

INDUSTRIAL INDUCTIVE TRANSDUCER CONDITIONER : SX 5100 SERIES

DESCRIPTION

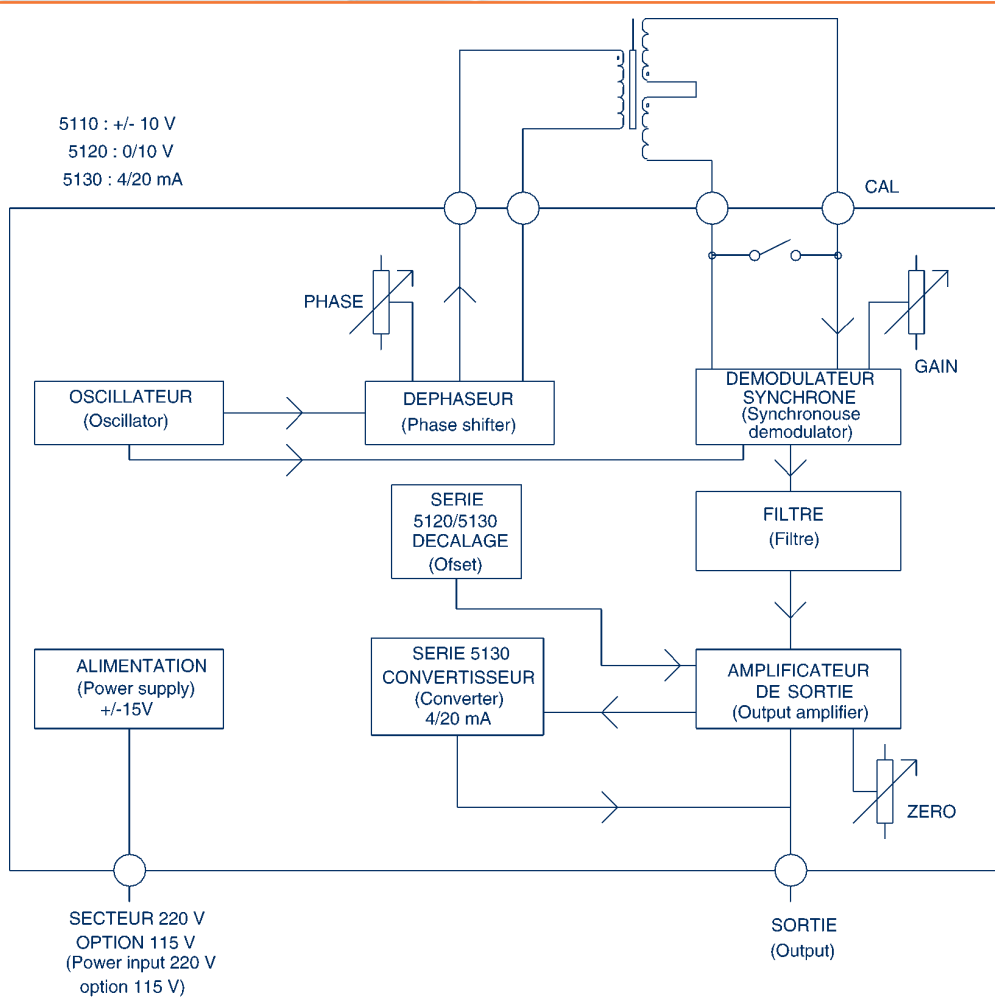
The 5100 series box conditioners combined with an LVDT provide a complete unit for displacement measurement in 12 versions, depending upon line power, response time and output mode (see specification table).

They comprise a 110 V / 220 V AC line power supply, an oscillator delivering a 3500 Hz or 15 KHz sine wave signal, a synchronous demodulator and a low-pass output filter.

The outputs are protected against short-circuits. The 5100 box is robust and its screw fastening allows use either on a table or in a measurement cabinet.

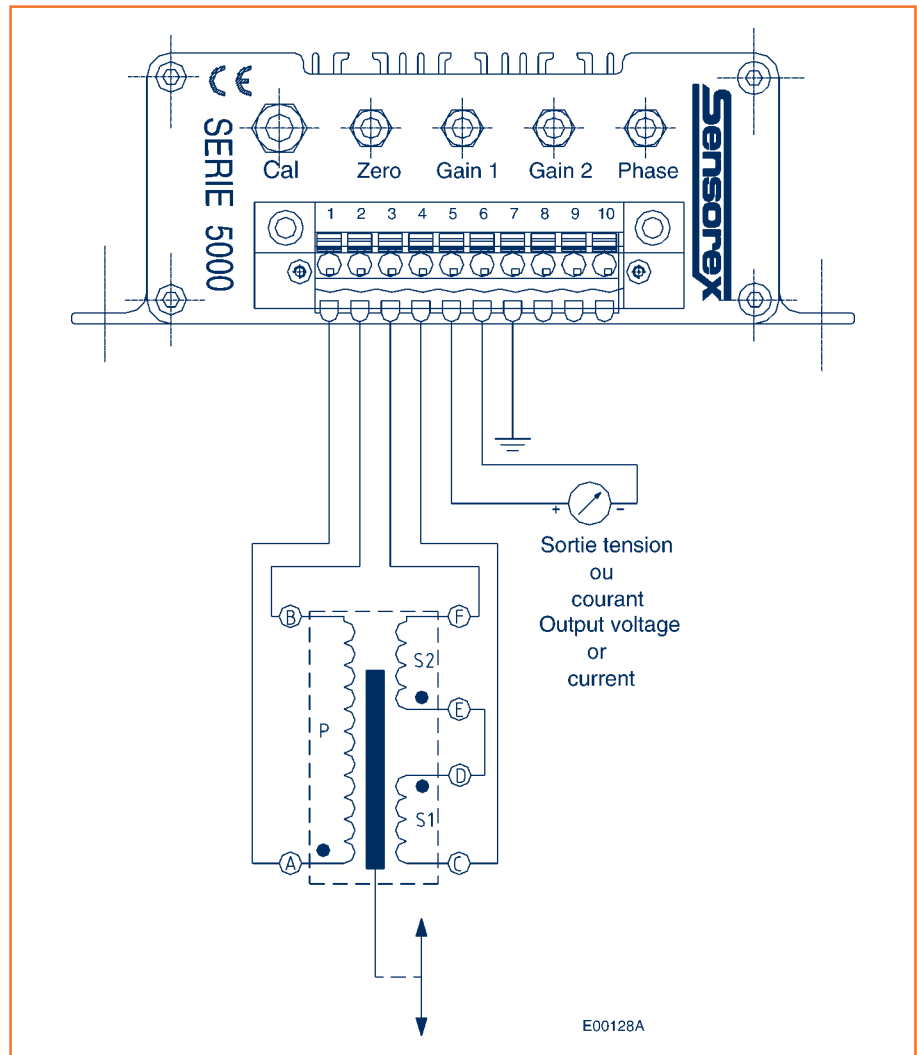
Detailed specifications: see DOC-A and DOC-AF modules.

SYNOPTIC



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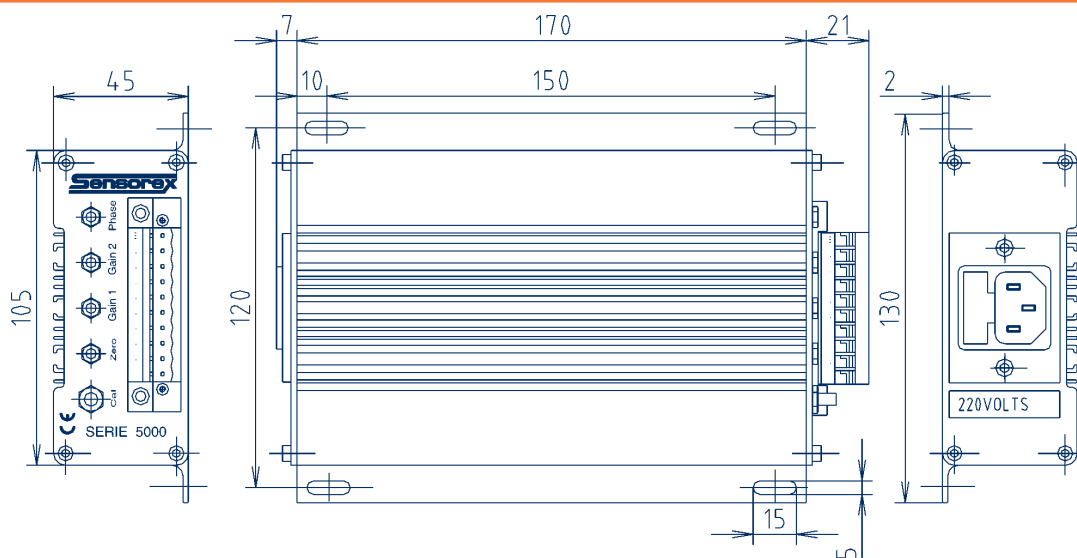
WIRING



CHARACTERISTICS

Power supply	220 VAC ± 10 % 50-60 Hz	5110	5120	5130	5132	5122	5112
	115 VAC ± 10 % 50-60 Hz	5111	5121	5131	5133	5123	5113
Output signal	± 10 VDC 5 mA max.	0 to 10 VDC 5 mA max.	4 to 20 mA sur Rc < 500 Ohm		0 to 10 VDC 5 mA max.	± 5 VDC 5 mA max.	
Gain adjust 1 (coarse) + gain 2 (fine)	5 to 50 (VDC/Vrms)	2.5 to 25 (VDC/Vrms)	4 to 40 (VDC/Vrms)		2.5 to 25 (VDC/Vrms)	5 to 50 (VDC/Vrms)	
«Zero» adjust (trimmer pot)	0V ± 0.1V	5 V ± 0.1V	12 mA ± 160 µA		5 V ± 0.1V	0V ± 0.1V	
Demodulation residual voltage	< 20 mV peak-peak		< 100 µA peak-peak		< 100 mV peak-peak		
Demodulation input sensitivity (standard version)	10 VDC output for voltage input from 200 to 2000 mV rms		20 mA output for voltage input from 200 to 2000 mV rms		5 mA output for voltage input from 100 to 1000 mV rms		
Output impedance	< 1 Ohm		> 150 kOhm		< 1 Ohm		
Signal delivered by the oscillator	2.2 Vrms to 3500 Hz, 15 mA rms			1,4 Vrms to 15 kHz 15 mA rms			
Demodulator non linearity	< 0.010 % of FSO			< 0.050 % of FSO			
Thermal drift	0.01 % / °C			0.05 % / °C			
Output filter cut-off frequency	400 Hz to - 3 dB			3300 Hz to - 3 dB			
-FSO to +FSO rise time	1.6 ms			0.2 ms			
Phase shift	2.5 ° to 10 Hz			3.1° to 100 Hz			
Oscillator input impedance	< 1 Ohm						
Demodulator input impedance	> 150 kOhm						
Operating temperature range	0° C to 60° C						
Phase adjust	± 30°						

INTERFACE DRAWING



E00127A