



EP9224-0023-1022 | Power distribution for EtherCAT Box (24 V_{DC})

EP9224-0023-1022 serves as a replacement for EP9224-0023.

Properties of EP9224-0023-1022:

- TwinCAT compatible with EP9224-0023. TwinCAT does not detect any difference during the exchange.
- Switching of the outputs is not possible. The current limitation of the outputs is fixed at 4 A.
- Fuse protection is provided by auto-reset drivers, which switch themselves back on after they have cooled down once the external fault has been cleared.
- Voltage measurement, current measurement and temperature measurement are disabled.
- The warning bit is always 0.
- CoE parameters for backup functionality are ignored.

The EP9224-0023-1022 enables connection of four EtherCAT Box power supply branches. In each 24 V_{DC} branch, the current consumption for control voltage U_S and peripheral voltage U_P is monitored, limited and, if necessary, switched off.

The power distribution is supplied via a 7/8" connector with up to 16 A (per U_S/U_P). Several modules can be cascaded via a downstream connection. In the event of a short-circuit in one of the four outputs the affected output is switched off. The supply for the other junctions remains active. During startup consumers with large capacities can be added without problem.

The status messages of the individual channels can be read by the master via the EtherCAT interface.

Advantages:

- eight independent 24 V_{DC} channels
- Status data

On delivery the eight box outputs (4x U_S and 4x U_P) are switched on so that operation without EtherCAT is also possible!

All values are typical values over the entire temperature range, unless stated otherwise.

| EtherCAT | |
|----------------------|-----------------------------|
| Connection | 2 x M8 socket, 4-pin, green |
| Electrical isolation | 500 V |

| Supply voltages | |
|--|--|
| Connection | Input: 7/8" - plug, 5-pin Downstream connection: 7/8" - socket, 5-pin |
| U _S nominal voltage | 24 V _{DC} (-15 % / +20 %) |
| U _S sum current ¹⁾ | max. 16 A at 40 °C |
| Current consumption from U _S | 110 mA + sum of the output currents |
| Rated voltage U _P | 24 V _{DC} (-15 % / +20 %) |
| U _P sum current ¹⁾ | max. 16 A at 40 °C |
| Current consumption from U _P | 40 mA + sum of the output currents |

¹⁾ This value corresponds to the current carrying capacity of the connectors.

| Outputs | |
|--|--|
| Number | 4 |
| Connection | 4x M8 socket, 4-pin, black |
| Cable length | max. 30 m |
| Output current per M8 socket | max. 4 A per U _S and U _P |
| Parallel connection of outputs | not permissible |
| Short circuit current | 4.2 A |
| Behavior in the event of short circuit | See chapter Behavior in case of short circuit. |

| Housing data | |
|-----------------------|---|
| Dimensions W x H x D | 60 mm x 150 mm x 26,5 mm (without connectors) |
| Weight | approx. 440 g |
| Material | PA6 (polyamide) |
| Installation position | variable |

| Environmental conditions | |
|--------------------------------------|--|
| Ambient temperature during operation | -25 ... +60 °C |
| Ambient temperature during storage | -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 |
| Protection class | IP65, IP66, IP67 conforms to EN 60529 |

| Approvals / markings | |
|------------------------------------|--------------------------|
| Approvals / markings ^{*)} | CE, UL under preparation |

^{*)} Real applicable approvals/markings see type plate on the side (product marking).