



## EL7221-9014 | Servomotor terminal with OCT and STO, 50 V DC, 7...8 A ( $I_{rms}$ ), operation with ZB8610

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 minimised. 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 EL7221-9014 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.

Technical data	EL7221-9014
Technology	Compact Drive Technology
Load type	permanent magnet-excited three-phase synchronous motor
Number of channels	1
Number of outputs	1 x servo motor, 1 x motor brake
Number of inputs	2 x end position, 1 x feedback, 1 x STO
Connection method	direct motor connection with OCT
Supply voltage electronics	24 V DC (via power contacts)
Supply voltage power	8...50 V DC (external)
Performance increase	-
Output current with ZB8610 (rms)	7 A up to 55 °C, 8 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
Frequency range	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
Special features	designed for operation with the ZB8610 fan cartridge, order fan cartridge separately
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
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/see documentation
Pluggable wiring	-
Approvals	CE, UL, TÜV SÜD

Accessories	
ZB8610	fan cartridge for EtherCAT and Bus Terminals
EL1904	4-channel digital input terminal, TwinSAFE, 24 V DC
EL2904	4-channel digital output terminal, TwinSAFE, 24 V DC, 0.5 A
EL6910	TwinSAFE Logic
EL9576	brake chopper terminal, 72 V, 155 $\mu$ F
AM8132	Servomotor 2.35 Nm (standstill torque)
AM8141	Servomotor 2.45 Nm (standstill torque)
ZB85xx	Shield busbar with mounting rail holder, shield busbar clamps
ZK47x4-04xx, ZK4000-xxxx	Supply cables for Compact Drive Technology

Related products	
EL7211-9014	EtherCAT servo terminal for OCT, with STO input, 50 V DC, $I_{ms} = 4.5$ A
EP7211-9034	EtherCAT Box, industrial housing, servo box module with OCT and STO, 50 V DC, $I_{ms} = 4.5$ A