

### FR-HAL Series General-Purpose Inverter Options Certified as Complying with the UL/CE/EAC Standards

Thank you for your continued patronage of Mitsubishi Electric drive control products. The FR-HAL series general-purpose inverter options will be compliant with the UL/CE/EAC standards, and their appearances will be changed.

#### 1. Products Affected



FR-HAL-0.4K to 110K, FR-HAL-H0.4K to H560K

#### 2. Details of the Change

The FR-HAL series will be compliant with the UL/CE/EAC standards. Due to this, the standards label will be added, the indications on the rating plate and packaging will be changed, and outline dimensions will be changed.

##### (1) Addition of the standards label

The standards label with UL/CE/EAC marks will be added. (The label position differs depending on the capacity.)

Area	Before	After
Standards label	UL/CE/EAC marks not applied	<p data-bbox="1043 1066 1362 1095">UL/CE/EAC marks applied</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p data-bbox="983 1245 1136 1296">UL mark</p> </div> <div style="text-align: center;">  <p data-bbox="1198 1245 1418 1296">CE/EAC marks</p> </div> </div>

<b>Date of issue</b>	September 2020	<b>Title</b>	FR-HAL Series General-Purpose Inverter Options Certified as Complying with the UL/CE/EAC Standards	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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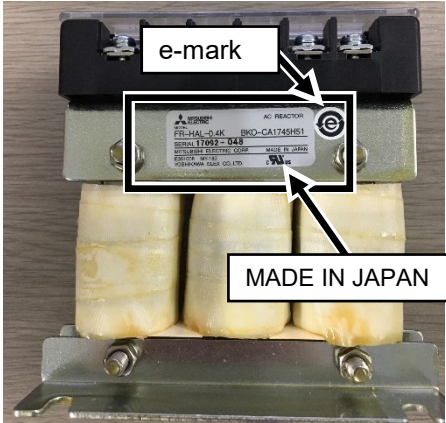
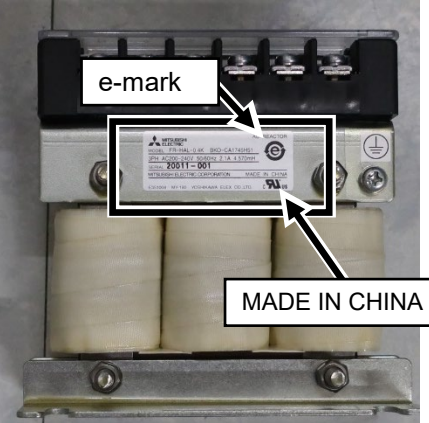
(2) Change of the indications on the rating plate and packaging (for the FR-HAL-0.4K to 55K)

The country of origin of the reactors will be changed from Japan to China.



Due to this, the country-of-origin indications on the rating plate and packaging of the FR-HAL-0.4K to 55K reactors will be changed.

An e-mark (mark indicating that no hazardous substances are present) will be printed on the rating plate.

Example) FR-HAL-0.4K

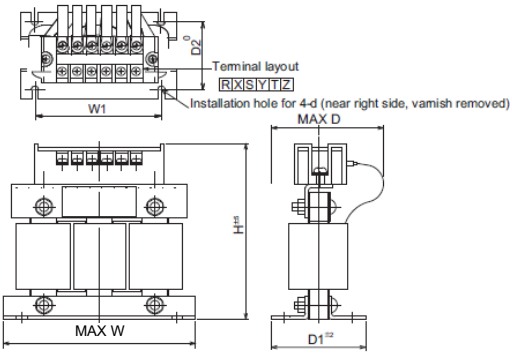
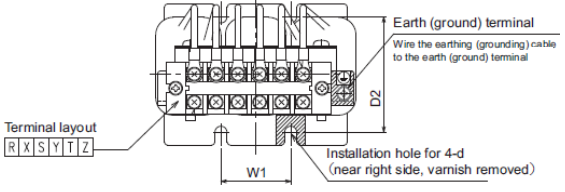
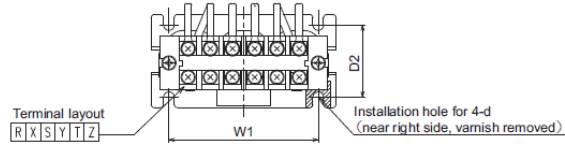
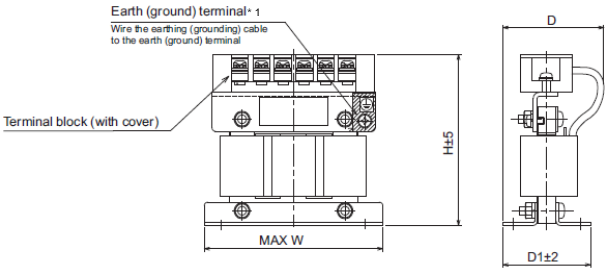
Area	Before	After
Rating plate	 <p>The image shows the rating plate of an FR-HAL-0.4K reactor before the change. It features a label with the following text: 'MITSUBISHI', 'FR-HAL-0.4K', 'BKO-CA1745H1', 'SINCE 11/01/14', 'MITSUBISHI ELECTRIC CORP.', 'MADE IN JAPAN', and 'POWER SYSTEMS'. A callout box labeled 'e-mark' points to a circled 'e' symbol on the label. Another callout box labeled 'MADE IN JAPAN' points to the 'MADE IN JAPAN' text on the label.</p>	 <p>The image shows the rating plate of an FR-HAL-0.4K reactor after the change. It features a label with the following text: 'MITSUBISHI', 'FR-HAL-0.4K', 'BKO-CA1745H1', 'SINCE 11/01/14', 'MITSUBISHI ELECTRIC CORP.', 'MADE IN CHINA', and 'POWER SYSTEMS'. A callout box labeled 'e-mark' points to a circled 'e' symbol on the label. Another callout box labeled 'MADE IN CHINA' points to the 'MADE IN CHINA' text on the label.</p>

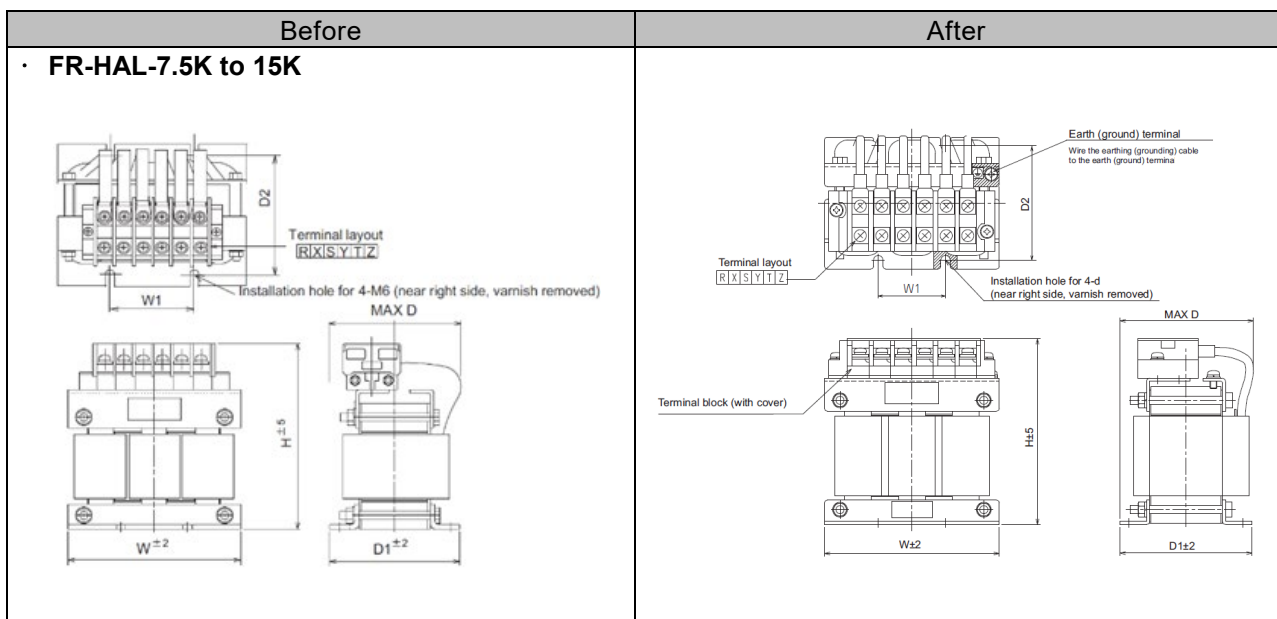
For the earthing (grounding) mark and the earth (ground) terminal, see (3) Change of outline dimensions.

Area	Before	After
Packaging	 <p>The image shows the packaging of an FR-HAL-0.4K reactor before the change. It features a cardboard box with the following text: '三菱电机', '变频调速器专用 选件', '原产地: 日本国', and '合格证'. A callout box labeled '三菱电机' points to the '三菱电机' text on the box. Another callout box labeled '变频调速器专用 选件' points to the '变频调速器专用 选件' text on the box. A third callout box labeled '原产地: 日本国' points to the '原产地: 日本国' text on the box. A fourth callout box labeled '合格证' points to the '合格证' text on the box. The bottom of the box features the Mitsubishi Electric logo and the text 'MITSUBISHI ELECTRIC CORPORATION' and 'MADE IN JAPAN'. A callout box labeled 'MITSUBISHI ELECTRIC CORPORATION' points to the 'MITSUBISHI ELECTRIC CORPORATION' text on the box. A fifth callout box labeled 'MADE IN JAPAN' points to the 'MADE IN JAPAN' text on the box.</p>	 <p>The image shows the packaging of an FR-HAL-0.4K reactor after the change. It features a cardboard box with the following text: '三菱电机', '变频调速器专用 选件', '原产地: 中国', and '合格证'. The bottom of the box features the Mitsubishi Electric logo and the text 'MITSUBISHI ELECTRIC CORPORATION' and 'MADE IN CHINA'.</p>

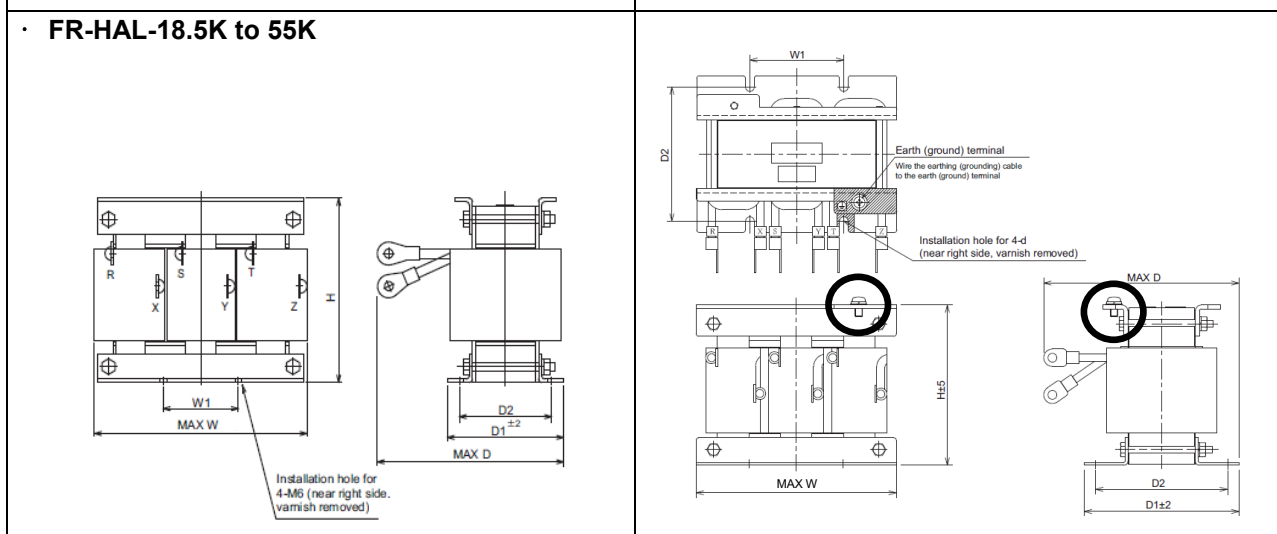
(3) Change of outline dimensions

The outline dimensions will be changed as follows.

Before	After
<p>• FR-HAL-0.4K to 5.5K</p> 	<p>Top view of FR-HAL-2.2K to 5.5K</p>  <p>Top view of FR-HAL-0.4K to 1.5K</p>  <hr/>  <p>*1 The earth (ground) terminal of the FR-HAL-2.2K to 5.5K is next to the terminal block.</p>
<p>The width, height, and depth dimensions are basically the same.</p>	



The width, height, and depth dimensions are basically the same.



The height will be increased by about 8 mm due to the earth (ground) terminal screw's head (as shown in the black circles)  
 The width, height, and depth dimensions are basically the same.

Before										After									
<b>FR-HAL-75K, 110K</b>																			
Model	W	W1	W2	H	H1	D	D1	D2	D3	Model	W	W1	W2	H	H1	D	D1	D2	D3
110K	330	270	170	325±10	6	259	165	127	83±1	110K	330	285	170	325±10	6	259	165	127	83±1

**FR-HAL-75K**

The width, height, and depth dimensions are basically the same.

**FR-HAL-110K**

The W1 dimension will be changed as shown in the table above, as the metal sheet on which the earth (ground) terminal is mounted will be 15 mm longer. Due to the dimension change, the position of the earth (ground) terminal (in the black circle) will be moved 15 mm toward the edge of the metal sheet.

The distance from the edge of the metal sheet to the earth (ground) terminal will be the same.

<p>• <b>FR-HAL-H0.4K to H3.7K</b></p>	
<p>The width, height, and depth dimensions are basically the same.</p>	

Before								After							
<p>• <b>FR-HAL-H5.5K, H7.5K</b></p>															
Model	W	W1	W2	H	D	D1	D2	Model	W	W1	W2	H	D	D1	D2
H5.5K	160	145	7.5	142	71±5	72	55	H5.5K	160	145	7.5	150	71±5	72	55
H7.5K	160	145	7.5	142	91±5	91	75	H7.5K	160	145	7.5	150	91±5	91	75

The H dimension will be changed as shown in the table above.

<p>• <b>FR-HAL-H11K, H15K</b></p>	
<p>The width, height, and depth dimensions are basically the same.</p>	

**Before** **After**

• **FR-HAL-H18.5K to H37K**

Model	W	W1	W2	H	D	D1	D2
H18.5K	220	200	10	215	170	90	70
H22K	220	200	10	215	170	90	70
H30K	220	200	10	215	170	96	75
H37K	220	200	10	214	170	120	100

Model	W	W1	W2	H	D	D1	D2
H18.5K	220	200	10	212	155	90	70
H22K	220	200	10	212	155	90	70
H30K	220	200	10	212	153	96	75
H37K	220	200	10	211	160	120	100

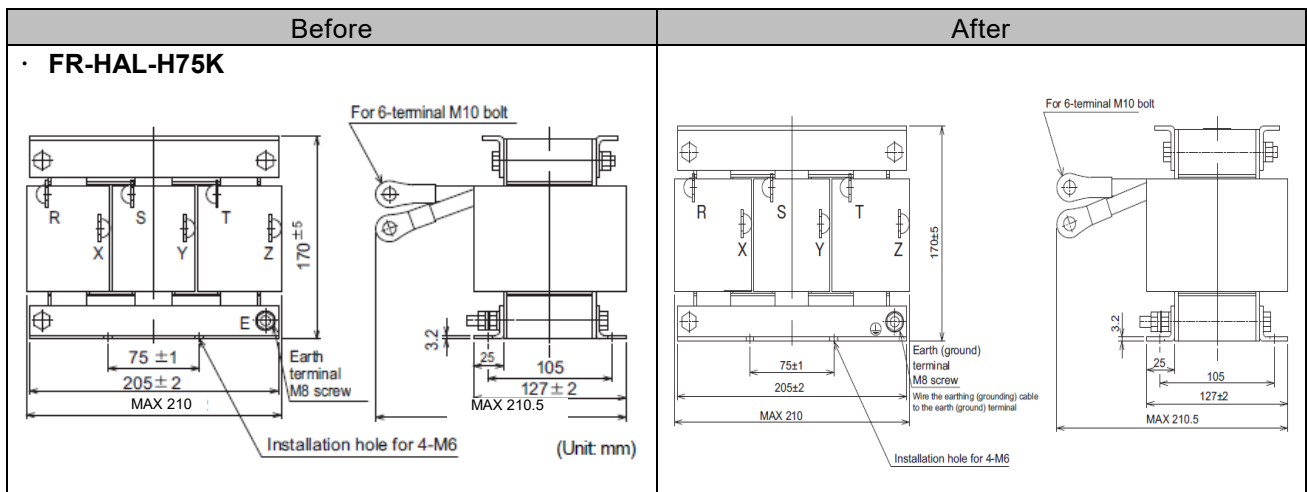
The H and D dimensions will be changed as shown in the table above.

• **FR-HAL-H45K, H55K**

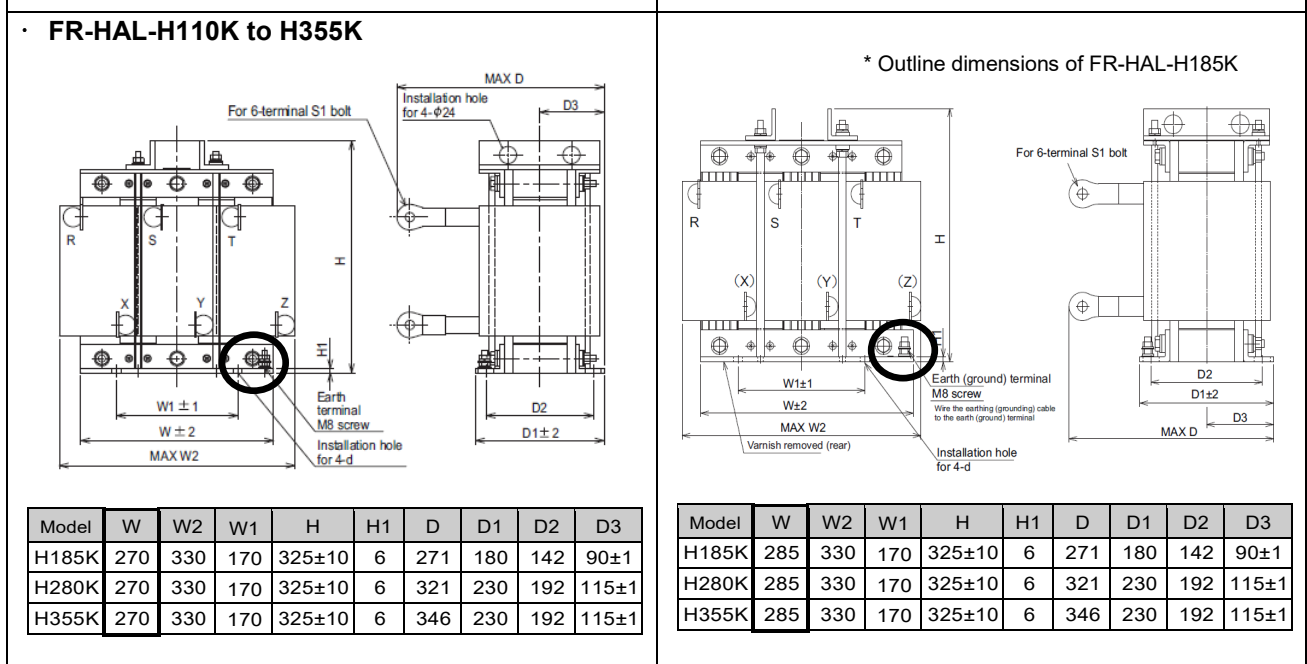
Model	W	W1	W2	H	D	D1	D2
H45K	280	255	12.5	245	165	111	80
H55K	280	255	12.5	245	170	121	90

Model	W	W1	W2	H	D	D1	D2
H45K	280	255	12.5	242	165	111	80
H55K	280	255	12.5	242	170	121	90

The H dimension will be changed as shown in the table above.



The width, height, and depth dimensions are basically the same.



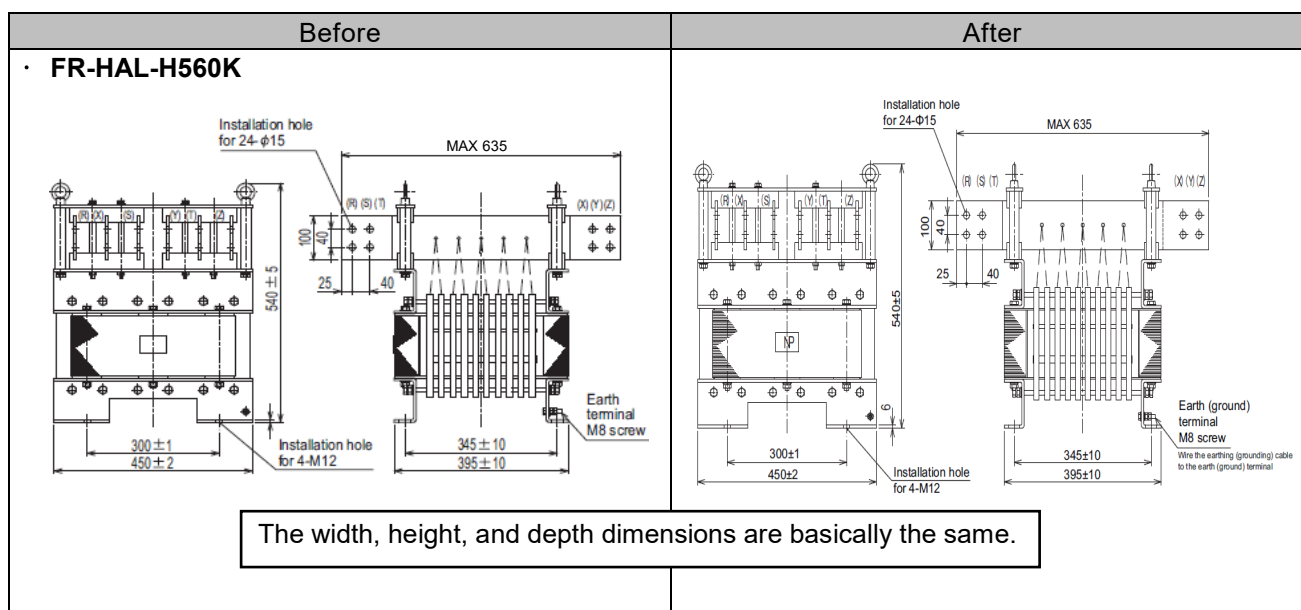
**FR-HAL-H110K**

The width, height, and depth dimensions are basically the same.

**FR-HAL-H185K to H355K**

The W dimension will be changed as shown in the table above, as the metal sheet on which the earth (ground) terminal is mounted will be 15 mm longer. Due to the dimension change, the position of the earth (ground) terminal (in the black circle) will be moved 15 mm toward the edge of the metal sheet. The distance from the edge of the metal sheet to the earth (ground) terminal will be the same.





### 3. Date of Change

The change will be sequentially applied to the products manufactured in October 2020 or later.

### 4. Product Identification

The product can be identified by the presence/absence of the UL, CE, and EAC marks.

### 5. Remarks

The outline dimensions of the products described in catalogs will be changed at the next revision of each catalog.