M8,
EtherCAT-P-coded

1	Tx+/GNDs
2	Rx+/GNDP
3	Rx-/UP
4	Tx-/Us

Power/EtherCAT OUT
Power/EtherCAT IN

1	Tx+
2	Rx+
3	Rx-
4	Tx-
5	GNDP
6	PE
7	UP
8	GNDs
9	Us

EP9224-0037

Connector assignment

EP9224-0037 | 4-channel power distribution box ENP to EtherCAT P

The EP9224-0037 enables power distribution from a B17-ENP input to four EtherCAT P ports with B17-ENP forwarding. In each EtherCAT P junction, the current consumption for the control voltage U_S and the peripheral voltage U_P is monitored, limited and if necessary switched off.

The input voltage and current values of all outputs can be evaluated via the process data. A 5-pin B17-ENP connector is used for communication with the box and for power supply of power to and with up to 14 A (per U_S/U_P). Several modules can be configured in a cascade arrangement through power forwarding. In case of a short circuit on one of the four outputs or eight voltages (4 x U_S/4 x U_P), this voltage is switched off. The supply for the other junctions remains active. The switch-off or voltage regulation is carried out in such a way that the input voltage does not drop below a critical value. A continuous log of the relevant data can be retrieved in the event of an error. During start-up consumers with large capacities can be added without problem.

The diagnostic messages of the individual channels can be read by the master via the EtherCAT interface. Independent switching of individual consumer branches is also possible via the EtherCAT master.

Technical data	EP9224-0037
Task within EtherCAT system	coupling to the EtherCAT network, EtherCAT P junction, feed in and monitoring of U_S and U_P
Number of channels	IN: 1 x ENP, OUT: 1 x ENP, 4 x EtherCAT P
Current rating per port	max. 3 A per U_S and U_P (M8 EtherCAT-P-coded)
Protocol	EtherCAT
Data logging	recording of relevant data in case of failure
Special features	input voltages/currents, output currents via process data
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
Approvals/markings	CE, UL in preparation

Accessories	
ZK700x-010x-0xxx	Cables for EtherCAT P: Ultra-fast Communication and Power in One Cable
ZK7208-xxxx-Axxx	ENP connector family in size B17, 5-pin 5 G 1.5 mm² + (1 x 4 x AWG22)