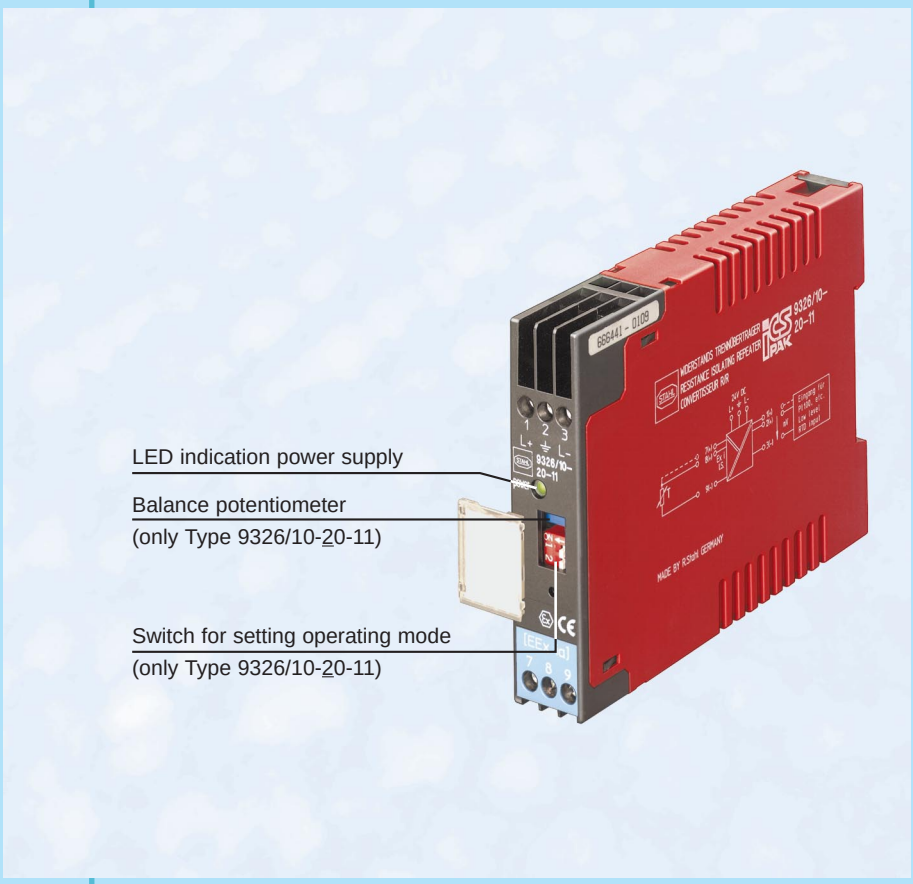
I.S. Isolators

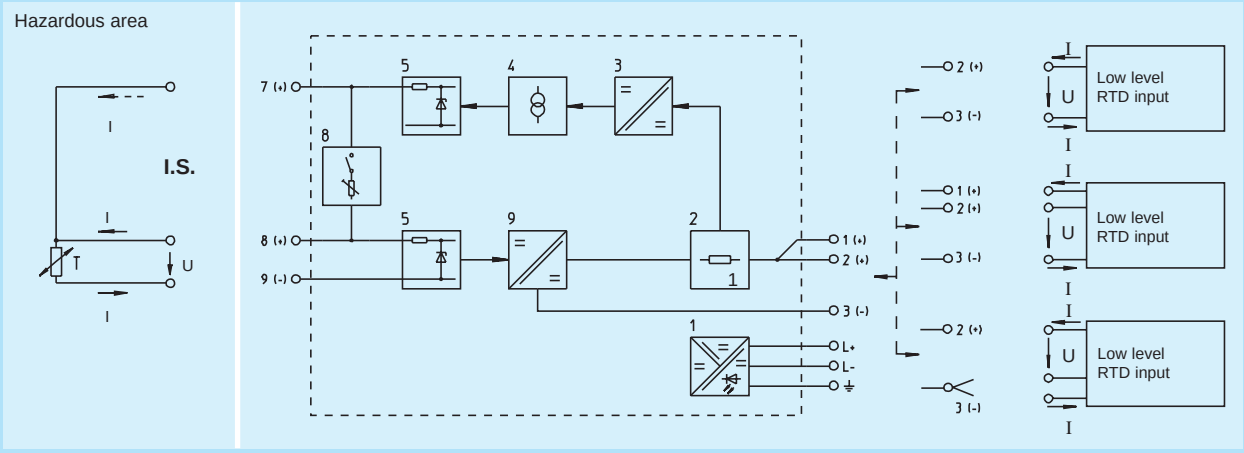


I.S. Isolators
(DIN Rail Mounting)
Resistance Isolating Repeater
Type 9326/10-20

- Intrinsically safe input [EEx ia] IIC
- Galvanic isolation between input, output and power supply
- Power supply 18 .. 35 V DC
- For 2-, 3-wire circuits
- Resistance range from 19 Ω up to 4 kΩ
- Sensor current from 1 to 5 mA
- Installation in Zone 2 (Div 2) possible
- EMC tested, CE marking

Basic function: analog input, Ω, 1 channel.

The resistance isolating repeaters are used for the intrinsically safe operation of resistance thermometers (Pt 100, Ni 100, Pt 500, etc) or other resistance sensors.



Selection table	
Version	**Ordering code**
2- or 3-wire circuit	**9326 / 10 - 20 - 11**

Safety data for input	
Certifications	BVS (Europe, CENELEC), CSA (Canada), SEV (Switzerland), FTZU (Czech Republic), BKI (Hungary), KDB (Poland), VNIIEF (Russia), FM (USA)
Marking	[EEx ia] IIC/IIB according to CENELEC
Classification	associated electrical apparatus

Safe maximum values (CENELEC)	
Max. voltage U_m	9.5 V
Max. current I_m	9.3 mA
Max. power P_m	23 mW
Max. capacitance C_a for [EEx ia] IIC / IIB	650 nF / 2000 nF
Max. inductance L_a for [EEx ia] IIC / IIB	2 mH / 5 mH

Further information and combinations of values, see certifications

Technical data			
Power supply			
Rated voltage U_N		24 V DC	
Voltage range		18 .. 35 V	
Rated current (for U_N)	$I_N \leq$	20 mA	
Max. power consumption		700 mW	
Polarity reversal protection		yes	
Signal transmission			
Sensor current range (for specified accuracy) I_F		1,0 .. 5 mA	
Sensor resistance range R_F		19 Ω .. 4 kΩ	
Response time (10 .. 90%)	≤	100 ms	
Input			
Connection type (no. of conductors)		2, 3	
Line resistance per conductor in			
2-wire circuit	≤	15 Ω	
3-wire circuit	≤	50 Ω	
Output (passive)			
Connection type (no. of conductors)		2, 3	
Open-circuit / short-circuit			
Output behavior for open-circuit or short-circuit on sensor side	$U_A \leq$	10 mV or $U_A \geq 5.5$ V	
Error limits			
Tolerance band setting, linearity and offset error for U_N, 23 °C			
In 2-wire circuit			
at sensor current I_F		1 .. 4 mA	4 .. 5 mA
R_F = 19 Ω .. 100 Ω (in % of 100 Ω)	≤	0.2 %	0.3 %
R_F = 100 Ω .. 400 Ω (in % of R_F)	≤	0.1 %	0.2 %
R_F = 400 Ω .. 4 kΩ (in % of R_F) for 1 mA	≤	0.1 %	–
In 3-wire circuit			
at sensor current I_F		1 .. 4 mA	4 .. 5 mA
R_F = 19 Ω .. 100 Ω (in % of 100 Ω)	≤	0,1 %	0,2 %
R_F = 100 Ω .. 400 Ω (in % of R_F)	≤	0,1 %	0,2 %
R_F = 400 Ω .. 4 kΩ (in % of R_F) for 1 mA	≤	0,1 %	–

Dimensions (Casing type A), mechanical data, ambient conditions and accessories see page 3/58f.