

Fieldbus Communication Units for Photoelectric Sensors



UC1-CL11

CC-Link

NEW



UC1-EC

EtherCAT

Coming soon



UC1-EP

EtherNet/IP

Features

- Compact slave adapters to fieldbus networks
- Max. 16 units of D3RF/D3WF fiber sensor amplifier can be connected.
- Max. 8 units of CDA displacement sensor amplifier can be connected.



PLC with fieldbus master



PC

Configuration files:

CC-Link - CSP

EtherCAT - ESI

EtherNet/IP - EDS



■ UC1 fieldbus slave adapter

■ Fiber sensor amplifiers

- Up to 16 units of D3RF/D3WF connectable

■ Displacement sensor amplifier

- Up to 8 units of CDA amplifier connectable
- Up to 2 units of TD1 or CD22 can be connected with each CDA amplifier.

■ Mixed connection with fiber sensor and displacement sensor amplifiers

- Enable to connect 16 units.

Specifications

Model	UC1-CL11	UC1-EC	UC1-EP
Supported version	CC-Link Ver. 1.10	EtherCAT ^{*1} Slave	EtherNet/IP adapter
No. of occupied stations	2/3/4	-	-
Compliant standards	-	IEEE802.3u	IEEE802.3u
Communication range	100 to 1200 m	100 m max	100 m max
Baud rate	156 kbps/625 kbps/2.5 Mbps/5 Mbps/10 Mbps	100 Mbps	10/100 Mbps
Station number settings	1 to 63	-	-
Cable connections	CC-Link-specified cable	STP Category 5 or higher	STP Category 5 or higher
Supported functions	-	Process data communication, mailbox communication (supports CoE)	Implicit message (Class1) Explicit message (Class3, UCMM) ACD (Address Conflict Detection) DLR (Device Level Ring) Static IP DHCP BOOTP
Power connection	2-pole terminal block connector	M8 4-pin connector	M8 4-pin connector
Data communication	-	PDO communication (sending: max. 120 bytes, receiving: max. 36 bytes) SDO communication	Implicit message (sending max. 40 byte, receiving 4 byte) Explicit message
Applicable regulations	EMC directive (2014/30/EU)	EMC directive (2014/30/EU)	EMC directive (2014/30/EU)
Applicable standards	EN 61000-6-2, EN 55011	EN 61000-6-2, EN 55011	EN 61000-6-2, EN 55011
NRTL Certification	UL Recognized Component	To be announced	To be announced

*1. EtherCAT is a registered trademark of Beckhoff Automation GmbH & Co. KG.

Common specifications

Connected devices	Connectable models	D3RF/D3WF series inter-connection master and slave unit CDA series master and slave unit
	No. of connectable units	Up to 16 units ^{*2} (One CDA unit occupies two units)
	Connection type	5-pin connector for linking (functions as a linking end unit)
Rating	Supply voltage	12 to 24 VDC, including $\pm 10\%$ ripple (p-p)
	Power consumption	3 W or less
Protection circuit		Reverse connection protection
Installation		35 mm DIN rail
Material		PC

*2. The maximum number of connectable D3RF/D3WF units varies depending on the ambient temperature.

Ambient temperature	-25 to +55°C	-25 to +50°C	-25 to +45°C
No. of connectable D3RF/D3WF	1 to 3	4 to 8	9 to 16

Accessories

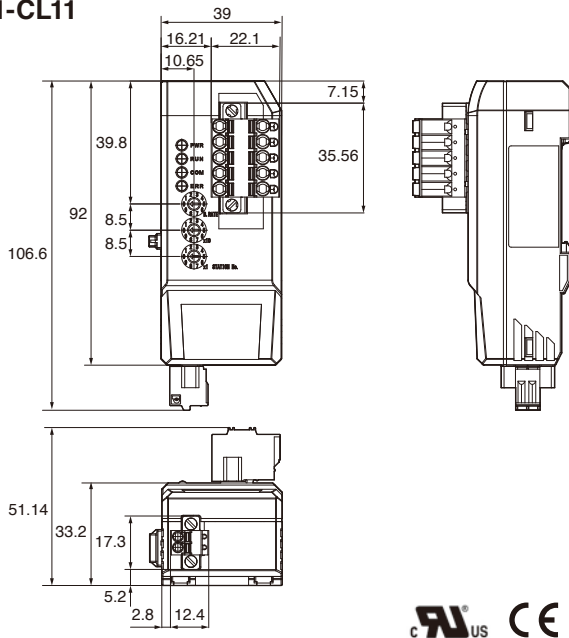
Power cables for UC1-EC/-EP

Model	Description
M84CN-25	Straight, M8 4-pin, 2m
M84CN-5S	Straight, M8 4-pin, 5m
M84CN-10S	Straight, M8 4-pin, 10m

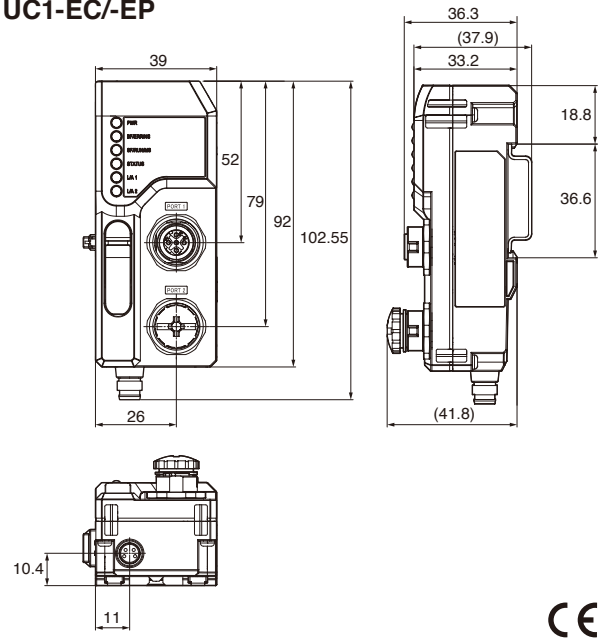
Dimensions

Unit (mm)

UC1-CL11



UC1-EC/-EP



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