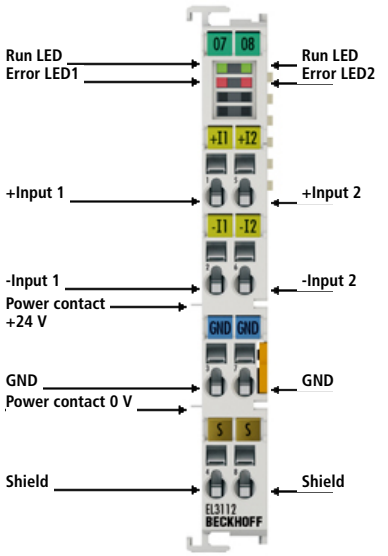
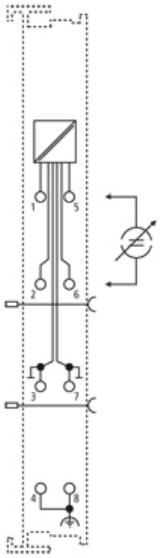
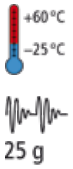


Top view



Contact assembly



EL3112 | 2-channel analog input terminals 0…20 mA, differential input, 16 bit

The EL3112 analog input terminal processes signals in the range between 0 and 20 mA. The current is digitised to a resolution of 16 bits and is transmitted, electrically isolated, to the higher-level automation device. The input channels of the EtherCAT Terminal have differential inputs and possess a common, internal ground potential. The EL3112 combines two channels in one housing. Overload condition is detected, and the terminal status is relayed to the controller via the E-bus. The EtherCAT Terminal indicates its signal state by means of light emitting diodes. The error LEDs indicate an overload condition.

Technical data	EL3112 | ES3112
Number of inputs	2 (differential)
Power supply	via the E-bus
Technology	differential input
Signal current	0…20 mA
Oversampling factor	–
Distributed clocks	yes
Distributed clock precision	<< 1 µs
Internal resistance	85 Ω typ. + diode voltage
Input filter limit frequency	5 kHz
Common-mode voltage U_{CM}	10 V max.
Conversion time	~ 50 µs (fast mode ~ 35 µs)
Input signal bandwidth	see input filter
Resolution	16 bit (incl. sign)
Measuring error	< ±0.3 % (relative to full scale value)
Surge voltage resistance	35 V DC
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 170 mA
Bit width in the process image	inputs: 8 byte
Special features	standard and compact process image, activatable FIR/IIR filters, limit value monitoring
Weight	approx. 55 g
Operating/storage temperature	-25…+60 °C/-40…+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Pluggable wiring	for all ESxxxx terminals
Approvals	CE, UL, Ex