Flange Mounting

For RSi "S" Series

Variable Frequency Drive

Instruction Manual





890049-13-00

© 2021 Benshaw Inc.

Benshaw retains the right to change specifications and illustrations in text without prior notification. The contents of this document may not to be copied without the explicit permission of Benshaw



Safety Information

Read and follow all safety instructions in this manual to avoid unsafe operating conditions, property damage, personal injury, or death.

Safety symbols in this manual



A Danger

Indicates an imminently hazardous situation which, if not avoided, will result in severe injury or death.

① Caution

Indicates a potentially hazardous situation which, if not avoided, could result in injury or death.

⚠ Warning

Indicates a potentially hazardous situation that, if not avoided, could result in minor injury or property damage.

A Danger

- Do not open the cover of the equipment while it is on or operating. Likewise, do not operate the inverter while the cover is open. Exposure of high voltage terminals or charging area to the external environment may result in an electric shock.
- Do not remove any covers or touch the internal circuit boards (PCBs) or electrical contacts on the product when the power is on or during operation. Doing so may result in serious injury, death, or serious property damage.
- Do not open the cover of the equipment even when the power supply to the inverter has been turned off unless it is necessary for maintenance or regular inspection. Opening the cover may result in an electric shock even when the power supply is off.
- The equipment may hold charge long after the power supply has been turned off. Use a multi-meter to make sure that there is no voltage before working on the inverter, motor or motor cable.

① Caution

- Do not modify the interior workings of the inverter. Doing so will void the warranty.
- The inverter is designed for 3-phase motor operation. Do not use the inverter to operate a single phase motor.
- Do not place heavy objects on top of electric cables. Doing so may damage the cable and result in an electric shock.

⚠ Warning

- This equipment must be grounded for safe and proper operation.
- Do not supply power to a faulty inverter. If you find that the inverter is faulty, disconnect the power supply and have the inverter professionally repaired.
- The inverter becomes hot during operation. Avoid touching the inverter until it has cooled to avoid burns.

Table of Contents

1 2 3 4	2 Before using the product					
4.	•	7.5 HP (230V/460V)				
4.	2 10 HP	~ 15 HP (230V/460V	2			
5	Cutout Dime	ensions	3			
5.	1 230V, 1	1 HP - 2 HP	3			
5.	2 230V, 3	3 HP - 5 HP	3			
5.	3 230V, 7	7.5 HP	4			
5.	4 460V, 1	1 HP - 2 HP	4			
5.	5 460V, 3	3 HP - 5 HP	5			
5.	6 460V, 7	7.5 HP	5			
5.	7 230V, 1	0 HP - 15 HP	6			
5.	8 460V, 1	.0 HP - 15 HP	6			
6	Inverter with	Flange Dimensions	7			
6.	1 230V, 1	1 HP - 2 HP	7			
6.	2 230V, 3	3 HP - 5 HP	8			
6.	3 230V, 7	7.5 HP	9			
6.	4 460V, 1	1 HP - 2 HP	10			
6.	5 460V, 3	3 HP - 5 HP	11			
6.	6 460V, 7	7.5 HP	12			
6.	7 230V, 1	10 HP - 15 HP	13			
6.	.8 460V, 1	10 HP - 15 HP	13			
7	Revision His	story	14			

1 Product Overview

This installation guide is for the Flange Mounting Option of the "S" Series inverter. This option is designed to provide mounting of the heat sink of the inverter on the outside of panel. This allows for radiating the majority of the heat produced by the inverter to outside of the enclosure.

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 the label of model whether it is as same as the model number printed on the package of the flange option.

3 Flange Option Part Numbers

The screws for mounting the flange option to the inverter are included. The hardware for mounting flange to enclosure are not included.

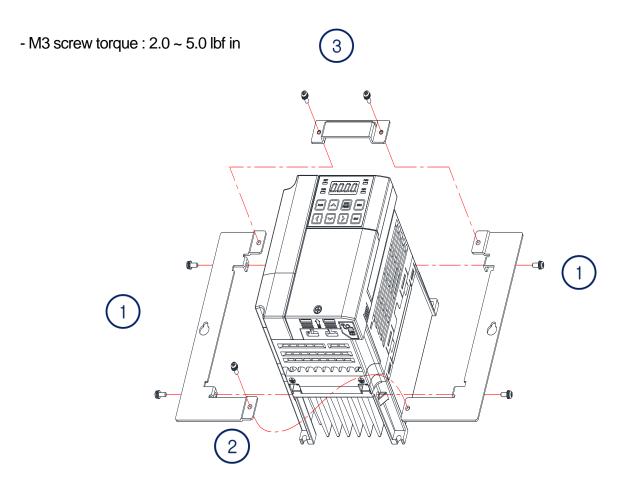
Flange Part#	230V Applicable VFD			
BRKT-100770-00	VFD-RSI-001-SS-2C			
BRKT-100770-00	VFD-RSI-002-SS-2C			
BRKT-100770-01	VFD-RSI-003-SS-2C			
BRKT-100770-01	VFD-RSI-005-SS-2C			
BRKT-100770-02	VFD-RSI-007-SS-2C			
BRKT-100770-03	VFD-RSI-010-SS-2C			
BRKT-100770-03	VFD-RSI-015-SS-2C			
Flange Part#	460V Applicable VFD			
BRKT-100770-04	VFD-RSI-001-SS-4C			
BRKT-100770-04	VFD-RSI-002-SS-4C			
BRKT-100770-05	VFD-RSI-003-SS-4C			
BRKT-100770-05	VFD-RSI-005-SS-4C			
BRKT-100770-06	VFD-RSI-007-SS-4C			
BRKT-100770-03	VFD-RSI-010-SS-4C			
BRKT-100770-03	VFD-RSI-015-SS-4C			

4 Assembly and Installation Procedure

4.1 1 HP ~ 7.5 HP (230V/460V)

Figure 1 below is representative of the 1 HP through 7.5 HP range.

- 1 Install the side pieces of the flange option (left and right) to the base of the inverter using the provided hardware as shown in the Figure 1. Do not completely tighten screws at this time.
- 2 Install one screw at bottom center of the flange.
- 3 Install the top piece of the flange option.
- 4 Tighten screws to the specified torque.



4.2 10 HP ~ 15 HP (230V/460V

Figure 2. below is representative of the 10 HP through 15 HP range.

- 1 Install the side pieces of the flange option (left and right) to the base of the inverter using the provided hardware as shown in the Figure 2. Do not completely tighten screws at this time.
- 2 Install the top and bottom pieces of the flange option to the inverter.
- 3 Tighten screws to the specified torque.

- M4 screw torque : 2.0 ~ 5.0 lbf in

- M5 screw torque : 3.5 ~ 9.0 lbf in

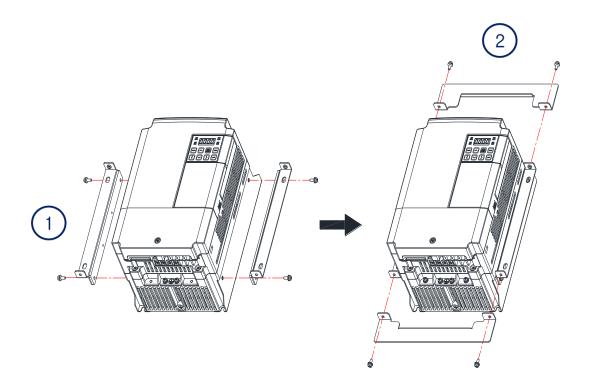
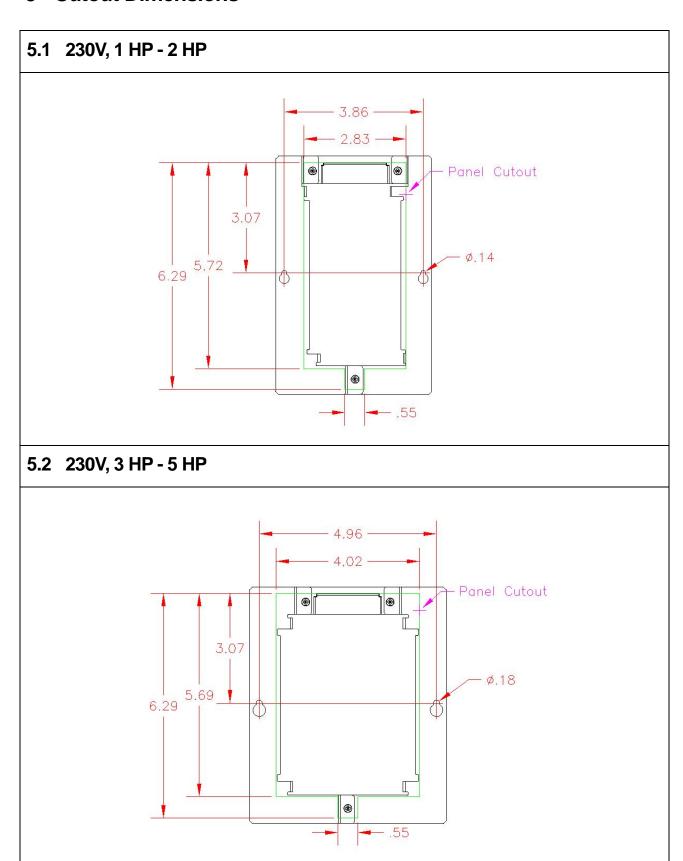
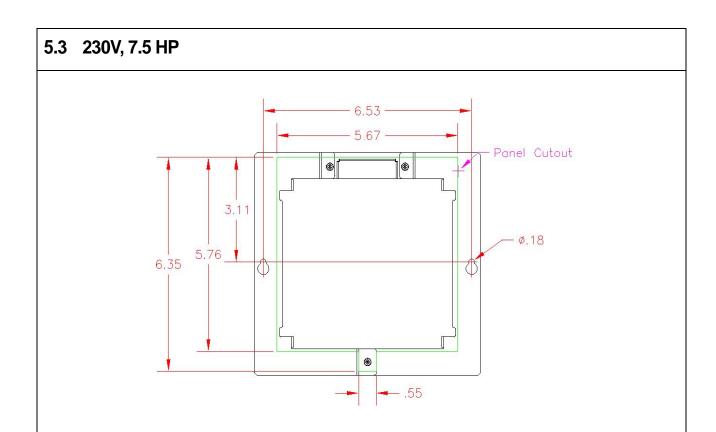


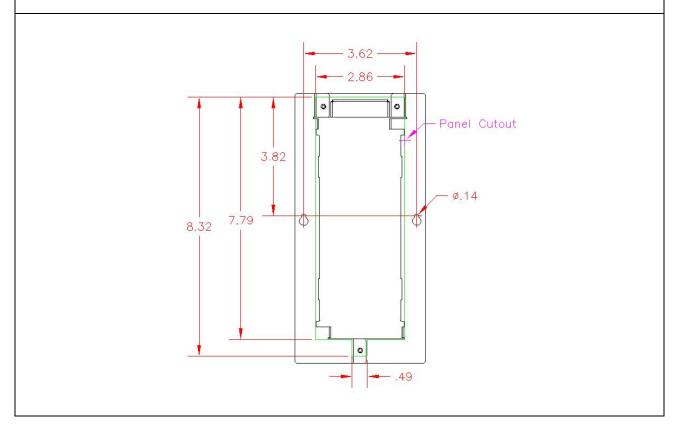
Figure 2.

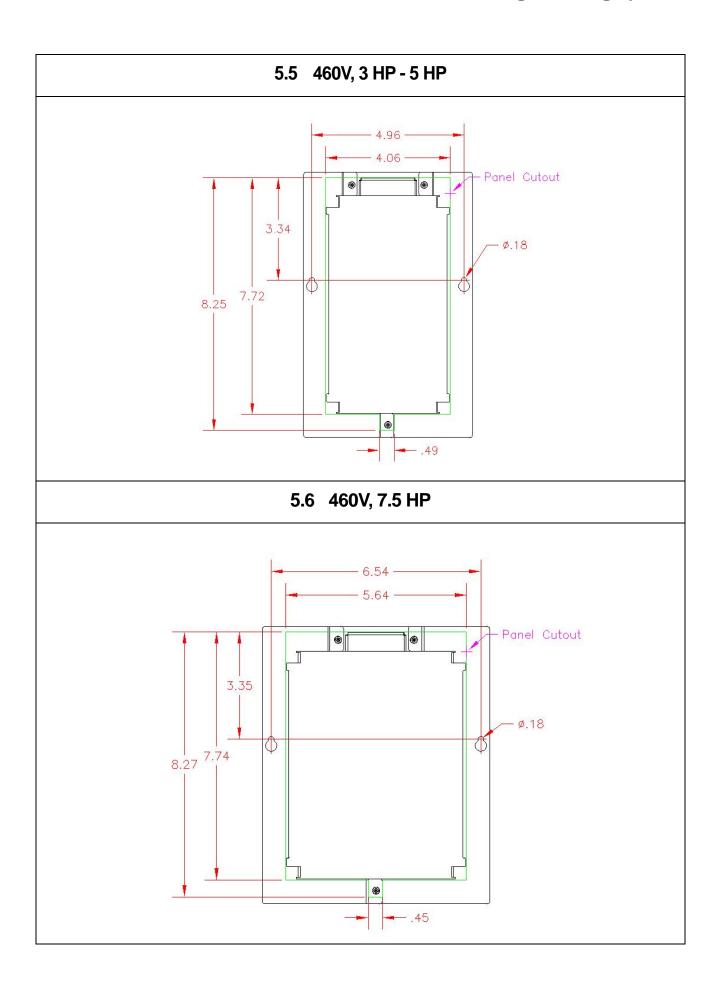
5 Cutout Dimensions

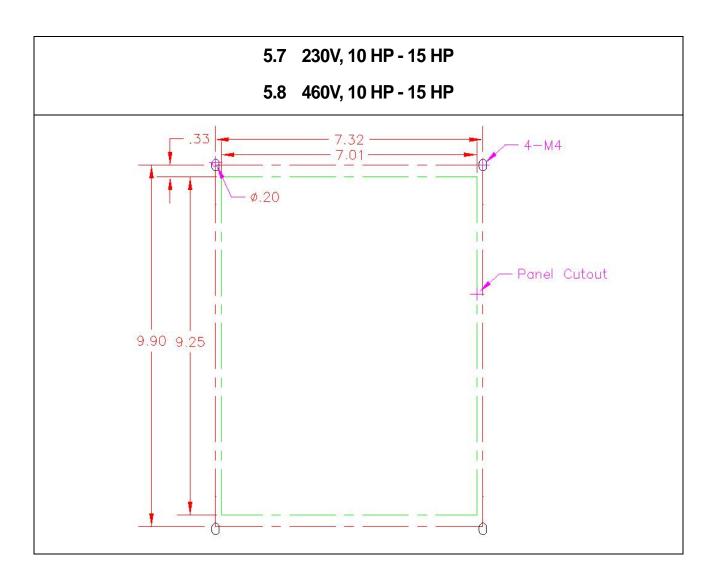




5.4 460V, 1 HP - 2 HP

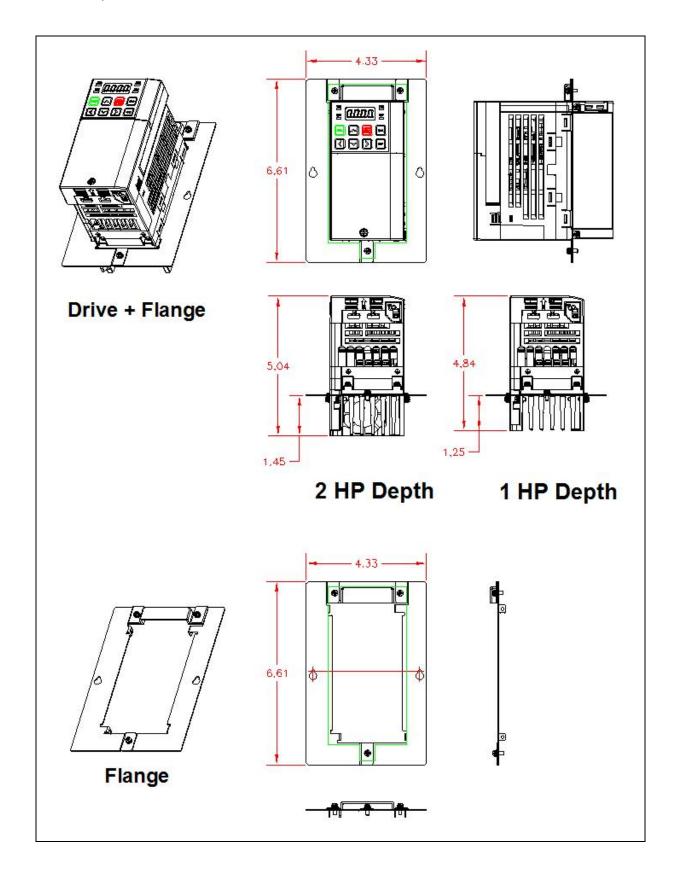




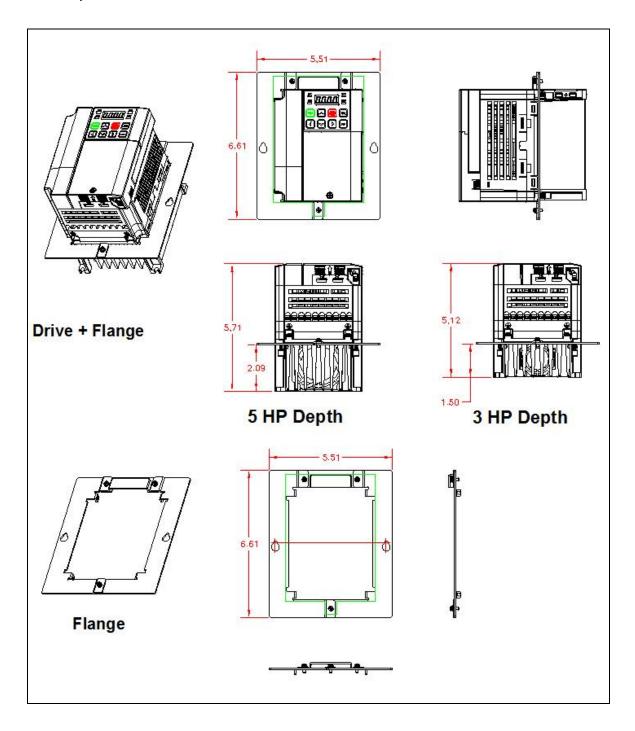


6 Inverter with Flange Dimensions

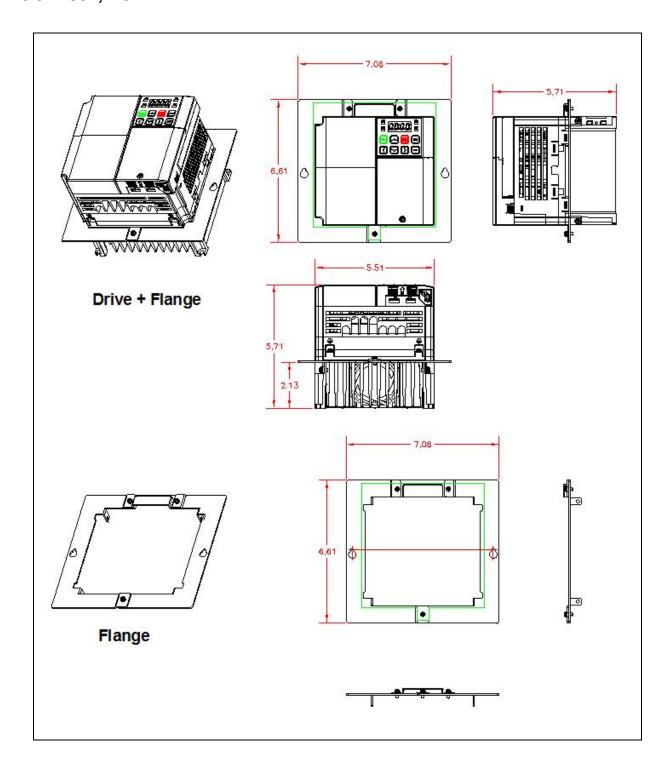
6.1 230V, 1 HP - 2 HP



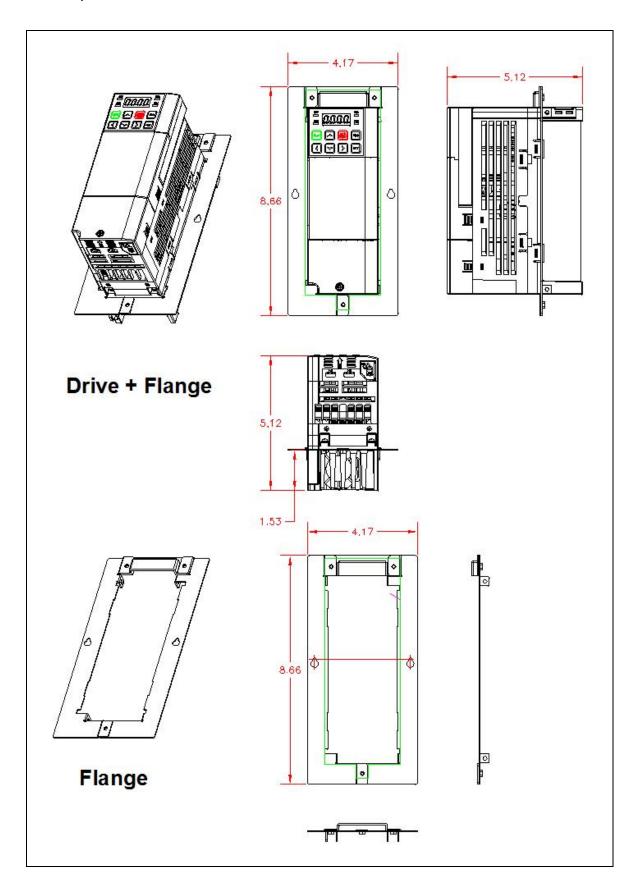
6.2 230V, 3 HP - 5 HP



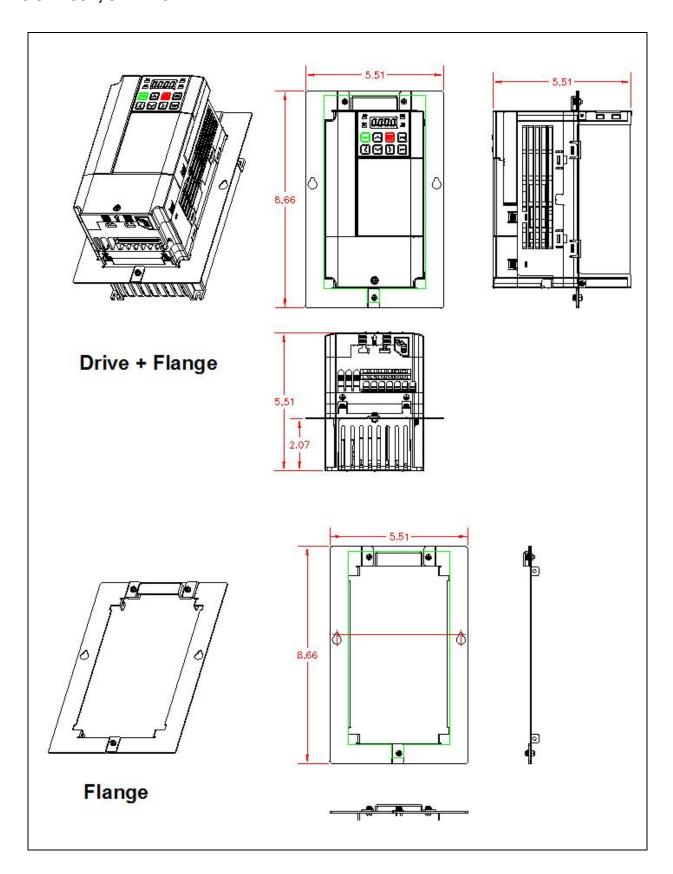
6.3 230V, 7.5 HP



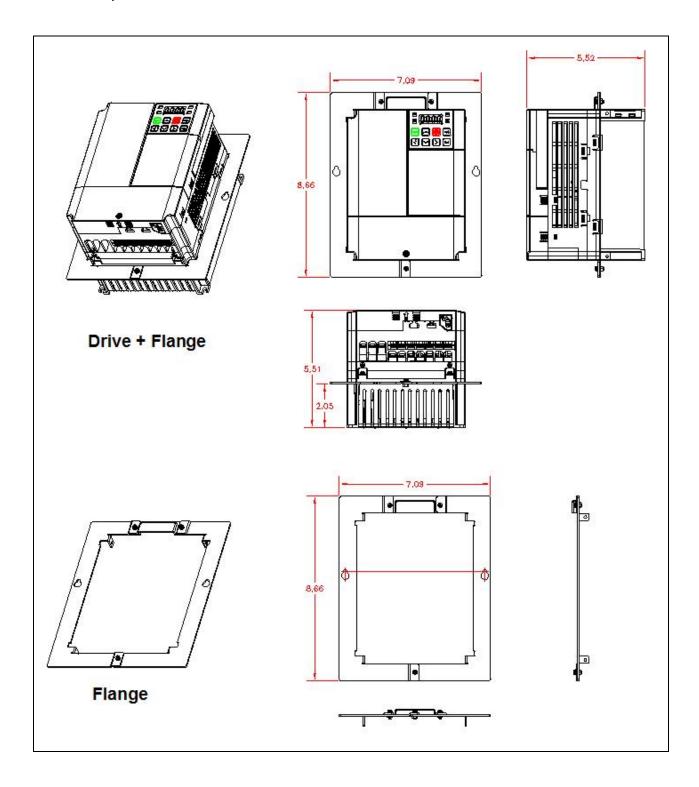
6.4 460V, 1 HP - 2 HP



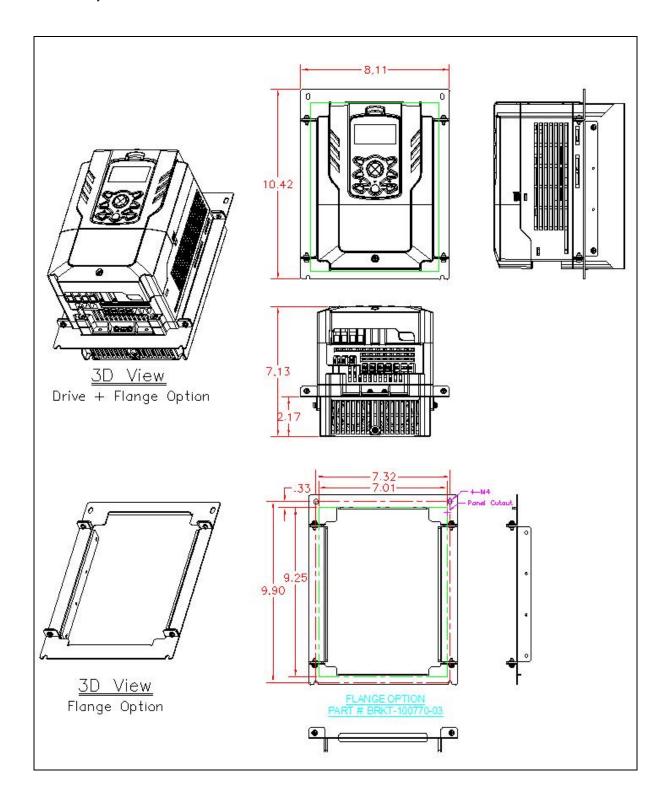
6.5 460V, 3 HP - 5 HP



6.6 460V, 7.5 HP



- 6.7 230V, 10 HP 15 HP
- 6.8 460V, 10 HP 15 HP



7 Revision History

No	Date	Edition	Changes
0	03/04/21	Initial Release	-



BENSHAW 615 Alpha Drive Pittsburgh, PA 15238 Phone: (412) 968-0100 Fax: (412) 968-5415

BENSHAW Canada 550 Bright Street

Listowel, Ontario N4W 3W3 Phone: (519) 291-5112

Fax: (519) 291-2595