

Technical data sheet

EtherCAT Bus coupler

EtherCAT Bus coupler for LCOS-CC-I and LOCC-Box-Net



Identification

Type	LCOS-BC-EC
Part No.	778000.1401

Product version

Hardware revision	1.1
Software version	2.1
Datasheet version	05

Description

Description	NOTICE: It is mandatory to order a corresponding LCOS function carrier with power supply (FTE) for the bus coupler. 1. If this EtherCAT bus coupler (778000.1401) is to control an LCOS CCI system: LCOS-LUNA 780510.006.1 or 780510.011.1 (operating voltage: max. DC 24V), LCOS-LUNA 780523.006.1 or 780523.011.1 (operating voltage: AC /DC 230V) 2. if the bus coupler is to control a LOCC-Box Net system, there is a special FTE BC: 780714.575.1 At the end of this data sheet there is an overview drawing with all part numbers of the LCOS FTE function carriers.
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Field bus connection

Fieldbus/Network systems	EtherCAT Slave acc. to ETG.1300
BUS physics	Ethernet
Interface mechanical	2 × Square connector 10-pin
Transfer rate	100 Mbit/s

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www.luetze.de • info@luetze.de

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Transmission standard	IEEE 802.3, 100 Base-Tx
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Communication assemblies

BUS physics	CANopen acc. to ISO 11898-1
Bus termination	120 Ω internal
BUS participants	Max. 64 functional assemblies
BUS topology	Line

Communication external LOCC-boxes

BUS physics	LIN
Bus termination	1 K internal
BUS participants	Max. 64 functional assemblies
BUS topology	Line
Interface mechanical	Plug-in spring terminal 3-pin, 0.2 – 2.5 mm ² (AWG 24 – AWG 12)
Interface electrical	Galvanically separated

Communication web server

BUS physics	Ethernet acc. to IEEE 802.3 100 Base-Tx
Transfer rate	100 Mbit/s
Interface mechanical	RJ45 bush with galvanic isolation 1.5 kV

communication LOCC-PADS

BUS physics	USB specification 2.0
Transfer rate	480 Mbit/s (USB High Speed)
Interface mechanical	Micro USB

Status indication

Status display	Power: red/green Maintenance: yellow RUN: red/green FB-Error: red/green Status: red/green
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General

Rated voltage	24 V
Nominal voltage range	DC 18 V – 31.2 V
Rated current	Max. 240 mA via function carrier with feed (FTE)
Power Dissipation	<5 W
Protection device	Reverse diode
Insulation voltage input / output	AC 1.5 kV _{eff}
Installation position	Any
MTBF	2196952 h
Cooling	Air convection
Housing material	PA 6.6 (UL 94 V-0, NFF I2, F2)

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Color of the housing	RAL 7012 Basalt grey
Mounting	Pluggable On LCOS-LUNA function carrier Latches into position On LCOS function carrier with feed (FTE) DIN rail mountable TS35 (EN 60715)
LOCC-Bus (transfer rate)	9600 kbit/s
LCOS-Bus (transfer rate)	1 Mbit/s
Max. altitude operation	2000 m
Degree of protection	IP20 (EN 60529)
Dimensions (w × h × d)	22.5 mm × 102.0 mm × 120.0 mm
Weight/unit	0.25 kg
PU (units)	1

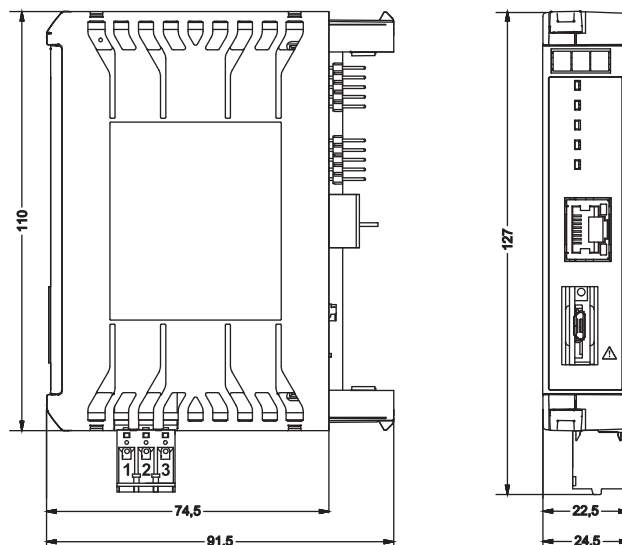
General ambient conditions

Operation temperature range	-25 °C ... +55 °C
Storage temperature range	-25 °C ... +85 °C
Relative air humidity	5 – 95 %, no defrosting
Vibration resistance	0.7 g acc. to EN 60068-2-6
Shock resistance	15 g acc. EN 60068-2-27

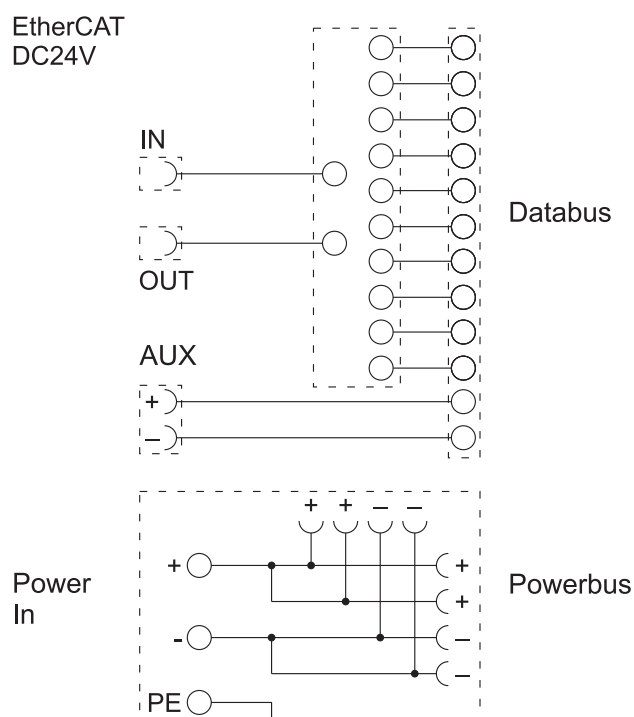
Certifications/Standards

Conformity	CE UKCA
Certifications	cULus (E170585) DNV (TAA00002SY)
Standards	EN 61000-6-2 EN 61000-6-4 UL 61010-1 UL 61010-2-201 DNV-CG-0339

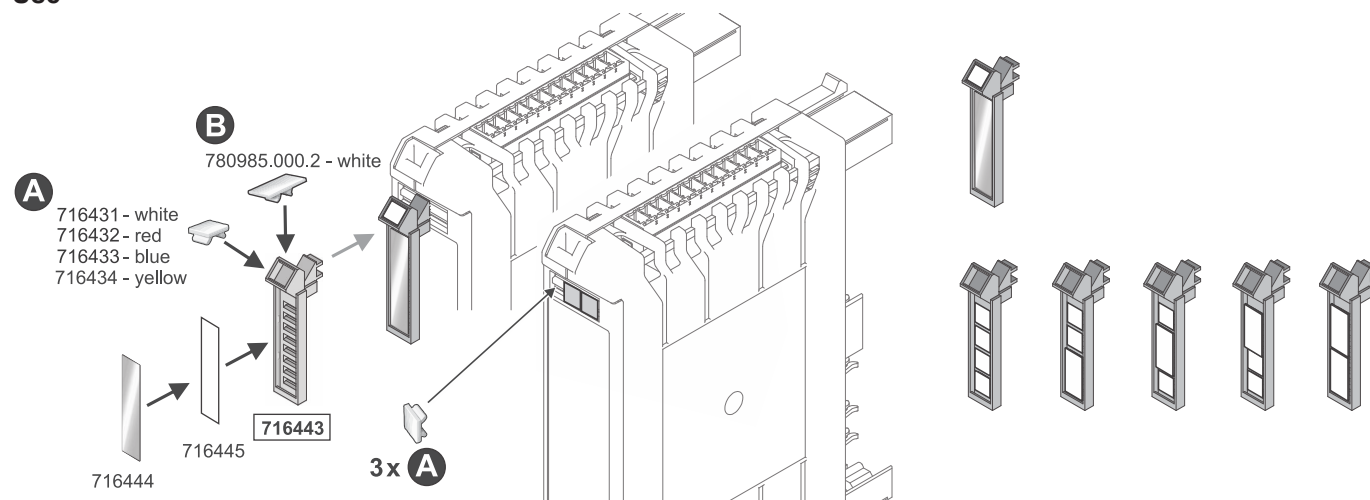
Dimensions



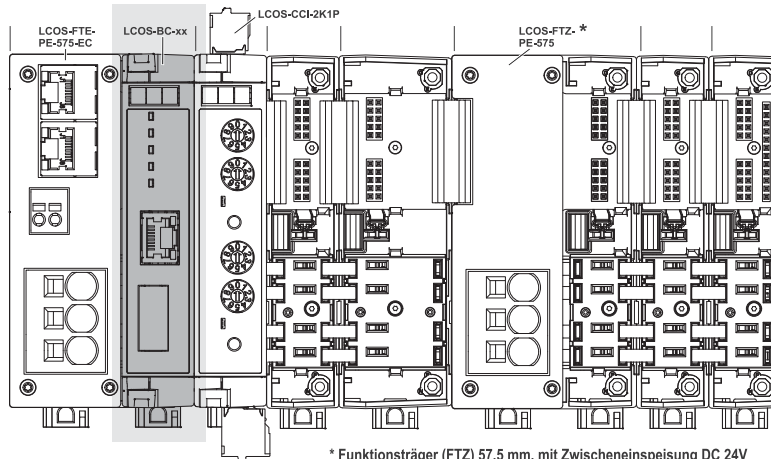
PIN assignment



Use



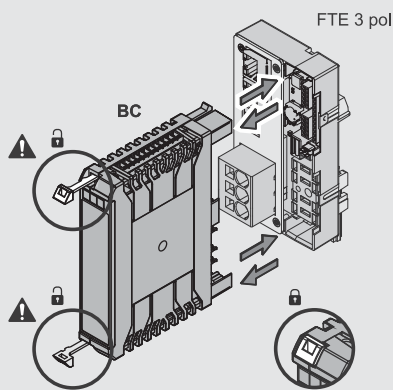
Use



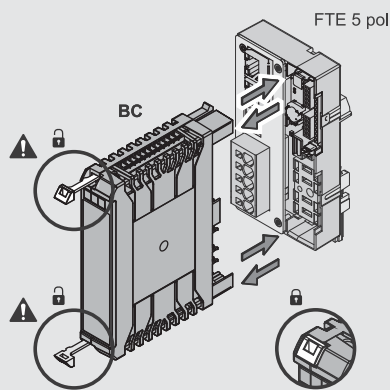
* Funktionsträger (FTZ) 57,5 mm, mit Zwischeneinspeisung DC 24V
 * Function carrier (FTZ) 57,5 mm, with intermediate supply DC 24V
 * Support de fonction (FTZ) 57,5 mm, avec alimentation intermédiaire DC 24V

Use

LCOS CCI system

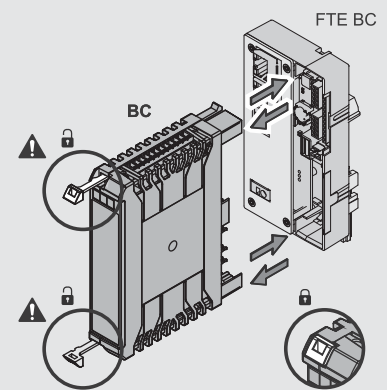


max. DC 48V
780713.575.1 LCOS-FTE-PE-575-UN-00-1-L
 AC230V
780731.575.1 LCOS-FTE-PE-575-PN-01-1-L
780741.575.1 LCOS-FTE-PE-575-EC-01-1-L
780771.575.1 LCOS-FTE-PE-575-ETIP-01-1-L



AC500V
780732.575.1 LCOS-FTE-PE-575-PN-02-1-L
780742.575.1 LCOS-FTE-PE-575-EC-02-1-L
780772.575.1 LCOS-FTE-PE-575-ETIP-02-1-L

LOCC-Box Net system



780714.575.1 LCOS-FTE-PE-575-UN-04-1-L