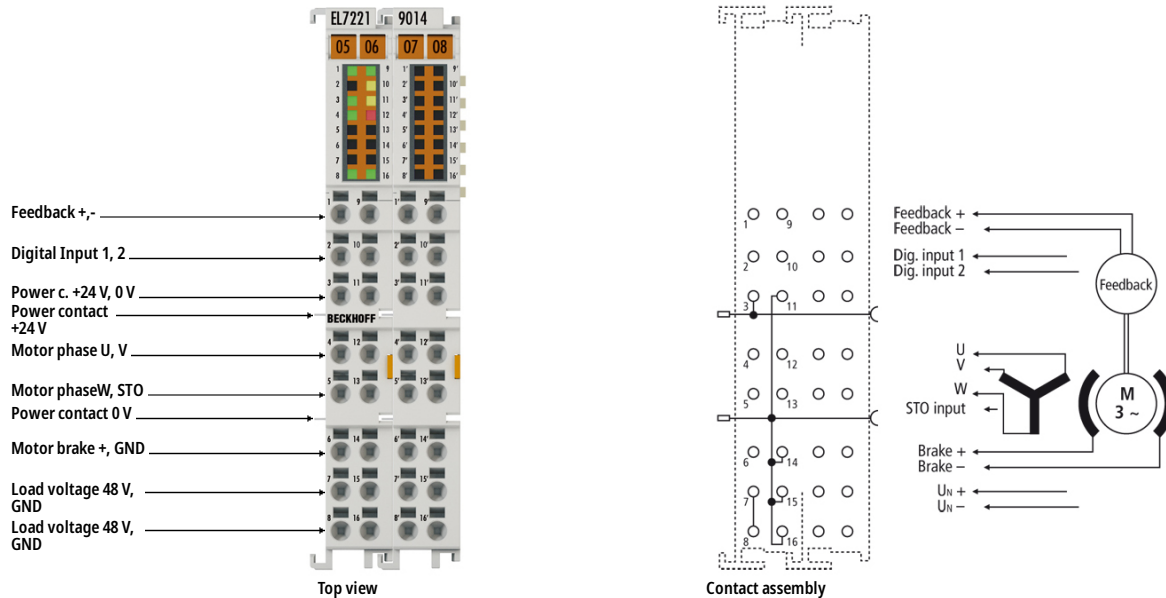
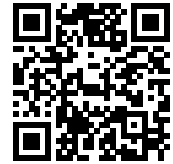


EL7221-9014 | EtherCAT Terminal, 1-channel motion interface, servomotor, 48 V DC, 8 A, OCT, suitable for STO applications



i Product status: Regular delivery

The EL7221-9014 servomotor EtherCAT Terminal with integrated One Cable Technology (OCT) offers powerful servo performance in a very compact design for motors from the AM8100 series up to 8 A (I_{rms}). OCT combines a motor cable and an absolute feedback system in a single cable. The integrated electronic type plate of the AM81xx motors can be read in by the servo terminal to configure the motor parameters automatically. Thus, commissioning of the motors as well as cabling are minimized. The high-performance control technology supports fast and highly dynamic positioning tasks. Monitoring of numerous integrated parameters offers maximum operational reliability. The specified output power is attained in operation with the ZB8610 fan cartridge. For operation without a fan cartridge, the EL7211-9014 is recommended. The EL7221-9014 enables the user to implement the safety function STO (Safe Torque Off) that corresponds to a Cat 3, PL d safety level according to EN ISO 13849-1:2015.

Product information

Technical data

Technical data	EL7221-9014
Protocol	EtherCAT
Technology	compact drive technology
Connection method	direct motor connection with OCT
Number of inputs	2 x end position, 1 x feedback, 1 x STO
Load type	permanent magnet-excited three-phase synchronous motor

Number of channels	1
Number of outputs	1 x servomotor, 1 x motor brake
Supply voltage electronics	24 V DC (via power contacts)
Supply voltage power	8...48 V DC (external)
Performance increase	–
Output current with ZB8610 (rms)	7.0 A up to 55 °C, 8.0 A up to 45 °C operating temperature
Peak current with ZB8610 (rms)	max. 16.0 A for 1 s up to 55 °C operating temperature
Rotating field frequency	0...599 Hz
PWM clock frequency	16 kHz
Current controller frequency	32 kHz
Rated speed controller frequency	16 kHz
Output voltage motor brake	24 V DC
Output current motor brake	max. 0.5 A
Current consumption power contacts	typ. 100 mA + holding current motor brake
Current consumption E-bus	typ. 120 mA
Distributed clocks	yes
Realization STO	hard-wired via safe output
Special features	compact, absolute feedback, One Cable Technology (OCT), plug and play, integrated track control
Safe stop functions	Safe Torque Off (STO)
Electrical isolation	500 V (E-bus/field potential)
Weight	approx. 95 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
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
Approvals/markings	CE, UL

Housing data	EL-24-2x16pin
Design form	HD (High Density) housing with signal LEDs
Material	polycarbonate
Dimensions (W x H x D)	24 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 conductors (e): direct plug-in technique; fine-stranded conductors (f) and ferrule (a): spring actuation by screwdriver

Connection cross-section	s*: 0.08...1.5 mm ² , st*: 0.25...1.5 mm ² , f*: 0.14...0.75 mm ²
Connection cross-section AWG	s*: AWG 28...16, st*: AWG 22...16, f*: AWG 26...19
Stripping length	8...9 mm
Current load power contacts	I _{max} : 10 A

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