Signal LED1

Signal LED2

Output 1

Output 2

+24 V

Power contact +24 V

Power contact 0 V

0 V

Power contact PE

PE

XFC

25 g

Top view      Contact assembly

# EL2262 | 2-channel digital output terminal with oversampling

The EL2262 digital output terminal connects the binary control output signals at the process level with electrical isolation. The outputs are controlled with an adjustable, integer multiple (oversampling factor: n) of the bus cycle time (n microcycles per bus cycle). For each micro-cycle, the EtherCAT Terminal receives a process data block that is output consecutively. The time base of the terminal can be synchronised precisely with other EtherCAT devices via distributed clocks. This enables an output pattern with a significantly higher pulse sequence than the bus cycle time, exactly synchronised with the system time base. This procedure enables the temporal resolution of the digital output signals to be increased to n times the bus cycle time. The maximum output rate is 1 Msample/s.

| Technical data | EL2262 \| ES2262 |
|---|---|
| Connection technology | 4-wire |
| Number of outputs | 2 |
| Rated load voltage | 24 V DC (-15 %/+20 %) |
| Load type | ohmic, inductive, lamp load |
| Oversampling factor | n = integer multiple of the cycle time, 1…1,000 |
| Distributed clocks | yes |
| Distributed clock precision | << 1 µs |
| Max. output current | 0.5 A (short-circuit-proof in push operation) per channel |
| Short circuit current | typ. < 1.5 A |
| Reverse voltage protection | yes |
| Current limitation | typ. 4 A/150 µs |
| Breaking energy | < 150 mJ/channel |
| Switching times | typ. $T_{ON}$: < 1 µs, typ. $T_{OFF}$: < 1 µs |
| Output stage | push-pull |
| Output rate | max. 1 Msample/s, min. cycle 1 µs |
| Current consumption E-bus | typ. 70 mA |
| Electrical isolation | 500 V (E-bus/field potential) |
| Current consumption power contacts | typ. 35 mA + load |
| Bit width in the process image | n x 2 outputs + 32 bit CycleCounter + 32 bit StartTimeNextOutput |
| Configuration | via TwinCAT System Manager |
| Special features | up to 1,000 x oversampling, max. 1 Msample/s, min. output cycle 1 µs |
| 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/variable |
| Pluggable wiring | for all ESxxxx terminals |
| Approvals | CE, UL, Ex |

| Further information | |
| --- | --- |
| **XFC** | eXtreme Fast Control Technology |