

(Technical Data) EA Series Economy-Type Speed Controller

A22 Series Speed-Regulating Governor Type
User Manual

Dear User:

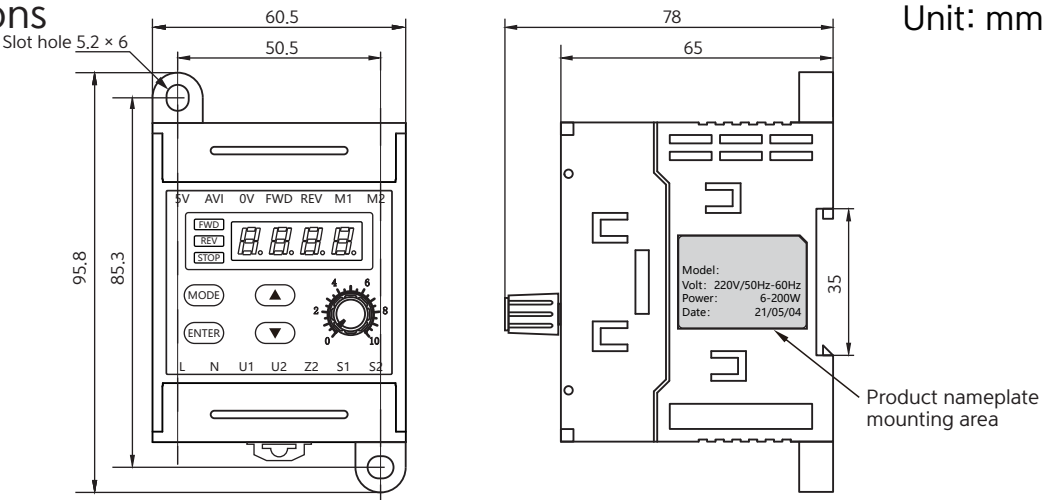
Thank you for purchasing and using this product. To ensure safety and correct operation, please read this manual carefully before use.

- 1
- Functions and Features
- Uses MCU digital control technology, offering rich functions and excellent performance;
 - Equipped with a digital display menu, for quick and convenient parameter adjustment;
 - Display scaling can be set according to user needs; the system automatically converts and displays the target value;
 - Supports slow acceleration, slow deceleration, quick stop, and 3-speed operation;
 - Supports external switch control and 0-5 V analog control;
 - Analog control automatically matches the maximum speed for convenient and safe speed regulation;
 - Automatically detects the input power frequency;
 - Stall protection prevents damage to the motor or speed controller during stall conditions. (This function protects against stall overload but cannot protect against non-stall overload)

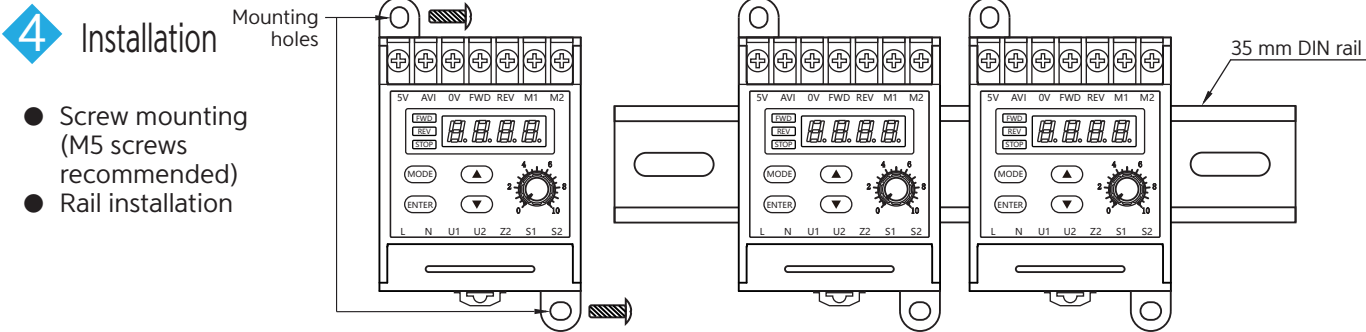
2 Model / Performance Parameter Table

Model	EA-A22S2-200			
Model Definition	Product Type: EA	Series: A22	Power Supply: S1 Single-phase 110V ±10% S2 Single-phase 220V ±10%	Maximum Applicable Motor Power: 200 W
Applicable Motor Power	6W~200W			
Applicable Motor Type	Speed-regulating motor			
Installation Method	Built-in Type			
Motion Control Functions	External switch operation control; speed regulation; slow acceleration; slow deceleration; quick stop; 3-speed mode			
Speed Regulation Methods	Panel ▲/▼ keys; panel rotary knob; 0-5 V analog input			
Speed Regulation Range	50 Hz: 90-1400 r/min; 60 Hz: 90-1700 r/min			
Run Capacitor	External (supplied in speed motor package; user must connect manually)			
Input Power Supply	Single-phase 220V ±10%; 50Hz-60Hz			
Operating Environment	Ambient Temperature: -10°C ~ +40°C (no freezing); Ambient Humidity: Below 85% (no condensation)			

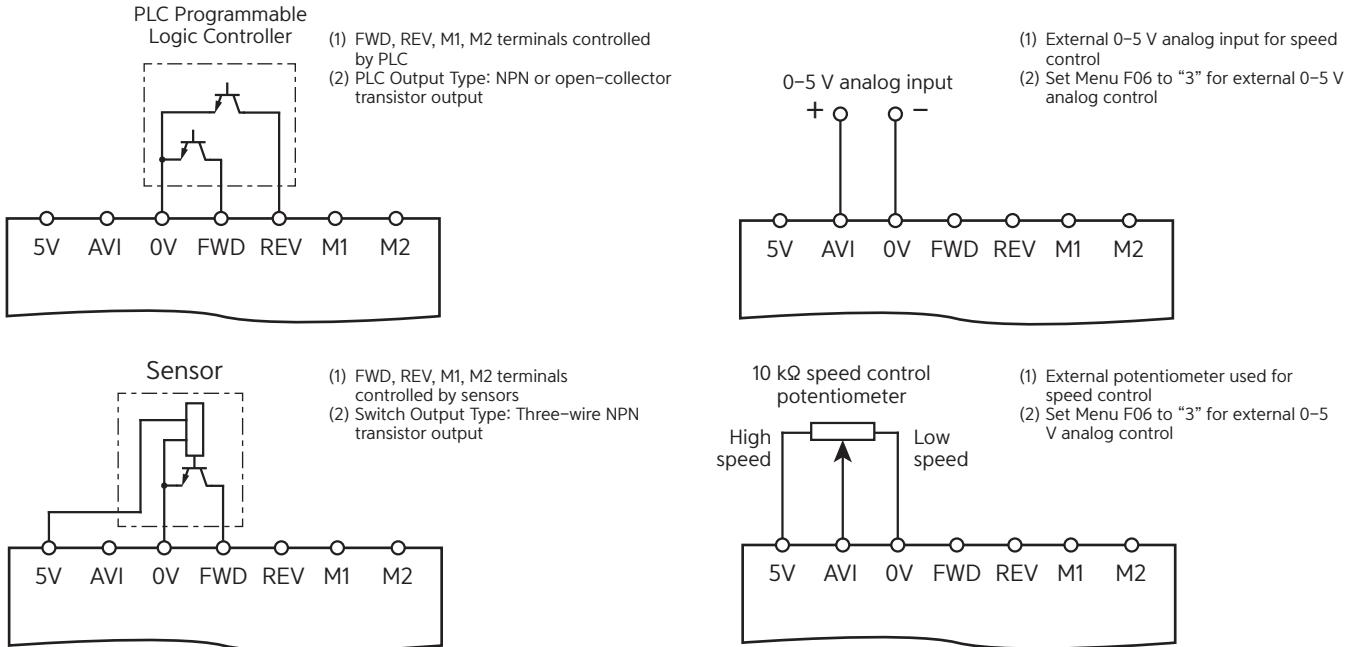
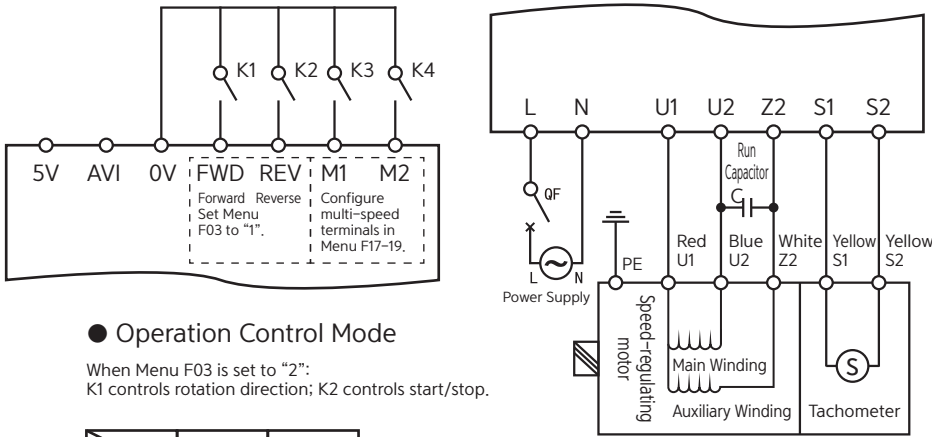
3 Dimensions



(Technical Data) EA Series Economy-Type Speed Controller



5 Wiring Diagram



(Technical Data) EA Series Economy–Type Speed Controller

6 Speed Controller Menu ● Function Code List (R/W: Read/Write; RO: Read-Only)

Function Code	Name	Parameter Description	Setting Range	Default Value	Modification Allowed
F-01	Display Content	1: Motor speed setting 2: Scaled speed setting	1~2	1	R/W
F-02	Scaling factor setting	Scaling factor 1.0~999.9 Scaled speed setting = Motor speed setting / Scaling factor	1.0~999.9	1.0	R/W
F-03	Operation Control Mode	1: Forward/Reverse 2: Forward/Stop	1~2	1	R/W
F-04	Rotation Mode	1: Forward and reverse rotation allowed 2: Forward rotation allowed, reverse rotation prohibited 3: Reverse rotation allowed, forward rotation prohibited	1~3	1	R/W
F-05	Rotation Direction	1: Normal direction 2: Reverse direction	1~2	1	R/W
F-06	Speed Regulation Methods	1: Speed control using panel UP/DOWN keys 2: Speed control using panel rotary knob 3: External analog signal	1~3	1	R/W
F-07	Maximum Speed	From F-08 (minimum speed) to 1700 r/min Limits maximum speed to prevent overspeed and equipment damage	F-08~1700	1400	R/W
F-08	Minimum Speed	90 to F-07 (maximum speed) Limits minimum speed to avoid instability caused by excessively low rotation	90~F-07	120	R/W
F-09	Forward Start Acceleration Time	0.1~10.0 seconds	0.1~10.0	1.0	R/W
F-10	Forward Stop Mode	1: Free stop 2: Quick stop 3: Slow stop	1~3	1	R/W
F-11	Forward Quick-stop Intensity	Effective when F-10 = 2; higher values result in faster stopping	1~10	5	R/W
F-12	Forward stop deceleration time	0.1~10.0 seconds (effective when F-10 = 3)	0.1~10.0	1.0	R/W
F-13	Reverse start acceleration time	0.1~10.0 seconds	0.1~10.0	1.0	R/W
F-14	Reverse Stop Mode	1: Free stop 2: Quick stop 3: Slow stop	1~3	1	R/W
F-15	Reverse Quick-stop Intensity	Effective when F-14 = 2; higher values result in faster stopping	1~10	5	R/W
F-16	Reverse stop deceleration time	0.1~10.0 seconds (effective when F-14 = 3)	0.1~10.0	1.0	R/W
F-17	First Segment Speed	First multi-speed segment selected by M1/M2	F-08~F07	500	R/W
F-18	Second Segment Speed	Second multi-speed segment selected by M1/M2	F-08~F07	800	R/W
F-19	Third Segment Speed	Third multi-speed segment selected by M1/M2	F-08~F07	1000	R/W
F-20	Power Frequency Setting	1: Auto-detection by driver 2: Power frequency 50 Hz 3: Power frequency 60 Hz	1~3	1	R/W
F-21	Restore Factory Settings	1: Do not restore 2: Restore	1~2	1	R/W
F-22	Current Adapted Power Frequency	50: Compatible with 50 Hz AC power supply 60: Compatible with 60 Hz AC power supply		**	RO
F-23	Internal Temperature of Driver	Current internal temperature of the driver			RO
F-24	Software Version			***	RO

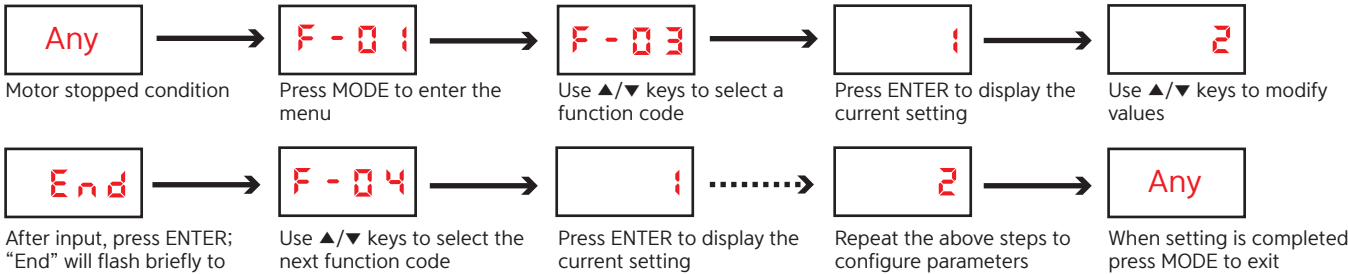
● Fault Maintenance and Status Indication

	Name	Cause	Solution
Fault Code	E.LOC	Motor Stall Fault	Check wiring between controller and motor; inspect for mechanical issues
	E.EEP	Parameter storage fault	Power cycle to clear the alarm
Warning Code	S.run	The motor is currently running; function codes cannot be modified	Make changes after stopping the motor
	S.not.	This key is currently disabled	Modify function code F-04 or F-06
	S.Err	The driver is currently in a fault state	Clear the fault and try again
	S.loc	The keys are currently locked	Press DOWN and ENTER simultaneously to unlock

(Technical Data) EA Series Economy–Type Speed Controller

7 Menu Editing

● For safety reasons, parameter editing is only allowed when the motor is stopped; editing is disabled during operation.



Note: When the driver is in operation or stop display mode, pressing MODE and ENTER simultaneously will lock the keys. All key functions (motor control and menu entry) are disabled. Press DOWN and ENTER simultaneously to unlock and restore key functions.

8 Precautions for Use

- Before use, please check whether the packaging is intact, whether the nameplate matches the purchased model, and whether all accessories are included.
- Installation, wiring, inspection, and related tasks must be performed by qualified technical personnel.
- Follow the wiring instructions in this manual or on the top cover. Incorrect wiring may result in malfunction or danger.
- Do not disassemble the device or alter wiring while the power is on, as this may result in electric shock.
- For first-time use, please perform a no-load test run to confirm that all functions operate normally, and adjust the required parameters.
- Do not use the device in humid, flammable, or corrosive gas environments.
- Ensure proper grounding of the device for safe operation.
- Images in this manual may be processed for clarity; refer to the actual product as the final reference.
- During normal operation, the motor housing temperature may exceed 70°C. Therefore, in environments where the motor may be touched, please place the “High Temperature Warning” label as shown in the illustration!

