

INVERTER

New Product RELEASE

No.21-4E-B

Release of the Plug-In Option FR-E8DS E Kit for the FR-E800 Series

For the FR-E800 series inverter, the plug-in option FR-E8DS E kit is now available.

Features

• 24 VDC input

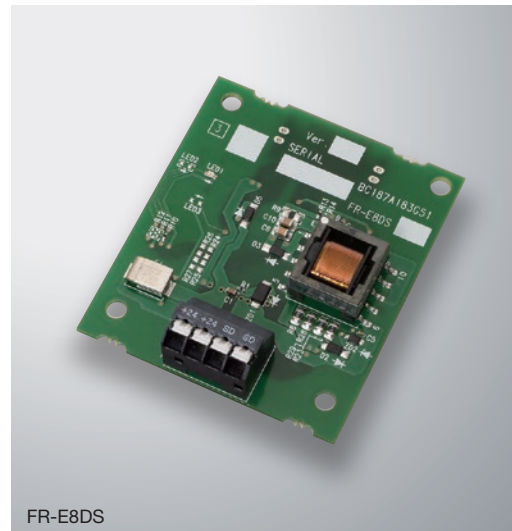
Connecting a 24 V external power supply across terminals +24 and SD enables the 24 V external power supply operation, and the following operations are available even at power-OFF of inverter's main circuit power supply.

- Turning ON/OFF I/O terminals
- Display/operation of the operation panel
- Communication^{*1} with other devices

Turning ON the main circuit power during the 24 V external power supply operation switches the operation to the normal operation.^{*2}

*1: RS-485 communication (standard model), Ethernet communication (Ethernet model and safety communication model)

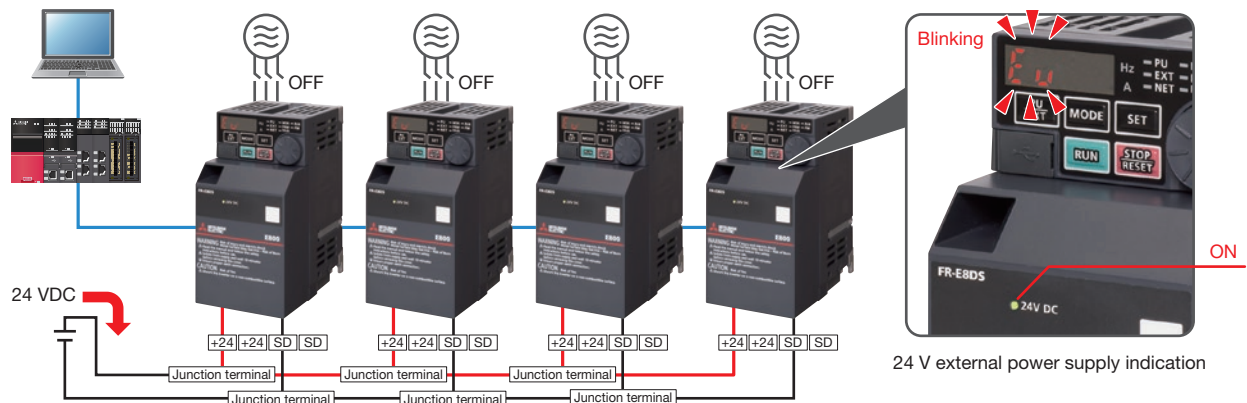
*2: Before the operation is switched, a reset is performed in the inverter.



Benefit

• Easier maintenance

Maintenance can be performed safely as the parameter setting and communication operation can be done while the main circuit power is OFF. When a fault occurs, troubleshooting is facilitated as the fault indication remains after turning OFF the main circuit power supply.



Specifications

During the 24 V external power supply operation, the inverter operation is disabled.

Input terminal specifications

Terminal symbol	Common	Terminal function description	Rated specification ^{*1}
+24	SD	Used for the 24 V external power supply to turn ON/OFF I/O terminals, keep the operation panel ON, and carry out communication with other devices even at power-OFF state of inverter's main circuit power supply. ^{*2}	Input voltage: 23.5 to 26.5 VDC Input current: 0.7 A or less

*1: Prepare a 24 V external power supply according to the rated specification.

*2: Up to four inverters can be connected in parallel.

Availability of the inverter functions while the 24 V external power is supplied

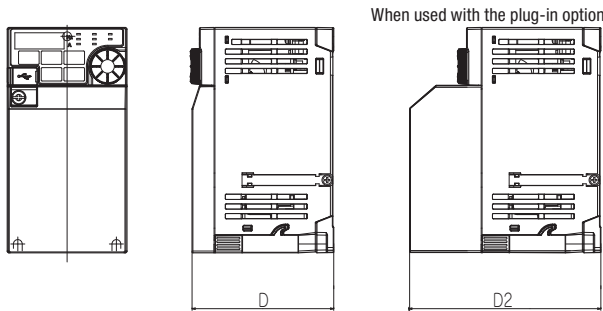
Function	Availability when the FR-E8DS is installed (main circuit power supply is OFF)
Reading/writing parameters	Enabled
Monitor display	Enabled (The monitor items related to the main circuit power supply are not available. ^{*3})
Operation panel indication / key operation	Enabled (The RUN key is disabled.)
Input terminals	Enabled (Terminals 2, 4, and 10 and the start signals (STF and STR) are disabled.)
Output terminals	Enabled (Terminals FM and AM and the output signals related to the main circuit power supply are disabled. ^{*3,4})
Fault indication	Enabled
USB connector	Enabled
Others	<ul style="list-style-type: none"> Parameter unit (FR-PU07(BB)), LCD operation panel (FR-LU08), and enclosure surface operation panel (FR-PA07) are available. Terminal PC cannot be used for 24 VDC power supply. Terminal 10 cannot be used for 5 VDC power supply.

*3: For details, refer to the FR-E800 Instruction Manual (Function).

*4: Terminal FM is provided in the FM type inverter. Terminal AM is provided in the AM type inverter.

Inverter outline dimensions

Note that the depth increases after the front cover for plug-in option is installed.



• Three-phase 200 V class

Inverter model	D	D2
FR-E820-0008(0.1K)	80.5	108.1
FR-E820-0015(0.2K)		
FR-E820-0030(0.4K)	112.5	140.1
FR-E820-0050(0.75K)	132.5	160.1
FR-E820-0080(1.5K)	135.5	163.1
FR-E820-0110(2.2K)		
FR-E820-0175(3.7K)	142.5	170.1
FR-E820-0240(5.5K)	165	192.6
FR-E820-0330(7.5K)		
FR-E820-0470(11K)	190	217.6
FR-E820-0600(15K)		
FR-E820-0760(18.5K)		
FR-E820-0900(22K)		

• Three-phase 575 V class

Inverter model	D	D2
FR-E860-0017	135	162.6
FR-E860-0027		
FR-E860-0040		
FR-E860-0061	147	174.6
FR-E860-0090		
FR-E860-0120		

• Three-phase 400 V class

Inverter model	D	D2
FR-E840-0016(0.4K)	129.5	157.1
FR-E840-0026(0.75K)		
FR-E840-0040(1.5K)	135	162.6
FR-E840-0060(2.2K)		
FR-E840-0095(3.7K)	147	174.6
FR-E840-0120(5.5K)		
FR-E840-0170(7.5K)	190	217.6
FR-E840-0230(11K)		
FR-E840-0300(15K)		
FR-E840-0380(18.5K)		
FR-E840-0440(22K)		

• Single-phase 200 V class

Inverter model	D	D2
FR-E820S-0008(0.1K)	80.5	108.1
FR-E820S-0015(0.2K)		
FR-E820S-0030(0.4K)	142.5	170.1
FR-E820S-0050(0.75K)	135	162.6
FR-E820S-0080(1.5K)	161	188.6
FR-E820S-0110(2.2K)	142.5	170.1

Applicable inverters

The FR-E8DS can be used with the inverters which have the following SERIAL number or later.

Check the SERIAL number indicated on the inverter rating plate or package.

For the location of the rating plate and how to check the SERIAL number, refer to the FR-E800 Instruction Manual (Connection).

Model	Country of origin indication	SERIAL	Manufactured year and month
FR-E820-0008(0.1K) to 0900(22K) FR-E840-0016(0.4K) to 0440(22K) FR-E860-0017 to 0120 FR-E820S-0008(0.1K) to 0110(2.2K)	MADE in Japan	□□21Z○○○○○○ or later	December 2021 or later

Refer to the FR-E800 inverter catalog for the inverter model.

Check the Instruction Manual. ▶



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