## No. 683EA

# MITSUBISHI ELECTRIC Inverter Sales and Service

Firmware Upgrade for the FR-A800, A800 Plus, F800 Series General-Purpose Inverters and the FR-B, B3 Series Inverters (FR-A800 Specification) for Pressure-Resistant Explosion-Proof Motors

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

The firmware of the FR-A800, A800 Plus, F800 series general-purpose inverters and the FR-B, B3 series inverters (FR-A800 specification) for pressure-resistant explosion-proof motors will be upgraded to improve functionality.

#### 1. Products Affected

FR-A800 (not including the FR-A800-P), FR-A800 Plus (FR-A800-CRN/LC), FR-F800, FR-B, B3 series inverters

#### 2. Details of Change

(1) Addition of Internal storage device fault (E.PE6)

The operation of the storage device in the inverter can be checked.

If a data fault occurs in the storage device in the inverter, the protective function (E.PE6) is activated to shut off the inverter output.

When the read value of Pr.890 is "7" or smaller, an inverter reset after All parameter clear can return the operation to normal. (The parameters that had been changed before All parameter clear must be set again.)

When E.PE6 occurs, faulty area in the internal storage device can be checked by reading Pr.890.

Pr.	Name	Initial value	Setting range	Description
890 H325	Internal storage device status indication	0	(0 to 9999)*1	A faulty area detected by check function can be indicated in the internal storage device.

<sup>\*1</sup> Read only

The following table shows faulty areas indicated by the read value of Pr.890.

Some read values indicate that there are multiple faulty areas.

(For example, the read value "7" indicates that all the areas described in No. 1 to No. 3 are faulty.)

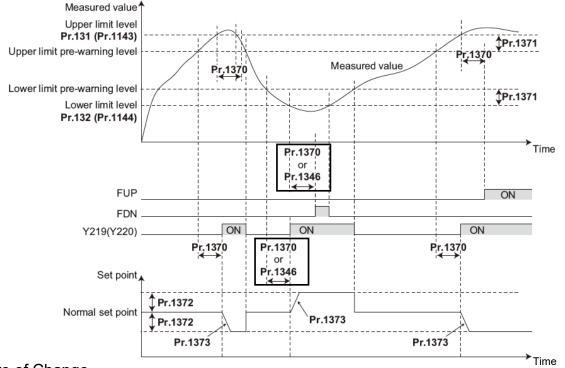
No.	Read value	Description
1	1, 3, 5, 7	Storage area other than the area for parameter settings is faulty (such as area for the set frequency). (When All parameter clear is performed, the set frequency, remotely-set frequency, host name for Ethernet communication, position pulse*2, multi-revolution counter*2, and offline auto tuning data are cleared.)
2	2, 3, 6, 7	Storage area for standard parameter settings is faulty.
3	4, 5, 6, 7	Storage area for communication parameter settings is faulty.
4	8 to 9999	Area for manufacturer setting is faulty.

<sup>\*2</sup> The data is cleared only in the FR-A800 and FR-A800 Plus series inverters.

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(2) Addition of PID lower limit operation detection time (FR-F800 only) Pr.1346 PID lower limit operation detection time will be added. Detection time for PID upper/lower limit pre-warning can be set separately.

Pr.	Name	Initial value	Setting range	Description
1346 A457	PID lower limit operation detection time	9999	0 to 900 s	Set the time from when the measured value reaches the lower limit pre-warning level (Pr.1371) until the set point change is started.
			9999	The Pr.1370 setting is applied to the operation.
1370 A442	Detection time for PID limiting operation	0 s	0 to 900 s	Set the time from when the measured value reaches the pre-warning level (Pr.1371) until the set point change is started.
1371	PID upper/lower limit	9999	0% to 50%	Set the operation range for the PID upper/lower limit pre-warning function.
A443	pre-warning level range	9999	9999	The PID upper/lower limit pre-warning function is disabled.
1372 A444	PID measured value control set point change amount	5%	0% to 50%	Set the set point change amount for the PID upper/lower limit pre-warning operation.
1373 A445	PID measured value control set point change rate	0%	0% to 100%	Set the set point change rate for the PID upper/lower limit pre-warning operation.



3. Date of Change

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Country of origin	Date of Change
MADE IN JAPAN	The change will be sequentially applied to the October 2021 production or later.
MADE IN CHINA	The change will be sequentially applied to the January 2022 production or later.

### 4. Product Identification

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

□ 1 X ○○○○○ 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).