



EL7201-0010 | Servomotor terminal with OCT, 50 V DC, 4 A

The EL7201-0010 servomotor EtherCAT Terminal with integrated absolute value 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 I^2T 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.

With the One Cable Technology (OCT) the encoder cable is omitted by transmitting the signals of the encoder digitally via the existing motor cable. The option to read the electronic identification plates of suitable motors from the AM81xx series enables a plug-and-play solution for maximum convenience during commissioning.

| Technical data | EL7201-0010 |
|------------------------------------|--|
| Number of channels | 1 servomotor, absolute feedback, motor brake, 2 digital inputs |
| Connection method | direct motor connection |
| Load type | permanent-magnet synchronous motors |
| Nominal voltage | 8...50 V DC |
| Output current I_N | 2.8 A (rms)/4 A (peak value) |
| Peak current I_N | 5.7 A (rms)/8 A (peak value) for 1 s |
| Frequency range | 0...1 kHz |
| PWM clock frequency | 16 kHz |
| Current controller frequency | double PWM clock frequency |
| Rated speed controller frequency | 16 kHz |
| Output voltage motor brake | 24 V DC (+6 %/-10 %) |
| Output current motor brake | max. 0.5 A |
| Current consumption power contacts | typ. 50 mA + holding current motor brake |
| Current consumption E-bus | 120 mA |
| Special features | compact design (only 12 mm wide), absolute feedback, One Cable Technology (OCT), plug-and-play |
| 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 |

| Accessories | |
|------------------|---|
| AM81xx | Synchronous Servomotors for EtherCAT Terminals EL7201 and EL7201-0010 (OCT) |
| ZK4704-0421-xxxx | motor cables for AM81xx servomotors with OCT to EL7201-0010 EtherCAT Terminal |
| EL9570 | Buffer capacitor terminal |
| ZB85xx | Shielding connection system |