Installation Guide

Pedestal Kit for FK09/FB09 and FK10/FB10

iC7 Series Frequency Converters

1 Overview

1.1 Description

The pedestal kit is intended for floor-mounted FK09/FB09 and FK10/FB10 frequency converters. A pedestal and a cable entry plate are required for proper operation of the frequency converter. The pedestal features a front grill to allow proper airflow for cooling. Reuse the cable entry plate that ships with the frequency converter to maintain the IP21/Type 1 or IP54/Type 12 protection rating.

1.2 Kit Numbers

Use these instructions with the following kits.

Table 1: Pedestal Kits for FK09-FK10/FB09-FB10 Frequency Converters

Number	Description
176F4034	400 mm (15.7 in) pedestal kit for FK09a/FB09a frequency converters
176F4035	400 mm (15.7 in) pedestal kit for FK10a/FB10a frequency converters
176F4036	200 mm (7.9 in) pedestal kit for FK09c/FB09c frequency converters

1.3 Items Supplied

The following parts are contained in the kit.

Table 2: Items Supplied in Pedestal Kits

Item	Quantity
Pedestal base	1
Front cover	1
Upper front flange	1
Lower front flange	1
Side plate	2
M5x18 screw	6
M10 hex nut	2
M8 hex nut	4
M5x14 countersunk screw	12

2 Installation

2.1 Safety Information

NOTICE

QUALIFIED PERSONNEL

Only qualified personnel are allowed to install the parts described in these installation instructions.

- Disassembly and reassembly of the frequency converter must be done in accordance with the corresponding service guide.
- Use the standard fastener torque values from the service guide, unless the torque value is specified in these instructions.

⚠ WARNING ⚠

ELECTRICAL SHOCK HAZARD

The frequency converter contains dangerous voltages when connected to mains voltage. Improper installation, and installing or servicing with power connected, can cause death, serious injury, or equipment failure.

- Only use qualified electricians for the installation.
- Disconnect the frequency converter from all power sources before installation or service.
- Treat the frequency converter as live whenever the mains voltage is connected.
- Follow the guidelines in these instructions and local electrical safety codes.

⚠ WARNING ⚠

DISCHARGE TIME (20 MINUTES)

The frequency converter contains DC-link capacitors, which can remain charged even when the frequency converter is not powered. High voltage can be present even when the warning indicator lights are off.

Failure to wait 20 minutes after power has been removed before performing service or repair work can result in death or serious injury.

- Stop the motor.
- Disconnect AC mains, permanent magnet type motors, and remote DC-link supplies, including battery back-ups, UPS, and DC-link connections to other frequency converters.
- Wait 20 minutes for the capacitors to discharge fully before performing any service or repair work.
- Measure the voltage level to verify full discharge.

NOTICE

ELECTROSTATIC DISCHARGE

Electrostatic discharge can damage components.

- Ensure discharge before touching internal frequency converter components, for example by touching a grounded, conductive surface or by wearing a grounded armband.

2.2 Overview of Pedestal Installation

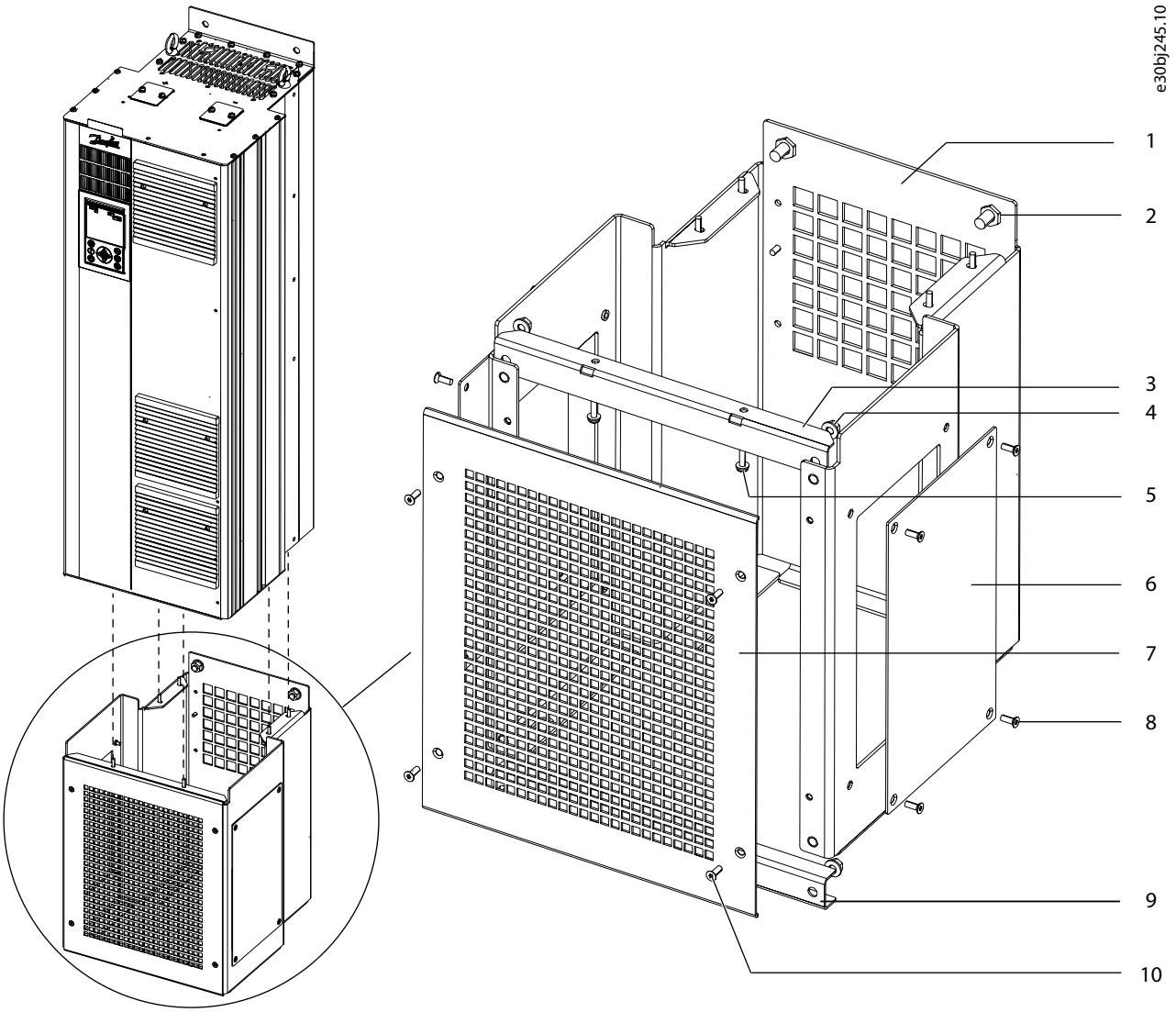

Illustration 1: Overview of Pedestal Kit

1	Pedestal base	6	Side plate
2	M10 hex nut	7	Front cover
3	Upper front flange	8	M5x14 countersunk screw
4	M8 hex nut	9	Lower front flange
5	M5x18 screw	10	M5x14 countersunk screw

2.3 Lifting the Frequency Converter

⚠ WARNING ⚠

LIFTING PRECAUTIONS

The frequency converter is heavy. Failure to follow local safety regulations for lifting heavy weights can cause death, personal injury, or property damage.

- Ensure that the lifting equipment is in proper working condition.
- Check the weight of the frequency converter and verify that the lifting equipment can safely lift the weight.
- Always lift the frequency converter using the dedicated eye bolts at the top of the frequency converter.
- Ensure that the angle from the top of the frequency converter to the lifting cable is 65° or greater.
- Test lift the frequency converter approximately 610 mm (24 in) to verify the proper center of gravity lift point. Reposition the lifting point if the frequency converter is not level.
- Never walk under suspended loads.

2.4 Securing the Pedestal to the Floor

Use the following steps to secure the pedestal to the floor before installing the frequency converter. See Illustration 2.

1. Determine proper placement of the pedestal and frequency converter, considering the operating environment and cable access requirements.
2. Set the pedestal base on the floor and secure 4 bolts through the mounting holes.
3. Position the upper and lower front flanges in the pedestal base and fasten with 4 M8 hex nuts, 2 per flange.

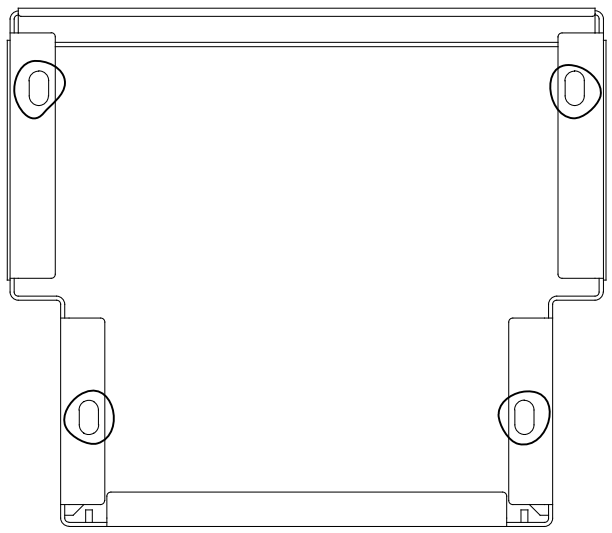

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Illustration 2: Pedestal-to-Floor Mounting Holes

2.5 Attaching the Frequency Converter

After attaching the pedestal to the floor, attach the frequency converter to the pedestal using the following steps. See Illustration 3.

⚠ WARNING ⚠

TIPPING PRECAUTION

If the frequency converter is not secured, the frequency converter can tip and cause serious personal injury.

- After attaching the pedestal to the frequency converter, secure the top of the frequency converter to the wall or mounting panel.

Procedure

1. Position the frequency converter on the pedestal base.
2. Secure 2 M10 nuts over the threaded studs at the back of the pedestal, securing the pedestal to the frequency converter.

3. Fasten 2 M5 screws through the back flange of the pedestal base into the flange on the lower end of the frequency converter.
4. To secure the frequency converter to the wall or mounting panel, fasten 2 M10 bolts (not supplied) in the mounting holes at the top of the frequency converter. Use 1 bolt per mounting hole.

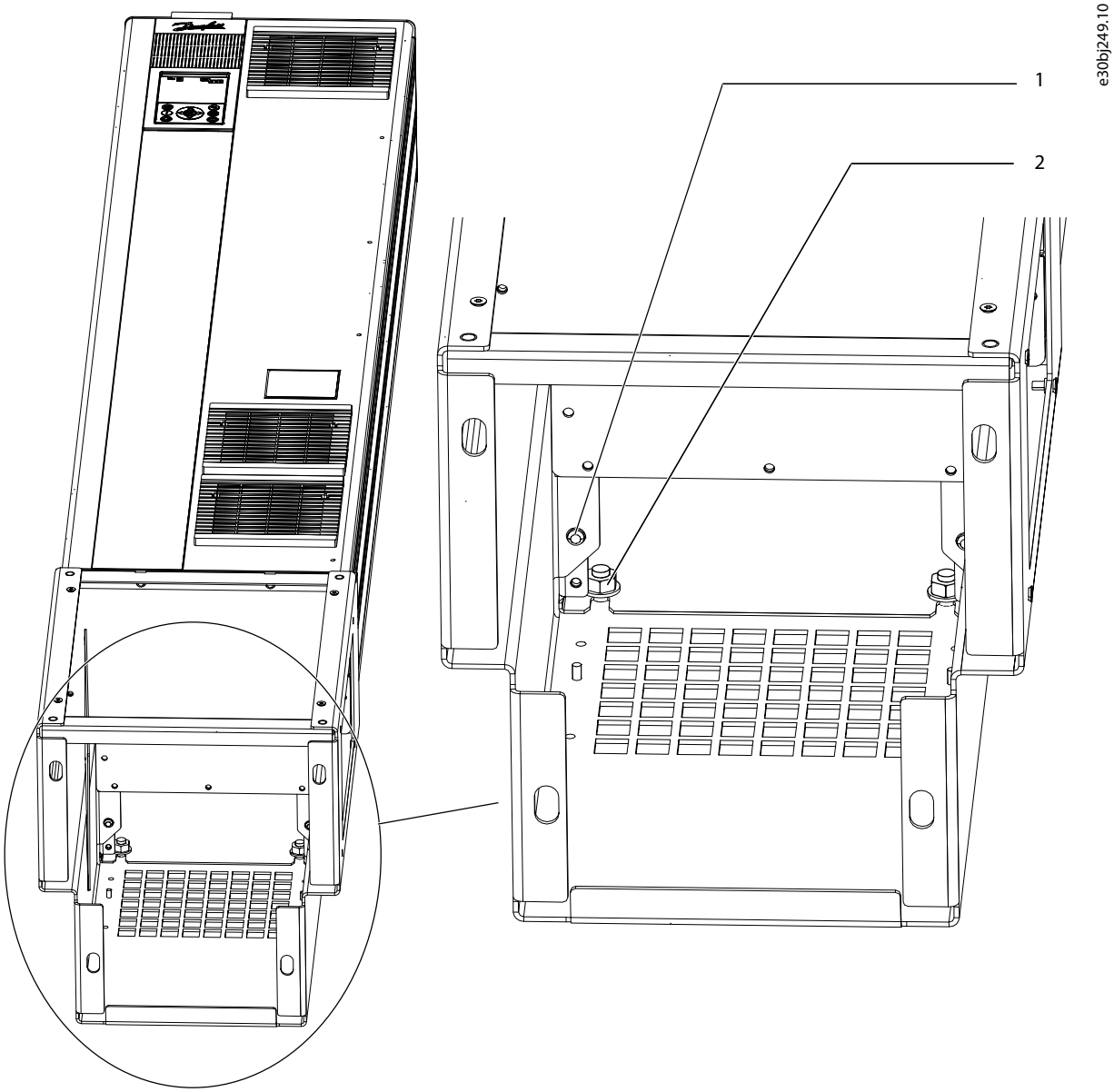

Illustration 3: Pedestal-to-Frequency Converter Mounting Points

1	M5 screw in back flange
2	M10 nut

2.6 Creating Cable Openings

The cable entry plate provides cable entry and cable termination points, and must be installed to maintain the IP21/Type 1 or IP54/Type 12 protection rating. The cable entry plate is placed between the frequency converter cabinet and the pedestal. Reuse the cable entry plate that is shipped with the frequency converter.

The cable entry plate can be installed from inside the frequency converter cabinet or before attaching the front cover and side plates of the pedestal. To install the cable entry plate, use the following steps. Refer to Illustration 4.

1. Create cable entry holes in the plate using a sheet metal punch.
2. Insert the cable entry plate using 1 of the following methods:

   a. Slide the cable entry plate through the pedestal front opening.
   b. Insert the cable entry plate through the frequency converter cabinet angling the plate until it slides into position.
3. Align the studs on the cable entry plate with the holes in the pedestal and secure with 8 M5 nuts.
4. Attach the pedestal side panels with 8 M5x14 countersunk screws, 4 in each panel.
5. Attach the front cover to the pedestal by securing 4 M5x14 countersunk screws.

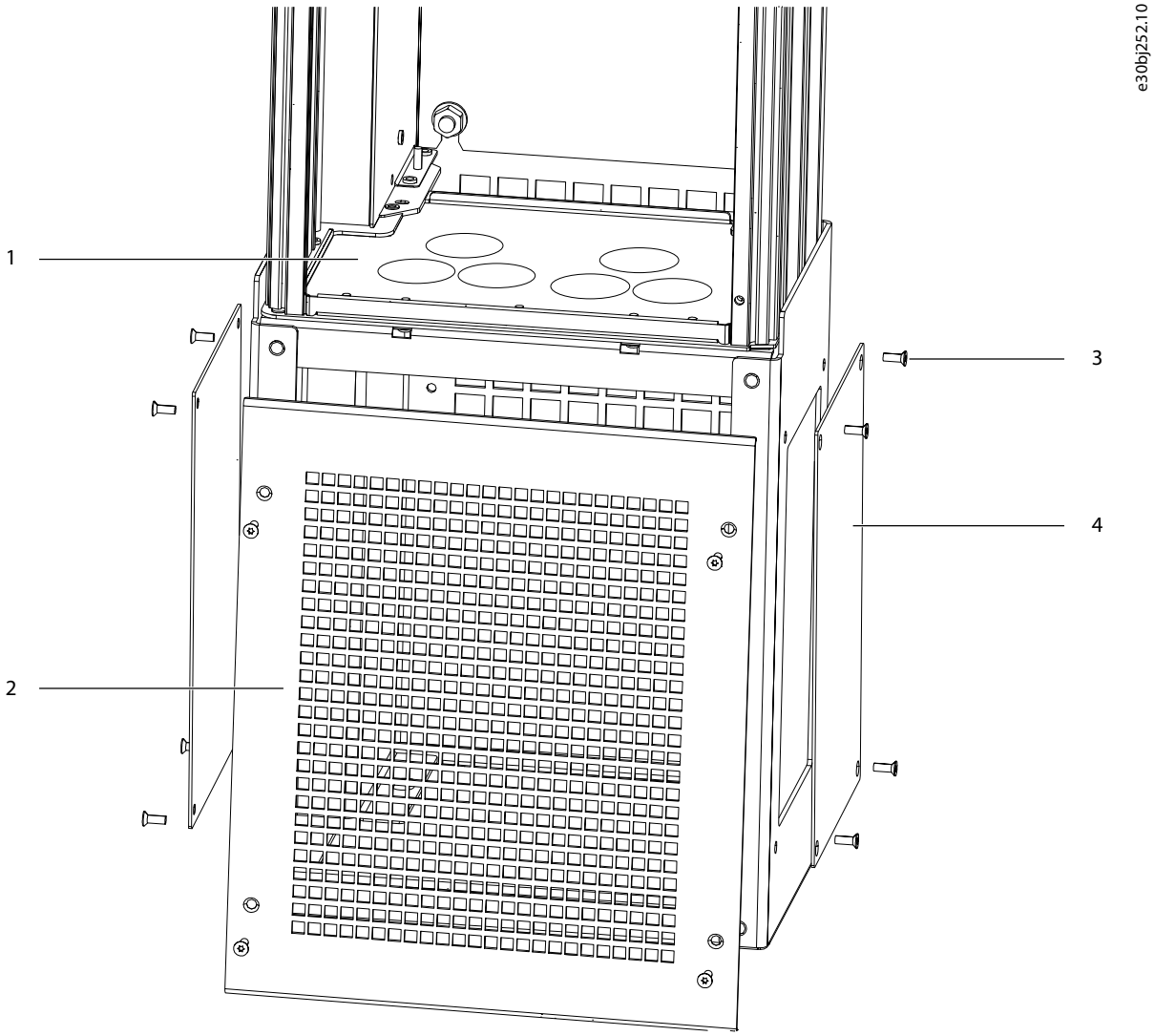

Illustration 4: Cable Entry Plate and Pedestal

1	Cable entry plate	3	Side panel
2	Front cover	4	M5 x14 countersunk screw

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