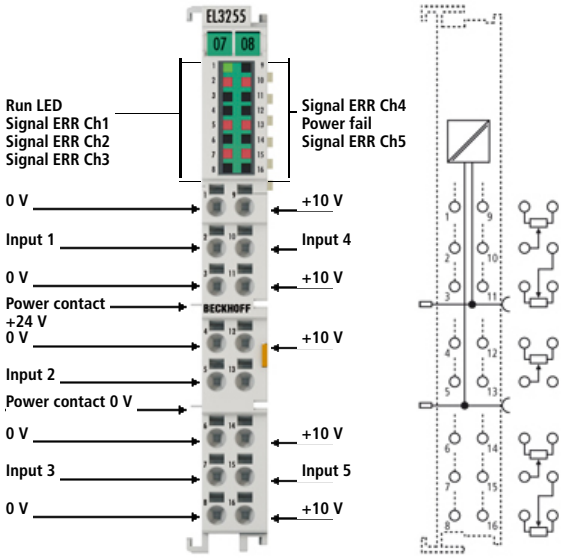

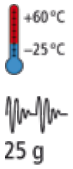

EL3255 | HD EtherCAT Terminal, 5-channel input, potentiometer measurement with sensor supply

The EL3255 EtherCAT Terminal enables potentiometers to be connected directly. A stabilised power supply in the terminal and the ratiometric measurement of the input voltage offer the preconditions for precise measurement. On account of its high sampling rate and together with potentiometer position encoders, the compact 5-channel EtherCAT terminal represents an economical position detector.

The HD EtherCAT Terminals (High Density) with increased packing density feature 16 connection points in the housing of a 12 mm terminal block.

Technical data	EL3255
Number of inputs	5
Power supply	via power contacts
Technology	ratiometric potentiometer evaluation with own supply, 3-wire connection
Distributed clocks	yes
Feed voltage potentiometer	typ. 10 V ±10 %
Internal resistance	>> 100 kΩ to wiper connection
Input filter limit frequency	typ. -3 dB at 3 kHz and potentiometer 50 kΩ
Sensor types	potentiometer 300 Ω…50 kΩ
Output current	max. 0.3 A total supply current for the potentiometers
Wiring fail indication	yes
Conversion time	typ. 300…700 µs, dependent on settings, default setting: approx. 500 µs (5 channels, filter deactivated)
Resolution	16 bit (incl. sign)
Measuring error	< ±0.5 % (relative to full scale value)
Electrical isolation	500 V (E-bus/field potential)
Current consumption power contacts	dependent on the potentiometers, max. 70 mA
Current consumption E-bus	typ. 80 mA
Bit width in the process image	5 x 16 bit input
Configuration	no address setting, configuration via the controller
Conductor types	solid wire, stranded wire and ferrule
Conductor connection	solid wire conductors: direct plug-in technique; stranded wire conductors and ferrules: spring actuation by screwdriver
Rated cross-section	solid wire: 0.08…1.5 mm²; stranded wire: 0.25…1.5 mm²; ferrule: 0.14…0.75 mm²
Special features	open-circuit recognition, supply monitoring, activatable filters, simultaneous measurement of the channels
Weight	approx. 70 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