

Flange Option

For RSi H2Series
Variable Frequency Drive

Installation Guide

890053-06-00



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Applied Motor Controls

Table of Contents

Table of Contents.....	1
Safety Instructions	2
Warning	3
Caution and Operating Precautions	4
1. Product Overview	5
2. Before Using the Product	5
3. Flange Option Part Number Table.....	6
4. Installation Procedure	7
4.1 H2: 1HP – 25HP (230V), 1HP – 40HP (460V).....	8
4.2 H2: 50HP – 125HP (460V)	9
4.3 H2: 150HP – 300HP (460V)	10
4.4 H2: 400HP (460V).....	11
4.5 H2: 500HP – 800HP (460V)	12
5. H2 Flange Option Cutout Size.....	11
6. Dimensions (with Flange Option installed)	16
6.1 1HP – 15HP (230V), 1HP – 15HP (460V)	16
6.2 20HP (230V), 20HP – 25HP (460V)	17
6.3 25HP (230V), 30HP – 40HP (460V)	18
6.4 50HP (460V)	19
6.5 60HP – 75HP (460V)	20
6.6 100HP – 125HP (460V)	21
6.7 150HP – 200HP (460V)	22
6.8 250HP – 300HP (460V)	23
6.9 400HP (460V).....	24
6.10 500HP – 650HP (460V).....	25
6.11 800HP (460V)	26
7. Required Hardware	27
8. Revision History	27

Safety Instructions

To prevent injury and property damage, follow these instructions. Incorrect operation due to ignoring instructions may cause harm or damage, the seriousness of which is indicated by the following symbols.

Danger

Indicates instant death or serious injury if instructions are not followed.

Warning

Indicates the possibility of death or serious injury.

Caution

Indicates the possibility of injury or damage to property.

■ The meaning of each symbol in this manual and on your equipment is as follows.



This is the safety alert symbol. Read and follow instructions carefully to avoid dangerous situations..



This symbol alerts the user to the presence of "dangerous voltage" "inside the product that might cause harm or electric shock.

- After reading this manual, keep it in an easily accessible location.
- This manual should be given to the person who actually uses the products and is responsible for their maintenance.



WARNING

- **Do not remove the cover while power is applied or the unit is in operation.**
Risk: Electric shock may occur.
- **Do not run the inverter with the front cover removed.**
Risk: Electric shock possible due to high voltage terminals or charged capacitor exposure.
- **Do not remove the cover except for periodic inspections or wiring, even if the input power is not applied.**
Risk: Electric shock may occur through exposure to the charged circuits.
- **Wiring and periodic inspections should be performed at least 10 minutes after disconnecting the input power and verifying via meter that the DC link voltage is below 30V DC.**
Risk: Electric shock may occur.
- **Operate switches with dry hands.**
Risk: Electric shock may occur if hands are wet.
- **Do not use the cable when its insulation is damaged.**
Risk: Electric shock may occur.
- **Do not subject the cables to scratches, excessive stress, heavy loads, or pinching.**
Risk: Electric shock may occur.



CAUTION

- **Install the inverter on a non-flammable surface. Do not place flammable material nearby.**
Risk: Fire may occur.
- **Disconnect the input power if the inverter gets damaged.**
Risk: Secondary accident and fire.
- **Do not touch the inverter while the input power is applied or immediately after removal. It will remain hot for a couple of minutes.**
Risk: Burns.
- **Do not apply power to a damaged inverter or to an inverter with parts missing even if the installation is complete.**
Risk: Electric shock may occur.
- **Do not allow lint, paper, wood chips, dust, metallic chips, or other foreign matter into the drive.**
Risk: Fire or other accident.

OPERATING PRECAUTIONS

- **Make sure the assembly is tightened to the specified torque. Do not overtorque.**
Risk: Product damage.

1. Product Overview

This installation guide is applied to the H2 drive series Flange Option.

The Flange Option is designed to allow the heat sink to radiate out of the back of the panel.

2. Before using the product

Perform the following tasks after receiving the Flange Option.

- ◆ Inspect the Flange Option for damage. If the Flange Option appears damaged upon receipt, contact the shipper immediately.
- ◆ Check that the model number on the Flange Option is the same as that on the packaging.

3. Flange Option Part Number

Screws for mounting Flange to VFD included. Screws for mounting Flange to back of enclosure not included.

VFD Size	Flange Option Part Number
VFD-RSI-001-H2-2C	BRKT-100770-03
VFD-RSI-002-H2-2C	BRKT-100770-03
VFD-RSI-003-H2-2C	BRKT-100770-03
VFD-RSI-005-H2-2C	BRKT-100770-03
VFD-RSI-007-H2-2C	BRKT-100770-03
VFD-RSI-010-H2-2C	BRKT-100770-03
VFD-RSI-015-H2-2C	BRKT-100770-03
VFD-RSI-020-H2-2C	BRKT-100794-00
VFD-RSI-025-H2-2C	BRKT-100794-01
VFD-RSI-001-H2-4C	BRKT-100770-03
VFD-RSI-002-H2-4C	BRKT-100770-03
VFD-RSI-003-H2-4C	BRKT-100770-03
VFD-RSI-005-H2-4C	BRKT-100770-03
VFD-RSI-007-H2-4C	BRKT-100770-03
VFD-RSI-010-H2-4C	BRKT-100770-03
VFD-RSI-015-H2-4C	BRKT-100770-03
VFD-RSI-020-H2-4C	BRKT-100794-00
VFD-RSI-025-H2-4C	BRKT-100794-00
VFD-RSI-030-H2-4C	BRKT-100794-01
VFD-RSI-040-H2-4C	BRKT-100794-01
VFD-RSI-050-H2-4C	BRKT-100794-02
VFD-RSI-060-H2-4C	BRKT-100794-03
VFD-RSI-075-H2-4C	BRKT-100794-03
VFD-RSI-100-H2-4C	BRKT-100794-04
VFD-RSI-125-H2-4C	BRKT-100794-04
VFD-RSI-150-H2-4C	BRKT-100794-05
VFD-RSI-200-H2-4C	BRKT-100794-05
VFD-RSI-250-H2-4C	BRKT-100794-06
VFD-RSI-300-H2-4C	BRKT-100794-06
VFD-RSI-400-H2-4C	BRKT-100794-07
VFD-RSI-500-H2-4C	BRKT-100794-08
VFD-RSI-650-H2-4C	BRKT-100794-08
VFD-RSI-800-H2-4C	BRKT-100794-09

4. Installation Procedure

◆ Flange Option Assembly and Installation Procedure

DANGER! Electrical Shock Hazard: Do not connect or disconnect wiring while the power is on.

Failure to comply may result in death or serious injury.

Wiring and periodic inspections should be performed at least 10 minutes after disconnecting the input power and verifying via meter that the DC link voltage is below 30V DC.

4.1 H2: 1HP – 25HP (230V), 1HP – 40HP (460V)

- ① Insert the Flange Option to fit on the sides of the base, fastening the side pieces as shown in Figure 1.

Use the included bolts to tighten to the specified torque requirements below:

- M4 torque: 1.15~1.45 (Ft·Lb)

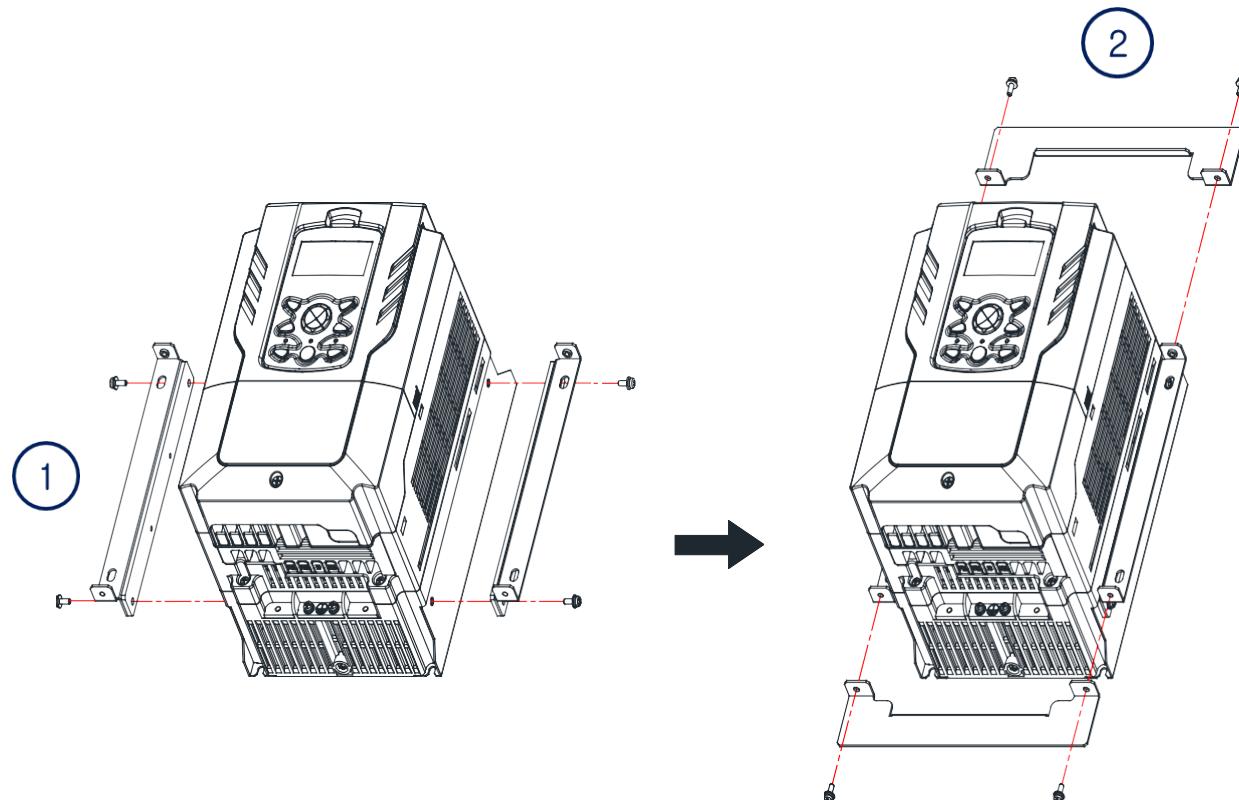


Figure 1. Installation

- ② Fasten the Flange Option with the remaining top and bottom pieces, using the remaining bolts.

4.2 H2: 50HP – 125HP (460V)

- ① Insert the Flange Option to fit on the top and bottom of the base, fastening both of the positions as shown in Figure 2.

Use the included bolts to tighten to the specified torque requirements below:

- M6 torque : 3.68~4.68 (Ft·lb)

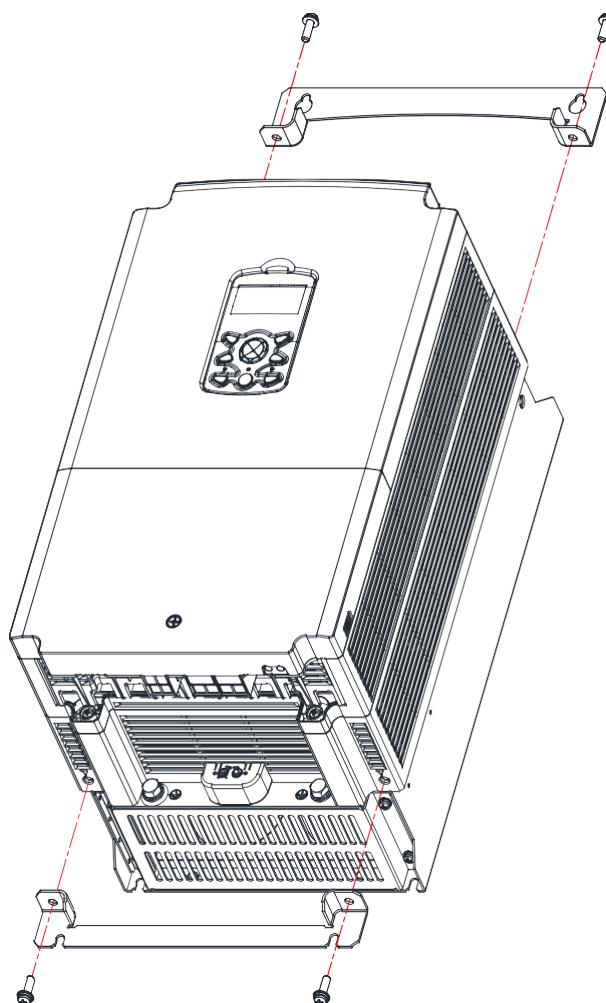


Figure 2. Installation

4.3 H2: 150HP – 300HP (460V)

- ① Insert the Flange Option to fit on the sides of the base, fastening the side pieces as shown in Figure 3.

Use the included bolts to tighten to the specified torque requirements below:

- M6 torque: 3.68~4.67 (Ft·lb)
- M10 torque: 6.46~8.78 (Ft·lb)
- M12 torque: 13.13~15.48 (Ft·lb)

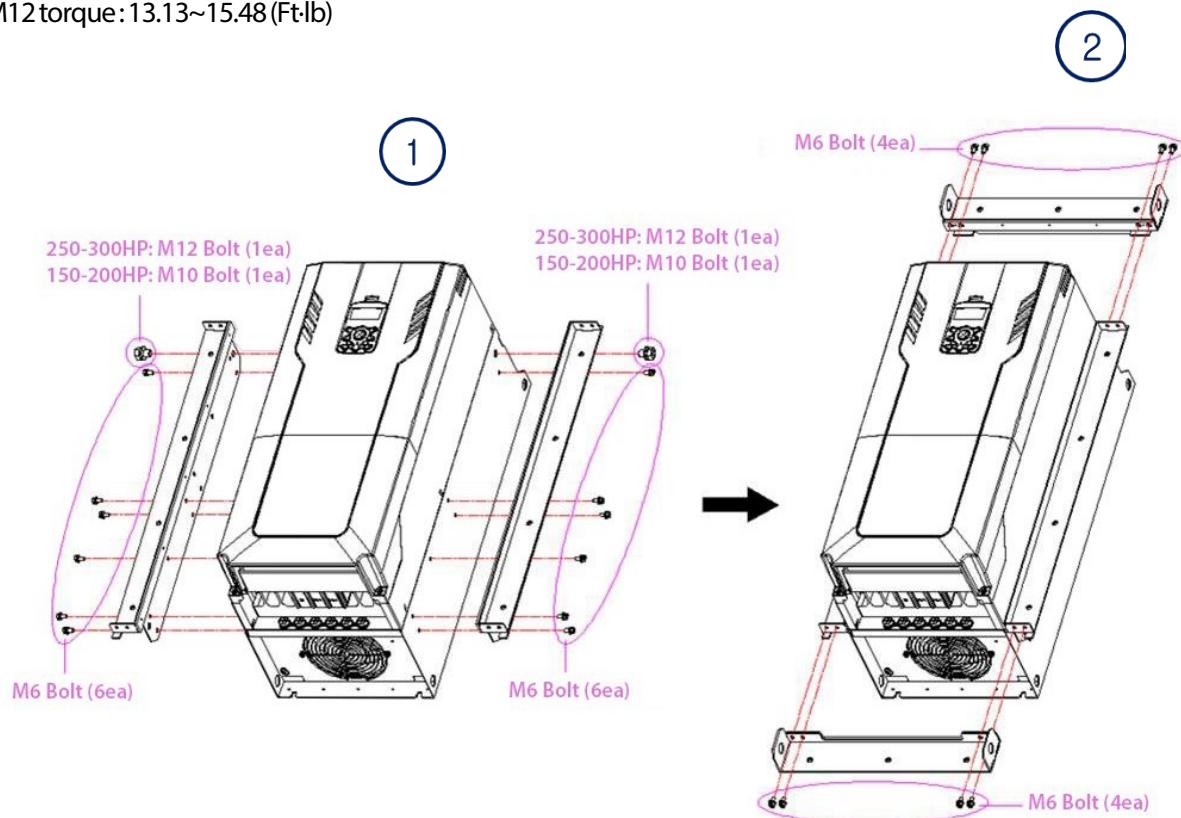


Figure 3. Installation

- ② Fasten the Flange Option with the remaining top and bottom pieces, using the remaining bolts.

4.4 H2: 400HP (460V)

- ① Insert the Flange Option to fit on the sides of the base, fastening the side pieces as shown in Figure 4.

Use the included bolts to tighten to the specified torque requirements below:

- M6 torque: 3.68~4.67 (Ft·lb)

- M12 torque: 13.13~15.48 (Ft·lb)

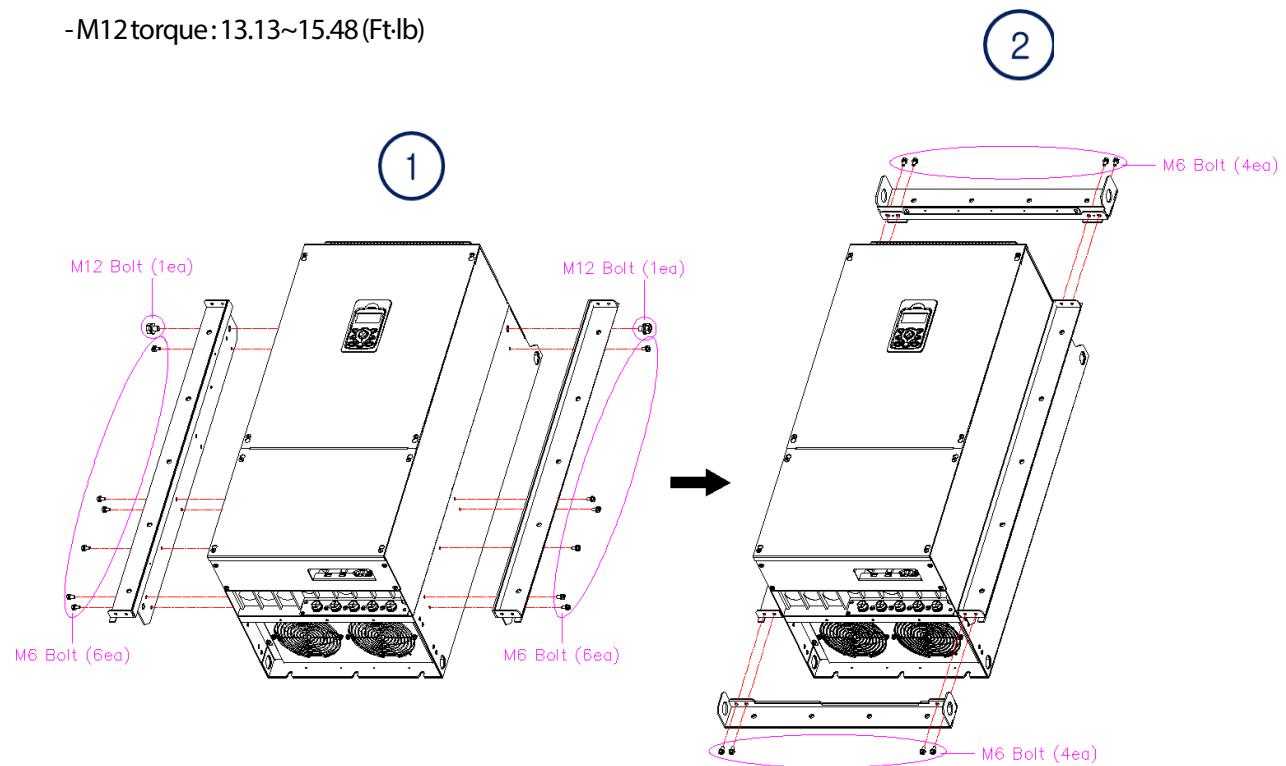


Figure 4. Installation

- ② Fasten the Flange Option with the remaining top and bottom pieces, using the remaining bolts.

4.5 H2: 500HP – 800HP (460V)

- ① Insert the Flange Option to fit on the top and bottom of the base, fastening the positions as shown in Figure 5.

Use the included bolts to tighten to the specified torque requirements below:

- M6 torque : 3.68~4.67 (Ft·lb)

- M8 torque : 4.41~6.61 (Ft·lb)

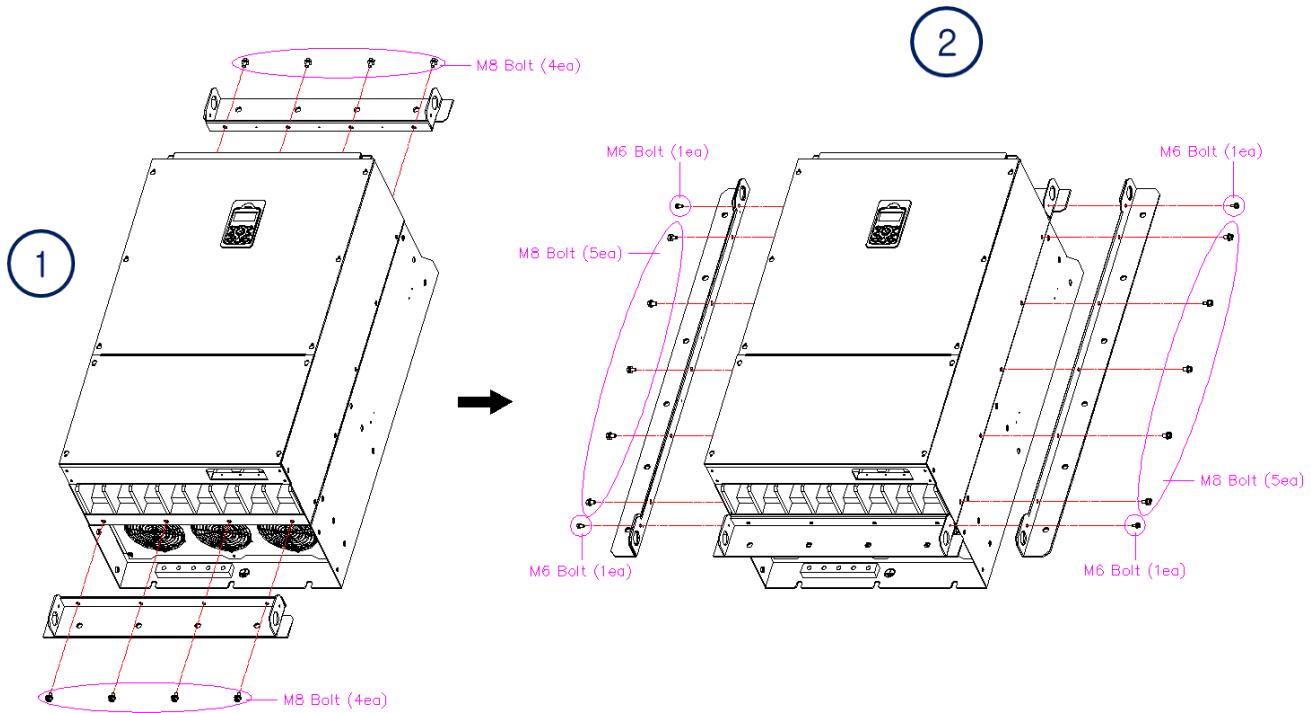
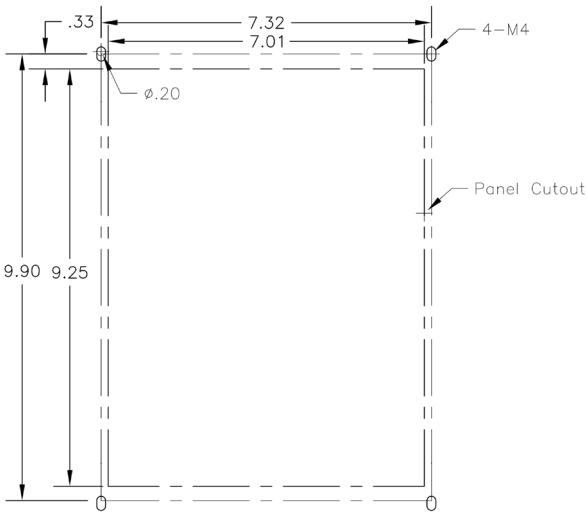
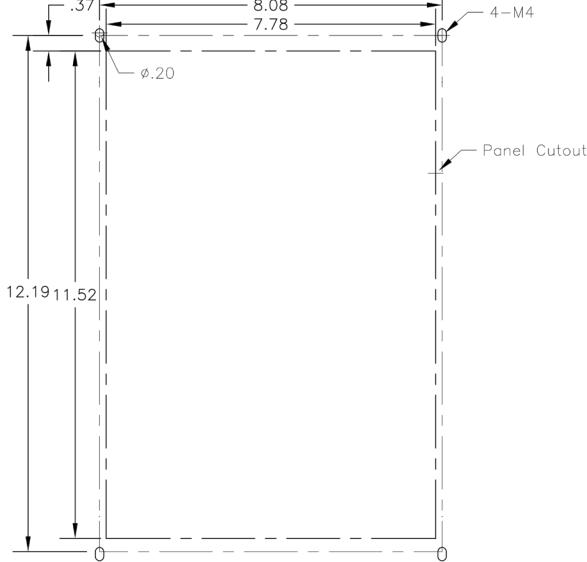
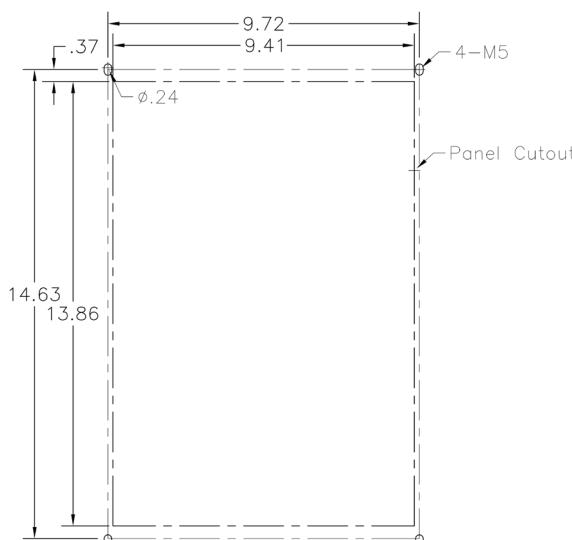
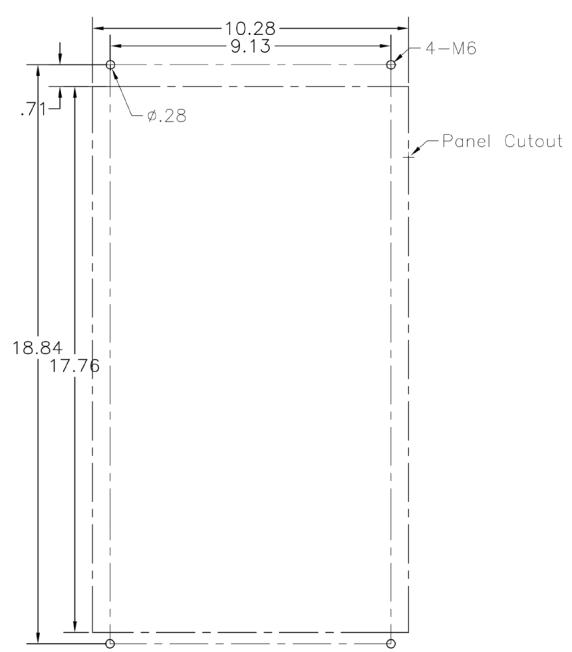
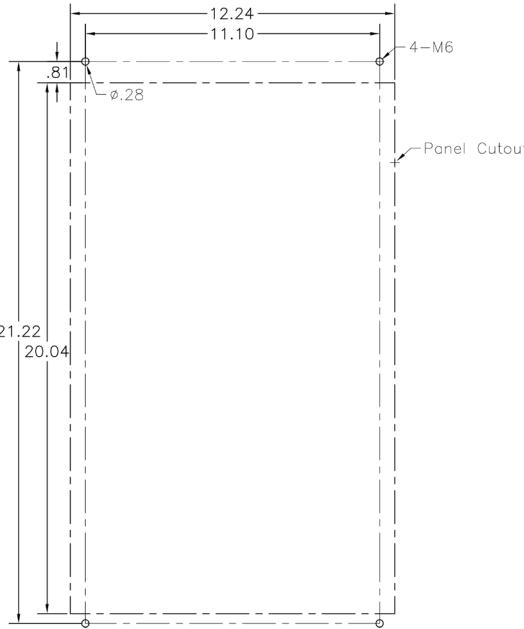
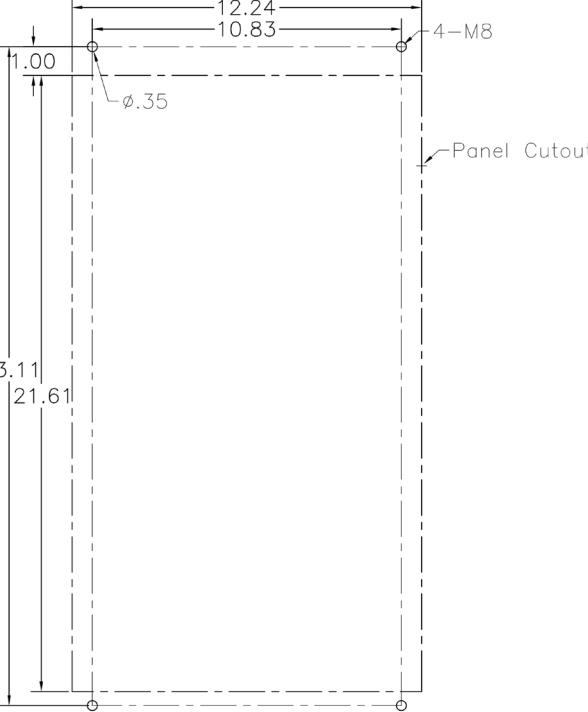
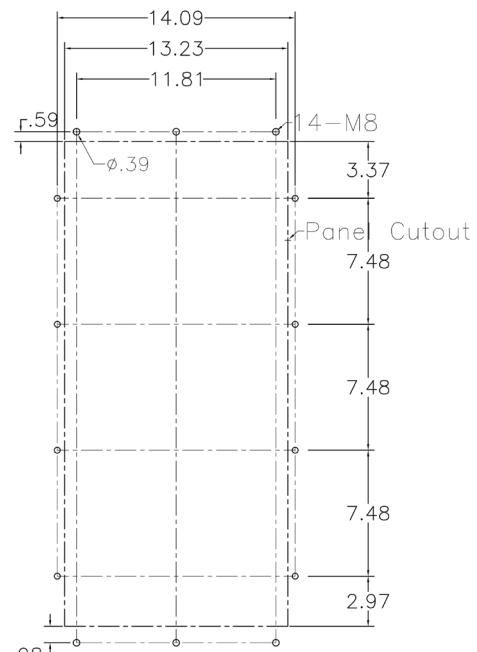
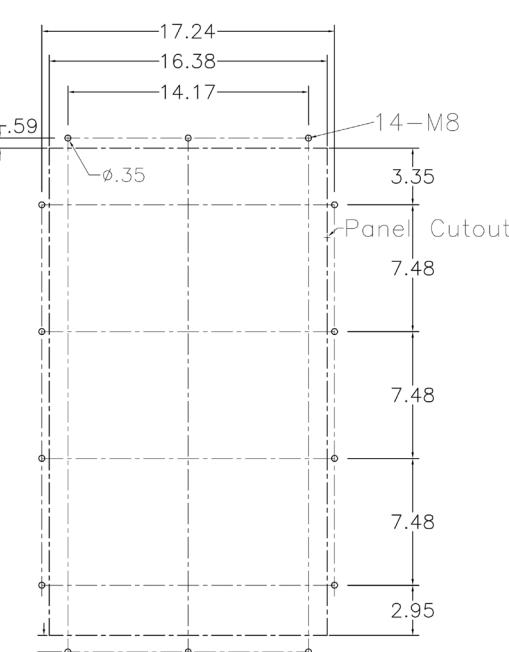


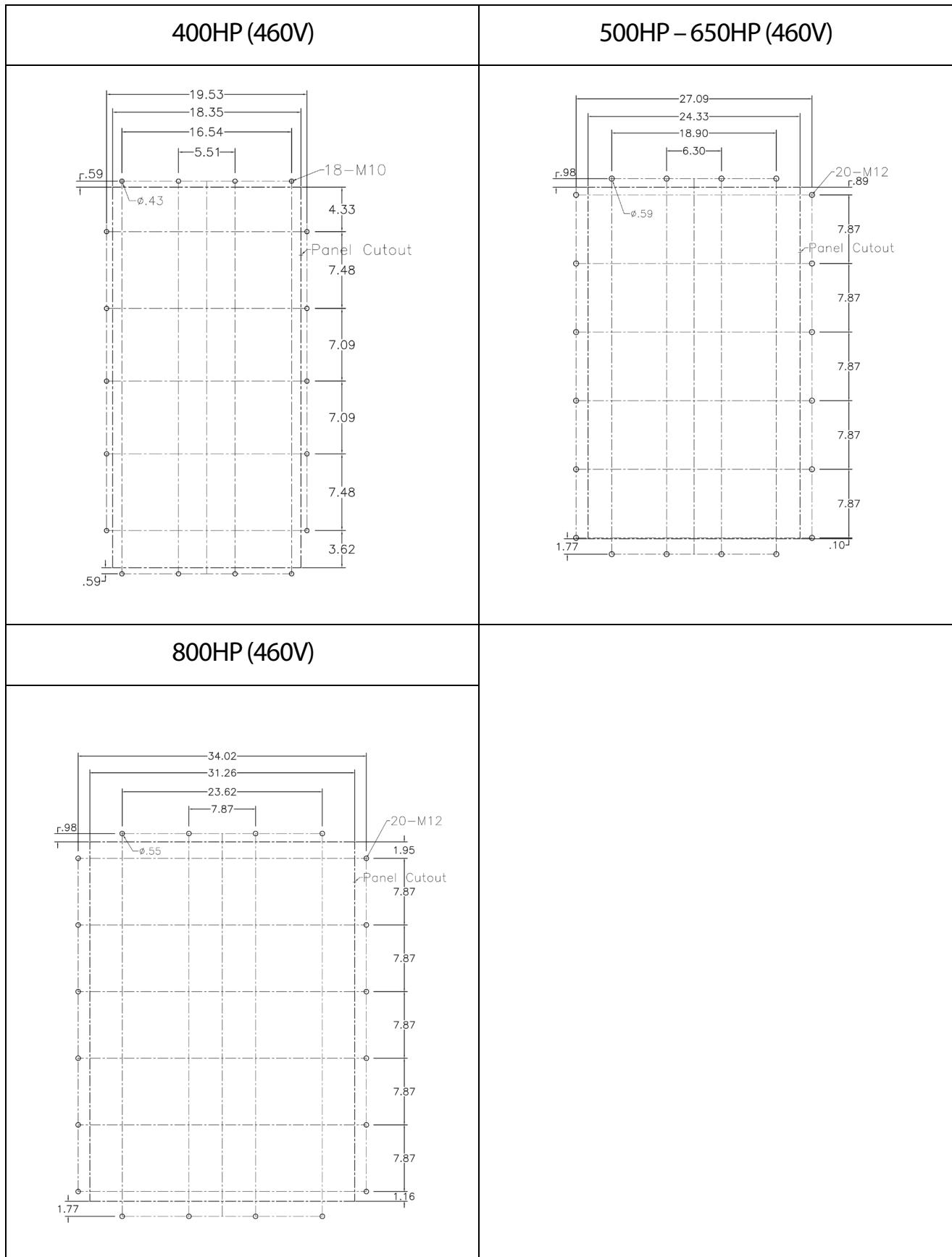
Figure 5. Install and Side Viewing

- ② Fasten the Flange Option with the remaining side pieces, using the remaining bolts.

5. H2 Flange Option Cutout Size

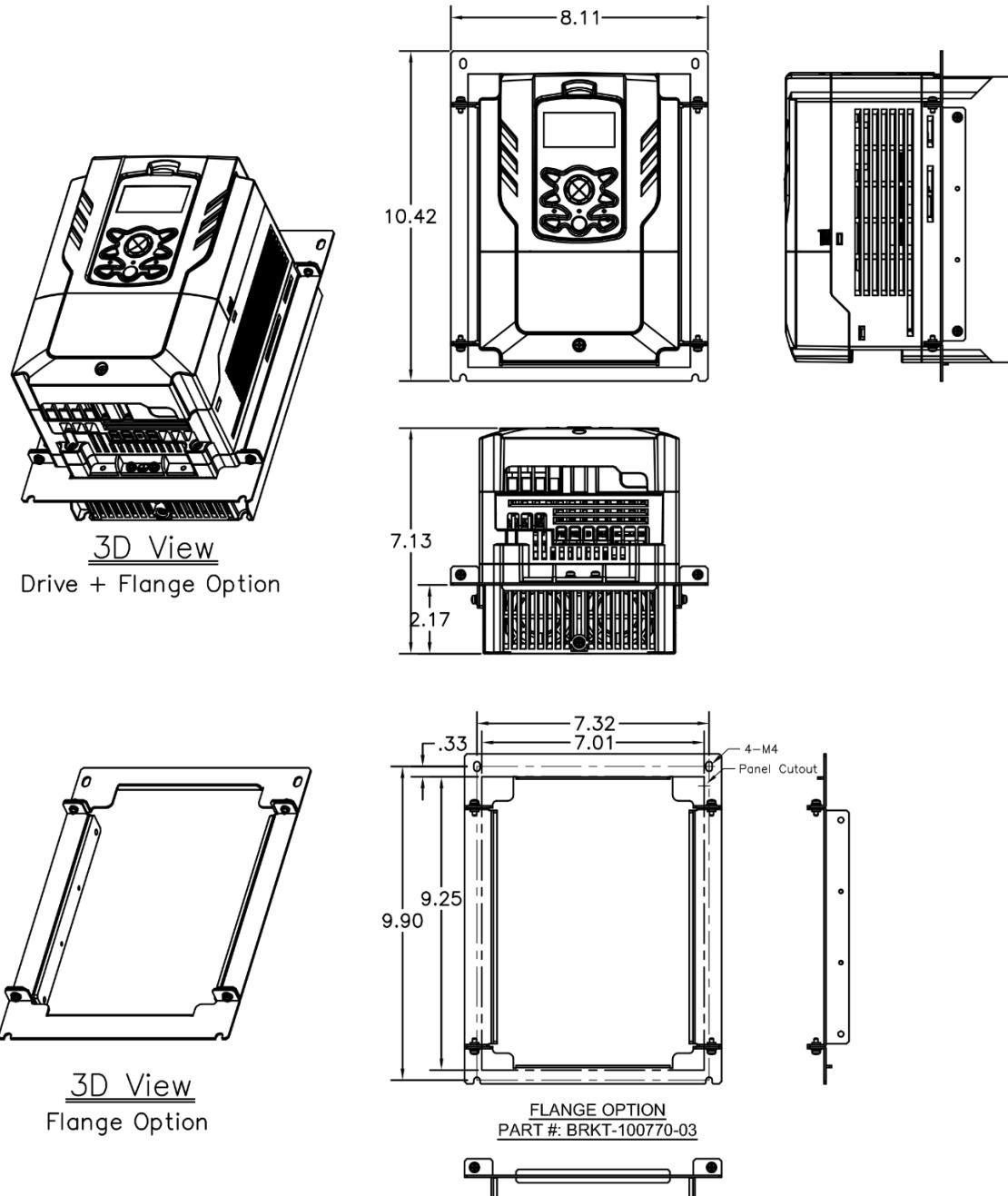
1HP – 15HP (230V), 1HP – 15HP (460V)	20HP (230V), 20HP – 25HP (460V)
 <p>Panel Cutout</p>	 <p>Panel Cutout</p>
25HP (230V), 30HP – 40HP (460V)	50HP (460V)
 <p>Panel Cutout</p>	 <p>Panel Cutout</p>

60HP – 75HP (460V)	100HP – 125HP (460V)
 <p>12.24 11.10 .81 .28 21.22 20.04 Panel Cutout</p>	 <p>12.24 10.83 1.00 .35 23.11 21.61 Panel Cutout</p>
150HP – 200HP (460V)	250HP – 300HP (460V)
 <p>14.09 13.23 .59 .39 11.81 3.37 Panel Cutout 7.48 7.48 7.48 2.97 .98</p>	 <p>17.24 16.38 .59 .35 14.17 3.35 Panel Cutout 7.48 7.48 7.48 2.95 .98</p>

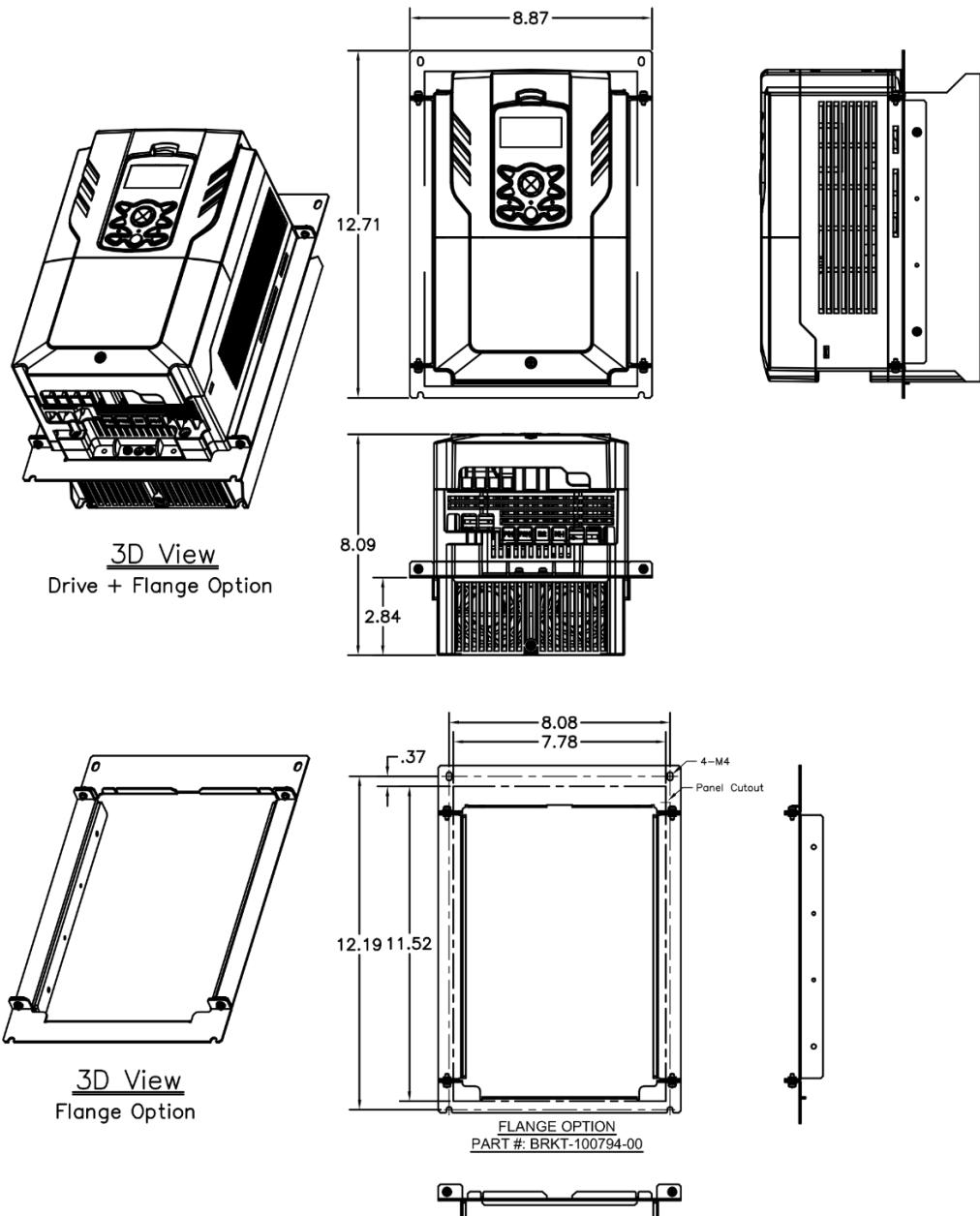


6. Dimensions (with Flange Option installed)

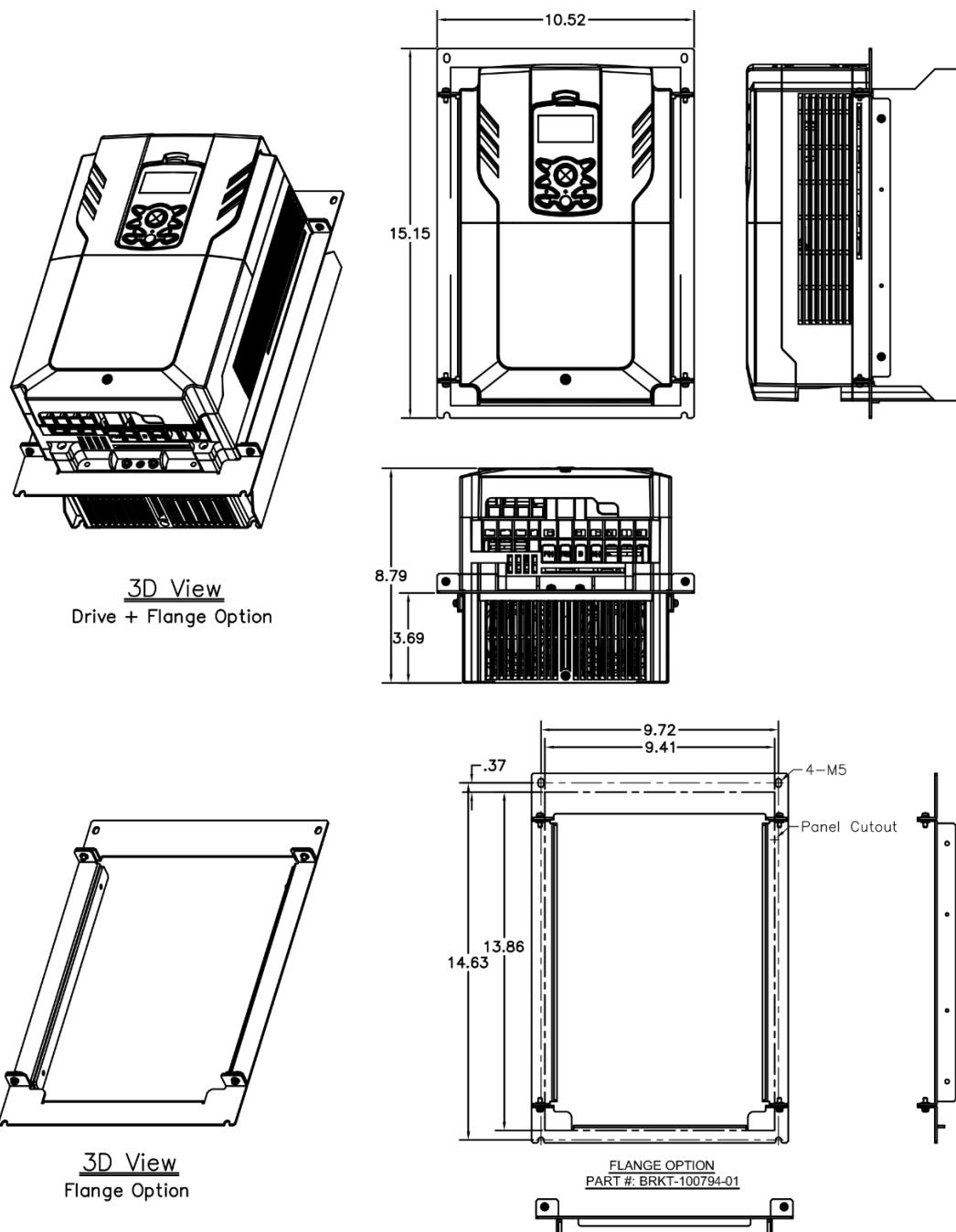
6.1 1HP – 15HP (230V), 1HP – 15HP (460V)



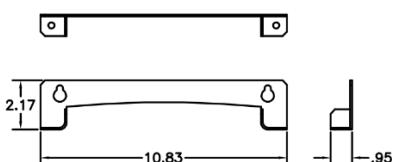
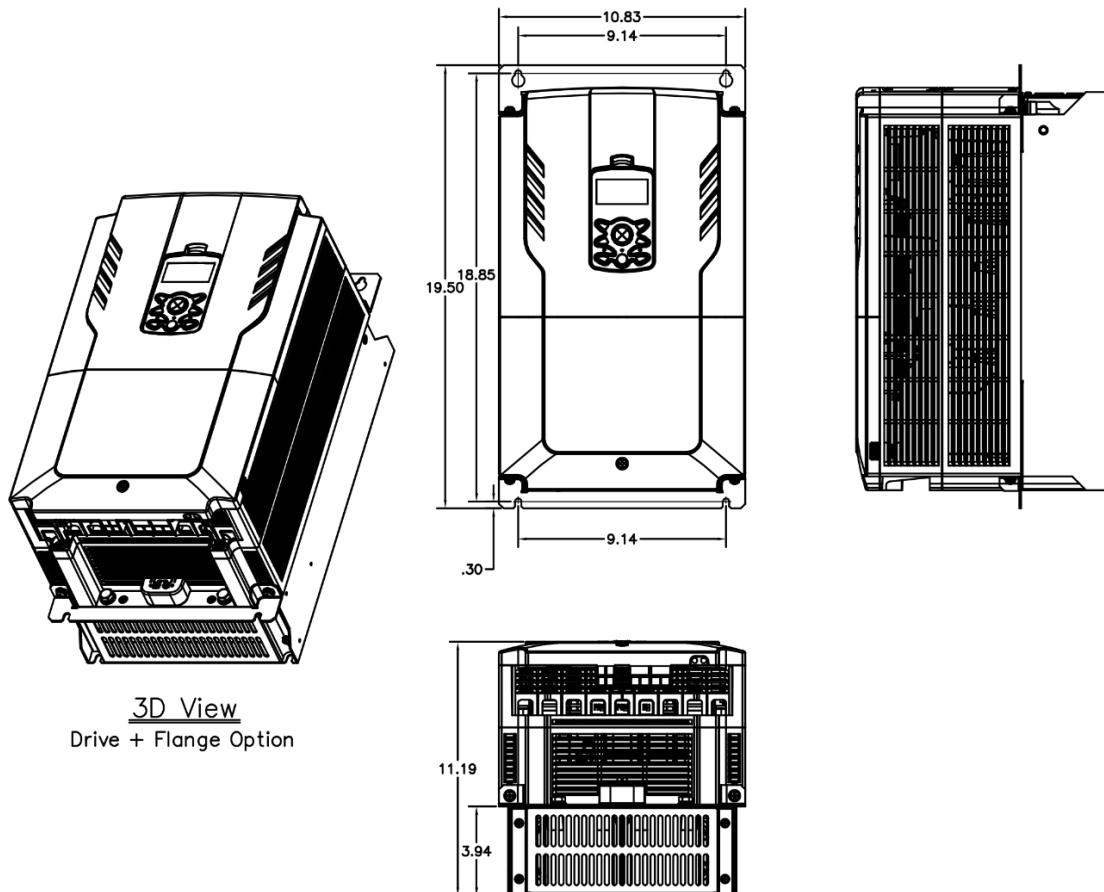
6.2 20HP (230V), 20HP – 25HP (460V)



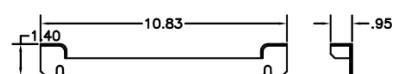
6.3 25HP (230V), 30HP – 40HP (460V)



6.4 50HP (460V)



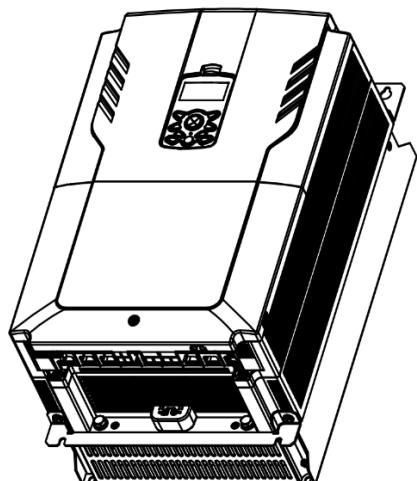
FLANGE OPTION
PART #: BRKT-100794-02



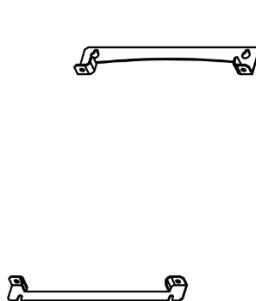
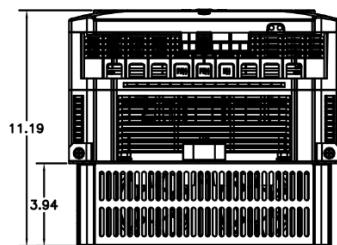
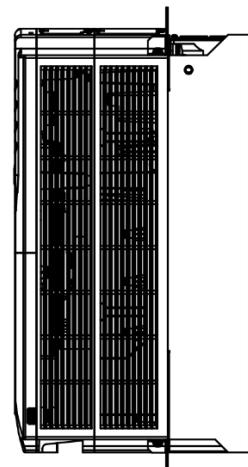
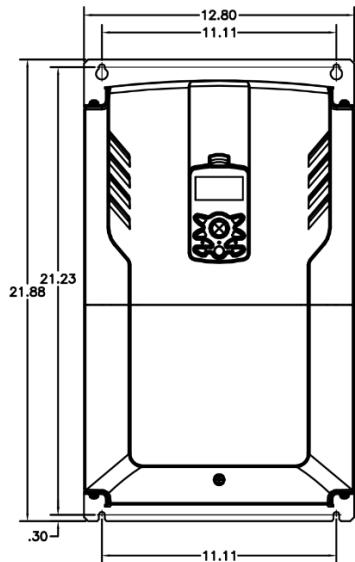
3D View
Flange Option



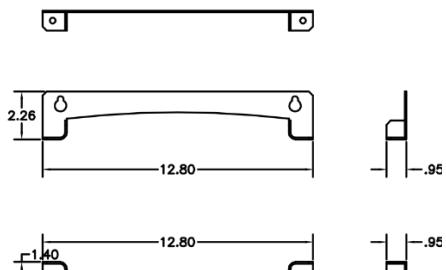
6.5 60HP – 75HP (460V)



3D View
Drive + Flange Option

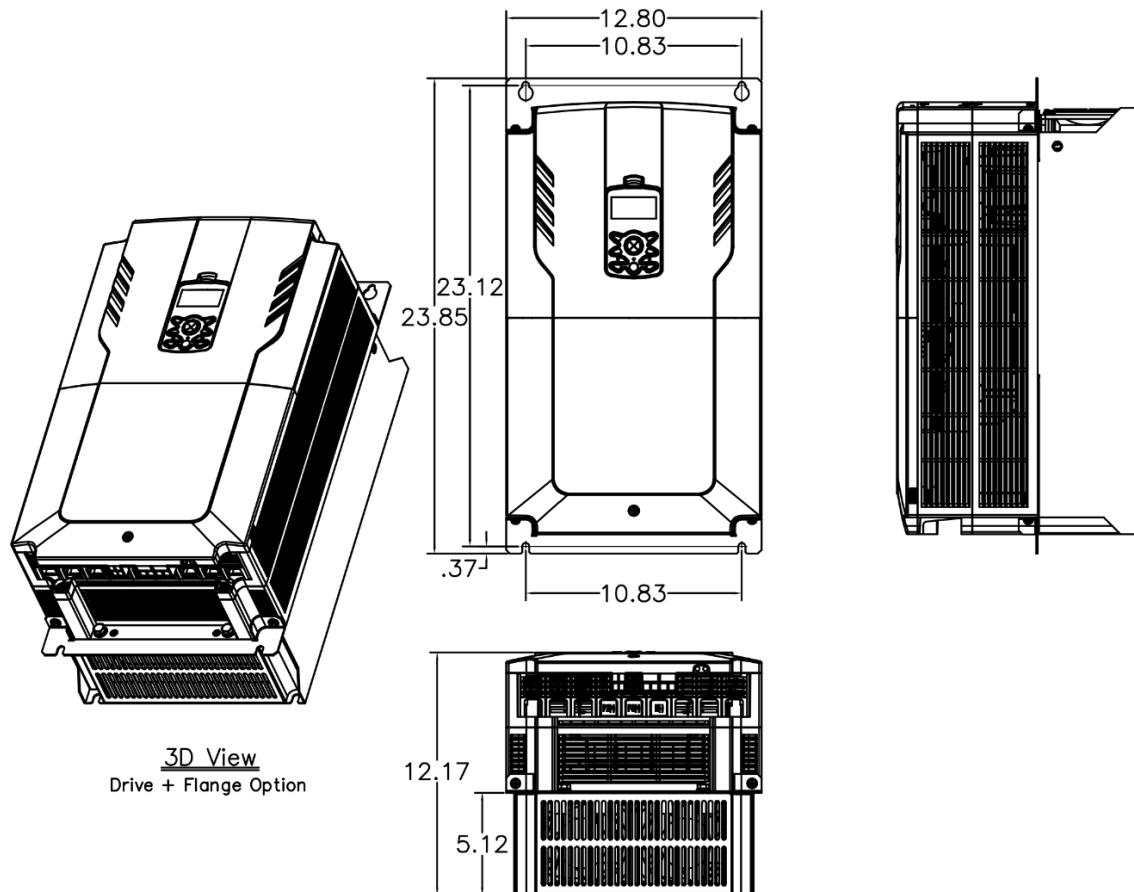


FLANGE OPTION
PART #: BRKT-100794-03



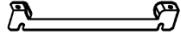
3D View
Flange Option

6.6 100HP – 125HP (460V)

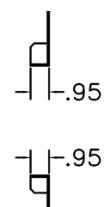
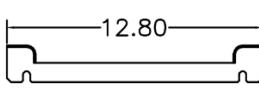
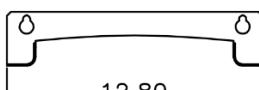


3D View
Drive + Flange Option

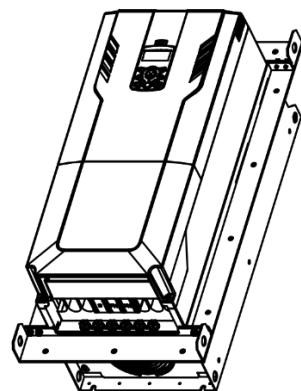
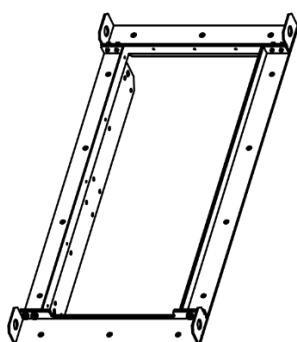
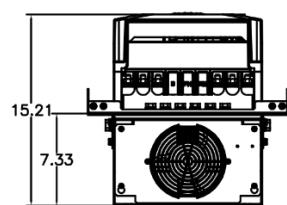
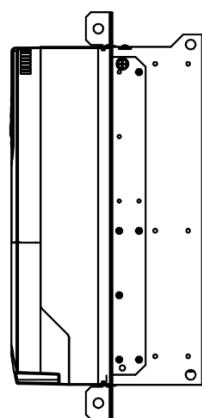
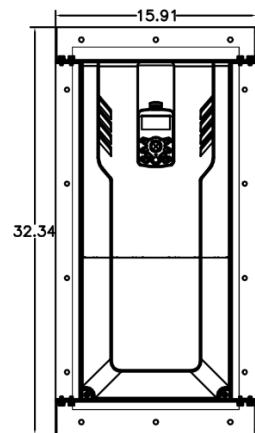
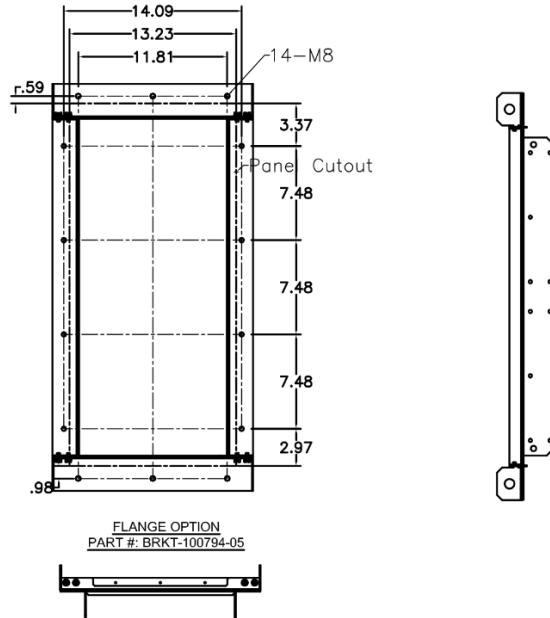
FLANGE OPTION
PART #: BRKT-100794-04



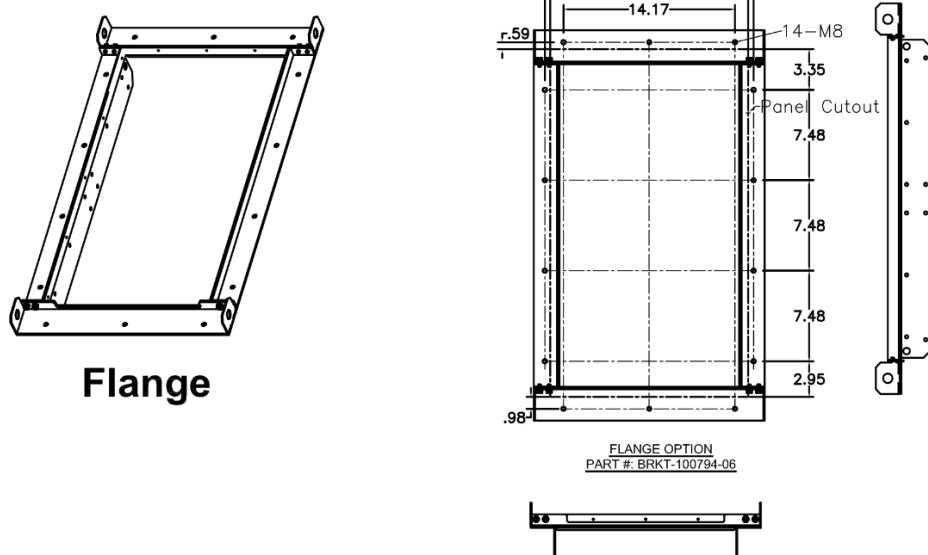
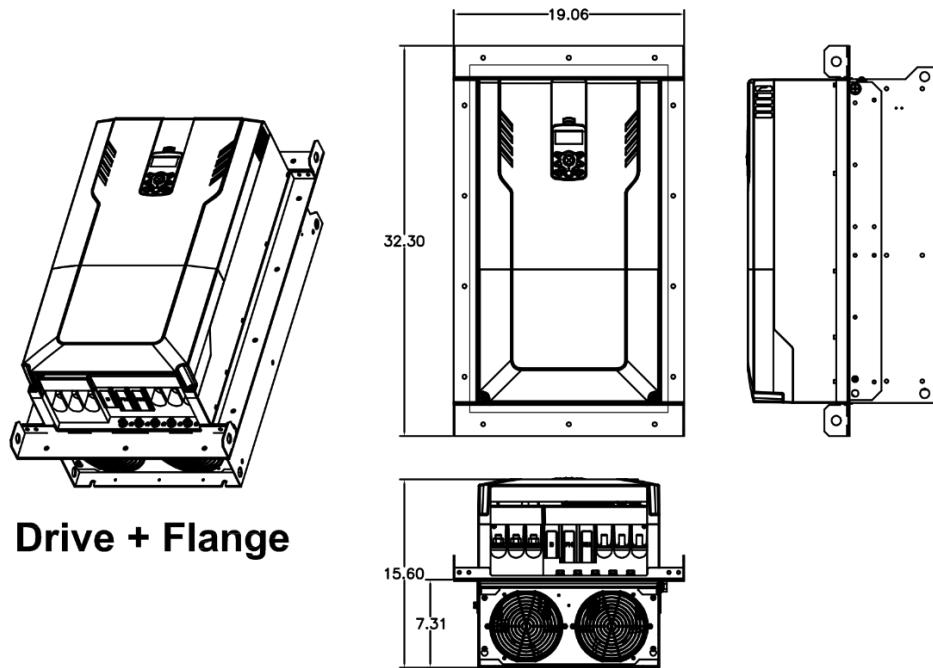
3D View
Flange Option



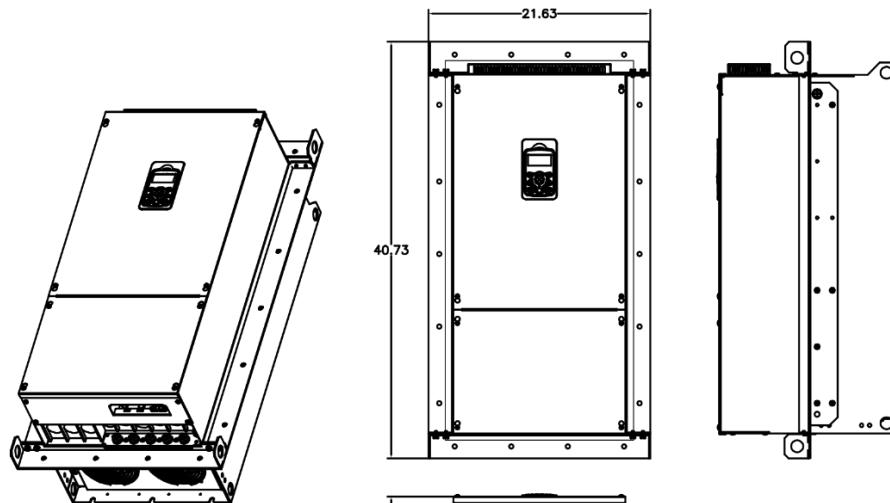
6.7 150HP – 200HP (460V)

**Drive + Flange****Flange**

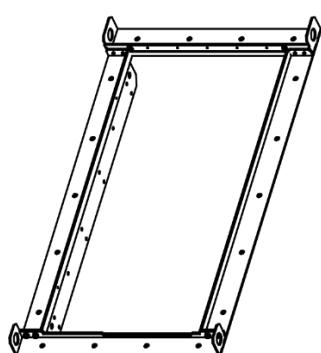
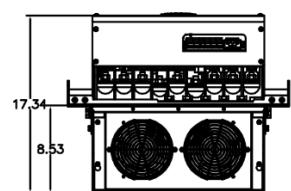
6.8 250HP – 300HP (460V)



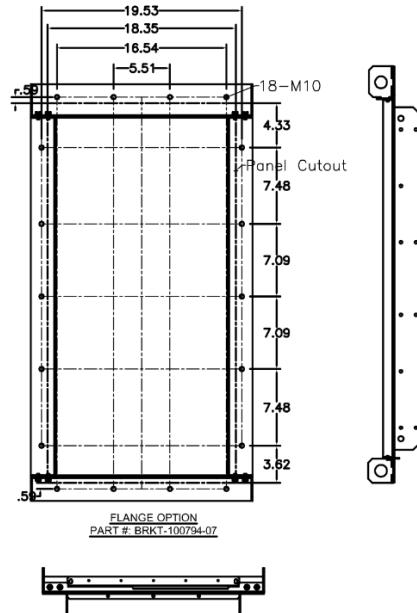
6.9 400HP (460V)



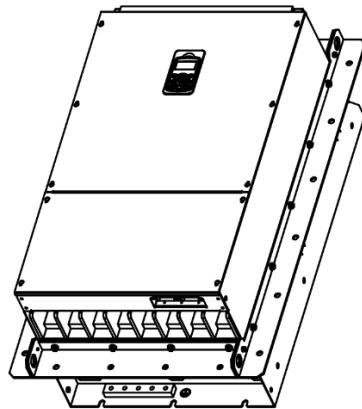
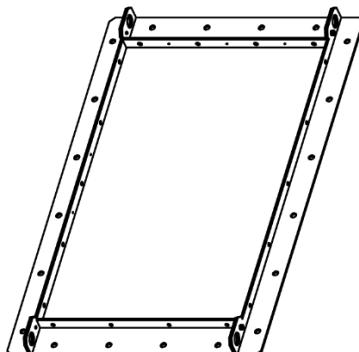
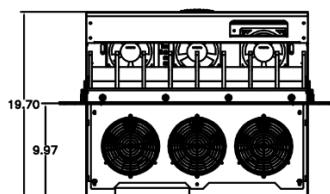
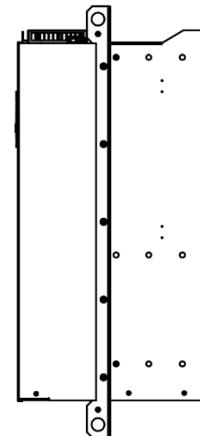
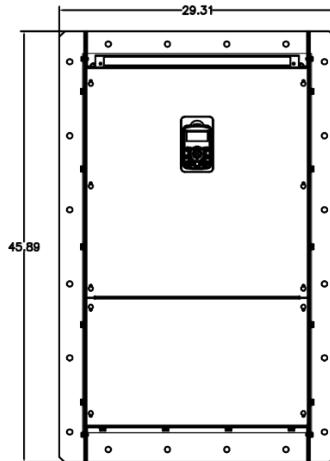
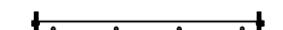
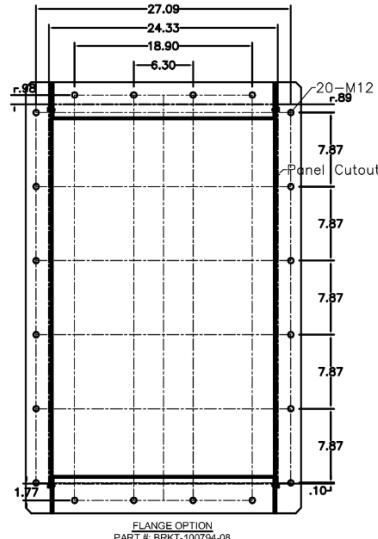
Drive + Flange



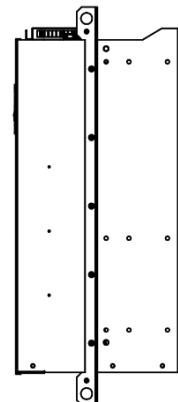
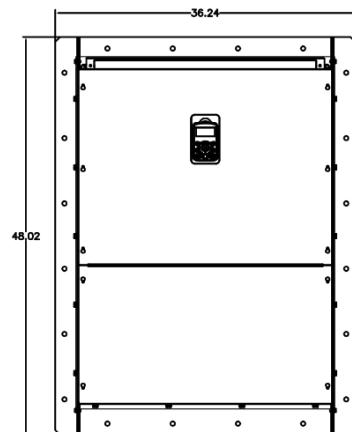
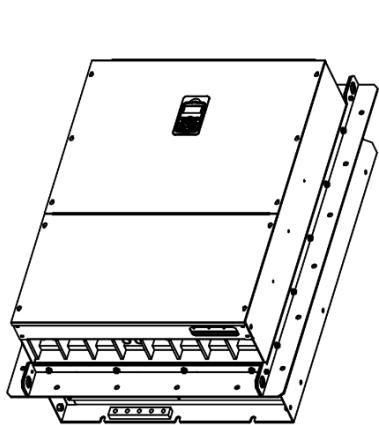
Flange



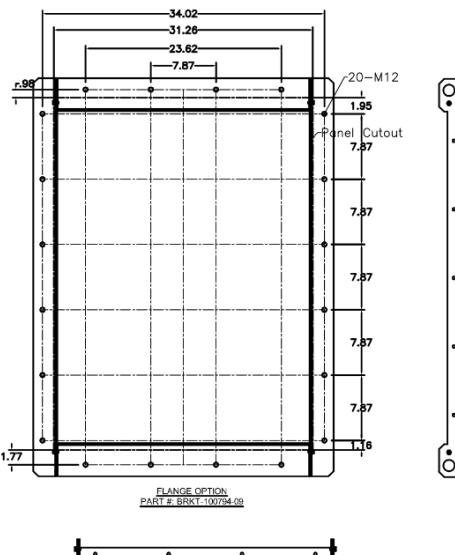
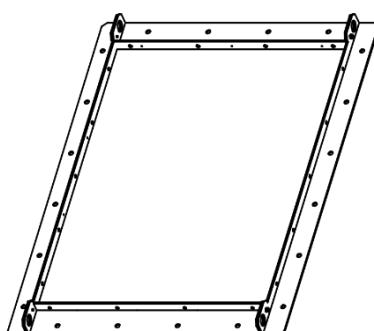
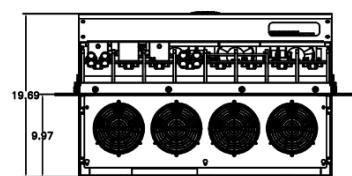
6.10 500HP – 650HP (460V)

**Drive + Flange****Flange**

6.11 800HP (460V)



Drive + Flange



7. Required Hardware

Screws for mounting Flange to VFD included. Screws for mounting Flange to back of enclosure not included.

Required Hardware						
Include		Not included				
Flange		Flange to Enclosure				
230V VFD Size	Flange Option	Qty	Size	Qty	Size	Hole Diameter (inches)
1HP – 15HP	BRKT-100770-03	8	M4	4	M4	0.2
20HP	BRKT-100794-00					0.24
25HP	BRKT-100794-01					
460V VFD Size	Flange Option	Qty	Size	Qty	Size	Hole Diameter
1HP – 15HP	BRKT-100770-03	8	M4	4	M4	0.20
20HP – 25HP	BRKT-100794-00			4	M5	0.24
30HP – 40HP	BRKT-100794-01			4	M6	0.28
50HP	BRKT-100794-02	4	M6	4	M8	0.35
60HP – 75HP	BRKT-100794-03			14	M8	0.39
100HP – 125HP	BRKT-100794-04			14	M8	0.35
150HP – 200HP	BRKT-100794-05	20	M6	18	M10	0.43
250HP – 300HP	BRKT-100794-06	20	M6			
400HP	BRKT-100794-07	2	M12	18	M10	0.43
500HP – 650HP	BRKT-100794-08	4	M6	20	M12	0.59
800HP	BRKT-100794-09	18	M8			0.55

8. Revision History

No	Date	Edition	Changes
1	March 2021	First Edition	-



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