

**VACON<sup>®</sup> NXS/P**  
AC DRIVES

**FLANGE MOUNTING KIT  
FOR FR4-FR6  
INSTALLATION MANUAL**

**DRIVE CENTRE**   
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**VACON<sup>®</sup>**



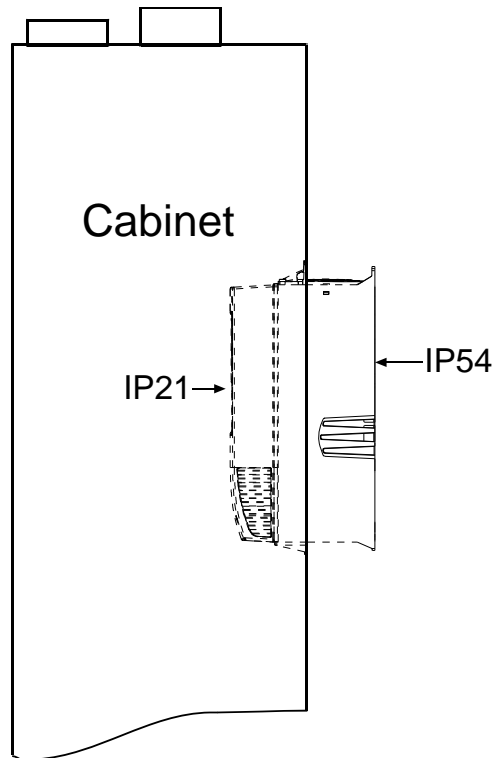
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## 1. General

Using the Vacon Flange Mounting Kit, you can mount your Vacon NX AC drive through the cabinet wall so that the control unit of the drive remains inside the cabinet.

The correct installation of the Flange Mounting Kit affects the IP protection class of the AC drive. After the installation, the control unit is protected according to IP21 and the power unit according to IP54 (unless the AC drive was originally IP21-protected). See figure below.

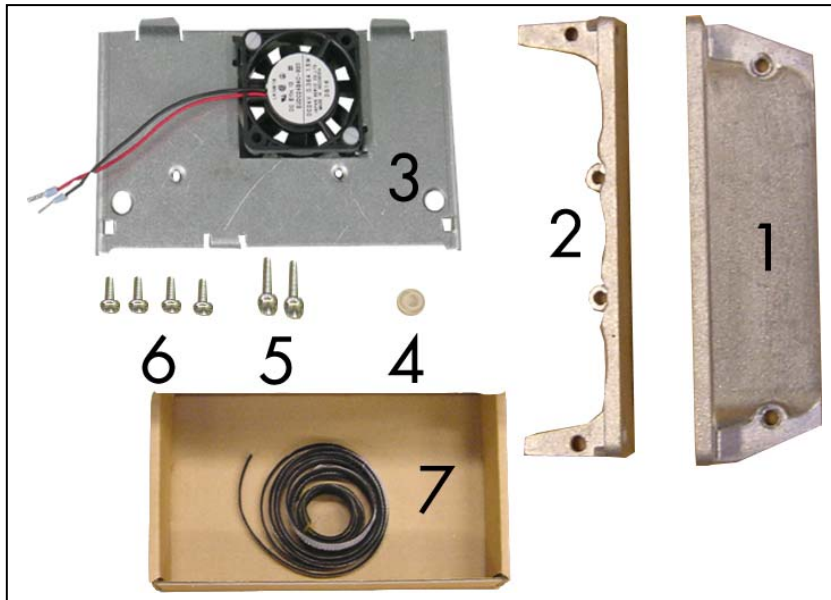


According to standard IEC 60529 (EN 60529), the IP54 AC drive enclosure provides protection against dust and water sprayed from all directions. Limited ingress of both is permitted.

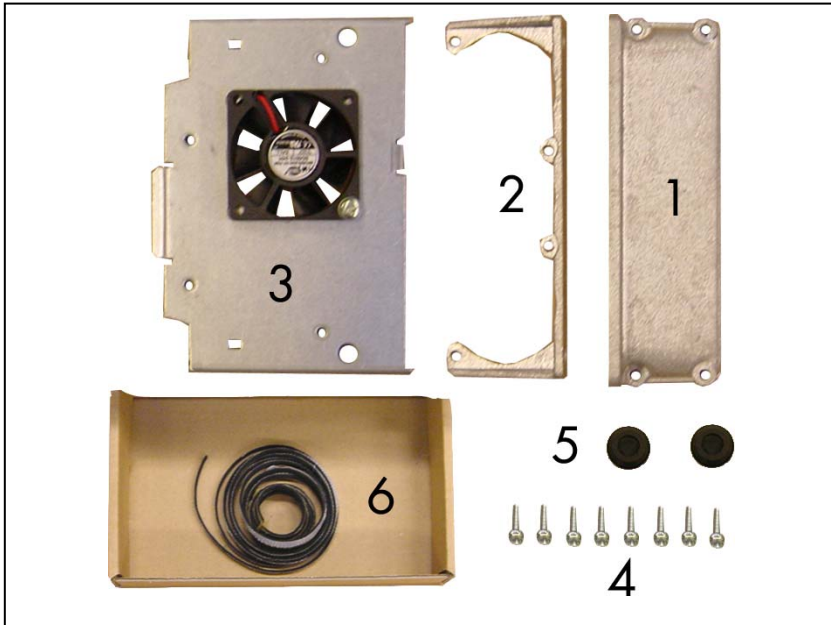
## 2. Vacon Flange Mounting Kit contents

The contents of the Flange Mounting Kits for different frames are shown in the following pictures.

### 2.1 FR4 (Type designation code: THR-FR4)



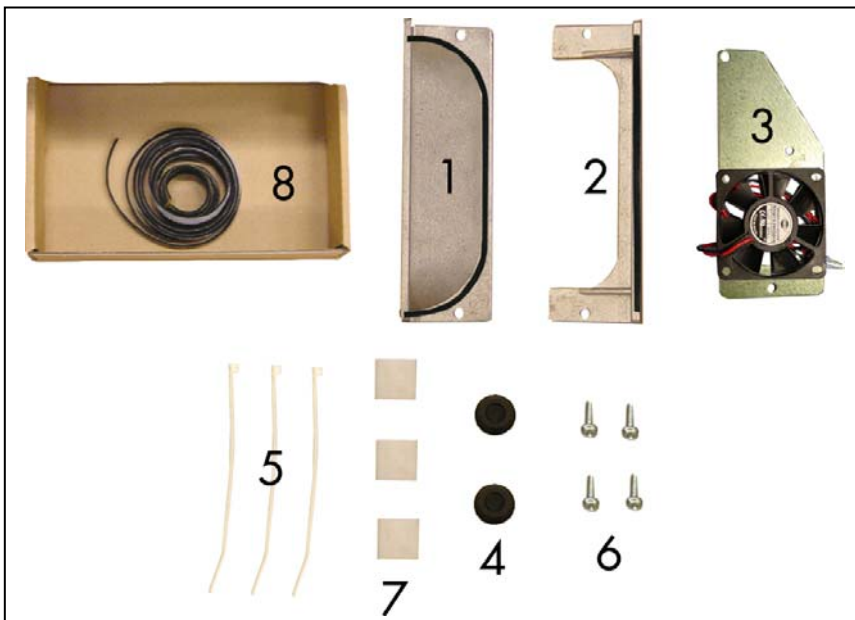
- |                          |                 |
|--------------------------|-----------------|
| 1 Flange, top            | 5 Screws (4*16) |
| 2 Flange, bottom         | 6 Screws (4*10) |
| 3 Fan & protection plate | 7 Sealing tape  |
| 4 Plastic sealing        |                 |



2.2 FR5 (Type designation code: THR-FR5)

- |                          |                  |
|--------------------------|------------------|
| 1 Flange, top            | 4 Screws (4*16)  |
| 2 Flange, bottom         | 5 Rubber sealing |
| 3 Fan & protection plate | 6 Sealing tape   |

2.3 FR6 (Type designation code: THR-FR6)



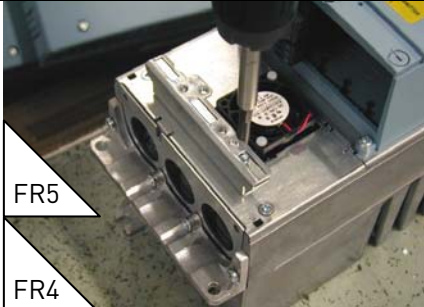
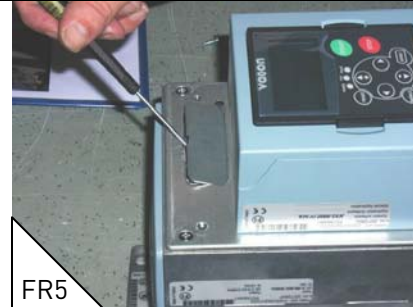


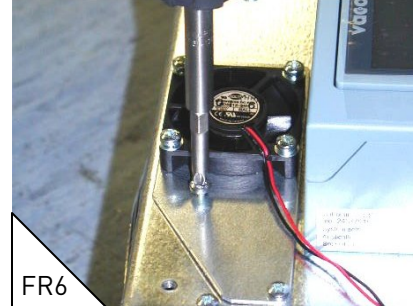
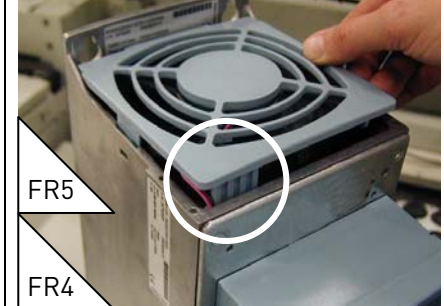


- |                   |                          |
|-------------------|--------------------------|
| 1 Flange, top     | 5 Cable ties             |
| 2 Flange, bottom  | 6 Screws (6*12)          |
| 3 Fan             | 7 Adhesive backed mounts |
| 4 Rubber sealings | 8 Sealing tape           |

### 3. Installation

These instructions guide you through the installation of the Flange Mounting Kit that you have purchased for your FR4, FR5 or FR6 size AC drive. Please note the white triangles in the lower left corners of the installation pictures. They designate the frame(s) the picture applies to. If no triangles exist, the step is applicable to all frames.

		
<p>1. Open the control cable cover and remove the cable entry flange.</p>	<p>2. Detach the protection plate. Keep the plate and the screws to hand, they will still be needed.</p>	<p>3. Attach the bottom flange to its place with screws. Do not tighten the screws yet.</p>
		
<p>4. Place the cable entry flange between the frame and the bottom flange. Now tighten the screws.</p>	<p>5. Detach the fan.</p>	<p>6a. Insert the plastic sealing (#4).</p>
		
<p>6b. Insert the rubber sealings (#5).</p>	<p>7. Fix the top flange to its place.</p>	<p>8. Attach the protection plate with fan (#3) with the screws you set aside at step 2.</p>



 <p>FR5</p> <p>FR4</p>	 <p>FR5</p>	 <p>FR6</p>
<p>9. Detach the grounding rack from the protection plate you removed at step 2 and fix it to the plate with fan using the screws from the old rack.</p>	<p>10a. Remove the plastic cover of the AC drive and open the small lid on the power unit cover. Leave the opening uncovered.</p>	<p>10b. Remove the plastic cover of the AC drive and open the small lid on the power unit cover. Set the screws aside for later use.</p>
 <p>FR6</p>	 <p>FR6</p>	 <p>FR5</p> <p>FR4</p>
<p>11. Seal the air inlets with the rubber sealings (#4). Leave the opening uncovered.</p>	<p>12. Fix the lid with fan (#3) on the power unit cover using the screws set aside at step 10b.</p>	<p>13. Carefully re-install the fan ensuring that the connector clip fits accurately. Do not slam, do not force!</p>
 <p>FR6</p>	 <p>FR6</p>	
<p>14. Attach the adhesive-backed mounts (#7) as shown in the picture and use the ties (#5) to fix the cables on the power unit.</p>	<p>15. Connect the fan cables to terminals #6 (red) and #7 (black) of the basic I/O board (NXOPTA1 or NXOPTA8)*</p>	

Continues on next page

\* Or any other free 24Vout terminal on your available I/O



16. Apply the sealing tape attached around the opening along the edge. Place the tape so that it runs *inside* the screw holes.  
The kit contains a greater amount of tape than what you might need. Only use such an amount of tape required by the dimensions of the opening. See Figure 1.
17. Fit the AC drive in the opening.  
NOTE: The AC drive will not fit in the opening in a straight position. Tip the converter positioning the lower end first in the opening. See Figures 2 and 3.

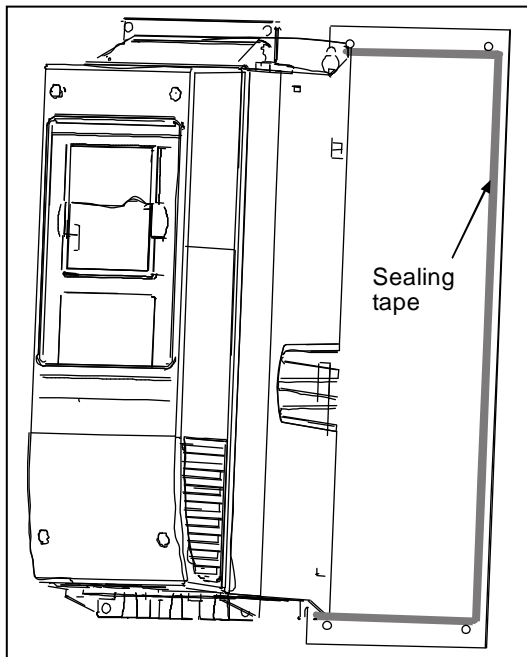
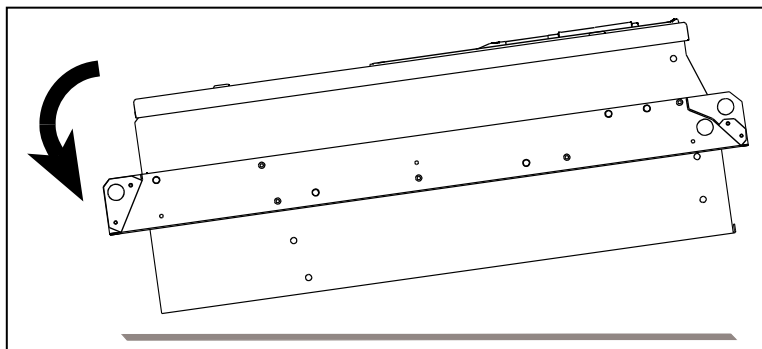
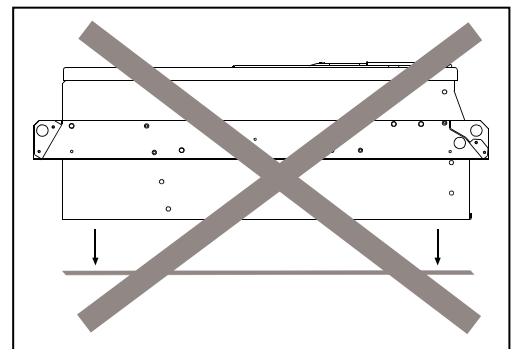


Figure 1.



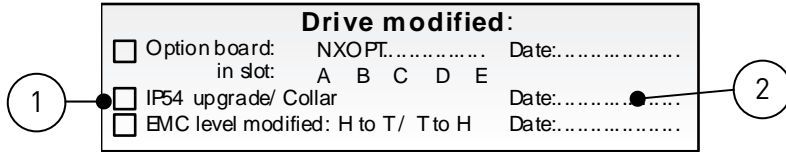
Figures 2 and 3.



#### 4. Information sticker

Each Flange Mounting Kit delivered by the factory includes a sticker (shown below). Please check *IP54/Collar* (1) and mark the installation date (2) on the sticker. Finally, attach the sticker on the drive.

Drive modified:		
<input type="checkbox"/>	Option board: NXOPT.....	Date:.....
	in slot: A B C D E	
<input type="checkbox"/>	IP54 upgrade/ Collar	Date:.....
<input type="checkbox"/>	EMC level modified: H to T/ T to H	Date:.....



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