

Lifting and Mounting the PowerFlex Active Front End (AFE)— Frames 10 and 13

General Precautions



ATTENTION: To guard against possible personal injury and/or equipment damage, adhere to the following precautions:

- Do **not** let any part of the AFE or lifting mechanism make contact with electrically charged conductors or components.
 - At no time must a person or their limbs be directly underneath the items being lifted.
 - Do not subject the load to high rates of acceleration or deceleration.
 - Inspect all lifting hardware for proper attachment before lifting the AFE.
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Installation Summary

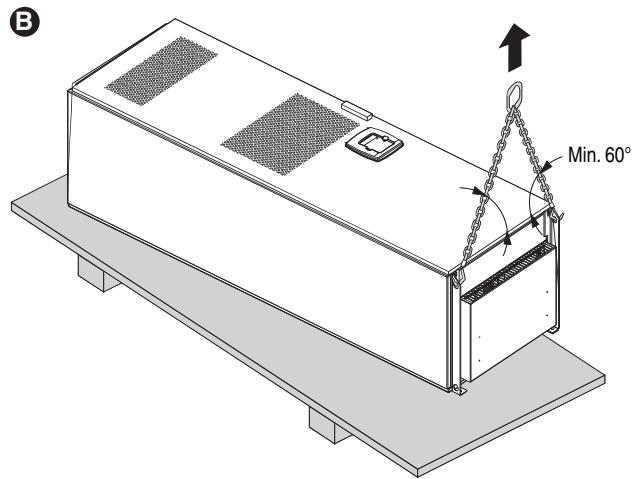
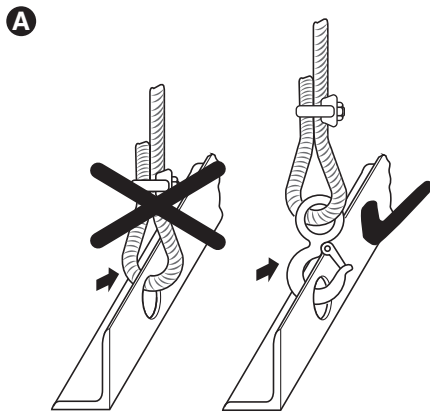
Read and understand these instructions before you begin to lift the AFE. This list is an overview of the lift steps for the AFE.

Step 1: Attach the lifting hardware to the AFE ([page 2](#), [page 3](#), or [page 4](#)).

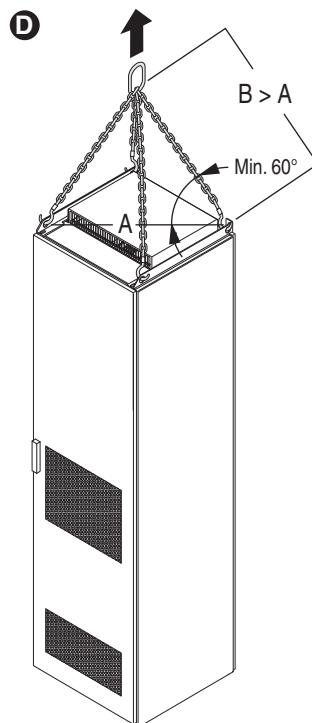
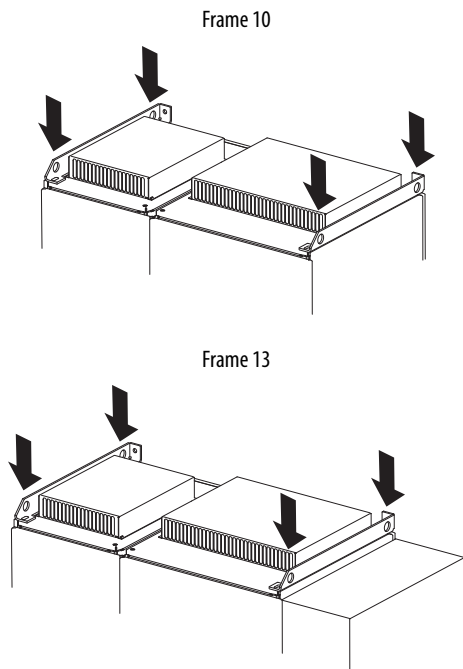
Step 2: Mount the AFE to the floor and/or wall ([page 5](#)).

Step 1: Attaching the Lifting Hardware to the AFE

Directions for AFE in IP21 Rittal Enclosure



C Lift Points



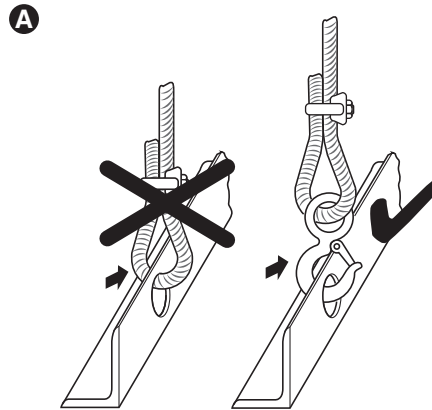
TIP To ensure that this angle is greater than 60°, make the length of chain or cable between the center and the corners (B) longer than the distance between the opposite corners (A).

Table 1 - Approximate AFE and IP21 Rittal Enclosure Weights

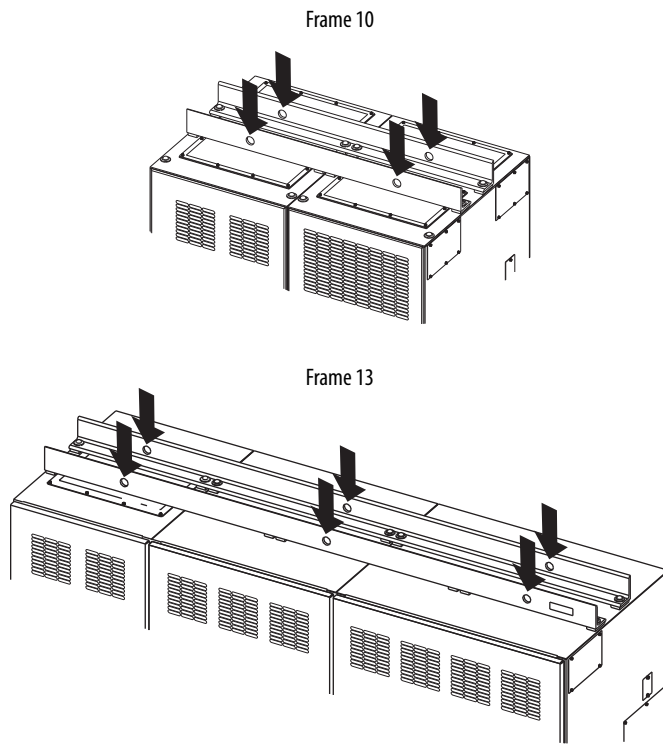
| Frame Size | AFE Voltage Class | AFE Rating Amps | Enclosure Weight, approx ⁽¹⁾ | Enclosure and Packaging Weight, approx ⁽¹⁾ |
|------------|-------------------|-----------------|---|---|
| 10 | 400/480V | 460 A | 600 kg (1323 lb) | 710 kg (1565 lb) |
| | 600/690V | 325 A | | |
| 13 | 400/480V | 1300 A | 1280 kg (2822 lb) | 1330 kg (2932 lb) |
| | 600/690V | 1030 A | | |

(1) Includes the AFE Power Module and LCL Filter.

Directions for AFE in IP20 2500 MCC Style Enclosure



B Lift Points



C

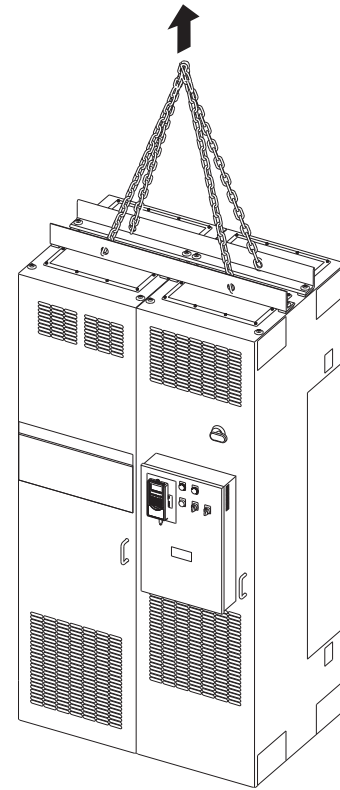
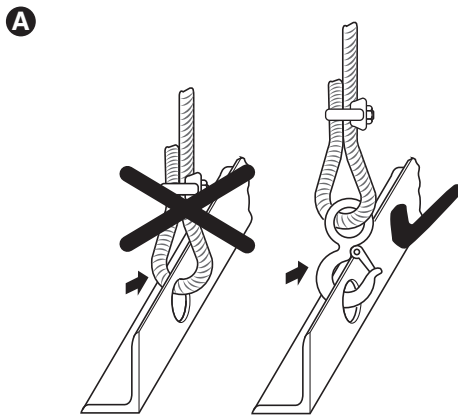


Table 2 - Approximate AFE and IP20 2500 MCC Style Enclosure Weights

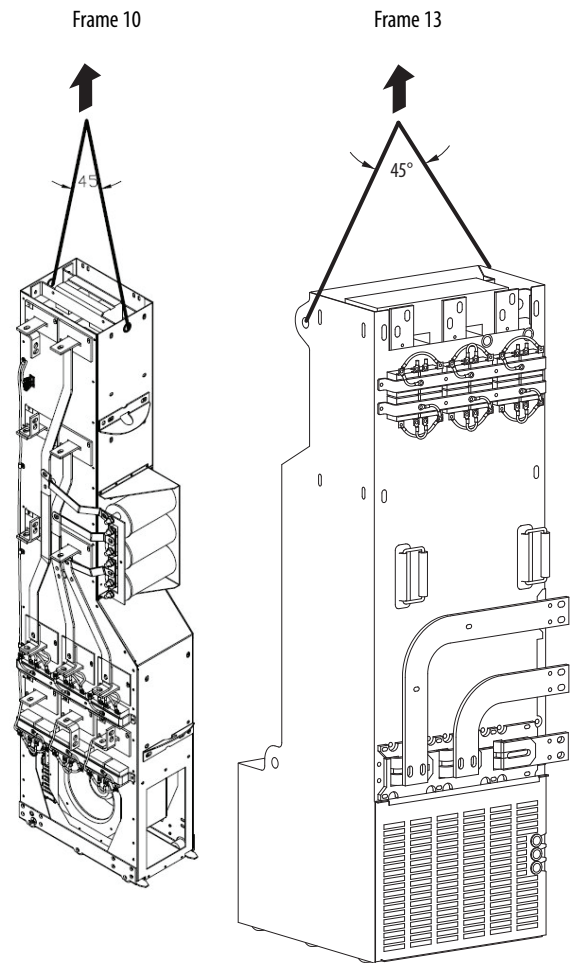
| Frame Size | AFE Voltage Class | AFE Rating Amps | Enclosure Weight, approx ⁽¹⁾ | Enclosure and Packaging Weight, approx ⁽¹⁾ |
|------------|-------------------|-----------------|---|---|
| 10 | 400/480V | 460 A | 1035 kg (2282 lb) | 1111 kg (2449 lb) |
| | 600/690V | 325 A | | |
| 13 | 400/480V | 1300 A | 2200 kg (4850 lb) | 2336 kg (5150 lb) |
| | 600/690V | 1030 A | | |

(1) Includes the AFE Power Module and LCL Filter.

Directions for IP00 Open Chassis AFE



B LCL Filter



C Power Module

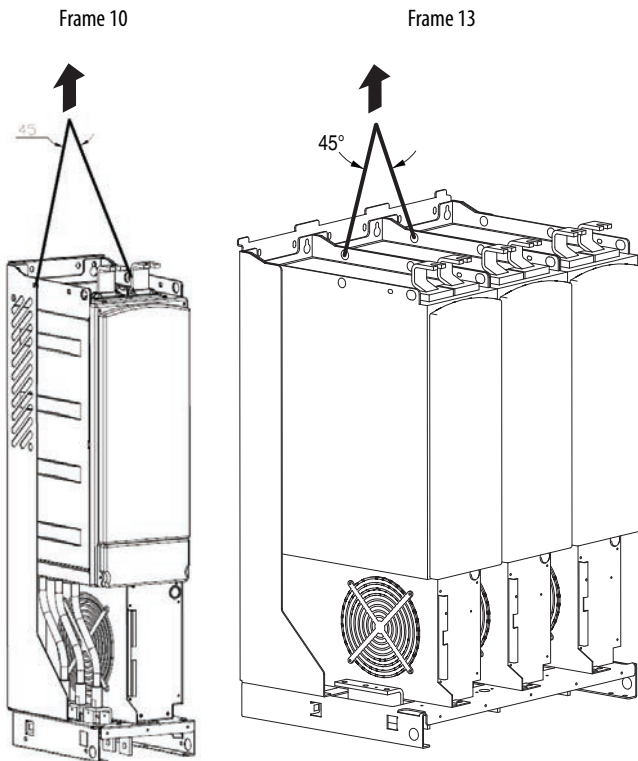


Table 3 - IP00 Open Chassis AFE Weights

| Frame Size | AFE Voltage Class | AFE Rating Amps | Power Module Weight, approx | LCL Filter Weight, approx | Open AFE and Packaging Weight, approx ⁽¹⁾ |
|------------|-------------------|-----------------|-----------------------------|---------------------------|--|
| 10 | 400/480 | 460 | 100 kg (221 lb) | 263 kg (580 lb) | 413 kg (911 lb) |
| | 600/690 | 325 | | 304 kg (670 lb) | 413 kg (911 lb) |
| 13 | 400/480 | 1300 | 306 kg (675 lb) | 477 kg (1052 lb) | 833 kg (1836 lb) |
| | 600/690 | 1030 | | 473 kg (1043 lb) | 829 kg (1828 lb) |

(1) Includes the AFE Power Module and LCL Filter.

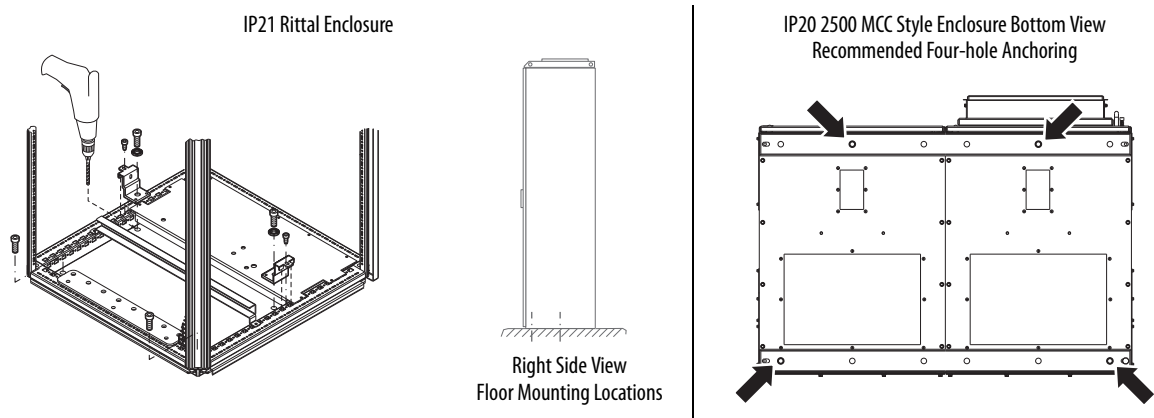
Step 2: Mounting the AFE to the Floor or Wall

When mounting the AFE to the floor or wall, use M12 (1/2 in.) Property Class 8.8 anchoring hardware.

Floor Mounting

Fasten the AFE enclosure through its internal mounting channel to the floor. Anchor bolts may be pre-located and embedded in the floor prior to installation.

For the AFE in the IP21 Rittal enclosure, use the mounting plates (Rittal part number 8800-210 or equivalent) as needed to secure the AFE. Do this as close as possible to the LCL Filter assembly plate. This method requires that the holes through the base plate must be drilled on site.



IMPORTANT If it is important to align the AFE enclosure vertically with adjacent enclosures, you may need to place shims under the AFE enclosure or use leveling feet throughout the enclosure line-up. The standard plastic plugs from the bottom of the enclosure may have been removed by the factory when the shipping feet were installed. This reduces the height of the enclosure by 2 mm.

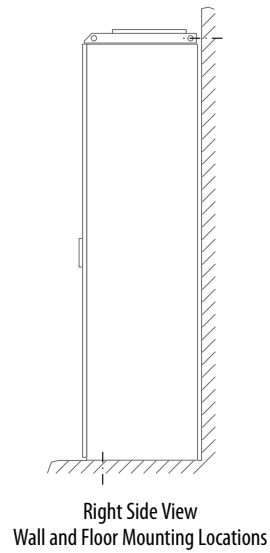
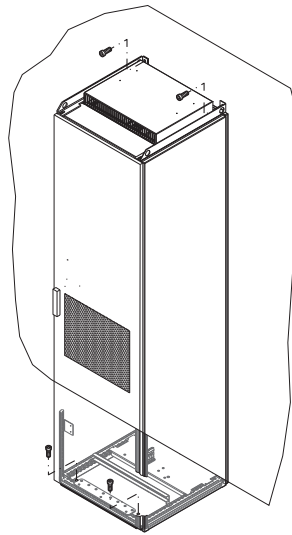
Wall Mounting

IMPORTANT The PowerFlex 700AFE in the IP20 2500 MCC style enclosure cannot be mounted to a wall. The enclosure does not have provisions for wall mounting.

To wall mount the PowerFlex 700AFE in the IP21 Rittal enclosure, follow these instructions.

- a. Secure the AFE to the floor with M12 anchor bolts in the front corner holes of the enclosure base plate.

- b. Fasten the AFE to the rear wall or supporting structure by bolting the adjustable lifting rails.



Right Side View
Wall and Floor Mounting Locations



www.rockwellautomation.com

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