



EP2038-000x | 8-channel digital output 24 V DC, I_{MAX} = 2 A (Σ 4 A), with diagnostics

The EP2038 EtherCAT Box with digital outputs connects binary control signals from the controller on to the actuators at the process level. The eight outputs handle load currents of up to 2 A each, although the total current is limited to 4 A. This makes these modules particularly suitable for applications in which not all of the outputs are active at the same time, or in which not all of the actuators draw 2 A signal current.

The signal state is indicated by means of light emitting diodes. The EP2038 offers output diagnostics in the form of short circuit and open circuit detection per channel. The signals are optionally connected via M8 (EP2038-0001) or M12 (EP2038-0002) screw type connectors.

| Technical data | EP2038-0001 | EP2038-0002 |
|--|---|-----------------|
| Number of outputs | 8 | |
| Output connections | M8, screw type | M12, screw type |
| Protocol | EtherCAT | |
| Bus interface | 2 x M8 socket, shielded, screw type | |
| Load type | ohmic, inductive, lamp load | |
| Nominal output voltage | 24 V DC (-15 %/+20 %) | |
| Max. output current | 2 A per channel, individually short-circuit safe, total current max. 4 A | |
| Short circuit current | max. 7 A | |
| Distributed clocks | – | |
| Auxiliary power current | typ. 20 mA + load | |
| Current consumption from Us (without sensor current) | 120 mA | |
| Diagnostics | short-circuit, open load detection (min. load > 200 mA) | |
| Power supply connection | feed: 1 x M8 male socket, 4-pin; downstream connection: 1 x M8 female socket, 4-pin | |
| Bit width in the process image | 8 outputs + 8 diagnostic inputs | |
| Electrical isolation | 500 V | |
| Weight | approx. 165 g | |
| Operating/storage temperature | -25...+60 °C/-40...+85 °C | |
| 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 65/66/67 (conforms to EN 60529)/variable | |
| Approvals | CE, UL | |

| Accessories | |
|------------------|--|
| ZK1090-3xxx-xxxx | Cables for EtherCAT signal in- and -output |
| ZK2000-xxxx-xxxx | Cables for M8 I/O connection sockets |
| ZK2000-6xxx-xxxx | Cables for M12 I/O connection sockets |
| ZK2020-3xxx-xxxx | Cables for M8 power supply |