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HD 588 MODULAR SIGNAL CONVERTER

THE HD 588 MODULAR SIGNAL CONVERTER WITH 3-WAY GALVANIC SEPARATION FOR THE PROCESSING OF ANALOGUE SIGNALS 0÷20mA   4÷20Ma   0÷10V
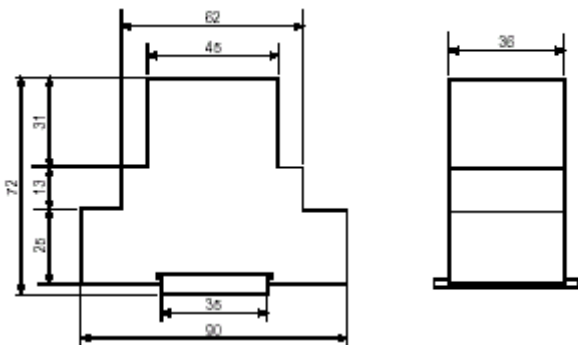
Built inside a 2-module DIN box for 35 mm asymmetric guide, the converter offers, as well as a conversion of analogue signals between input and output, a complete galvanic separation among input, output and power supply.

The 3-way circuital configuration ensures a definite decoupling of the sensor circuit from the external control circuit, preventing reciprocal influences in the presence of various measuring circuits.

The HD 588 converter module is made up of the following sections:
- Universal input stage with signal conversion from voltage into frequency.
- Universal output stage with signal conversion from frequency into voltage.
- Power supply stage.

Configuration can be modified through jumper connections, an important feature being the possibility of modifying the type of input and output without having to calibrate the converter again. By simple operations the HD 588 converter allows up to 9 different combinations between input and output.

FEATURES			
IMPUT	**CONFIGURATION:**		
Imput signal:	0÷10 Vc.c.	0÷20 mA	4÷20 mA
Maximum overload:	11 Vc.c.	22 mA	22 mA
Imput impedance:	100 k Ω	51 Ω	51 Ω
OUTPUT:			
Output signal:	0÷10Vcc	0÷20 mA	4÷20 mA
Maximum overload:	5 mA	500 Ω	500 Ω
Output impedance:	0,1 Ω	1M Ω	1M Ω
POWER SUPPLY:			
Imput voltage:	12÷24 V ~– ± 10%		
Consumption:	80 mA		
PERFORMANCE:			
Linearity:	0.2%		
Zero drift:	0.02%/°C referred to full scale		
Full scale drift:	0.02%/°C referred to applied signal		
Response time:	0.3 seconds at 63% of final value		
	1 second at 99.9% of final value		
Isolation:	3kV a 50 Hz for 1 minute		
	Operating temperature:		-
	10°C...50°C (the maximum temperature in which electronics can operate).		

Variation of jumper connections according to the chosen input and output relative retouch trimmers for start of scale and full scale.
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|		SETUP OF JUMPER CONNECTIONS				TRIMMER*	
		J1	J2	J3	J4	STAR OF SCALE	FULL SCALE
1) Imput 0÷10Vdc:	0÷10Vdc	A	A	A	A	RR1	RR2
Output	0÷20mA	A	A	B	A	RR1	RR2
	4÷20mA	A	A	B	B	RR1	RR2
2) Imput 0÷20mA:	0÷10Vdc	B	A	A	A	RR1	
Output	0÷20mA	B	A	B	A	RR1	
	4÷20mA	B	A	B	B	RR1	
3) Imput 4÷20mA:	0÷10Vdc	B	B	A	A	RR1	
Output	0÷20mA	B	B	B	A	RR1	
	4÷20mA	B	B	B	B	RR1	

* Multiturn trimmers RR1, RR2 are needed for slight calibration adjustments. If not strictly necessary it is advisable not to operate them, calibration being already carried out in the laboratory.
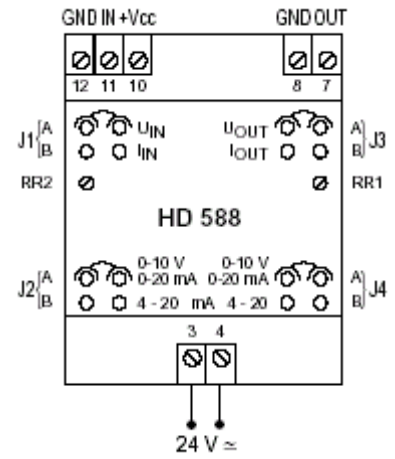
CONNECTION DIAGRAM
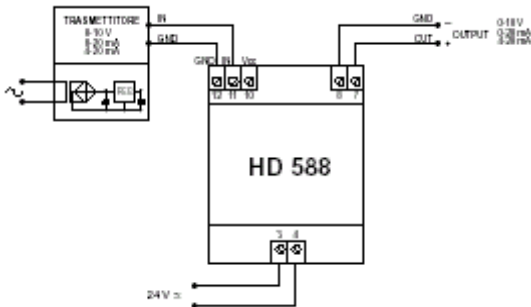
Transmitter supplied separately, interface optoinsulates input, output and power supply.
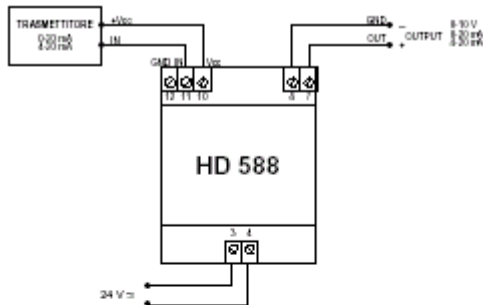
Transmitter not supplied, interface supplies transmitter and optoinsulates input output and power supply.