EtherCAT
signal output

EtherCAT
signal input

M12

M8 I/O
connection sockets

Signal status display

Labelling areas

Power supply
status display:
Box supply (Us)

Auxiliary voltage (UP)

Power supply feed

Power supply down-
stream connection

EP2338-0001   EP2338-0002

+60 °C
−25 °C

1 | Tx+
2 | Rx+
3 | Rx-
4 | Tx-

1 | + 24 V DC UP
2 | In-/Output B
3 | GND
4 | In-/Output A
5 | n.c.

1 | + 24 V DC UP
3 | GND
4 | In-/Output

1 | + 24 V DC Us
2 | + 24 V DC UP
3 | GND
4 | GND

3-wire 2-wire

I/O
connection

Connector
assignment

EP2338-000x | 8-channel digital input or output 24 V DC, 10 µs

The EP2338-000x EtherCAT Box has eight digital channels, each of which can optionally be operated as an input or as an output. A configuration for using a channel as input or output is not necessary; the input circuit is internally connected to the output driver, so that a set output is displayed automatically in the input process image.

The outputs handle load currents of up to 0.5 A, are short-circuit proof and protected against inverse polarity. The filter constant of the inputs is 10 µs.

The state of each signal is indicated by means of light emitting diodes. The signals are connected via M8 (EP2338-0001) or M12 connectors (EP2338-0002).

Technical data	EP2338-0001	EP2338-0002
Specification	EN 61131-2, type 1/3	
Number of channels	8 digital inputs or outputs	
Input/output connections	M8, screw type	M12, screw type
Protocol	EtherCAT	
Bus interface	2 x M8 socket, shielded, screw type	
Input filter	10 µs	
"0" signal voltage	-3…+5 V	
"1" signal voltage	11…30 V, 6 mA input current (EN 61131-2, type 3)	
Sensor supply	from load supply voltage, max. 0.5 A, short-circuit proof in total	
Load type	ohmic, inductive, lamp load	
Rated load voltage	24 V DC (-15 %/+20 %)	
Max. output current	0.5 A per channel, individually short-circuit proof	
Short-circuit current	typ. 1.5 A	
Auxiliary power current	typ. 20 mA + load	
Current consumption from Us	120 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 inputs + 8 outputs	
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/Markings	CE, UL, ATEX	
Ex-Marking	II 3 G Ex nA IIC T4 Gc	

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