

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	03

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: FTE 3-pole: 780713.575.1 (operating voltage: max. DC 48V), FTE 3-pole: 780741.575.1 (operating voltage: AC 230V), FTE 5-pole: 780742.575.1 (operating voltage: AC 500V).

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.

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

United Kingdom: LÜTZE Ltd.

Unit 3, Sandy Hill Park
Sandy Way, Amington • GB-Tamworth, Staffs B77 4DU
Tel. +44 (0)1827 31333-0 • Fax +44 (0)1827 31333-2
www.lutze.com • sales.gb@lutze.co.uk

Germany: Friedrich Lütze GmbH

Postfach 12 24 (PLZ 71366) • Bruckwiesenstraße 17-19 • D-71384 Weinstadt
Tel. +49 (0)7151 6053-0 • Fax +49 (0)7151 6053-277(-288)
www.luetze.de • info@luetze.de

Technical data sheet

EtherCAT Bus coupler

Transmission standard IEEE 802.3, 100 Base-Tx

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 mm² (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

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 consumption < 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)

Technical data sheet

EtherCAT Bus coupler

Color of the housing	RAL 7012 Basalt grey
Mounting	Pluggable On function carrier with feed (FTE) 780714.575.1 57.5 mm (Accessories)
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

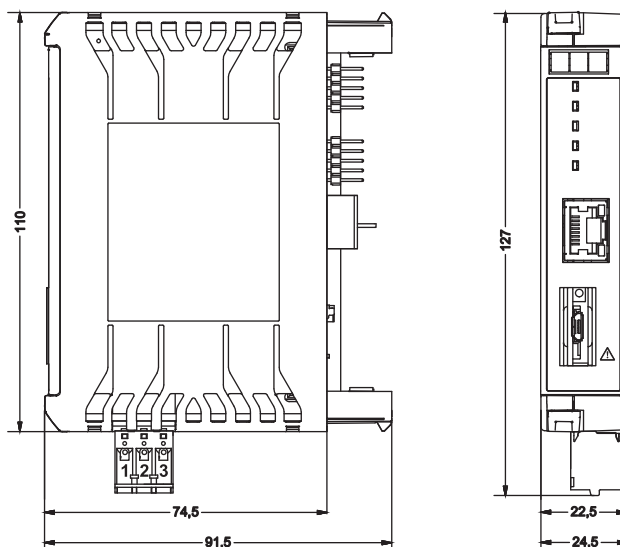
General ambient conditions

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

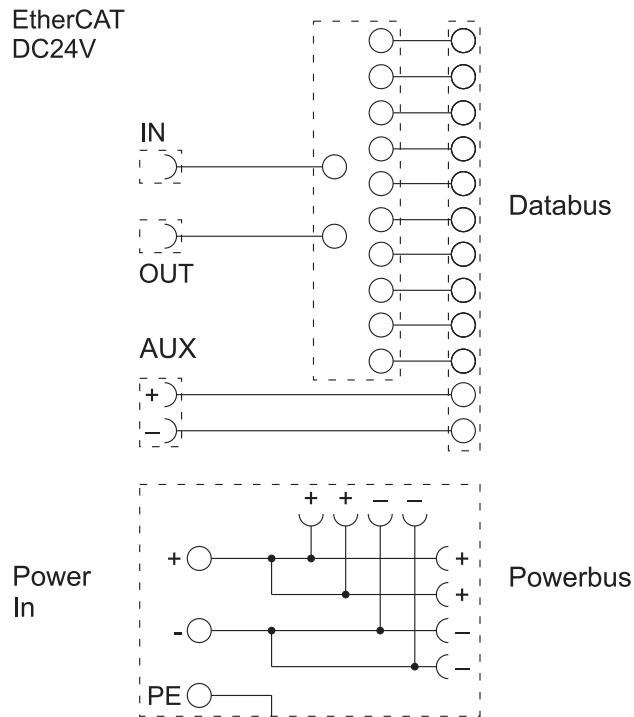
Certifications/Standards

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

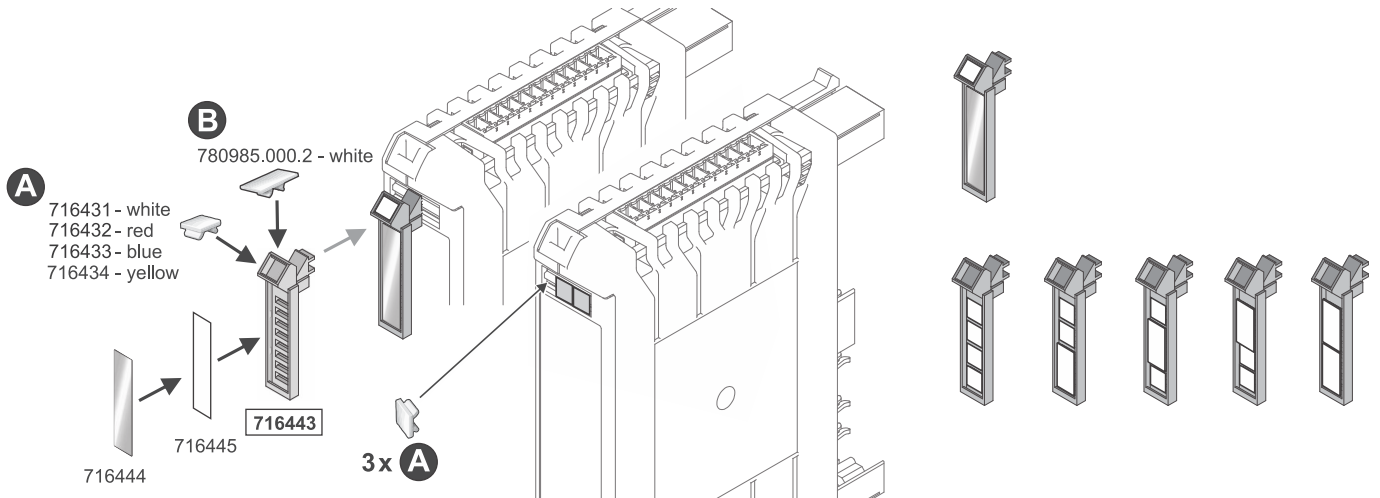
Dimensions



PIN assignment



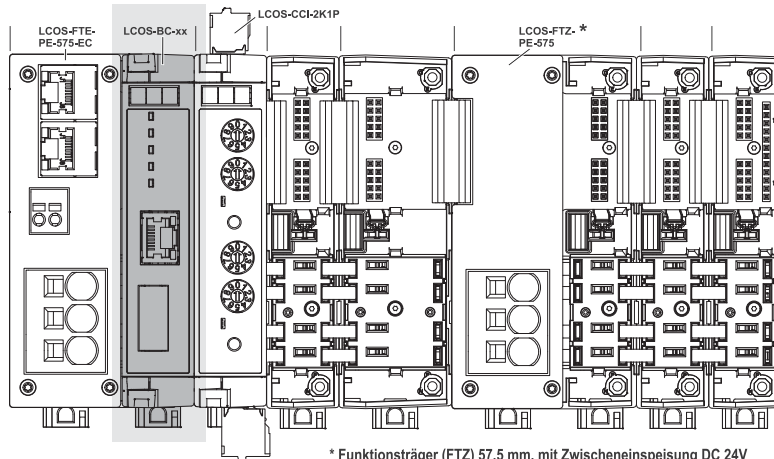
Use



Technical data sheet

EtherCAT Bus coupler

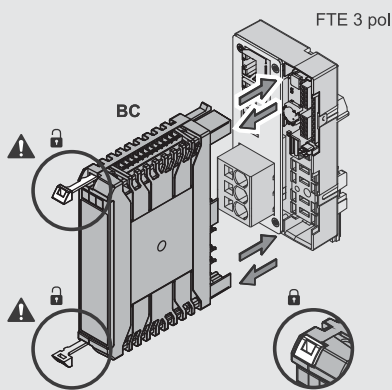
Use



* 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

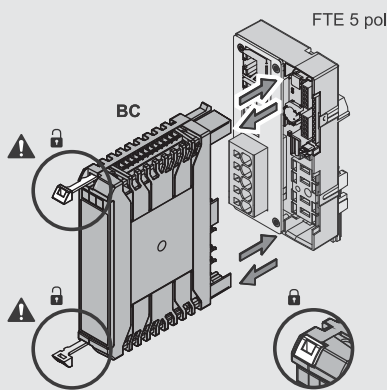
Use

LCOS CCI system



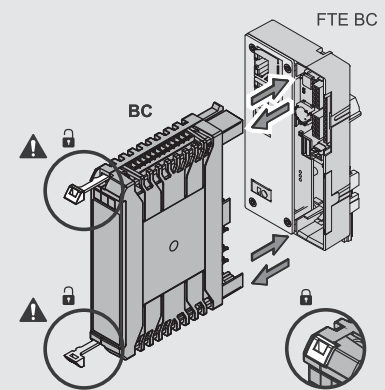
max. DC 48V
 780713.575.1 LCOS-FTE-PE-575-UN-00-1-L

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