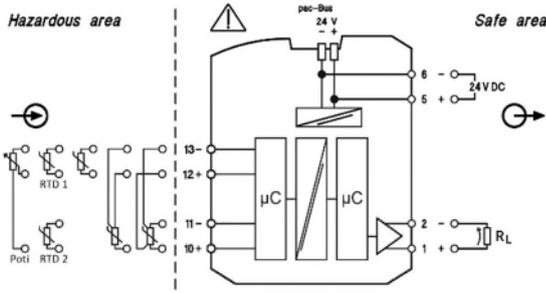
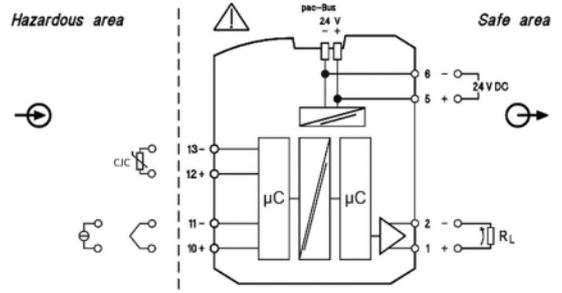


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Type 9282/11-51-16*



Type 9282/12-51-16*



The Temperature Transmitter is an associated apparatus as well as a nonincendive apparatus for installation in SAFE AREA and provides intrinsically safe circuits for field devices located in HAZARDOUS AREAS.

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

Type 9282/1b-51-16* with b = 1 (RTD - resistance temperature detector) Non- I.S. signal circuits: Terminal No.: 1, 2
 b = 2 (TC - thermocouple) Power supply circuits: Terminal No.: 5, 6 or pac-Bus
 * = s or k (design of terminals) 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,D or IIB,IIA	
						Ca / Co [μF]	La / Lo [mH]	Ca / Co [μF]	La / Lo [mH]
9282/1*-51-16* No. 10,11 / 12,13	6	16.8	25.2	44	negligible	40	100	-	-

- 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:
 $V_{max} \text{ (or } U_i) \geq V_{oc} \text{ or } V_t \text{ (or } U_o)$ $C_i + C_{cable} \leq C_a \text{ (or } C_o)$
 $I_{max} \text{ (or } I_i) \geq I_{sc} \text{ or } I_t \text{ (or } I_o)$ $L_i + L_{cable} \leq L_a \text{ (or } L_o)$
 $P_{max} \text{ (or } P_i) \geq P_o$
 It should be noted, however, for installation in which both the Ci and Li of the intrinsically safe equipment exceed 1% of the Ca (or Co) and La (or Lo) parameters of the associated apparatus (excluding the cable), only 50% of Ca (or Co) and La (or Lo) parameters are applicable and shall not be exceeded.
- 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 pF / ft., L_{cable} = 0.2 μH / 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})
- This associated apparatus shall be mounted on DIN rail, DIN rail with pac-Bus (9294) or pac-Carrier (9295).
 In any case, the field wiring is connected to the ISpac device terminals (FW2).
- Ambient temperature: -40°C ... +70°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.

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			2020	Date	Name	Certification drawing Temperature Transmitter Type 9282 9282 6 031 001 3	Scale	none
			Drawn by	02.07.	T.Stahl		Sheet	1 of 1
			Checked		Reistle		Agency	UL
01	29.06.2021	Reistle	STAHL			Rep. t.		A4
Version	Date	Name				Rep. t.		