

EA-BLDC10-120-L-DX**Features**

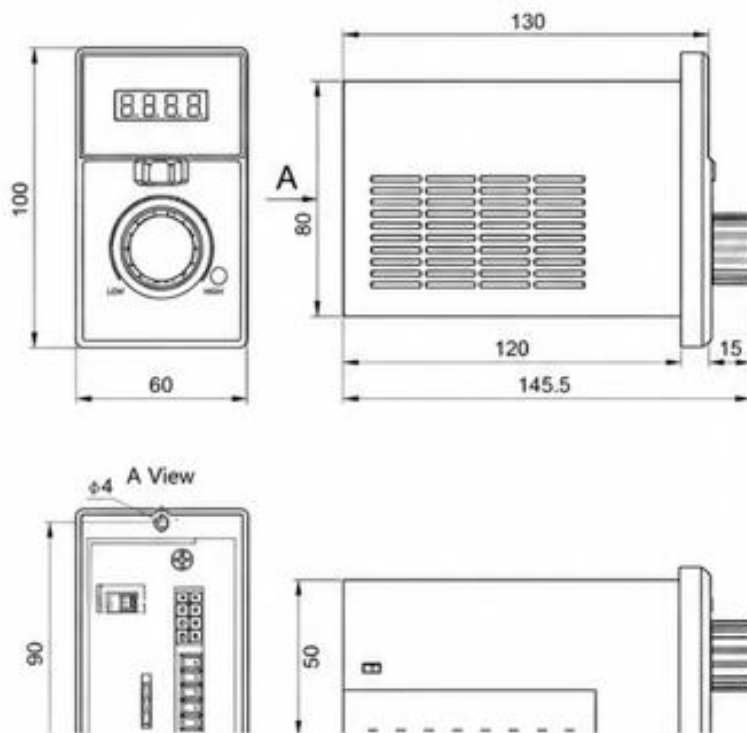
- Digital display Uses a 4-digit digital tube display: operating status, set speed, running speed, and fault indication.
- Stable operation Closed-loop speed control (control accuracy $\pm 0.5\%$).
- Input / Output 2 groups of NPN digital input ports (forward and reverse); 1 open-drain digital output port; extended 3 NPN digital input ports, 1 analog input port and 1 RS485 communication port.
- Speed setting Set the running speed with the panel knob, external analog input, or communication setting.
- Complete fault detection and protection Provides undervoltage, overvoltage, overcurrent, overload, stall, short circuit, phase loss, overtemperature and other fault detection/protection. After a fault occurs, the driver performs the corresponding protective action; fault information is shown on the digital display.

Product Model**EA-BLDC10-120-L-DX**

① ② ③ ④ ⑤

Mark	Description	Content
1	Company	EA : Misumi
2	Type	BLD: Brushless Motor Driver
3	Series	C10: C10 Series
4	Power	120: Max. output power 120W (24V), 200W (48V)
5	Attribute	L: DC24V~48V H: High voltage AC220V D: Digital display R: RS485 communication X: Extended function

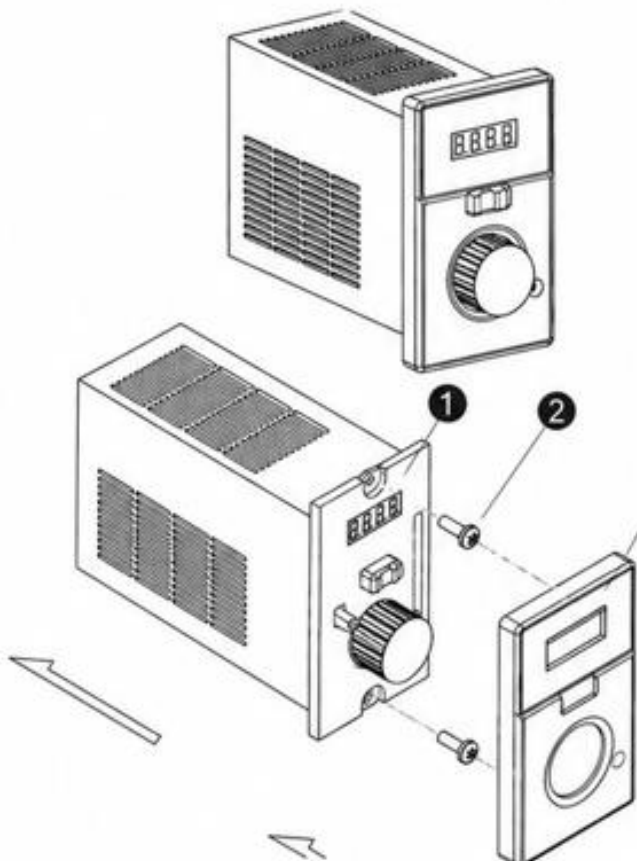
External Dimensions



Environmental Requirements

Ambient Temp	-10°C ~ +40°C (no condensation)
Humidity	≤85% (no condensation)
Altitude	≤1000 m
Vibration	No continuous vibration or excessive shock
Protection	IP20

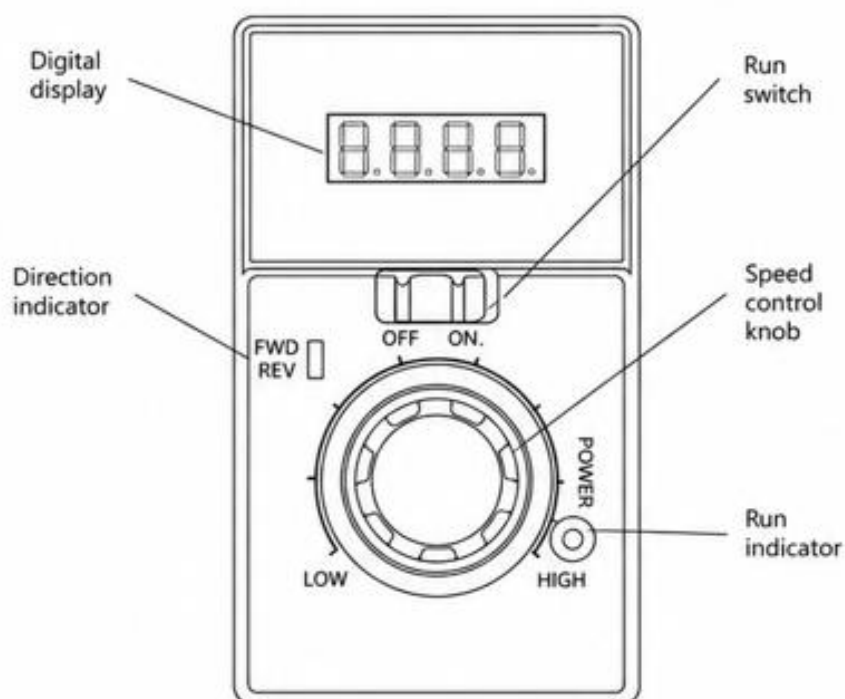
Installation & Fixing



Installation Steps

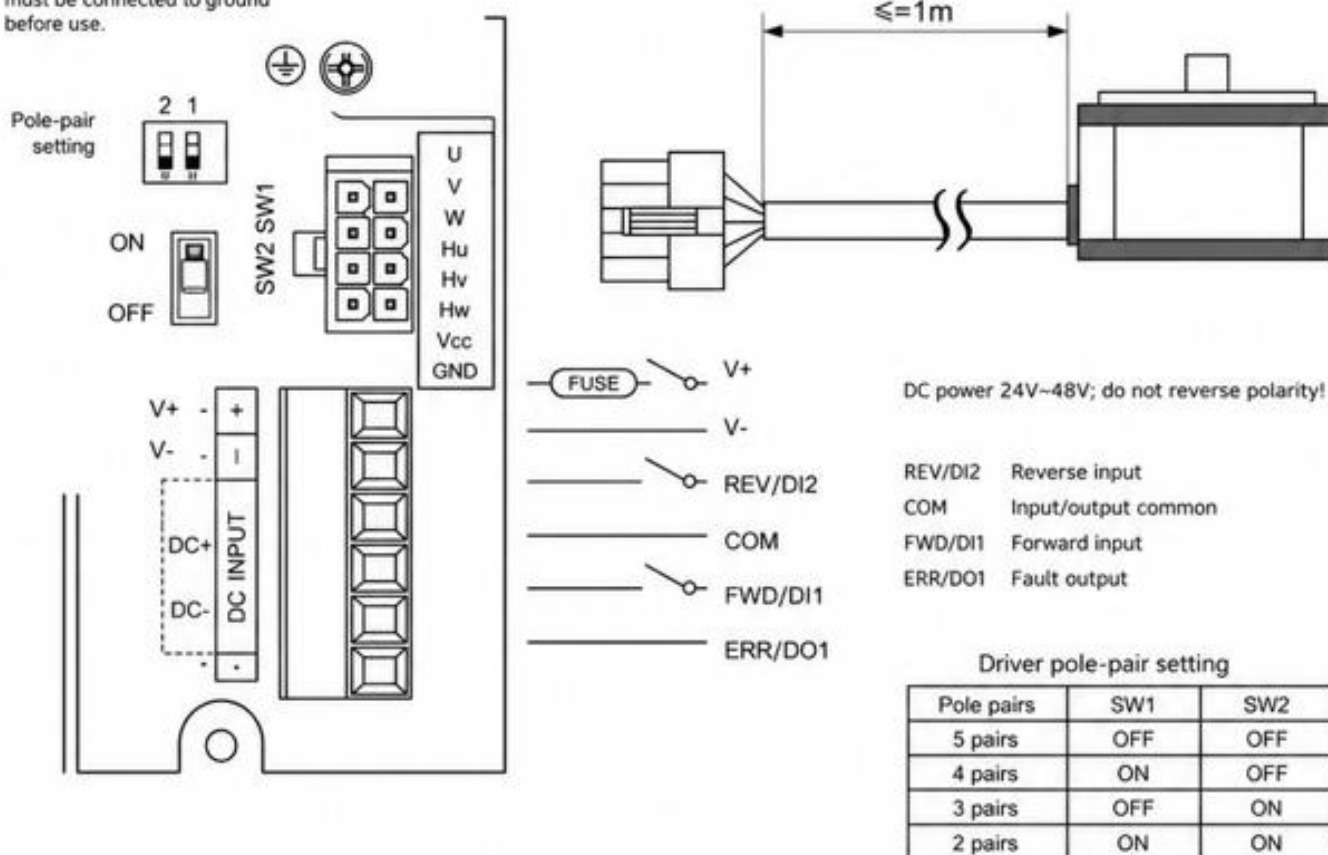
1. Open the panel (3).
2. Insert driver body (1) into the fixing position.
3. Fasten with M4 countersunk screws (GB68-85) (2).
4. Press panel (3) until it is in place as shown.

Do not use in explosive, flammable, corrosive, or water-contact environments. Otherwise explosion, injury, or fire may occur!



Connection & Operation

The driver grounding screw must be connected to ground before use.



Driver DIP Switch Setting

SW2: AI1 = OFF / AI2 = ON

SW3: Internal = OFF / RS485 = ON

SW4/SW5: Pole-pair matching

Baud rate: 19200 bps, 8-N-1

Slave address: 01

DIP SWITCH SETTINGS

Switch	Function	Setting	
SW2	AI1 / AI2	OFF	AI1 = OFF
		ON	AI2 = ON

SW3	Communication	OFF	Internal
		ON	RS485

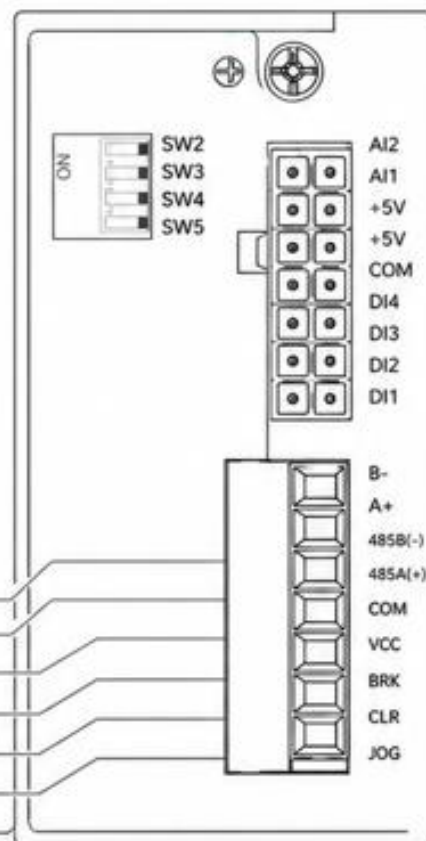
SW4 / SW5: POLE-PAIR MATCHING

Pole Pairs	SW4	SW5
8 pairs	OFF	OFF
6 pairs	ON	OFF
4 pairs	OFF	ON
2 pairs	ON	ON

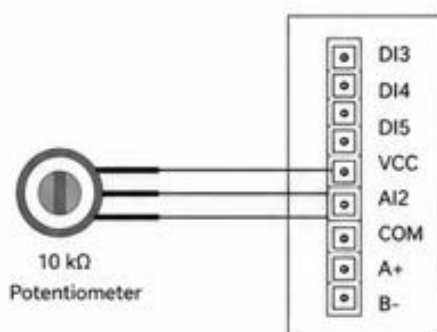
Terminal Functions

Digital Input	JOG/DI3
	CLR/DI4
	BRK/DI5
Power Output	VCC
	COM
Analog Input	AI2
	COM
Communication	485A(+)
	485B(-)

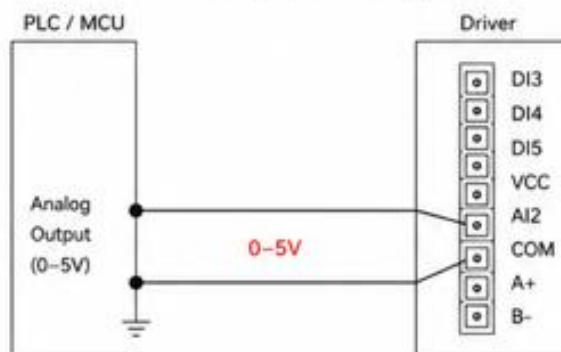
Jog
Fault reset
Brake
+5V output
Analog input (0-5V)
RS485 A
RS485 B



1. Driver – Potentiometer Wiring Diagram



2. Driver – PLC Analog Input Wiring Diagram



3. Driver – PLC Digital Input Wiring Diagram

