

COND-A420

CONDITIONER – AMPLIFIER FOR STRAIN-GAGE BASED TRANSDUCERS

The conditioner - amplifier COND-A420 provides standardized signals in current and voltage from every load cells, force transducer and torque sensor based on the strain-gauge technology.

COND-A420



Features

- o Input range : Wheatstone bridge (4 or 6 wires connection (sense))
- o Output : 4(0)...20mA and 0...10V (simultaneously)
- o DIN rail mouting

Applications

- Industrial weighing

Functions

- Zero point and full scale adjustment by potentiometers (20 turns) on the front panel
- Correction of the influence of transducer cable length (6 wires technology)

Specifications	COND-A420	COND-A420-DC	
Type	Strain gauge conditioner	Strain gauge conditioner	-
Input range	0.5...2 mV/V	0.5...2 mV/V	-
Sensor excitation	10 VDC (120mA max.)	10 VDC (120mA max.)	-
Display	-	-	-
Linearity error	< ± 0.01	< ± 0.01	% F.S.
Temperature coefficient of zero signal	< ± 0.2	< ± 0.2	% F.S./10 C
Temperature coefficient of the sensitivity	< ± 0.06	< ± 0.06	% F.S./10 C
Bandwidth	0...10	0...10	Hz
Service temperature range	-10...+60	-10...+60	C
Storage temperature range	-30...+80	-30...+80	C
Power supply	230 VAC* (50/60Hz) (3VA)	24 VDC (3W)	-
IP Rating	IP20	IP20	-
Output tension	0...10 (load R.>= 1000 Ohm)	0...10 (load R.>= 1000 Ohm)	V
Output current	0...20 or 4...20 (load R.<= 800 Ohm)	0...20 or 4...20 (load R.<= 800 Ohm)	mA

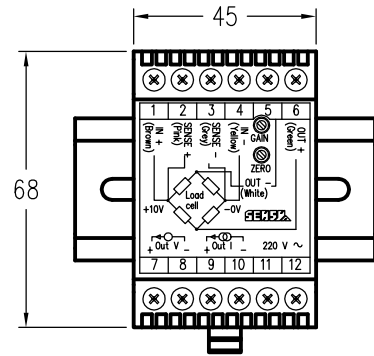
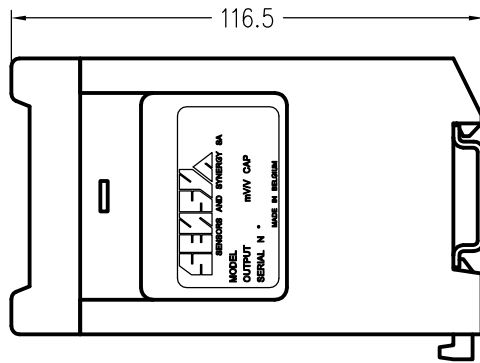
* : 110VAC available on request

F.S.: full scale - Specifications subject to change without notice

AMPLIFIER – CONDITIONER

model COND-A420

The COND-A420 (amplifier and transmitter) provides a normalized signal (0..10 V or 0..20 mA or 4..20 mA) from one to four force transducers connected in parallel.



Input signal : Excitation of 1 to 4 load cells 350Ω
 Excitation : 10 VDC, I max 120 mA
 Adjusting range of gain : 500 à 2000
 Adjusting range of zero : 0 to 75 %

Output signal : 0-10V : (minimum load 1 KΩ).
 0-20 mA : (maximum load 800 Ω)
 4-20 : (maximum load 800 Ω)

Accuracy : Non-linearity : $\leq \pm 0,01\%$ of full scale
 Thermal Zero drift : $\leq \pm 200\text{ppm}/^\circ\text{C}$ of full scale
 Thermal Span drift : $\leq \pm 60\text{ppm}/^\circ\text{C}$ of signal

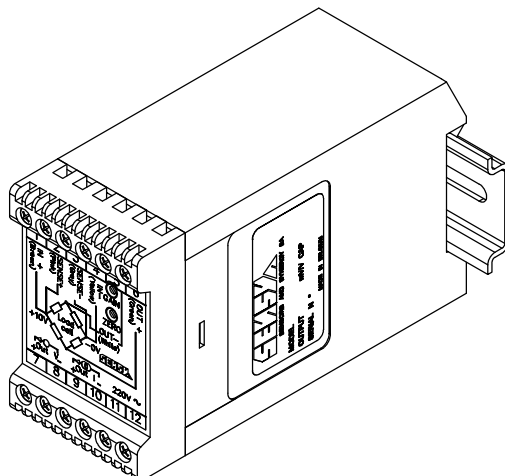
Specifications : Noise : $\leq 0.05\%$ of full scale
 Frequency response : 0 ... 10Hz (-3dB, 12 dB/octave).
 Operating temperature : -10°C ... $+60^\circ\text{C}$

Adjustment : Zero point and full scale by potentiometer on the front plate.

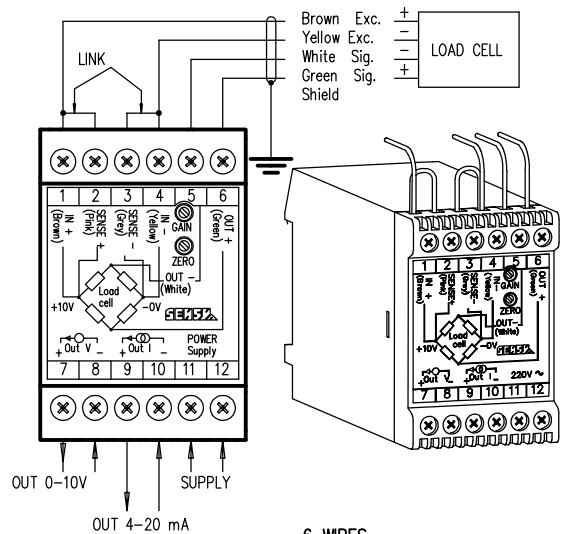
Power Supply : 230 V ($\pm +10/-15\%$) 50/60 Hz.

Consumption : 3 VA

Housing : NORYL box, weight 250 g, socket ABS
 Dimensions : 45 x 68 x 116 mm
 Din rail mounting (EN50022).



4 WIRES



6 WIRES

