

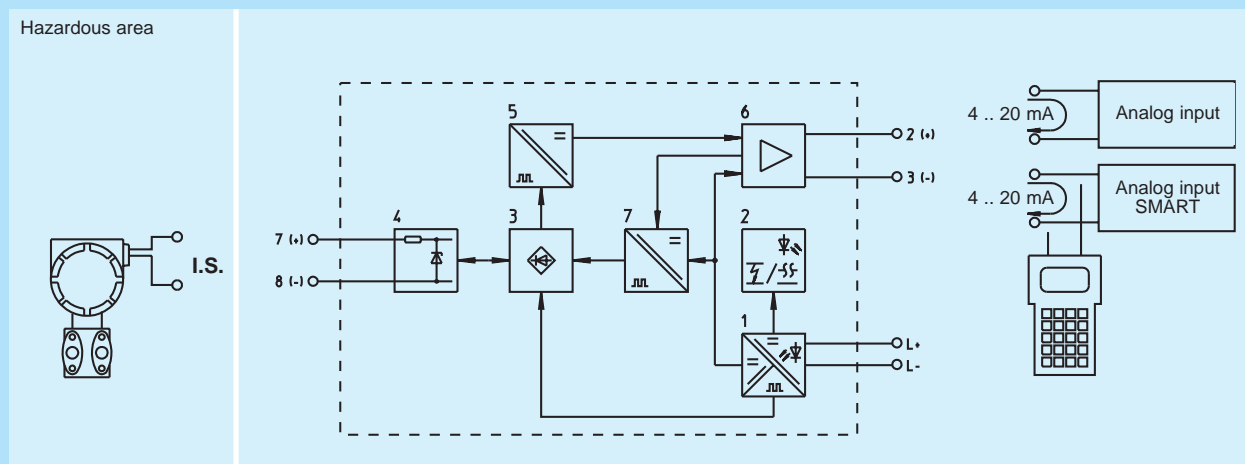
I.S. Isolators (DIN Rail Mounting) Transmitter Supply Unit Type 9303

- 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



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.



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 Classification	[EEx ia] IIC/IIB according to CENELEC 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%)	\leq	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	\geq	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 200..650 Ω	0..500 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				
Linearity error for U_N , 23 °C	\leq	0.1%	0.1%	0.1%
Temperature effect	\leq	± 0.1 % / 10K	± 0.1 % / 10K	± 0.1 % / 10K
Dimensions (Casing type A), mechanical data, ambient conditions and accessories see page 3/58f.				

