

## 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

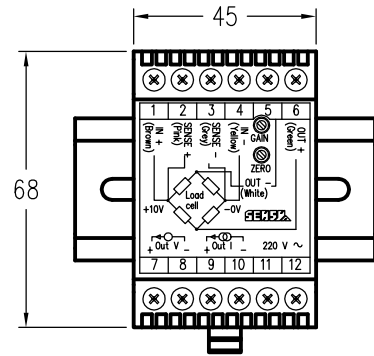
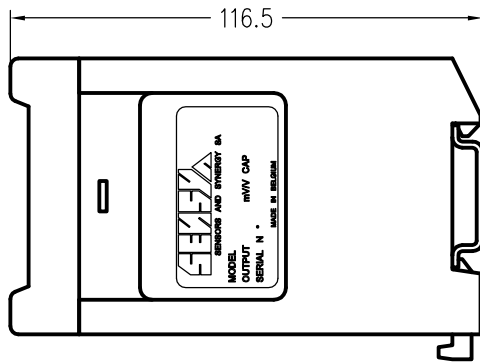
\* : 110VAC available on request

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

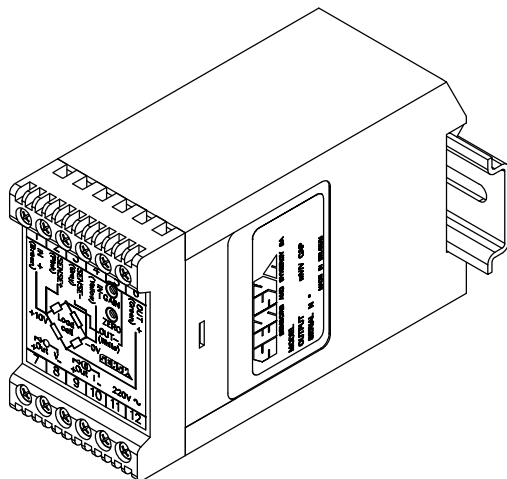
**Specifications** : Noise :  $\leq 0.05\%$  of full scale  
 Frequency response : 0 ... 10Hz (-3dB, 12 dB/octave).  
 Operating temperature :  $-10^\circ\text{C}$  ...  $+60^\circ\text{C}$

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

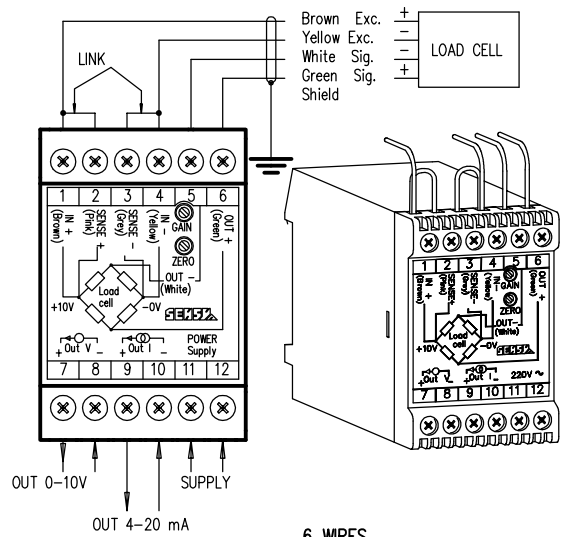
**Power Supply** : 230 V ( $\pm +10/-15\%$ ) 50/60 Hz.

**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

