

VACON[®] NX
AC DRIVES

FR7 IP54 KIT

INSTALLATION MANUAL

VACON[®]

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1. INTRODUCTION

Using these instructions, you can enhance the enclosure protection class of your IP21 class AC drive to IP54. A higher protection level may be necessary when the AC drive is used in ambient conditions which might constitute a risk for the proper functioning of the AC drive (moist, dust).

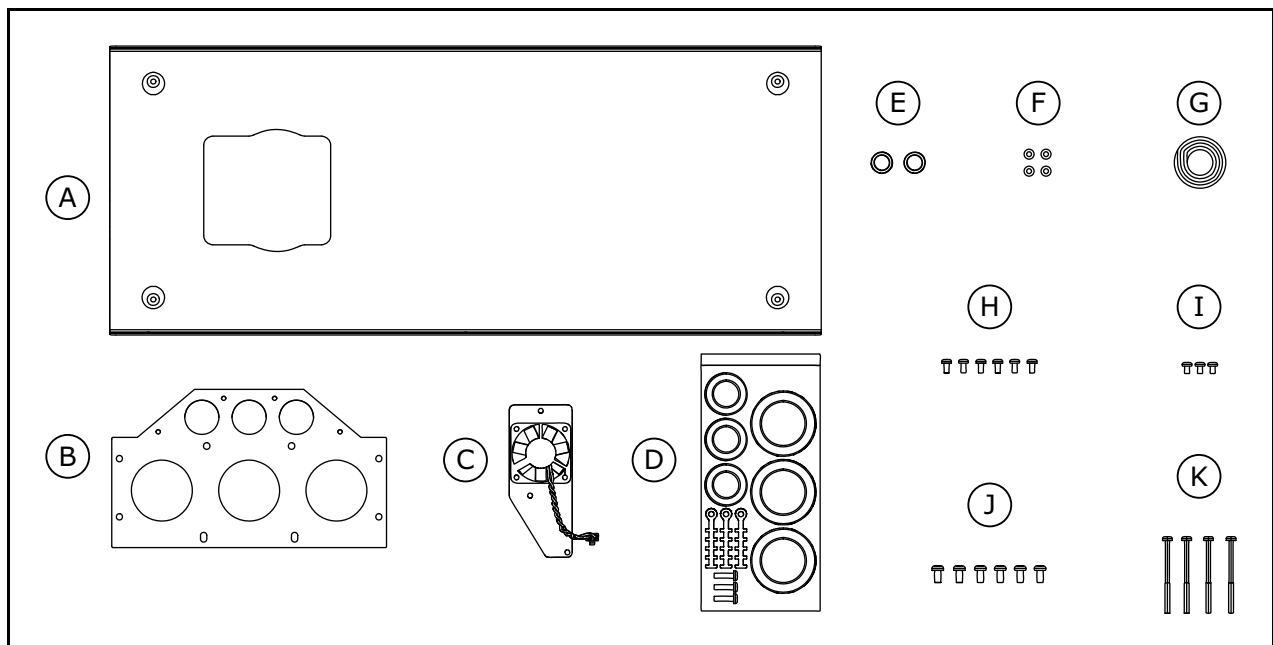
According to standard IEC 60529 (EN 60529), the IP54 AC drive enclosure provides protection against dust and water sprayed from all directions. Limited ingress of both is permitted.

NOTE! An IP54 enclosure does not protect the AC drive against strong jets of water or the effects of immersion.

1.1. KIT CONTENTS

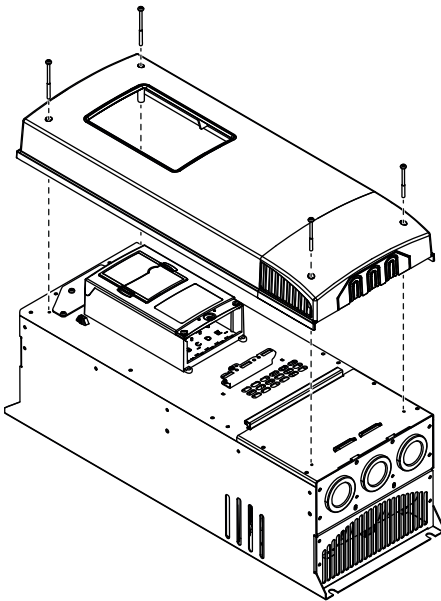
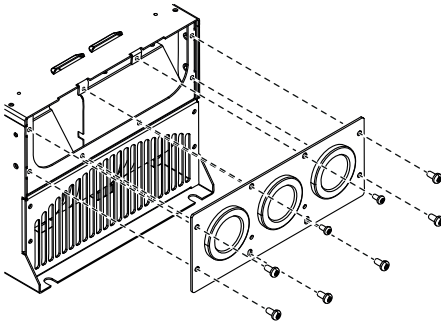
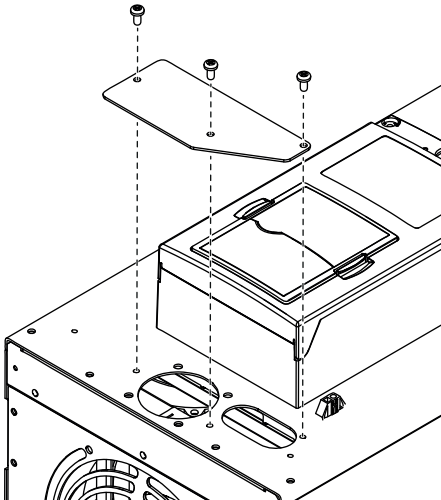
Two versions of the kit are available:

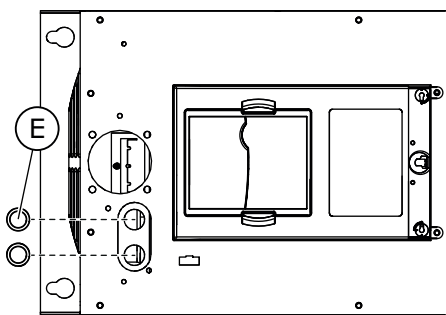
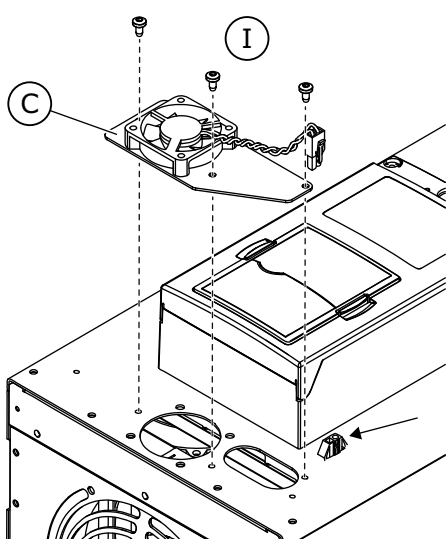
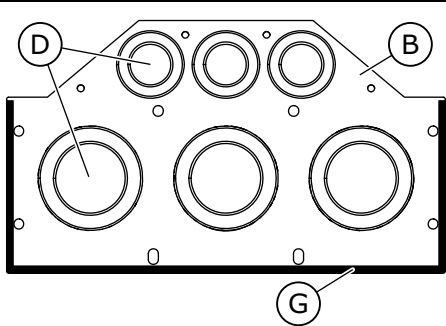
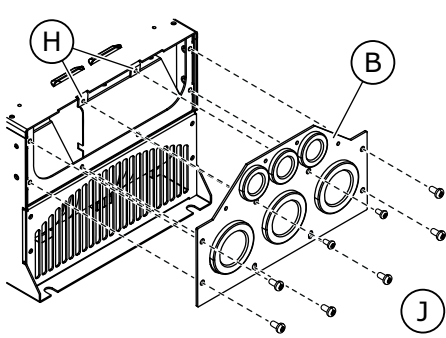
- IP5-FR7-G3: IP54 retrofit kit with a light blue front cover
- IP5-FR7-MP-G3: IP54 retrofit kit with a grey front cover

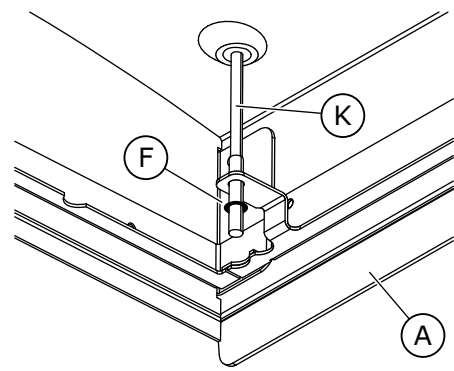
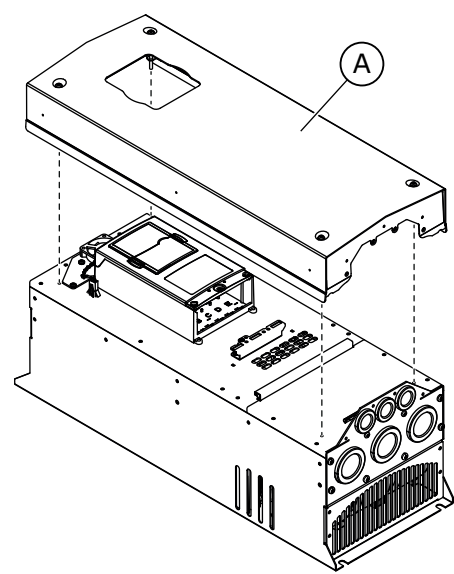
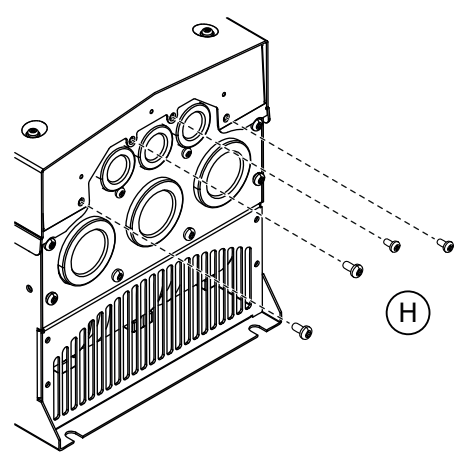


#	Part description	Pcs
A	IP54 front cover (light blue or grey)	1
B	IP54 conduit plate	1
C	IP54 internal fan assembly	1
D	IP54 installation bag	1
E	Bushing rubber, size GD9	2
F	O-ring, size 3.00x2	4
G	Gasket tape, size 2x5x45	1
H	Screw M4x8-DIN7500CE-Thread Forming-Zn-Pz	6
I	Screw M4x6-DIN7500CE-Thread Forming-Zn-Pz	3
J	Screw M5x10-DIN7500CE-Thread Forming-Zn-Pz	6
K	Screw M4x60-DIN7985-8.8-Zn-Pz	4

2. INSTALLATION INSTRUCTIONS

<p>1</p>	<p>Remove the IP21 front cover by removing the two M4x60 and two M4x50 mounting screws. Use a PZ2 bit.</p>	
<p>2</p>	<p>Remove the conduit plate by removing the six M5x10 screws and the two M4x8 screws. Use a PZ2 bit.</p>	
<p>3</p>	<p>Remove the cover plate from the power unit cover by removing the three M4x6 screws. Use a PZ2 bit.</p>	

<p>4</p>	<p>Install the two GD9 bushing rubbers (E) in the two open holes.</p>	
<p>5</p>	<p>Install the IP54 internal fan assembly (C) on the power unit cover.</p> <p>Use the three M4x6 screws (I) to mount the IP54 internal fan assembly. Use a PZ2 bit and tighten the screws to torque 2.4 Nm.</p> <p>Connect the fan power cable to the connector on the power unit cover.</p>	
<p>6</p>	<p>Install the gasket tape (G) on the IP54 conduit plate (B).</p> <p>Also install the bushing rubbers (D) on the IP54 conduit plate (B). The bushing rubbers are included in the IP54 installation bag.</p>	
<p>7</p>	<p>Install the IP54 conduit plate (B) on the AC drive.</p> <p>Use the six M5x10 screws (J) to mount the IP54 conduit plate to the frame.</p> <p>Use two of the M4x8 screws (H) to mount the IP54 conduit plate to the connection cover.</p> <p>Use a PZ2 bit and tighten the screws to torque 2.4 Nm.</p>	

<p>8</p>	<p>Push the four M4x60 screws (K) through the holes on the IP54 front cover (A).</p> <p>Install the four O-rings (F) on the screws (K).</p>	 <p>A detailed line drawing showing a corner of the IP54 front cover (A). Four screws (K) are being inserted through the cover into the AC drive. O-rings (F) are being placed onto the screws (K) to create a seal.</p>
<p>9</p>	<p>Install the IP54 front cover (A) on the AC drive.</p> <p>Use a PZ2 bit and tighten the four screws to torque 1.5 Nm.</p>	 <p>A perspective view of the AC drive with the IP54 front cover (A) being lowered into place. Dashed lines indicate the alignment of the cover with the drive's mounting points.</p>
<p>10</p>	<p>Install the last four M4x8 screws (H) to secure the IP54 cover to the IP54 conduit plate.</p> <p>Use a PZ2 bit and tighten the screws to torque 2.4 Nm.</p>	 <p>A side view of the AC drive with the IP54 front cover (A) already installed. Four screws (H) are shown being inserted through the cover into the IP54 conduit plate to secure it.</p>

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