CKD

Multi-Axis Controller for Electric Actuators
ECMG Series   PROFINET specs. added

Features

■ Multi-axis controller that can connect to units

■ Up to 16 axes of actuators can be connected

■ Significantly improved basic performance, increased actuator payload and max. speed when connected to ECMG

■ Supports 3 types of power supply methods (Central, individual, and mixed wiring methods)

c**UL**us   CE   UKCA   RoHS

*Products with the interface specification of PROFINET are not UL compliant.

How to Order

ECMG - **C** NN **A** 30- **CL** D **NN**
① ② ③ ④

① Unit type

C	Communication unit

② End unit

A	Included (standard end unit)
N	Not included

③ Interface specification

CL	CC-LINK
EC	EtherCAT
EN	EtherNet/IP
EP	PROFINET

④ Accessories *1

NN	None
1N	1-port communication connector for CC-Link
2N	2-port communication connector for CC-Link

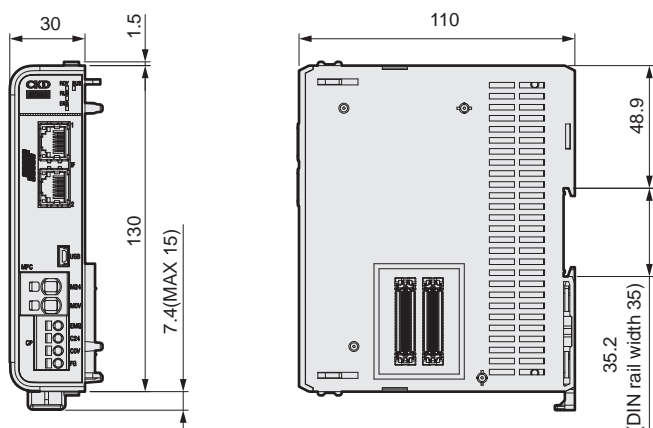*1. Select from "NN" when selecting EC, EN, or EP with the interface specifications, and "1N" or "2N" when selecting CL.

General specifications

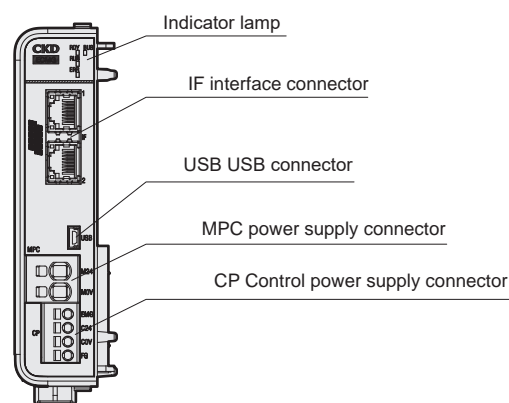| Item		Description						
Applicable actuators		EJSG, EBS-G, EBR-G, GSSD2, GSTK, GSTG, GSTS, GSTL			FLSH-G, FLCR-G, FGRC-G, GCKW				
Applicable motor sizes		□35	□42	□56	□20	□25	25L	□35
Settings tool		PC setting software (S-Tools), connection cable: USB cable (mini-B)						
External interface	Field network specification	CC-Link, EtherCAT, EtherNet/IP, PROFINET						
Power supply voltage	Control power supply, Motion power supply	24 VDC ±10%						

Refer to "Multi-axis controller for electric actuator ECMG Series" (Catalog No.CC-1570A) for * and other general specifications.

Dimensions

● Communication unit

[Panel description]

30   1.5
110
48.9
130
7.4(MAX 15)
35.2
(DIN rail width 35)

- Indicator lamp
- IF interface connector
- USB USB connector
- MPC power supply connector
- CP Control power supply connector

⚠ Read the safety precautions in "Multi-axis Controller for Electric Actuators ECMG Series" (Catalog No. CC-1570A) before use.

CKD Corporation

ECMG Series

[Communication specifications]

Item	Specifications
Communication protocol	PROFINET IO
Conformance class	CC-B
Communication speed	100 Mbps
Occupied bytes	Input: Max. 272 bytes Output: Max. 272 bytes
Connection cable	PROFINET compliant cable (Twisted pair cable of CAT5e or higher(Double shield with aluminum tape and network) recommended.)
Monitor function	Position, speed, current, alarm

Cyclic data from master

Byte	bit	Full direct value mode — Signal name
0	0 to 7	–
1	0 to 2	–
1	3	Communication unit alarm reset
1	4 to 7	–
2 to 3	0 to 7	–
4 to 5	0 to 7	Writing data
6 to 7	0 to 7	Writing data
8 to 9	0 to 7	Data number
10 to 11	0 to 7	Data number
12	0 to 3	–
12	4	Data request
12	5	Data R/W selection
12	6 to 7	–
13	0 to 7	Data R/W subject specification
14 to 15	0 to 7	–
16	0 to 5	Point number selection bit 0 to 5
16	6	Point travel start
16	7	JOG/INCH (-) travel start
17	0	JOG/INCH (+) travel start
17	1	Origin return start
17	2	Servo ON
17	3	Alarm reset
17	4	Stop#
17	5	Direct value travel selection
17	6	INCH selection
17	7	–
18 to 19	0 to 7	Mode (direct value travel)
20 to 21	0 to 7	Position (direct value travel)
22 to 23	0 to 7	Position (direct value travel)
24 to 25	0 to 7	Positioning width (direct value travel)
26 to 27	0 to 7	Speed (direct value travel)
28	0 to 7	Acceleration (direct value travel)
29	0 to 7	Deceleration (direct value travel)
30	0 to 7	Pressing ratio (direct value travel)
31	0 to 7	Pressing speed (direct value travel)
32 to 33	0 to 7	Pressing distance (direct value travel)
34 to 35	0 to 7	Pressing distance (direct value travel)
36 to 37	0 to 7	Gain magnification (direct value travel)
38 to 39	0 to 7	–

Cyclic data from controller

Byte	bit	Full direct value mode — Signal name
0	0	Temperature error (warning)
0	1	Communication status 1 between units
0	2	Communication status 2 between units
0	3 to 7	–
1	0	Communication unit status
1	1 to 2	–
1	3	Communication unit alarm state
1	4 to 7	–
2 to 3	0 to 7	Axis link status
4 to 5	0 to 7	Read data
6 to 7	0 to 7	Read data
8 to 9	0 to 7	Data (alarm)
10 to 11	0 to 7	Data (alarm)
12	0 to 3	Data response
12	4	Data complete
12	5	Data write status
12	6 to 7	–
13	0 to 7	–
14 to 15	0 to 7	–
16	0 to 5	Point travel confirmation bit 0 to 5
16	6	Point travel complete
16	7	Selectable output 1
17	0	Selectable output 2
17	1	Origin return complete
17	2	Servo ON state
17	3	Alarm#
17	4	Operation preparation complete
17	5	Direct value travel status
17	6 to 7	–
18 to 19	0 to 7	–
20 to 21	0 to 7	Position (monitor value)
22 to 23	0 to 7	Position (monitor value)
24 to 25	0 to 7	Speed (monitor value)
26 to 27	0 to 7	Current (monitor value)
28 to 29	0 to 7	–
30 to 31	0 to 7	Alarm code (monitor value)
32 to 39	0 to 7	–

* The signal configuration with a single axis is indicated. The number of bytes is determined by the number of axes to be operated, so refer to the instruction manual for details.
* Refer to the instruction manual for other operation modes.
* # Indicates a negative logic signal.