No. 742E

MITSUBISHI ELECTRIC Inverter Sales and Service

Firmware Upgrade for FR-A800 and FR-A800 Plus Series Inverters

Thank you for your continued patronage of Mitsubishi Electric drive control products.

The firmware of FR-A800 and FR-A800 Plus series inverters will be upgraded to improve functionality.

1. Products Affected

FR-A800 series inverters (excluding the FR-A800-P),

FR-A800 Plus series inverters (excluding the FR-A800-R2R/-AWH)

2. Details of Change

Mitsubishi Electric high-performance energy-saving motor SF-PR 0.4kW will be supported. Due to this, the following changes will be applied.

(1) The Pr.0 and Pr.12 settings can be changed automatically using Pr.71. When the initial values are set in Pr.0 and Pr.12, the Pr.0 and Pr.12 settings are automatically changed to the values in the following table by setting Pr.71 = "70, 73, or 74" (SF-PR).

<Before>

Inverter		Pr.0 value (%) after automatic change							Pr.12 value (%) after automatic change			
FR-A820-[]	FR-A840-[]	Standard motor		Constant-torque motor		SF-PR			Standard	Constant-	SF-PR	
		SLD/ LD	ND/ HD	SLD/ LD	ND/ HD	Pr.81 ≠ "2, 4, 6"	Pr.81 = "2"	Pr.81 = "4"	Pr.81 = "6"	Motor	torque S Motor	SF-FK
00046 (0.4K)	00023 (0.4K)	6			6	4	4	4	4	4	4	4

<After>

Inverter		Pr.0 value (%) after automatic change							Pr.12 value (%) after automatic change			
FR-A820-[]	FR-A840-[]	motor		Constant-torque motor		SF-PR				Standard	Constant- torque	SF-PR
			ND/ HD	SLD/ LD	ND/ HD	Pr.81 ≠ "2, 4, 6"	Pr.81 = "2"	Pr.81 = "4"	Pr.81 = "6"	Motor	Motor	
0.4K(00046)	0.4K(00023)	6		6		5	8	6.5	7.5	4	4	5

(2) The inverter will store the motor constants of the SF-PR 0.4kW. When Advanced magnetic flux vector control, Real sensorless vector control, or Vector control is selected, the required motor constants of the SF-PR 0.4kW will be applied.

(Perform offline auto tuning or online auto tuning as required.)

(3) When the inverter's applicable motor capacity is 0.4 kW, the SF-PR slip amount adjustment mode is enabled by setting the number of poles of the SF-PR to be used in Pr.673.

Date of issue	May 2023	Title	Firmware Upgrade for FR-A800 and FR-A800 Plus Series Inverters	Mitsubishi Electric Corp., Nagoya Works 5-1-14 Yada-minami, Higashi-ku, Nagoya 461-8670 Tel.: +81 (52) 721-2111 Main line
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3. Date of Change

Country of origin	Date of Change
MADE IN JAPAN	The change will be sequentially applied to the June 2023 production or later.
MADE IN CHINA	The change will be sequentially applied to the July 2023 production or later.

4. Product Identification

The SERIAL (determined by date of production) can be checked on the rating plate or packaging plate of the inverter.

SERIAL SERIAL

The SERIAL consists of one symbol, two characters indicating the production year and month, and the control number (six characters for the rating plate, three characters for the packaging plate).

The last digit of the production year is indicated as the Year, and the Month is indicated by 1 to 9, X (October), Y (November), or Z (December).

5. Firmware Version

The inverter firmware version to which the change described will be applied is as follows:

Series	Firmware version			
FR-A800	29 or leter			
FR-A800 Plus	38 or later			

For how to install the downloaded firmware, refer to the FR Configurator2 (SW1DND-FRC2-E) Instruction Manual (IB-0600516ENG).