

EL4024 | EtherCAT Terminal, 4-channel analog output, current, 4...20 mA, 12 bit

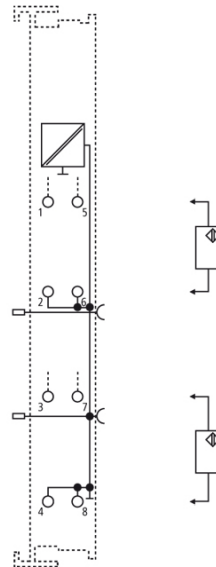
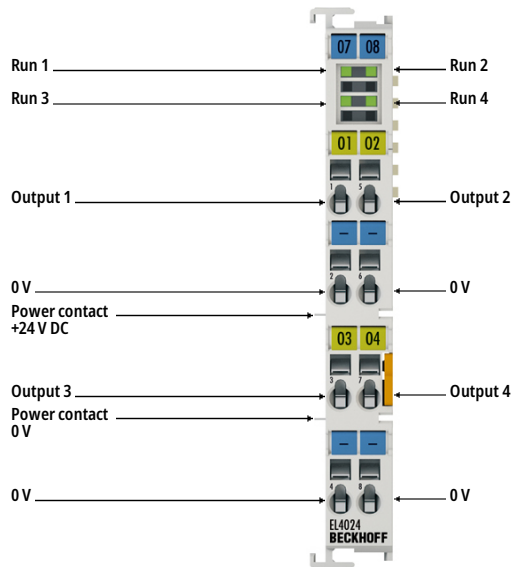


Image similar, may contain optional accessories

i **Product status:** regular delivery

The EL4024 analog output terminal generates signals in the range between 4 and 20 mA. The power is supplied to the process level with a resolution of 12 bits and is electrically isolated. Ground potential for the output channels of the EtherCAT Terminal is common with the 24 V DC supply. The output stages are powered by the 24 V supply. The EL4024 has four channels. The signal state of the EtherCAT Terminal is indicated by light emitting diodes.

Product information

Technical data

Technical data	EL4024
Number of outputs	4
Power supply	24 V DC via power contacts
Signal current	4...20 mA
Distributed clocks	yes
Distributed clock precision	<< 1 μ s
Load	< 350 Ω (short-circuit proof)
Resolution	12 bit
Output error	< 0.1% (relative to end value)

Electrical isolation	500 V (E-bus/signal voltage)
Conversion time	~ 250 µs
Current consumption power contacts	typ. 50 mA
Current consumption E-bus	typ. 140 mA
Bit width in the process image	4 x 16 bit AO output
Special features	Optional watchdog: user-specific output value with ramp; user synchronization can be activated.
Weight	approx. 60 g
Operating temperature	-25...+60°C
Storage temperature	-40...+85°C
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Relative humidity	95%, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
Protect. rating/installation pos.	IP20/variable
Plug-in wiring level	for all ESxxx terminals
Approvals/markings	CE, CCC, UL, ATEX, IECEx
Ex marking	ATEX: II 3 G Ex ec IIC T4 Gc IECEx: Ex ec IIC T4 Gc

Housing data	EL-12-8pin	ES-12-8pin
Design form	compact terminal housing with signal LEDs	terminal housing with pluggable wiring level
Material	polycarbonate	
Installation	on 35 mm DIN rail, conforming to EN 60715 with lock	
Side by side mounting by means of	double slot and key connection	
Marking	labeling of the BZxxx series	
Wiring	solid conductor (s), flexible conductor (st) and ferrule (f): spring actuation by screwdriver	
Connection cross-section	s*: 0.08...2.5 mm ² , st*: 0.08...2.5 mm ² , f*: 0.14...1.5 mm ²	s*: 0.08...1.5 mm ² , st*: 0.08...1.5 mm ² , f*: 0.14...1.5 mm ²
Connection cross-section AWG	s*: AWG28...14, st*: AWG28...14, f*: AWG26...16	s*: AWG28...16, st*: AWG28...16, f*: AWG26...16
Stripping length	8...9 mm	9...10 mm
Current load power contacts	I _{max} : 10 A	
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm	

*s: solid wire; st: stranded wire; f: with ferrule

Ordering information

Ordering information	
EL4024	EtherCAT Terminal, 4-channel analog output, current, 4...20 mA, 12 bit
ES4024	EtherCAT Terminal, 4-channel analog output, current, 4...20 mA, 12 bit, pluggable wiring level