



## **COND-SGA**

# CONDITIONER - AMPLIFIER FOR STRAIN-GAGE BASED TRANSDUCERS

The conditioner - amplifier COND-SGA provides normalised signals in current and voltage from every load cells, force transducers and torque sensors based on the strain-gauge technology.



COND-SGA

Input Signal Full Wheatstone bridge

From 0.1 to 30 mV/V

Transducer excitation 5 or 10 VDC (Zmin : 85  $\Omega$ )

Adjusting range of gain from 35 to 10000
Adjusting range of zero from 0 to 79 %

Output signal 0..10 VDC (load  $\geq 5 \text{ k}\Omega$ )

-10..0..+10 VDC (load ≥ 5 kΩ)

0..20 mA (load  $\leq$  500  $\Omega$ ) - (source or sink mode) 4..20 mA (load  $\leq$  500  $\Omega$ ) - (source or sink mode)

Accuracy Non-linearity  $\pm$  0.03% of full scale

Zero temperature coefficient Typical  $\pm$  0.002 %/°C of full scale @ 2.5 mV/V

Maximum  $\pm$  0.009 %/°C of full scale @ 2.5 mV/V

Span temperature coefficient Typical  $\pm\,0.007\,$  %C of signal

Maximum  $\pm 0.01$  %°C of signal

Band width 0..6 kHz

**Low pass filter** 1, 5, 10, 50, 100, 500, 800, 1000 or 5000 Hz (switchable range)

Operating temperature - 10°C.. + 50°C

Adjustment Zero point and full scale by internal dip-switches and potentiometers

With internal shunt calibration resistor of 120  $\mbox{k}\Omega$ 

Power supply COND-SGA-D 18 to 24 VDC\*

COND- SGA-A 115 and 230 VAC (50/60 Hz) + 18 to 24 VDC\*

\* 18 V max at full load

Consumption 5 VA

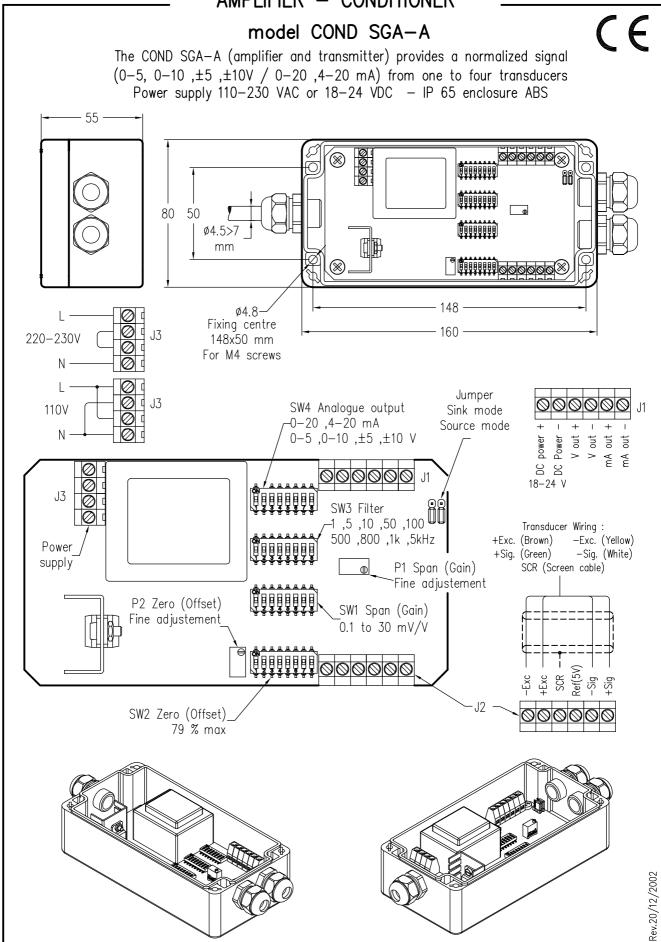
Enclosure ABS case 160 x 80 x 55 mm sealed to IP65 and fitted with 3 cable glands

Weight: 0.28 kg

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# AMPLIFIER - CONDITIONER





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#### $C \in$ model COND SGA-D The COND SGA-D (amplifier and transmitter) provides a normalized signal $(0-5, 0-10, \pm 5, \pm 10 \text{V} / 0-20, 4-20 \text{ mA})$ from one to four transducers Power supply 18-24 VDC - IP 65 enclosure ABS - 55 -000000 80 50 Ø4.5>7 mm - 148 -Ø4.8 Fixing centre <del>-</del> 160 -148x50 mm For M4 screws Jumper **00000** J1 SW4 Analogue output Sink mode -0-20 ,4-20 mA Source mode 0-5 , 0-10 , $\pm 5$ , $\pm 10$ V power Power V out V out A out 20 18-24 V SW3 Filter -1 ,5 ,10 ,50 ,100 **II** Transducer Wiring: 500 ,800 ,1k ,5kHz +Exc. (Brown) -Exc. (Yellow) +Sig. (Green) -Sig. (White) SCR (Screen cable) P1 Span (Gain) Fine adjustement P2 Zero (Offset) SW1 Span (Gain) Fine adjustement \_ 0.1 to 30 mV/V SW2 Zero (Offset) 79 % max Rev.10/2/2005