# MITSUBISHI ELECTRIC Inverter

## **Sales and Service**

### Firmware Upgrade for FR-A800-R2R Inverters (FR-A800 Plus Series)

Thank you for your continued patronage of Mitsubishi Electric drive control products. The firmware of FR-A800-R2R inverters (FR-A800 plus series) will be upgraded to improve functionality.

#### 1. Products Affected

FR-A800-R2R inverters (FR-A800 Plus series)

#### 2. Details of the Change

(1) Extended maximum setting value of the tension command

The maximum setting value of the tension command will be changed from 10,000 to 50,000 N.

| Pr.  | Pr. group | Name                                      | Change  |  |
|------|-----------|---|---|--|
| 1401 | R301      | Tension command increment                 | The setting range of the tension command value will be<br>changed as follows.<br>0: 0 to 500 N,<br>1: 0 to 5,000 N,<br>2: 0 to 50,000 N |  |
| 365  | R102      | Tension command value (RAM)               |   |  |
| 366  | R330      | Tension command value (RAM,<br>EEPROM)    |   |  |
| 1137 | R331      | Tension sensor feedback bias              |   |  |
| 1139 | R333      | Tension sensor feedback gain              | The setting range will be 0 to 50,000 N.  |  |
| 1281 | R402      | Commanded tension monitoring<br>reference | (When Pr. 1401 Tension command increment is set to "2".)  |  |
| 1283 | R321      | Cushion time reference tension            |   |  |
| 1403 | R311      | Tension command bias                      |   |  |
| 1405 | R313      | Tension command gain                      |   |  |

#### (2) Functions available during tension sensor feedback torque control

The following functions will be available during tension sensor feedback torque control.

|                  | -                  |   | -   |
|------------------|--------------------|---|---|
| Pr.              | Pr. group          | Name  | Change  |
| 424              | R104               | Dancer / tension sensor feedback input offset | The PID offset displacement function will be available to<br>calibrate the reference value of the tension sensor<br>feedback amount (PID measured value).   |
| 190<br>to<br>196 | M400<br>to<br>M406 | Output terminal function selection            | The following signals will be available for tension sensor<br>feedback torque control.<br>16, 116: RL signal (PID forward/reverse rotation output)<br>47, 147: PID signal (While PID control is activated)<br>48, 148: Y48 signal (PID deviation limit) |
| 554              | A604               | PID signal operation selection                | Setting will be available for tension sensor feedback torque control.   |

| Date<br>of<br>issue | February 2019 | Title | Firmware Upgrade for FR-A800-R2R<br>Inverters (FR-A800 Plus Series) | 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

The change will be sequentially applied to the products manufactured in February 2019 or later.

#### 4. Product Identification

The SERIAL (determined by date of production) can be checked on the product's rating plate.

|        | 9    | 2     | 000000         |
|--------|------|-------|----------------|
| Symbol | Year | Month | Control number |

SERIAL

The SERIAL consists of one symbol, two characters indicating the production year and month, and six characters indicating the control number.

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).