

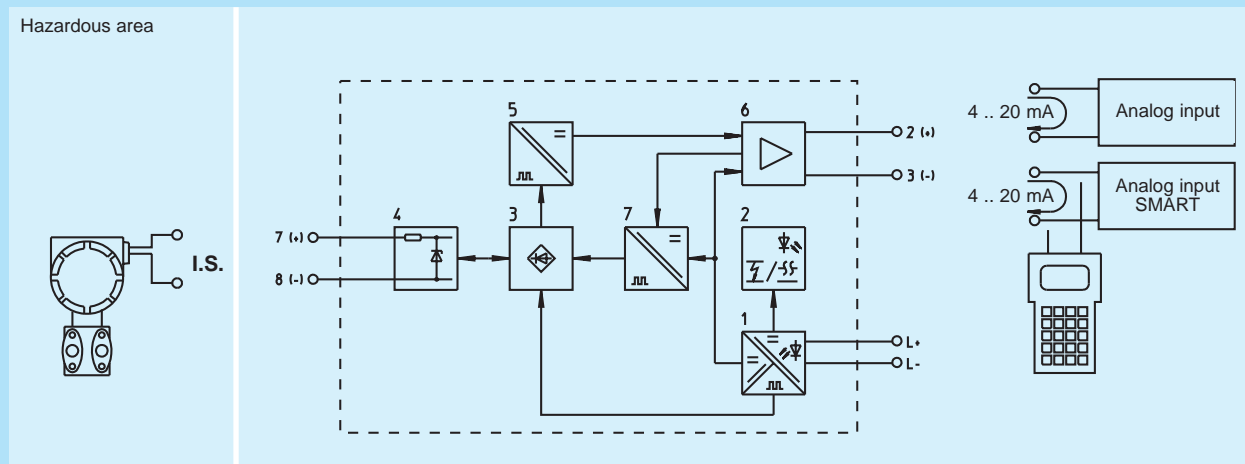
### I.S. Isolators (DIN Rail Mounting) Transmitter Supply Unit Type 9303

- 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	[EEx ia] IIC/IIB according to CENELEC
Classification	associated electrical apparatus
<b>Safe maximum values (CENELEC)</b>	
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
<b>Power supply</b>				
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
<b>Signal transmission</b>				
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
<b>Input</b>				
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 $\Omega$
<b>Output</b>				
Range for load resistance $R_L$ with HHT		0..750 $\Omega$	0..650 $\Omega$ 200..650 $\Omega$	0..500 $\Omega$ 200..500 $\Omega$
<b>Open-circuit and/or short-circuit</b>				
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
<b>Error limits</b>				
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	$\leq$	$\pm 0.1$ % / 10K	$\pm 0.1$ % / 10K	$\pm 0.1$ % / 10K
Dimensions (Casing type A), mechanical data, ambient conditions and accessories see page 3/58f.				

