperature: -20°C ... +60°C (any mounting position)

WARNING – EXPLOSION HAZARD

Substitution of components may impair suitability for Class I, Division 2 or Class I, Zone 2.
Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.

AVERTISSEMENT - RISQUE D'EXPLOSION

Le remplacement des composants peut remettre en cause la compatibilité avec la classe I, division 2 ou classe I, zone 2.
Ne déconnecter l'appareil que s'il est hors tension ou si l'atmosphère est exempte de concentrations inflammables.

F 4830 503

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			2017	Date	Name	Certification drawing		Scale
			Drawn by	19.06.	Reistle	Switching Repeater Type 9270		none
			Checked		Kaiser			Sheet
			STAHL			9270 6 031 001 3		1 of 1
01	05.08.20	Reistle						Agency
Version	Date	Name	Rep. f.			Rep. t.		A4