

### Firmware Upgrade for FR-CC2 Series Converter Units

Thank you for your continued patronage of Mitsubishi Electric drive control products.  
The firmware of the FR-CC2 series converter units will be upgraded to improve functionality.

#### 1. Products Affected

FR-CC2-H  
FR-CC2-C  
FR-CC2-N

#### 2. Details of Change

Pr.244 (Cooling fan operation selection) and the Cooling fan operation input (X21) signal will be added. Cooling fan ON/OFF control is enabled/disabled using the parameter. The same operation is applied to all regardless of the number of cooling fans.

The Cooling fan operation input (X21) signal enables switching ON/OFF of the cooling fan according to the converter unit internal temperature.

Pr.	Name	Initial value	Setting range	Description
244 H100	Cooling fan operation selection	0	0, 2	<p>0: Cooling fan ON/OFF control is disabled. The cooling fan operates at power ON.</p> <p>2: Cooling fan ON/OFF control is enabled. While the Cooling fan operation input (X21) signal is OFF, the cooling fan is always ON. While the X21 signal is ON, the converter unit status is monitored and the fan switches ON/OFF according to the temperature.</p> <p>The cooling fan is OFF during resetting while power is ON regardless of the Pr.244 setting.</p> <p>To assign the X21 signal, set "21" in Pr.178, Pr.187, or Pr.189 (Input terminal function selection).</p>
178 T700	RDI terminal function selection	9999	7, 21, 62, 9999	<p>7: OH (External thermal relay input) 21: X21 (Cooling fan operation input) 62: RES (Converter reset) 9999: No function</p>
187 T709	OH terminal function selection	7		
189 T711	RES terminal function selection	62		

<b>Date of issue</b>	August 2023	<b>Title</b>	Firmware Upgrade for FR-CC2 Series Converter Units	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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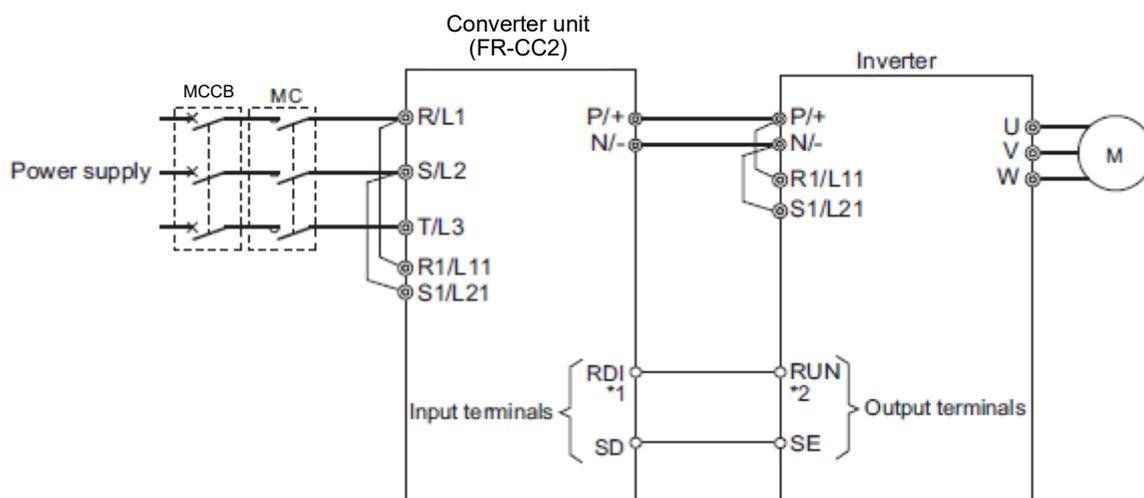
Use the Cooling fan operation input (X21) signal in combination with a certain inverter output signal to control the converter unit cooling fan in conjunction with the inverter operation.

Application examples are as follows.

Example 1: When the Inverter running (RUN) signal of the inverter is input to terminal RDI of the converter unit, the converter unit cooling fan can be operated only during inverter operation.

Example 2: When the Cooling fan operation command (Y206) signal of the inverter is input to terminal RDI of the converter unit, the converter unit cooling fan can be operated in conjunction with the inverter cooling fan.

The following connection diagram shows the example using the RUN signal of the inverter and the RDI signal of the converter unit. (The FR-CC2 is used in the sink logic.)



\*1 To use the Cooling fan operation input (X21) signal, assign the function to an input terminal using Pr.178 of the converter unit.

\*2 To turn ON/OFF the Cooling fan operation input (X21) signal in conjunction with inverter operation, assign the Cooling fan operation command (Y206) signal or the Inverter running (RUN) signal in negative logic to an output terminal of the inverter.

### 3. Date of Change

Country of origin	Date of change
MADE IN JAPAN	The change will be applied to the September 2023 production or later.
MADE IN CHINA	The change will be applied to the October 2023 production or later.

### 4. Product Identification

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

□ 3 9 ○○○○○○  
Symbol Year Month Control number

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).