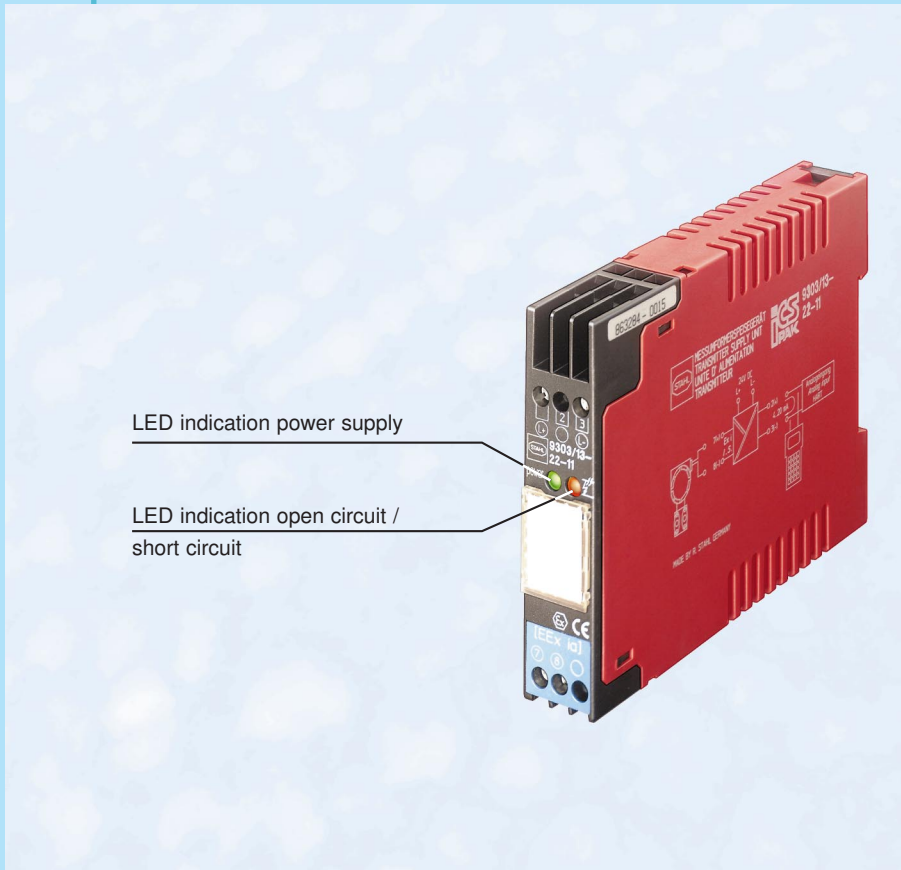




**I.S. Isolators
(DIN Rail Mounting)
Transmitter Supply Unit
Type 9303**

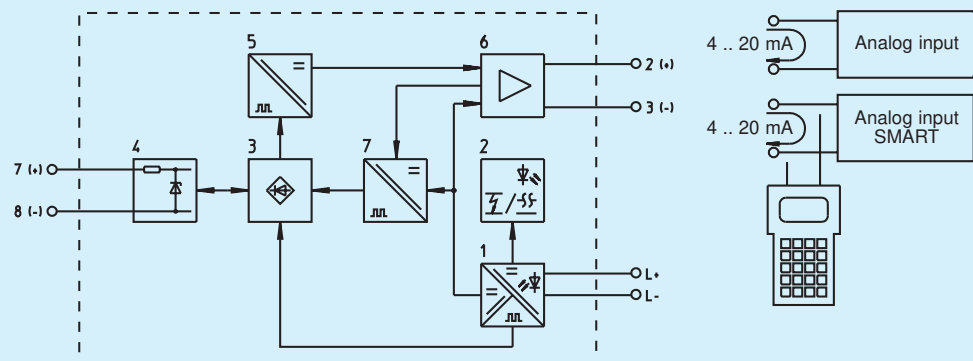
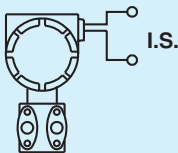
- Intrinsically safe input [Ex ia] IIC
- Output 4 .. 20 mA
- Galvanic isolation between input, output and power supply
- Power supply 18 .. 35 V DC
- Open-circuit and short-circuit monitoring
- Suitable for intelligent transmitters
- Installation in Zone 2 (Div 2) possible
- EMC tested, CE marking

STAHL

Basic function: analog input, 4 .. 20 mA, 1 channel.

The transmitter supply units are used for intrinsically safe operation of 2-wire transmitters. They supply power to the transmitter and transmit the signal to the output. Also suitable for intelligent transmitters.

Hazardous area



Selection table

Version	Ordering code
for analog transmitters	9303 / 11 - 22 - 11
for HART-transmitters	9303 / 13 - 22 - 11
for intelligent transmitters (signals up to 15 kHz)	9303 / 15 - 22 - 11

Safety date for input

Certifications	BVS (Europe, CENELEC), CSA (Canada), SEV (Switzerland), FTZU (Czech Republic), EVPU (Slovakia), 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	28 V
Max. current I_m	91 mA
Max. power P_m	637 mW
Max. capacitance C_a for [EEx ia] IIC / IIB	70 nF / 500 nF
Max. inductance L_a for [EEx ia] IIC / IIB	4.9 mH / 18 mH

Further information and combinations of values, see certifications

Technical data

Types	9303/11	9303/13	9303/15
Power supply			
Rated voltage U_N	24 V DC	24 V DC	24 V DC
Voltage range	18 .. 35 V	18 .. 35 V	18 .. 35 V
Rated current (for U_N , $I_E = 20$ mA)	$I_N \leq 63$ mA	70 mA	70 mA
Max. power consumption (for $U_N = 30$ V, $I_E = 22$ mA)	1.7 W	2.0 W	2.0 W
Polarity reversal protection	yes	yes	yes
Signal transmission			
Current range (specified accuracy)	$I_A = I_E$ 4 .. 20 mA	4 .. 20 mA	4 .. 20 mA
Response time (10 .. 90%)	≤ 0.2 ms	0.2 ms	0.2 ms
Input			
Transmitter supply voltage ($I_E = 20$ mA, $R_L = 250 \Omega$) is reduced on change of R_L by	≥ 16.5 V	17.0 V	16.5 V
	–	–	1 V / 50 Ω
Output			
Range for load resistance R_L with HHT	0..750 Ω	0..650 Ω	0..500 Ω
	–	200..650 Ω	200..500 Ω
Open-circuit and/or short-circuit			
Output behavior on open-circuit or short-circuit	$I_A \sim I_E$	I_E	I_E
Output current (for $I_E = 0$)	$I_A \leq 1.5$ mA	1.5 mA	1.5 mA
Open-circuit or short-circuit indication	LED red	LED red	LED red
Error limits			
Tolerance band setting in % of the measuring range	$\leq 0.1\%$	0.1%	0.1%
Linearity error for U_N , 23 °C	$\leq \pm 0.1\%$ / 10K	$\pm 0.1\%$ / 10K	$\pm 0.1\%$ / 10K
Temperature effect	$\leq$		

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