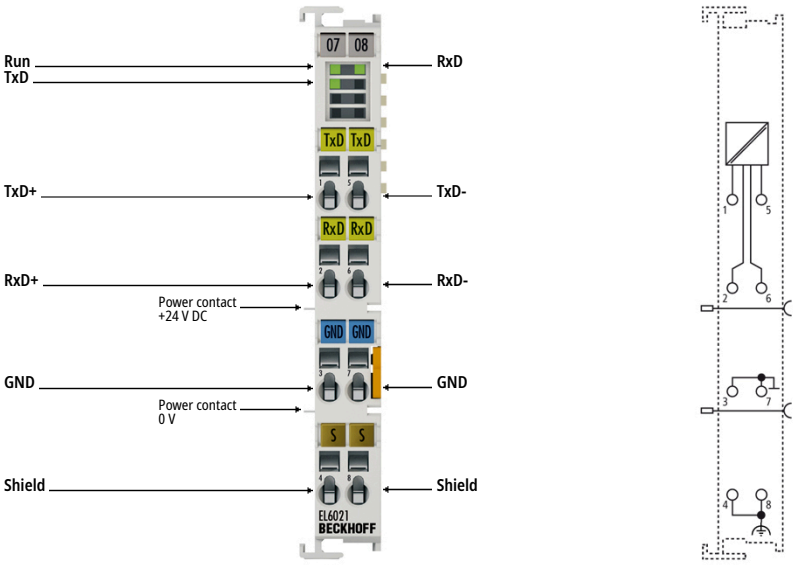
EL6021 | EtherCAT Terminal, 1-channel communication interface, serial, RS422/RS485

Image similar, may contain optional accessories



EL6021 | EtherCAT Terminal, 1-channel communication interface, serial, RS422/RS485

Product status: regular delivery

The EL6021 serial interface enables the connection of devices with RS422 or RS485 interface. These devices communicate with the automation device via the coupler. The active communication channel operates independently of the higher-level bus system in full or half duplex mode at up to 115.2 kbaud. The transmission of differential signals according to RS422 guarantees high immunity to interference through electrically isolated signals.

In conjunction with the TwinCAT Virtual Serial COM Driver (see TwinCAT Functions – Communication) the EL6021 can be used as a normal Windows COM interface.

Product information

Technical data

Technical data	EL6021
Connection technology	terminal contact
Data transfer channels	TxD and RxD, full/half duplex
Transmission rate	2400...115,200 baud; default: 9600 baud, 8 data bits, no parity and one stop bit
Interfaces	1 x RS422/RS485
Bit transfer	with differential signal

Technical data	EL6021
Cable impedance	120 Ω
Cable length	approx. 1000 m twisted pair
Providing external supply	–
Power supply	via the E-bus
Distributed clocks	–
Electrical isolation	500 V (E-bus/signal voltage)
Data buffer	864 bytes receive buffer, 128 bytes transmit buffer
Configuration	no address setting, configuration via PLC
Current consumption power contacts	–
Current consumption E-bus	typ. 170 mA
Weight	approx. 55 g
Operating temperature	-25...+60°C
Storage temperature	-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. rating/installation pos.	IP20/variable
Pluggable wiring level	for all ESxxxx terminals
Approvals/markings	CE, CCC, UL, ATEX, IECEx, DNV, cFMus
Ex marking	ATEX: II 3G Ex ec IIC T4 Gc IECEx: Ex ec IIC T4 Gc cFMus: Class I, Division 2, Groups A, B, C, D Class I, Zone 2, AEx 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 BZxxxx 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

Housing data	EL-12-8pin	ES-12-8pin
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	
EL6021	EtherCAT Terminal, 1-channel communication interface, serial, RS422/RS485
ES6021	EtherCAT Terminal, 1-channel communication interface, serial, RS422/RS485, pluggable wiring level

Material Compliance

Material compliance	EL6021
REACH SVHC	no
POP	compliant
RoHS	compliant with exemption
RoHS exemption	7c-I: Lead-containing electrical and electronic components in glass and ceramic materials, excluding dielectric ceramics in capacitors
China-RoHS	www.beckhoff.com/china-rohs-io
CA Prop65	www.beckhoff.com/prop65
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