

Description



- Ethernet based communication
- Closed loop system (errors are corrected)
- No gain tuning / No hunting
- Heat reduction / Torque improvement
- Up to 3000 rpm
- Plug & Play solution with the Unimotion motors
- Brake control
- DIN rail mount (optional)
- RoHS directive
- EMC directive

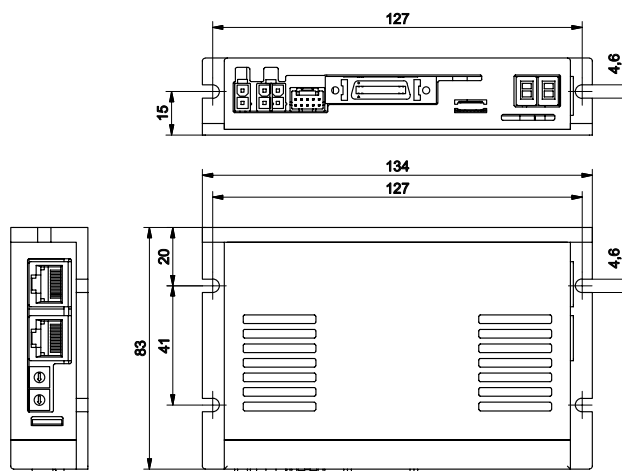
General technical data

PARAMETER	Type	Stepper
	Protocol/control	Ethernet
	Code	STDF-EN
	UNIT	VALUE
Operating voltage	[V DC]	24 ± 10 %
Current consumption ¹	[mA]	max. 500
Rotational speed	[rpm]	0 ~ 3000
Supported resolution ²	[ppr]	500, 1000, 1600, 2000, 3600, 5000, 7200, 10000
DRIVE	Input signals	3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN)
		9 programmable inputs (Photocoupler)
	Output signals	1 dedicated output (Compare out)
		9 programmable outputs (Photocoupler)
		Brake
Ambient temperature	[°C]	0 ~ +50
Ambient humidity	[%]	35 ~ 80 (non-condensing)
Vibration resistance	[G]	0,5
Duty cycle	[%]	100

¹ Except the motor current

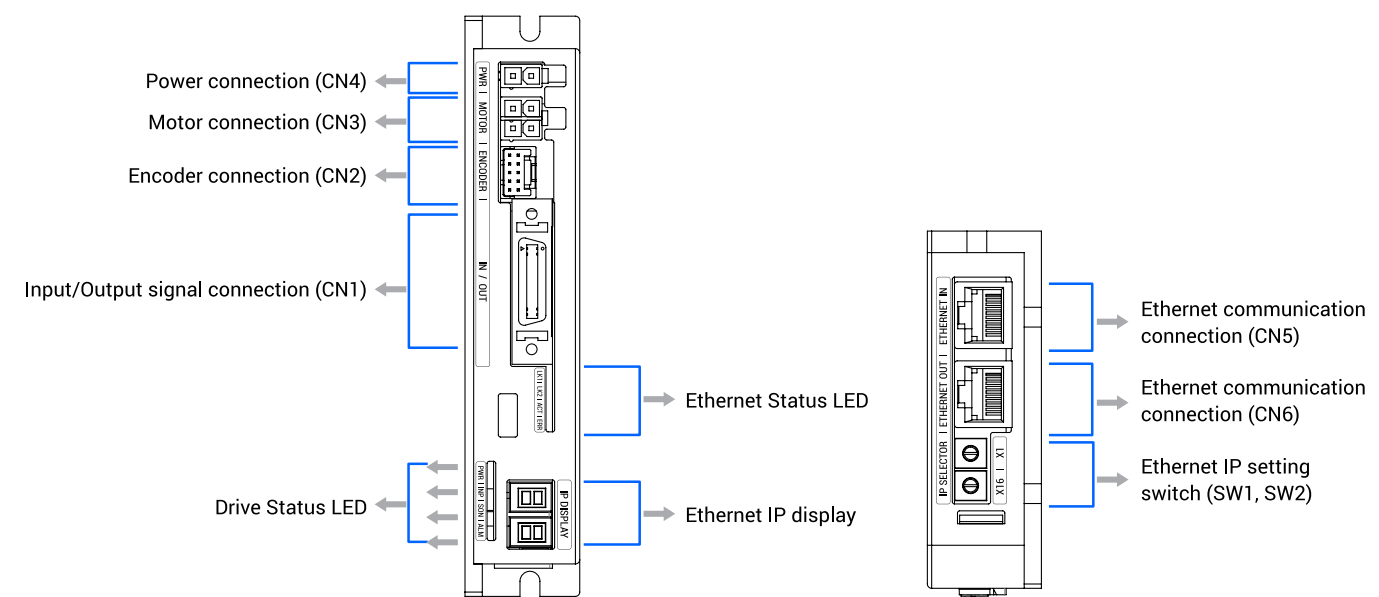
² For the case that resolution is higher than the encoder's resolution, the motor shall operate by micro-step between pulses

Dimensions



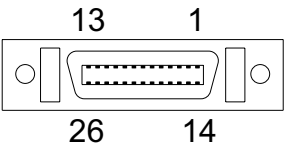
i All dimensions are in mm.
The scale of the drawings
may not be equal.

Port and indicator information



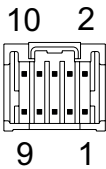
Input/Output signal connector (CN1):

NO.	FUNCTION	I/O
1	LIMIT+	Input
2	LIMIT-	Input
3	ORIGIN	Input
4	Digital In1	Input
5	Digital In6	Input
6	Digital In7	Input
7	Compare out	Output
8	Digital Out1	Output
9	Digital Out2	Output
10	Digital Out3	Output
11	Digital Out4	Output
12	Digital Out5	Output
13	Digital Out6	Output
14	Digital In2	Input
15	Digital In3	Input
16	Digital In4	Input
17	Digital In5	Input
18	Digital In8	Input
19	Digital In9	Input
20	Digital Out7	Output
21	Digital Out8	Output
22	Digital Out9	Output
23	BRAKE+	Output
24	BRAKE-	Output
25	EXT_GND	Input
26	EXT_24VDC	Input



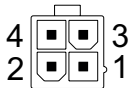
Encoder connector (CN2):

NO.	FUNCTION	I/O
1	A+	Input
2	A-	Input
3	B+	Input
4	B-	Input
5	I+	Input
6	I-	Input
7	5 V (DC)	Output
8	GND	Output
9	F.GND	-
10	F.GND	-



Motor connector (CN3):

NO.	FUNCTION	I/O
1	A+	Output
2	B+	Output
3	A-	Output
4	B-	Output



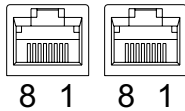
Power Connector (CN4):

NO.	FUNCTION	I/O
1	24 V (DC)	Input
2	GND	Input



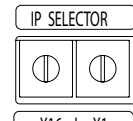
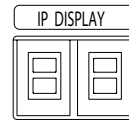
Ethernet communication connector (CN5, CN6):

NO.	FUNCTION
1	TD+
2	TD-
3	RD+
4	-
5	-
6	RD-
7	-
Connection hood	F.GND



Ethernet IP display and setting switch (SW1, SW2):

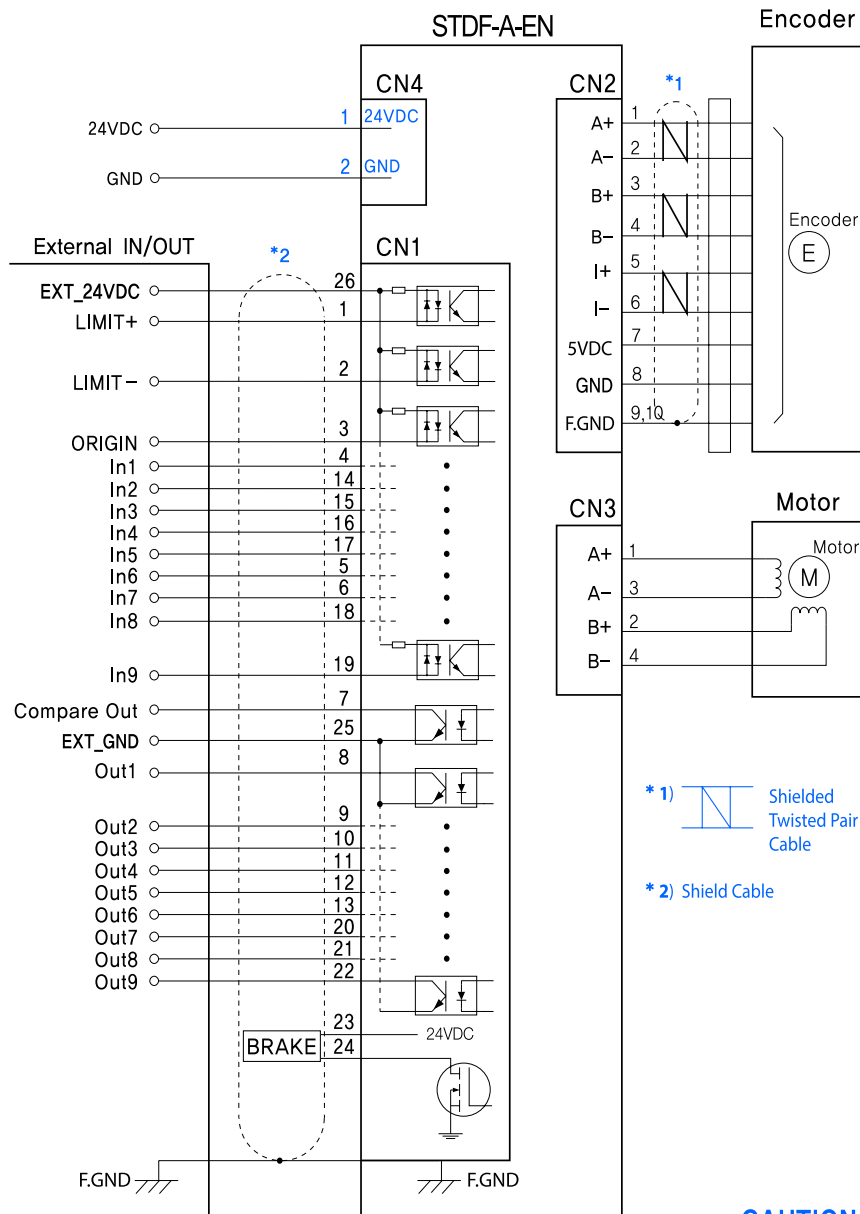
The value of the fourth digit of Ethernet IP can be set through the setting switch. Set the product's IP not to overlap with other connected products. The first, second and third values of the IP can be set through the GUI. Please refer to the manual for details. When the switch is set to 255 (FF), IP is set automatically, ignoring the setting. (DHCP function) The fourth digit of the Ethernet IP is displayed in 7-Segment.



X16 | X1
(SW2)(SW1)

Ex) In case of Sw1 : 7 and Sw2 : 5
(5x16) + (7x1) = 87
IP is to be set as 192.168.0.87

External wiring diagram



CAUTION

Please refer to the Manual when connecting the motor extension cable.
Carefull connection will be required to protect the drive from any damages.

※When connecting the I/O cables between the controller and drive, please turn off the power of both controller and drive to protect the drive from any damage.

A simple user interface software can be used to parameterize the drive, perform simple test movements, set drive parameters, and more.

