



EL7201 | Servomotor terminal for resolver, 48 V DC, 2.8 A (I_{rms})

The EL7201 servomotor EtherCAT Terminal, with integrated resolver interface, offers high servo performance in a very compact design. The fast control technology, based on field-oriented current and PI speed control, supports fast and highly dynamic positioning tasks. The monitoring of numerous parameters, such as overvoltage and undervoltage, overcurrent, terminal temperature or motor load via the calculation of a I²T model, offers maximum operational reliability. EtherCAT, as a high-performance system communication, and CAN-over-EtherCAT (CoE), as the application layer, enable ideal interfacing with PC-based control technology. The latest power semiconductors guarantee minimum power loss and enable feedback into the DC-Link when braking. 16 LEDs indicate status, warning and error messages as well as possibly active limitations.

Technical data	EL7201
Technology	compact drive technology
Load type	permanent magnet-excited three-phase synchronous motor
Number of channels	1
Number of outputs	1 x servomotor, 1 x motor brake
Number of inputs	1 x feedback
Connection method	direct motor connection + feedback
Supply voltage electronics	24 V DC (via power contacts)
Supply voltage power	8...48 V DC (external)
Output current (rms)	2.8 A
Peak current (rms)	max. 5.7 A for 1 s
Performance increase	yes, through ZB8610 fan cartridge
Output current with ZB8610 (rms)	max. 4.5 A
Peak current with ZB8610 (rms)	max. 9.0 A for 1 s
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. 50 mA + holding current motor brake
Current consumption E-bus	typ. 120 mA
Distributed clocks	yes
Special features	compact (only 12 mm wide), system-integrated
Electrical isolation	500 V (E-bus/field potential)
Weight	approx. 60 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
Approvals/markings	CE, UL

Accessories	
ZKxxx-xxxx-xxxx	supply cables for compact Drive Technology
ZB85xx	shield busbar with mounting rail holder, shield busbar clamps
Related products	
EL7211	servomotor EtherCAT Terminal for resolver, 50 V DC, $I_{rms} = 4.5\text{ A}$