

### 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

The PM motor EM-A series (200 V class 0.75kW to 7.5kW) is supported.

- (1) PM parameter initialization setting can be configured by using Pr.998. Setting "3044 or 3144" (EM-A) in Pr.998 enables PM parameter initialization for the EM-A motor.

| Pr. | Name                        | Initial value | Setting value | Description                                                   |
|-----|-----------------------------|---------------|---------------|---------------------------------------------------------------|
| 998 | PM parameter initialization | 0             | 3044          | Parameter setting (in rotations per minute) for an EM-A motor |
|     |                             |               | 3144          | Parameter setting (in frequencies) for an EM-A motor          |

- (2) Settings can be configured according to the motor by setting Pr.71. Setting Pr.71 = "1140" (EM-A) sets the motor thermal characteristic and the motor constant according to the EM-A motor.
- (3) When the EM-A motor is used, offline auto tuning cannot be performed by setting Pr.96 = "1 or 101". Tuning can be performed by setting Pr.96 = "11".
- (4) The brake sequence function is available when the EM-A motor is used.  
For details on the brake sequence function, refer to "5.14.3 Brake sequence function" in the FR-A800 Instruction Manual (Detailed).
- (5) The automatic restart after instantaneous power failure function is available when the EM-A motor is used.  
When the EM-A motor is used, the frequency search is available at 450 r/min or higher.  
For details on the automatic restart after instantaneous power failure function, refer to "5.14.15 Automatic restart after instantaneous power failure/flying start with a PM motor" in the FR-A800 Instruction Manual (Detailed).

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

### 3. Date of Change

| Country of origin | Date of change                                                                     |
|-------------------|------------------------------------------------------------------------------------|
| MADE IN JAPAN     | The change will be sequentially applied to the September 2023 production or later. |
| MADE IN CHINA     | The change will be sequentially applied to the October 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 example on rating plate   | SERIAL example on packaging plate |
| □ 3 9 ○○○○○○                     | □ 3 9 ○○○                         |
| Symbol Year Month Control number | Symbol Year Month Control number  |
| 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<br>FR-A800 Plus | 39 or later      |

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