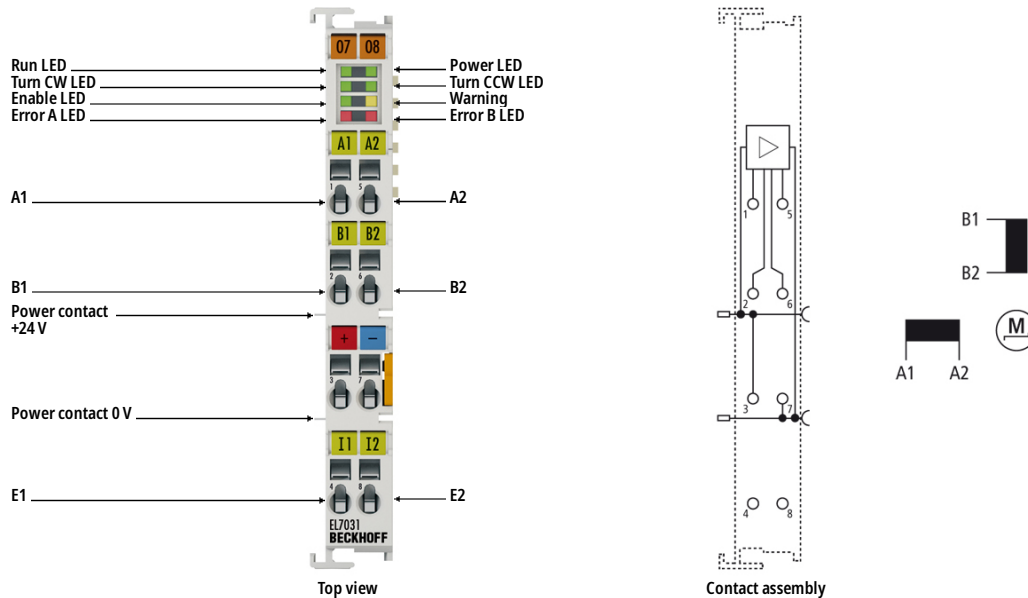




EL7031 | EtherCAT Terminal, 1-channel motion interface, stepper motor, 24 V DC, 1.5 A



i Product status: Regular delivery

The EL7031 EtherCAT Terminal is intended for the direct connection of stepper Motors in the low power range up to 1.5 A. The compact stepper motor output stage is accommodated in the EtherCAT Terminal together with two digital inputs for limit switches. Through parameterization, the EL7031 can be adjusted to the motor and the application requirements. 64-fold micro-stepping ensures particularly quiet and precise motor operation.

In combination with a corresponding stepper motor, the EL7031 represents a cost-effective compact drive solution.

Product information

Technical data

Technical data	EL7031, ES7031
Technology	compact drive technology
Connection method	direct motor connection
Number of inputs	2 x end position
Load type	2-phase stepper motor (uni-/bipolar)
Number of channels	1
Number of outputs	1 x stepper motor
Supply voltage electronics	24 V DC (via power contacts)
Supply voltage power	24 V DC (internally via power contacts)

Output current	max. 1.5 A
Step frequency	configurable up to 8000 full steps/s
Step pattern	64-fold micro stepping
Current controller frequency	approx. 25 kHz
Resolution	approx. 5000 positions in typ. applications (per revolution)
Current consumption power contacts	typ. 30 mA + motor current
Current consumption E-bus	typ. 120 mA
Distributed clocks	yes
Special features	travel distance control
Electrical isolation	500 V (E-bus/field potential)
Relative humidity	95 %, no condensation
Weight	approx. 50 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
Protect. rating/installation pos.	IP20/see documentation
Pluggable wiring	for all ESxxx terminals
Approvals/markings	CE, UL

Housing data	EL-12-8pin	ES-12-8pin
Design form	compact terminal housing with signal LEDs	terminal housing with pluggable wiring level
Material	polycarbonate	
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm	
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 (e), flexible conductor (f) and ferrule (a): 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*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16	s*: AWG 28...16, st*: AWG 28...16, f*: AWG 26...16
Stripping length	8...9 mm	9...10 mm
Current load power contacts	I _{max} : 10 A	

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

Ordering information

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EL7031	EtherCAT Terminal, 1-channel motion interface, stepper motor, 24 V DC, 1.5 A
ES7031	EtherCAT Terminal, 1-channel motion interface, stepper motor, 24 V DC, 1.5 A, pluggable wiring
