

High-Voltage BLDC Driver

EA-DRVC10-200S2-D



Features

- Digital Display 5-digit LED display: run status, set speed, actual speed, and fault indication
- Stable Speed Closed-loop speed control (accuracy $\pm 0.5\%$)
- Operation 2 NPN fully isolated digital inputs (forward and reverse)
- I/O 1 open-drain digital output (fault output)
- Multi-Function Keys RUN key and STOP key
- Speed Setting Set running speed by the panel knob; quick and convenient
- Comprehensive Fault Detection Detects undervoltage, overvoltage, overcurrent, overload, stall, short circuit, phase loss, overtemperature, etc.
- and Protection Functions After a fault occurs, the driver performs the corresponding protection action according to the fault type. Fault information can be shown on the digital display.

Product

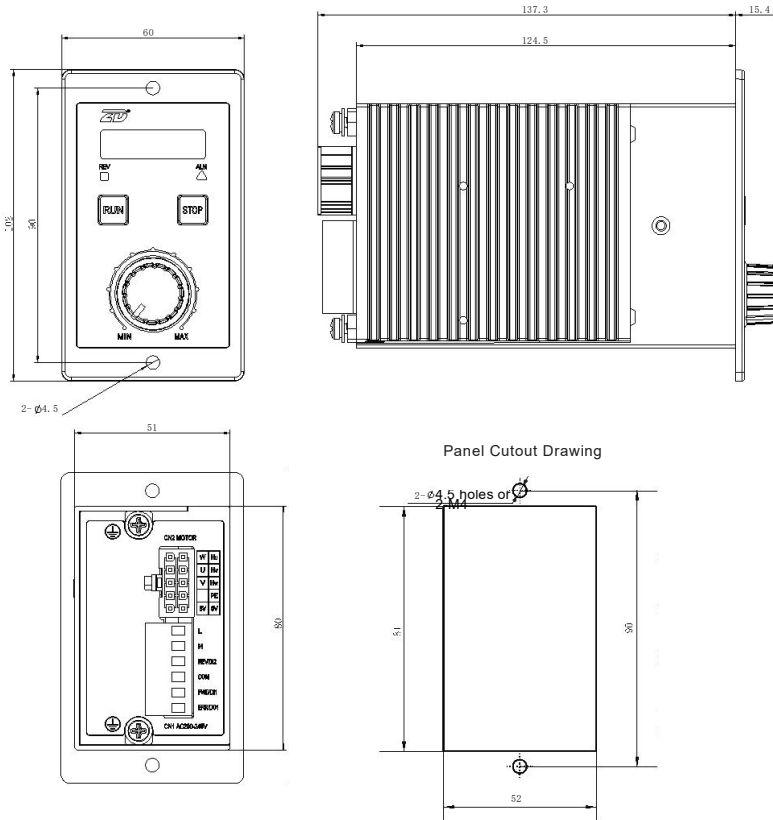
Model

EA-DRVC10-200S2- D

① ② ③ ④ ⑤ ⑥

Mark	Description	Content
①	Company	Z: ZD Motor
②	Type	DRV: BLDC driver
③	Series	C10: C10 series
④	Power	200: Max. output power 200 W
⑤	Voltage	S2: High-voltage AC220 V
⑥	Function	D: With digital display R: With RS485

communication



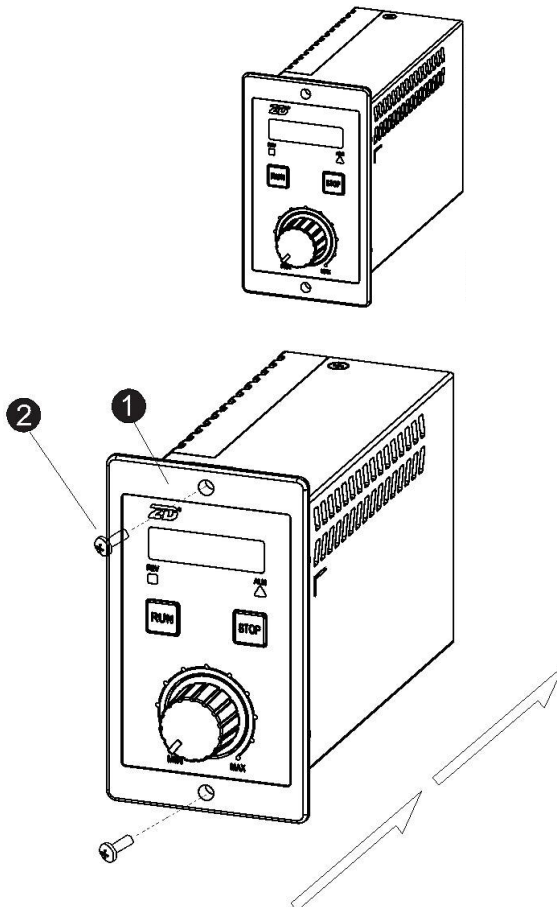
Environmental Requirements

Ambient temperature:	-10°C to +40°C (no condensation)
Ambient humidity:	below 85% (no condensation)
Altitude:	below 1000 m
Vibration:	no continuous vibration or excessive shock
Protection rating:	IP20

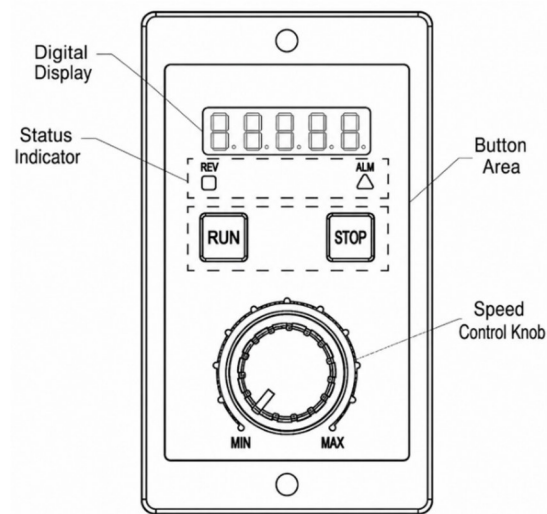
Mounting and Fixing

Installation Steps

- 1 Insert the driver body **1** into the mounting position.
- 2 Fasten with M4 countersunk screws (GB68-80) **2** to secure the unit.

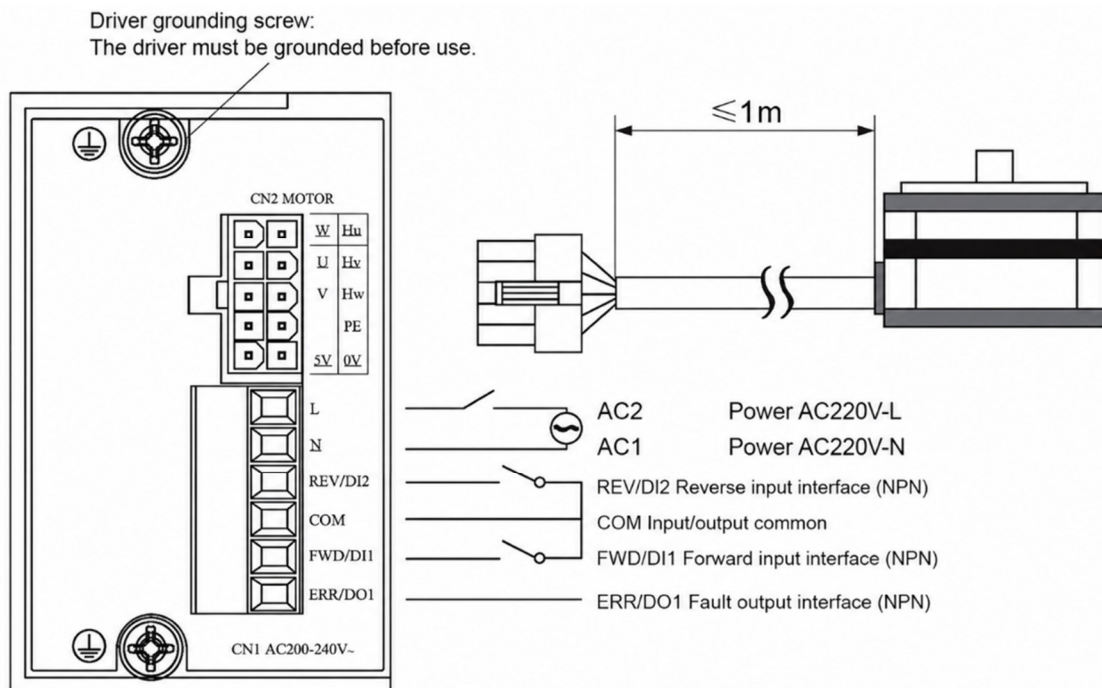


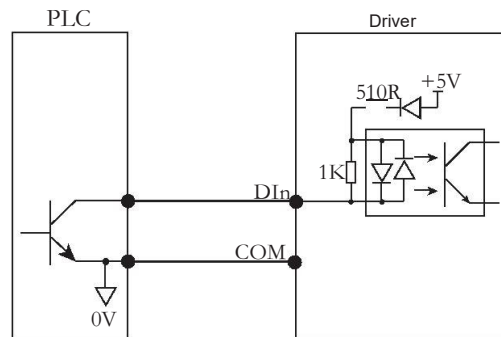
Do not use in explosive or flammable-gas environments, corrosive environments, water-contact areas, or near flammables. Otherwise explosion, injury, or fire may occur!



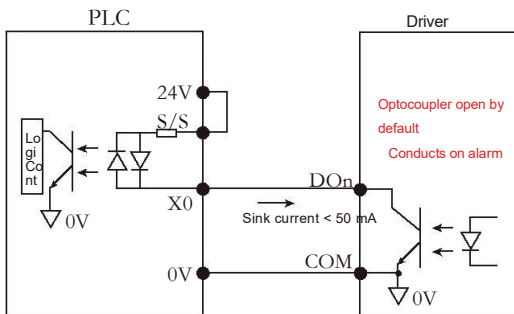
Standby	Fault
Display flashes, showing set speed.	Panel shows fault code; ALM stays on.
Forward run: display stays on and shows actual speed.	
Reverse run: display and REV lamp stay on and show actual speed.	

Wiring and Operation

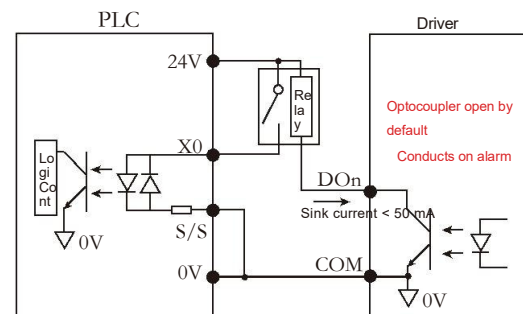




Driver-to-PLC digital input wiring diagram (NPN)



Driver-to-PLC output wiring diagram (NPN)



Driver-to-PLC output wiring diagram (PNP)

Test Run

- Connect AC220V power. Do not use other ports.
- Connect motor and Hall plug.
- FWD/DI1-COM
- VAR/AI1 right
Max.
- See fault table.

If a fault is detected, the driver stops and displays the fault code. Troubleshoot by code.

Before checking or clearing faults, disconnect power and wait 5 minutes!!!

No.	Fault Name	Fault Code	Cause	Action
1	HW Accel OC	OCH1	1. Low voltage 2. Driver power too low 3. Sudden load 4. Phase-to-phase short 5. Strong interference	1. Check input voltage 2. Use a higher-power driver 3. Check load 4. Check/replace cable or motor 5. Check interference
2	HW Decel OC	OCH2		
3	HW Const-Speed OC	OCH3		
4	SW Accel OC	OC1		
5	SW Decel OC	OC2		
6	SW Const-Speed OC	OC3		
7	Accel OV	OV1	1. Input voltage high 2. Rapid F/R switching 3. External drive/generating; add brake	1. Check supply voltage 2. Increase F/R switch time
8	Decel OV	OV2		
9	Const-Speed OV	OV3		
10	Bus UV Fault	UV	1. Power voltage low 2. Accel time too fast; reduce speed 3. Supply voltage drop 4. Driver hardware abnormal	1. Check input power 2. Reset the fault 3. Contact technical support
11	Motor OL	OL1	1. Power voltage low 2. Motor power too high 3. Motor stall/sudden load	1. Check input power 2. Set the rated motor current 3. Reduce load; check motor/mechanism
12	Driver OL	OL2	1. Power voltage low 2. Load too large	1. Check input power 2. Use a higher-power controller
13	Hall Fault	HALL	1. Hall wire disconnected 2. Strong interference	1. Check motor-driver cable 2. Check for strong interference sources
14	Stall Fault	LOC	1. Load too large 2. Motor jammed	1. Check mechanical connection 2. Check motor cable
19	Current Detect Fault	SCur	Driver hardware damaged	1. Replace the driver
27	Parameter Storage Fault	EEP	Erase/write limit reached	1. Power on again
29	OC Feedback Fault	OCHE	Driver hardware damaged	1. Replace the driver
30	Output Phase Loss	POUT	1. U/V/W phase loss 2. Driver hardware damaged	1. Check U/V/W connection 2. Replace the driver

