Thank you for choosing this Mitsubishi Electric inverter option unit. This Instruction Manual provides handling information and precautions for use of the equipment. Incorrect handling might cause an unexpected fault. Before using this product, always read this Instruction Manual carefully to use this product correctly.

Please forward this Instruction Manual to the end user.

### SAFETY INSTRUCTIONS

- While power is ON or for some time after power-OFF, do not touch the inverter and attachment since they will be extremely hot. Touching these devices may cause a burn.
- ❌ The product must be transported in correct method that corresponds to the weight. Failure to do so may lead to injuries. Special attention must be paid to the edges of the product.
- ❌ Foreign conductive objects must be prevented from entering the inverter. That includes screws and metal fragments or other flammable substance such as oil.

This attachment allows approximately 70% of the heat generated by the inverter to be radiated outside the enclosure by protruding the inverter heatsink section out from the rear side of the enclosure.

## 1. ENCLOSED ITEMS

Check the attachment model, and check that the following items are enclosed with the indicated quantity.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Enclosed items</th>
<th>Attachment model</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Upper installation frame</td>
<td>FR-A8CN01</td>
</tr>
<tr>
<td>b</td>
<td>Upper cover</td>
<td>1</td>
</tr>
<tr>
<td>c</td>
<td>Lower installation frame</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>Upper/lower frame installation screw</td>
<td>4 (M5-12)</td>
</tr>
<tr>
<td>e</td>
<td>Cover installation screw</td>
<td>2 (M4-10)</td>
</tr>
<tr>
<td>f</td>
<td>Right installation frame</td>
<td>—</td>
</tr>
<tr>
<td>g</td>
<td>Left installation frame</td>
<td>—</td>
</tr>
<tr>
<td>h</td>
<td>Left/right frame installation screw</td>
<td>—</td>
</tr>
</tbody>
</table>

*1 For the FR-A8CN06 to 09, the lower installation frame (c) is not enclosed. Use the inverter’s lower installation frame by changing its installation position.

*2 Use the fixing screws for the standard installation feet of the inverter.
## 2 APPLICABLE MODELS

<table>
<thead>
<tr>
<th>Model</th>
<th>Fr-A8cn01</th>
<th>Fr-A8cn02</th>
<th>Fr-A8cn03</th>
<th>Fr-A8cn04</th>
<th>Fr-A8cn05</th>
<th>Fr-A8cn06</th>
<th>Fr-A8cn07</th>
<th>Fr-A8cn08</th>
<th>Fr-A8cn09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fr-A820</td>
<td>00105(1.5K)</td>
<td>00167(2.2K)</td>
<td>00250(3.7K)</td>
<td>00340(5.5K)</td>
<td>00490(7.5K)</td>
<td>00630(11K)</td>
<td>00770(15K)</td>
<td>00930(18.5K)</td>
<td>01250(22K)</td>
</tr>
<tr>
<td>Fr-A840</td>
<td>00023(0.4K)</td>
<td>00038(0.75K)</td>
<td>00052(1.5K)</td>
<td>00083(2.2K)</td>
<td>00126(3.7K)</td>
<td>00170(5.5K)</td>
<td>00250(7.5K)</td>
<td>00310(11K)</td>
<td>00380(15K)</td>
</tr>
<tr>
<td>Fr-F820</td>
<td>00105(2.2K)</td>
<td>00167(3.7K)</td>
<td>00250(5.5K)</td>
<td>00340(7.5K)</td>
<td>00490(11K)</td>
<td>00630(15K)</td>
<td>00770(18.5K)</td>
<td>00930(22K)</td>
<td>01250(30K)</td>
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<tr>
<td>Fr-F840</td>
<td>00023(0.75K)</td>
<td>00038(1.5K)</td>
<td>00052(2.2K)</td>
<td>00083(3.7K)</td>
<td>00126(5.5K)</td>
<td>00170(7.5K)</td>
<td>00250(11K)</td>
<td>00310(15K)</td>
<td>00380(18.5K)</td>
</tr>
</tbody>
</table>

*1 For replacement from the Fr-F720(P)-75K, the enclosure cut dimensions are not compatible with those of the heatsink protrusion attachment (Fr-A7CN10) of the Fr-F720(P)-75K.

## 3 ENCLOSURE CUT DIMENSIONS

(1) Cut an enclosure to the following dimensions according to the inverter capacity.

**FR-A8CN01**

![Diagram](image1)

(Unit:mm)

**FR-A8CN02**

![Diagram](image2)

(Unit:mm)

**FR-A8CN03**

![Diagram](image3)

(Unit:mm)

**FR-A8CN04**

![Diagram](image4)

(Unit:mm)
(2) Refer to "INSTALLATION PROCEDURE" on page 5 to assemble the attachment to the inverter. After assembly, install the inverter in the enclosure.

**NOTE**
- Since the cooling section, which comes out of the enclosure, has a cooling fan, avoid environment with water drops, oil mist, dust, etc.
- Be careful not to drop screws, dust, etc. into the inverter and cooling fan section.
- A gap of approximately 1 mm is left between the FR-A8CN and the inverter. (The inverter is not in an enclosed condition.)
4 OUTLINE DIMENSION DRAWINGS

(----: Enclosure cut dimensions)

FR-A8CN01

FR-A8CN02

FR-A8CN03

FR-A8CN04

FR-A8CN05

FR-A8CN06

(Unit:mm)
5 INSTALLATION PROCEDURE

**FR-A8CN01**
- (a) Upper installation frame
- (b) Upper cover
- (c) Lower installation frame
- (e) Cover installation screw M4

**FR-A8CN02**
- (a) Upper installation frame
- (b) Upper cover
- (d) Upper/lower frame installation screw M5
- (e) Cover installation screw M4

*Install after making sure that the lug is firmly fitted into the groove.*
6 INSTALLATION PROCEDURE

FR-A8CN03

(a) Upper installation frame
(b) Upper cover
(c) Lower installation frame
(d) Upper/lower frame installation screw M5

FR-A8CN04

(a) Upper installation frame
(b) Upper cover
(e) Cover installation screw M4
(d) Upper/lower frame installation screw M8
(c) Lower installation frame

FR-A8CN05

(a) Upper installation frame
(b) Upper cover
(e) Cover installation screw M4
(g) Left installation frame
(f) Right installation frame
(c) Lower installation frame
(d) Upper/lower frame installation screw
(h) Left/right frame installation screw M4

FR-A8CN06

(a) Upper installation frame
(b) Upper cover
(e) Cover installation screw M4
(g) Left installation frame
(f) Right installation frame
(c) Lower installation frame
(d) Upper/lower frame installation screw
(h) Left/right frame installation screw M4

FR-A8CN07

(a) Upper installation frame
(b) Upper cover
(e) Cover installation screw M4
(g) Left installation frame
(f) Right installation frame
(c) Lower installation frame
(d) Upper/lower frame installation screw
(h) Left/right frame installation screw M4

FR-A8CN08

(a) Upper installation frame
(b) Upper cover
(e) Cover installation screw M4
(g) Left installation frame
(f) Right installation frame
(c) Lower installation frame
(d) Upper/lower frame installation screw
(h) Left/right frame installation screw M4
When carrying the inverter, do not hold the upper section of the upper installation frame (a). Doing so may change the frame shape.

For the FR-A8CN06 to 09, change the position of the standard installation feet/lower section and use it instead of the lower installation frame (c).

For the FR-A8CN05 to 09, fit the upper cover (b) to the upper installation frame (a) first, and then install the upper installation frame (a) to the inverter. When the upper cover (b) is installed to the upper installation frame (a), a gap may sometimes remain between the lower part of the upper cover (b) and the upper installation frame (a). Install the upper cover after checking that no gap exists.

Remove the standard installation foot/upper section of the inverter. Use the fixing screws for the standard installation feet to fix the upper installation frame.

Remove the standard installation foot/lower section of the inverter. Use the fixing screws for the standard installation feet to fix the lower installation frame.

**NOTE**

- When replacing the cooling fan, remove the upper cover (b) and then replace the cooling fan from the opening. (For details on the cooling fan replacement, refer to the Instruction Manual of the inverter.)

### 6 DEPTH DIMENSIONS

When a 700 series option unit is replaced with an 800 series option unit, depth requirements outside and inside the enclosure differ as shown in the shaded area of the table below.

<table>
<thead>
<tr>
<th>Attachment model</th>
<th>D (mm)</th>
<th>D1 (mm)</th>
<th>Attachment model</th>
<th>D (mm)</th>
<th>D1 (mm)</th>
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<tbody>
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<td>FR-A7CN01</td>
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<td>106.4</td>
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<td>FR-A7CN04</td>
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<td>110.6</td>
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<td>FR-A7CN05, 06</td>
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<tr>
<td>FR-A7CN11</td>
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<td>120</td>
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<td>FR-A7CN10</td>
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<td>183.5</td>
<td>FR-A8CN08</td>
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<td>183.5</td>
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<td>FR-A7CN08, 09</td>
<td>116.5</td>
<td>183.5</td>
<td>FR-A8CN09</td>
<td>152.3</td>
<td>147.7</td>
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