

Description



- EtherCAT based communication
- CiA 402 Drive profile support
- 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

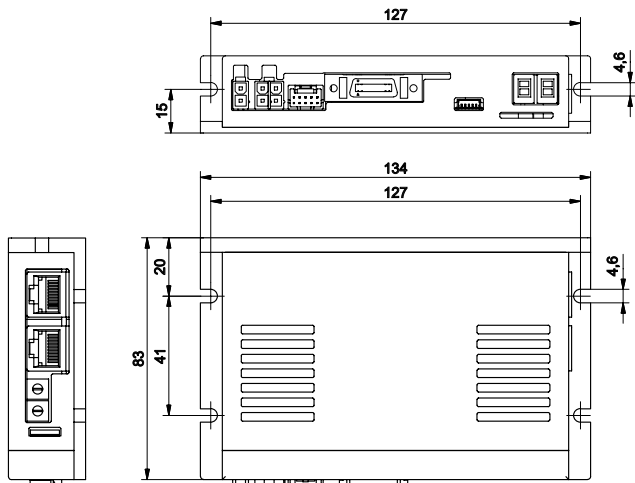
General technical data

	Type	
	Protocol/control	
	Code	
	Stepper	
PARAMETER	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)
		7 user inputs (Photocoupler)
	Output signals	6 user 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

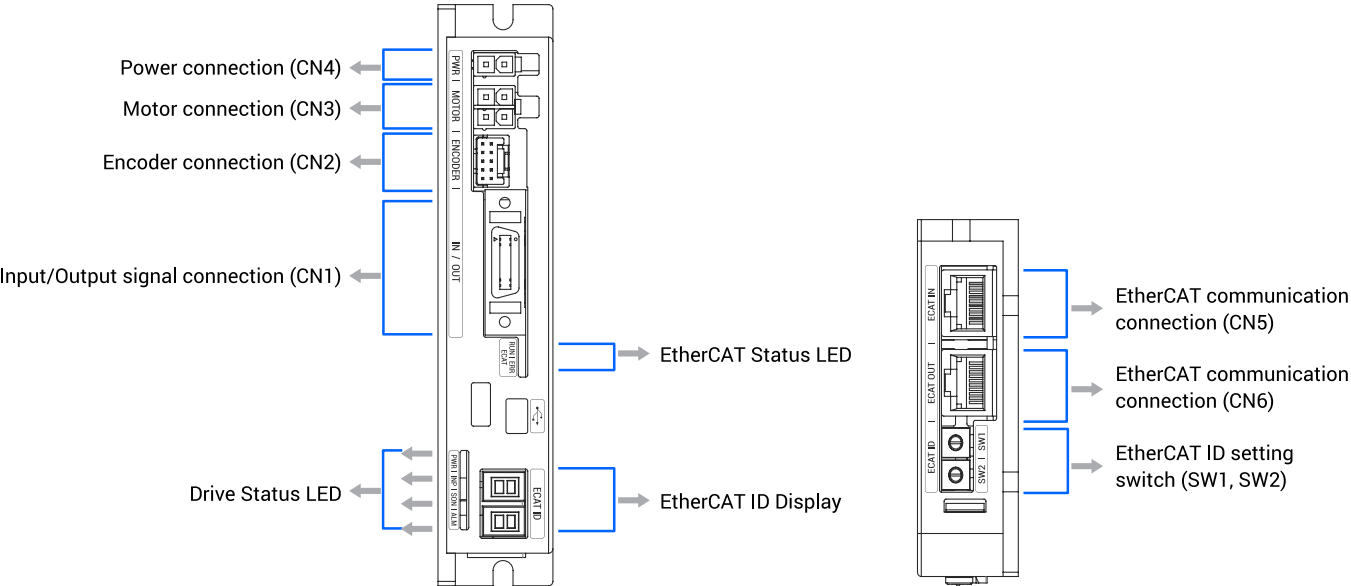
² For the case that resolution is higher than the encoder's resolution, the motor shall operate by micro-step between pulses

Dimensions



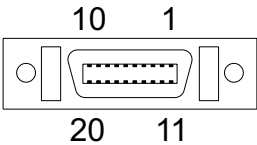
i All dimensions are in mm.
The scale of the drawings
may not be equal.

Port and indicator information



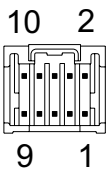
Input/Output signal connector (CN1):

NO.	FUNCTION	I/O
1	LIMIT+	Input
2	LIMIT-	Input
3	ORIGIN	Input
4	Digital In1	Input
5	Digital In2	Input
6	Digital In3	Input
7	Digital In4	Input
8	Digital In5	Input
9	Digital In6	Input
10	Digital In7	Input
11	Digital Out1	Output
12	Digital Out2	Output
13	Digital Out3	Output
14	Digital Out4	Output
15	Digital Out5	Output
16	Digital Out6	Output
17	BRAKE+	Output
18	BRAKE-	Output
19	EXT_GND	Input
20	EXT_24VDC	Input



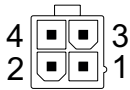
Encoder connector (CN2):

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+ Phase	Output
2	B+ Phase	Output
3	A- Phase	Output
4	B- Phase	Output



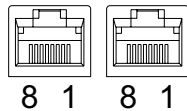
Power connector (CN4):

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



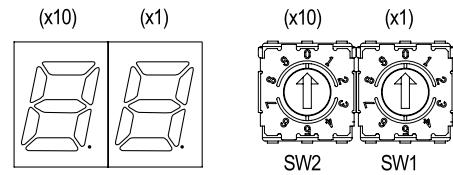
EtherCAT communication connector (CN5, CN6):

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

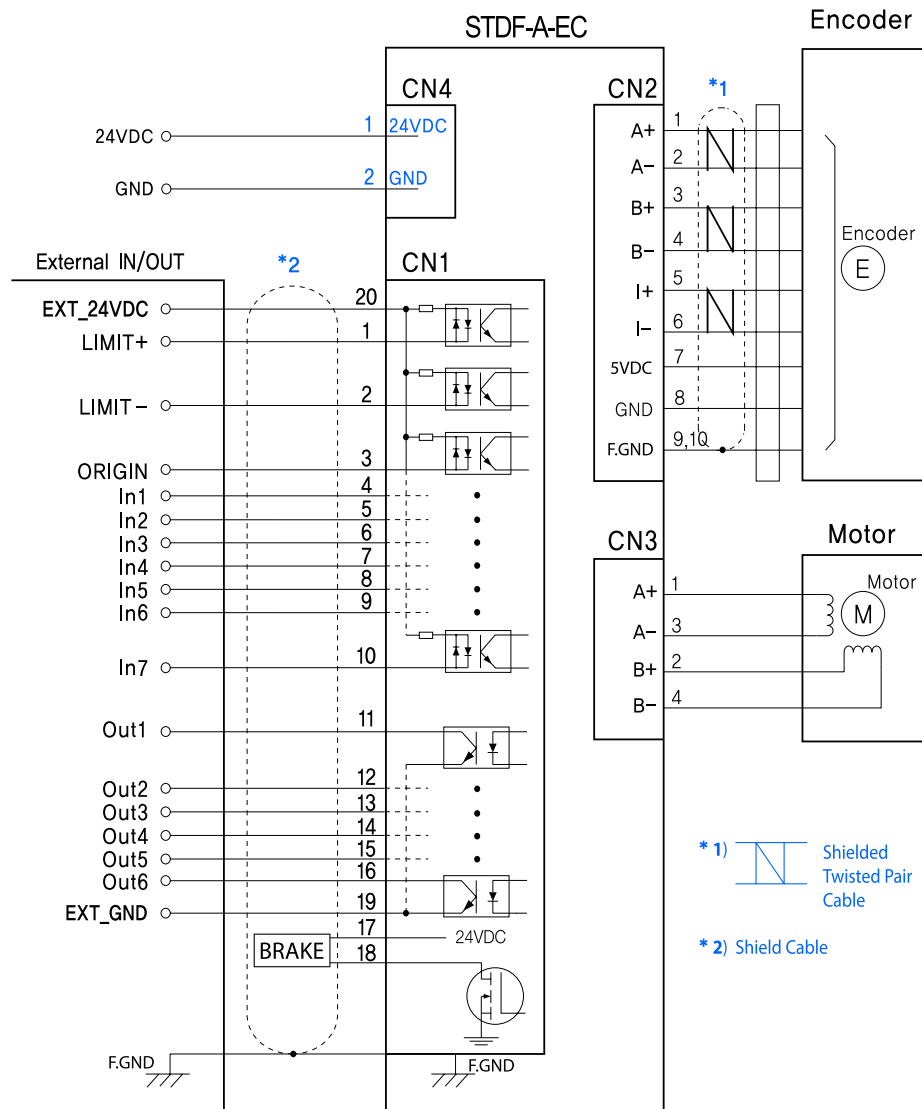


EtherCAT ID display and setting switch (SW1, SW2):

There are two rotary switches for setting the value of the EtherCAT ID (ECAT Device ID) on the side of the device. The right switch (SW1) sets the »ones« (X1), while the switch on the left (SW2) sets the »tens« (X10). Set values are displayed on »ECAT ID« segment display.



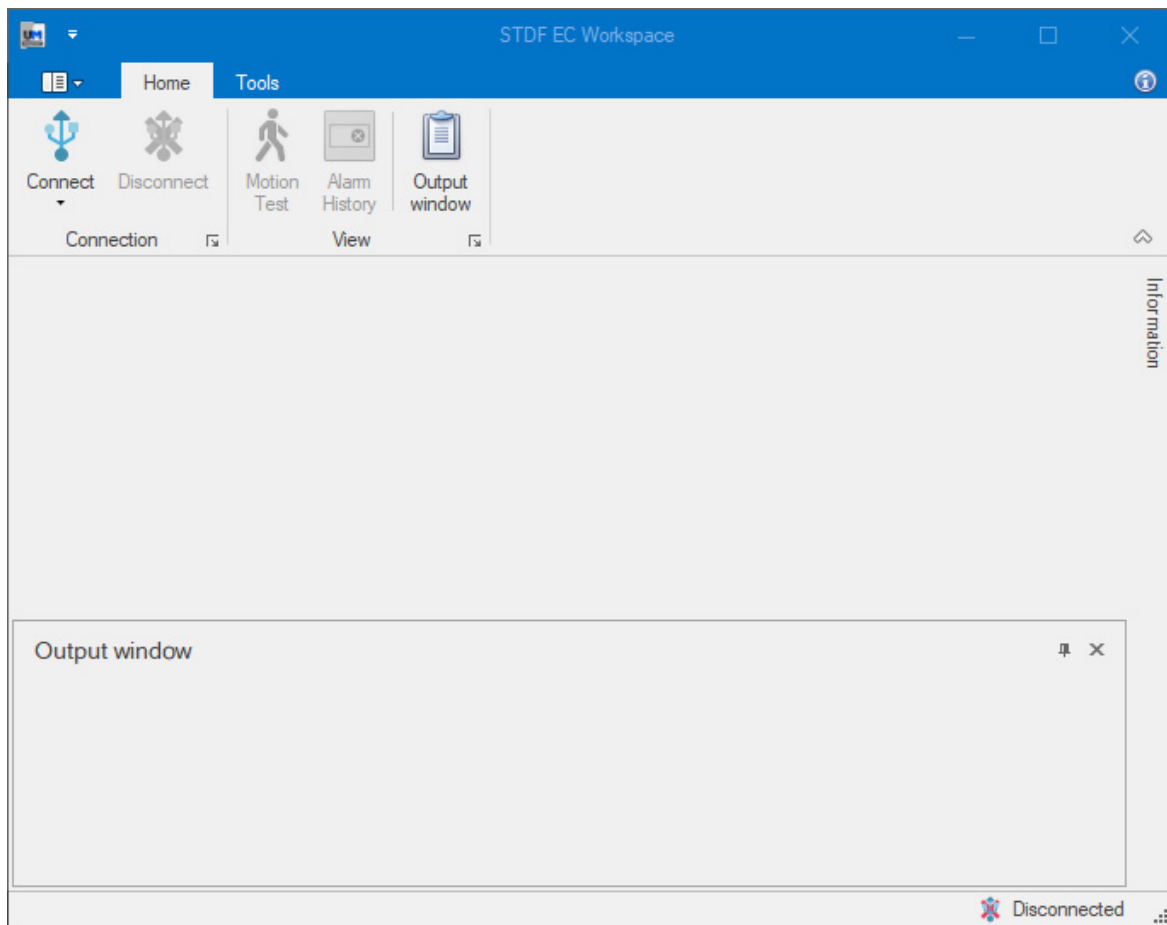
External wiring diagram



※ 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.

Software

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



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