

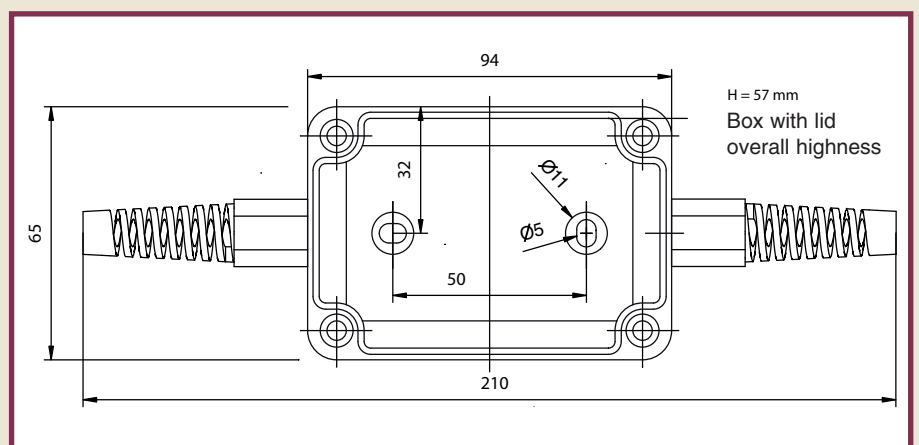
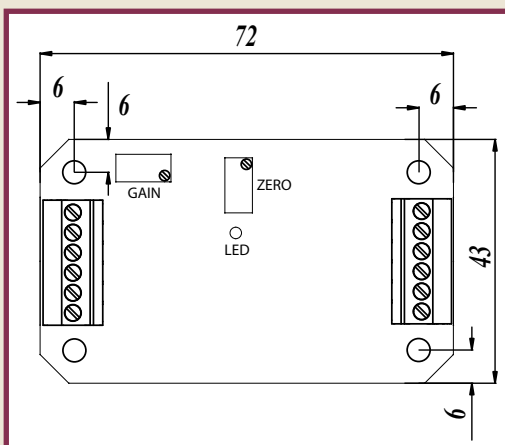
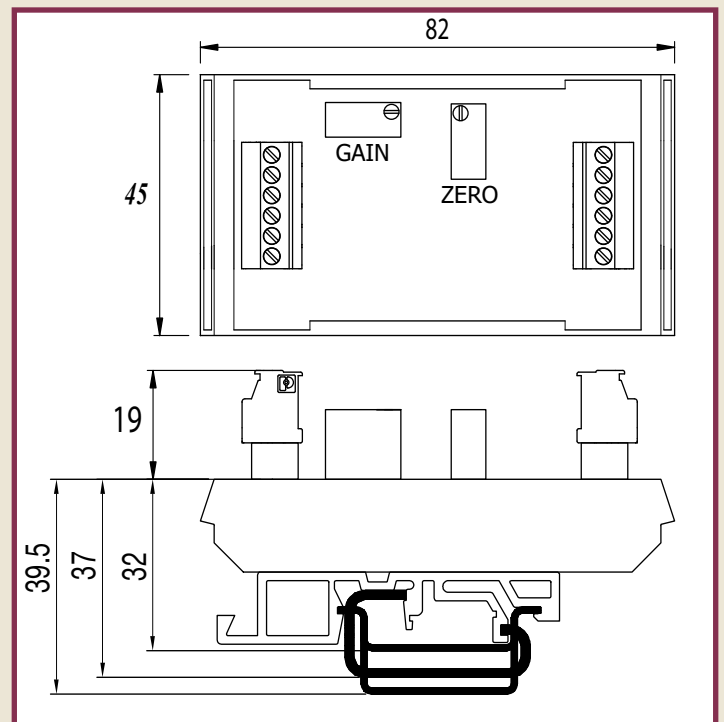
CONDITIONING ELECTRONICS

SERIES EL600 FOR STRAIN GAUGE TRANSDUCERS AND LVDT



- Connected to strain gauge transducers (load cells, pressure transducers, torque meters, wheatstone bridges) and LVDT.
- EL600 feeds power supply to connected transducer and amplifies its signal.
- Good price
- Many types of outputs: voltage, current and frequency.
- Easy to calibrate: by means of zero and gain trimmers.

- Built – in calibration circuit: many DS Europe transducers have a built-in calibration circuit that allows calibration without specimen loads.
- Easy to fix: by means of 4 through holes, in box or DIN rail.
- Compact: small dimensions allow many applications.
- Easy connections: by means of extractable screw terminal boards.
- High resolution: by means of CE/EMC protection that reduce effect of electromagnetic noise.



General Description

Conditioning electronics series EL600 can be connected to strain gauge transducers (load cells, pressure transducers, torque meters and Wheatstone bridges with strain gauges) and to LVDT position transducers.

Series EL600 are to be externally fed power supply, they feed power supply to connected transducer and condition its analog signal by giving an easy to calibrate amplified output.

Calibration:

Many DS Europe transducers (load cells and pressure transducers) have a built-in calibration circuit that allows an easy calibration without having to use bulky specimen loads or presses with specimen load cells (a jumper on EL600 activates such circuit).

Zero and gain trimmers are used for calibration and a LED is signalling when EL600 is powered.

Protection against electromagnetic noise:

Series EL600 allow to amplify analog low amplitude signals from connected transducers and to transmit them far away even in electrically noised environment (inverters, power lines etc.) and to recover the drop of voltage on connection cables. Series EL600 cards have been CE / EMC certified under the strictest regulations by an independent external certification laboratory.

Working temperatures:

From -40 up to $+85^{\circ}\text{C}$ by means of extended temperature range SMD electronic components.

How to order:

- EL600: card with 4 through fixing holes (example: EL621).
- EL600EA: with IP66 EN60529 plastic box with low halogen content, with good chemical compatibility and two plastic glands for connection cables (example: EL621EA).
- EL600DIN: on DIN rail accordingly to DIN EN50022 and EN50035 (example: EL621DIN).

Load resistance:

EL624 (4-20mA 2 wires) needs an external load resistance (not included) to be applied in series to one of the two power supply conductors (typically $R_L=250$ Ohm with 24Vdc power supply).

Frequency output:

EL626 allows to transmit the measured signals up to approximately 100m, from the transducer, to a microprocessor or PLC or computer saving the costs of having expensive analog input A/D converters and having also good protection against electrical noise.

Model	Output	Card power supply	Transd. power supply	Input signal	Zero	Gain
EL621	$\pm 10\text{Vcc}$	18-28Vdc filt. stab.	15Vdc	0 a $\pm 80\text{mVdc}$ differential	$\pm 100\%$ FS	0 to 1000
EL631	+10Vcc	18-28Vdc filt. stab.	15Vdc	0 a $\pm 80\text{mVdc}$ differential	$\pm 100\%$ FS	0 to 1000
EL624	4-20mA 2 wires	12-40Vdc filt. stab.	1Vdc	0 a $\pm 80\text{mVdc}$ differential	$\pm 100\%$ FS	0 to 1000
EL634	4-20mA 3 wires 0-20mA 3 wires	18-28Vdc filt. stab.	15Vdc	0 a $\pm 80\text{mVdc}$ differential	$\pm 100\%$ FS	0 to 1000
EL625	$\pm 5\text{Vcc}$	10,5-28Vdc filt. stab.	8Vdc	0 a $\pm 80\text{mVdc}$ differential	$\pm 100\%$ FS	0 to 1000
EL635	+5Vcc	10,5-28Vdc filt. stab.	8Vdc	0 a $\pm 80\text{mVdc}$ differential	$\pm 100\%$ FS	0 to 1000
EL626	Frequency 100Hz to 1MHz Amplitude 5V TTL type	10,5-28Vdc filt. stab.	5Vdc	0 a $\pm 80\text{mVdc}$ differential	$\pm 100\%$ FS	0 to 1000
EL646 (for LVDT)	$\pm 10\text{Vcc}$	10,5-28Vdc filt. stab.	0 - 30Vac to 2,5KHz	15Vac max.	$\pm 100\%$ FS	0 to 1000

Applications

EL 600 because it is easy to use, compact and with good price, it can be used in many applications on automation machines, weighing applications, textile machines, research, machine tools, packaging machines, dosing machine, converting machines, on vehicles, agriculture machines, marble machines etc.



Specifications and prices may change without notice,

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