

1. Product Description

1.1 Order designation

Description	Material number
EtherCAT DI16 (1 ms)	00C6CB1-0100
EtherCAT DI16 (5 ms)	00C6CB1-0300
EtherCAT DO16 (500 mA)	00C6CB1-0500
EtherCAT DI16 (1 ms) / DO16 (500 mA)	00C6CB1-0600
EtherCAT DI16 (5 ms) / DO16 (500 mA)	00C6CB1-0700
Plug 18-pole for in-/outputs (accessories)	0090501-7121
Plug 36-pole for in-/outputs (accessories)	0090501-7119
Grounding assembly 2x8 mm (accessories)	00C6CD1-0400
Grounding assembly 14 mm (accessories)	00C6CD1-0500

1.2 Application

Inputs and outputs for the processing of digital signals.

1.3 Description of the modules

Picture 1.3 Front view of the modules for digital inputs and outputs






1. Release lever

2. Status-LED' s module (with DI16 only EtherCAT LED)

EtherCAT	Flash code	Description
	red - constant	Initialisation (Init), no data exchange
red/green 1:1	Ready for operation (Pre-Op), no data exchange	
red/green 3:1	Safe operation (Safe-Op), inputs are readable	
green - constant	Normal operation (Op), full data exchange	
I/O	off	OK, no error available
	red - constant	Short circuit at digital output
Power	green - constant	24 VDC available
	off	24 VDC not available

further on next side

3.	I/O-LED's	Flash code	Description
		green constant	Output ON (DO) / input signal TRUE (DI)
		off	Output OFF (DO) / input signal FALSE (DI)
4.	Connection I/O (see plug chapter 1.1)		
5.	Voltage supply		
6.	Earth-/shield connection for bolt M3x5		
7.	E-Bus / module locking		
	16DI/16DO: If the total current exceeds 6A, L+ must be connected to both provided terminals.		
	The output drivers have a thermal protection and they switches the outputs (with short circuit) independently off. The outputs are switched on again after cooling until the thermal protection responses again in case of a permanent short-circuit.		
	Connect the DIN mounting rail or the earthing connection with functional earth.		

## 1.4 Technical data

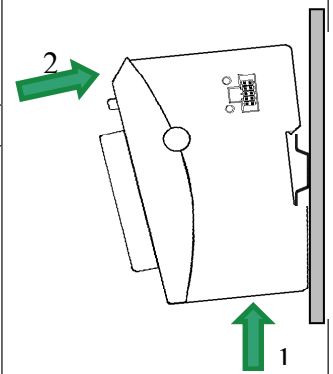
Fieldbus	EtherCAT 100 Mbit/s
WxHxD	25x120x90 mm
Assembling	35mm DIN mounting rail
Controller	ASIC ET1200
Connection E-bus	10-pole system connector in side panel
End module	not necessary
Voltage supply	24 VDC -20% +25%
Potential separation	Modules each other and against the bus
Storage temperature	-25 °C...+70 °C
Operation temperature	0 °C...+55 °C
Relative humidity	5%...95% without condensation
Degree of protection	IP20
Noise immunity	Zone B
<b>DI16 / DO16</b>	
Digital inputs	16
Input deceleration	5 ms (variant -0700) , 1 ms (variant -0600)
Signal level (EN 61131-3, type1)	off: -3...5V; on: 15V...30V
Digital outputs	16
max. current	0,5A for each output
Total current	max. 8A
Last E-bus	135mA

<b>DI16</b>	
Digital inputs	16
Input deceleration	5 ms (variant -0300), 1 ms (variant -0100)
Signal level (EN 61131-3, type1)	off: -3...5V; on: 15V...30V
Last E-bus	100 mA
<b>DO16</b>	
Digital outputs	16
max. current	0,5A for each output
Total current	max. 8A
Last E-bus	130 mA

1.5 Assembling

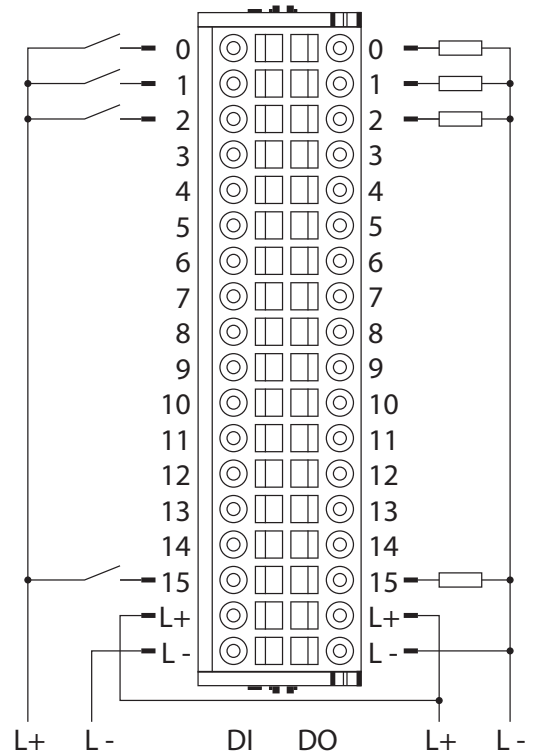
Picture 1.5 Mounting of the bus coupler

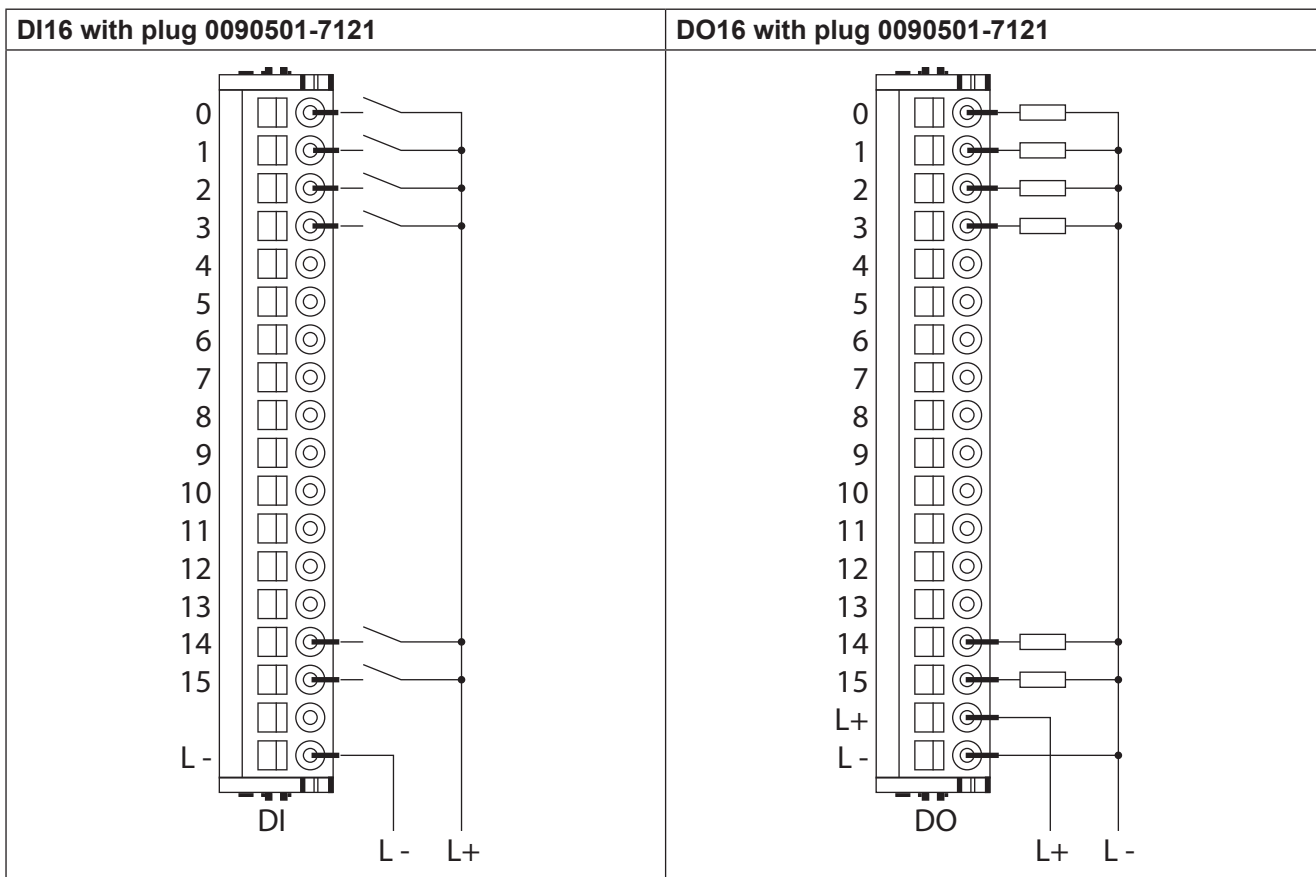
1. Put the module in accordance with the picture from downside against the mounting rail that the metal spring is impressed between mounting rail and mounting surface.
2. Press the module against the mounting panel above until it is snapped-in.



1.6 Connection of the inputs and outputs

DI16 / DO16 with plug 0090501-7119





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