Table of Contents

Thank you for purchasing LS Variable Frequency Drives!

SAFETY INSTRUCTIONS

To prevent injury and property damage, follow these instructions. Incorrect operation due to ignoring instructions can cause harm or damage. The following symbols indicate the seriousness and risks associated with a particular item..

⚠ DANGER	This symbol indicates the instant death or serious injury if you don't follow instructions
⚠ WARNING	This symbol indicates the possibility of Death or serious injury
⚠ CAUTION	This symbol indicates the possibility of Injury or damage to property

- The definition 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 situation.

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

- After reading this manual, keep it in a location the easily found.
- This manual should be given to the person who actually installs the products and responsible for their maintenance.

⚠ WARNING

- **Do not remove the cover while power is applied or the unit is in operation.**

  Otherwise, electric shock can occur.

- **Do not run the inverter with the front cover removed.**

  Otherwise, you may get an electric shock 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.**

  Otherwise, you may access the charged circuits and get an electric shock.

- **Wiring and periodic inspections should be performed at least 10 minutes after disconnecting the input power and after checking the DC link voltage is discharged with a meter (below DC 30V).**

  Otherwise, you may get an electric shock.

- **Do not operate the products or switches with wet hands.**

  Otherwise, you may get an electric shock.

- **Do not use wire or cable when if the insulation is damaged.**

  Otherwise, you may get an electric shock and cause damage to the product..

- **Do not subject the cables to scratches, excessive stress, heavy loads or pinching.**

  Otherwise, you may get an electric shock.

⚠ CAUTION

- **Install the inverter on a non-flammable surface. Do not place flammable material nearby.**

  Otherwise, fire could occur.

- **Disconnect the input power if the inverter gets damaged.**

  Otherwise, it could result in injuries or fire.

- **Do not touch the inverter while the input power is applied or after removed. It will remain energized for a up to 5 minutes.**

  Otherwise, you may get bodily injuries such as skin-burn or damage.

- **Do not apply power to a damaged inverter or to an inverter with parts missing even if the installation is complete.**

  Otherwise, electric shock could occur.

- **Do not allow lint, paper, wood chips, dust, metallic chips or other foreign matter into the drive.**

  Otherwise, fire or accident could occur.

OPERATING PRECAUTIONS

- **Make sure to tighten to the specific torque, do not over tighten the screw.**

  Otherwise, it could result in product damage.

1. Preface and Safety

This installation guide is applied to the SV-IS7 drive series Flange Option..

2. Product Overview

This option is designed to provide the functionality of installing a flange option on to the drive to extend the heat sink out the back of an enclosure to reduce the amount of heat inside the enclosure.

3. 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.

- Verify receipt of the correct model by checking the model number printed on the package of the flange option.

4. Contents

Capacity	FLANGE		Screw			Manual
	Up	Low	M5	M6	M12	
0.75~3.7kW-200V/400V	1	1	4			1
5.5~7.5kW-200V/400V	1	1	4			1
11~15kW-200V/400V	1	1	8			1
18.5~22kW-200V/400V	1	1	8			1
30~45kW-400V	1	1		8		1
55~75kW-400V	1	1		8		1
90~110kW-400V	1			4	2	1
132~160kW-400V	1			4	2	1
185~220kW-400V	1			4	2	1

5. 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 can result in death or serious injury.

Wiring and periodic inspections should be performed at least 10 minutes after disconnecting the input power

And after checking the DC link voltage is discharged with a meter (below DC 30V)

4.1 0.75~7.5kW-200V/400V

① Remove the Top Cover.

② Insert the Flange Option to fit on the product by fastening the top/bottom positions as shown in Figure 1.

③ Using the included bolt, tighten to the specific torque.

- M5 Screw Torque : 35 (kfg·cm) / 30 lb-in

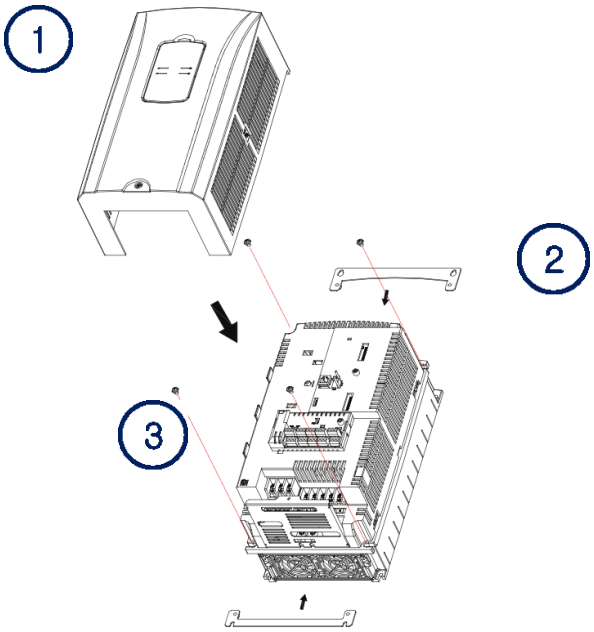


Figure 1. 0.75~7.5kW Flange Install and Side View

4.2 11~75kW-400V , 11~22kW-200V

① Insert the Flange Option to fit on the product by fastening the right/left positions as shown Figure 2.

② Using the included bolt, tighten to the specific torque.

- M5 Screw Torque : 35 (kfg·cm) / 30lb-in => Model : 11~22kW-200V/400V

- M6 Screw Torque : 58 (kfg·cm) /50lb-in => Model : 30~75kW-400V

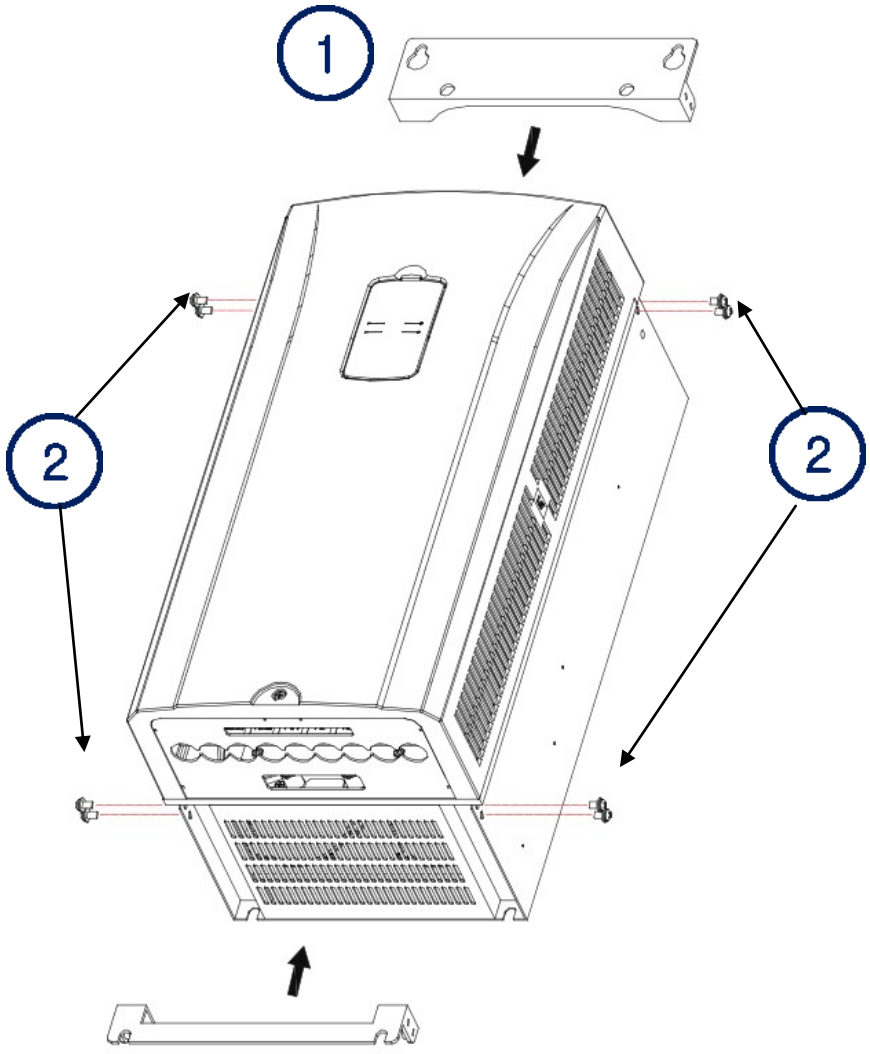


Figure 2. 11 - 75kW Flange Install and Side View

4.3 90~220kW-400V

① Insert the Flange Option to fit on the product by fastening the top position as shown in Figure 3.

② Using the included bolt, tighten to the specific torque.

- M12(2 points) : 480(kfg·cm) / 415 lb-in

- M6(8 points) : 58(kfg·cm) / 50 lb-in

- M5(8 points) : 35(kfg·cm) / 30 lb-in

③ Remove the bottom bracket (there are six screws).

④ Then rotate it 180 degrees and reassemble it . The mounting holes will now be closer to the front of the unit.

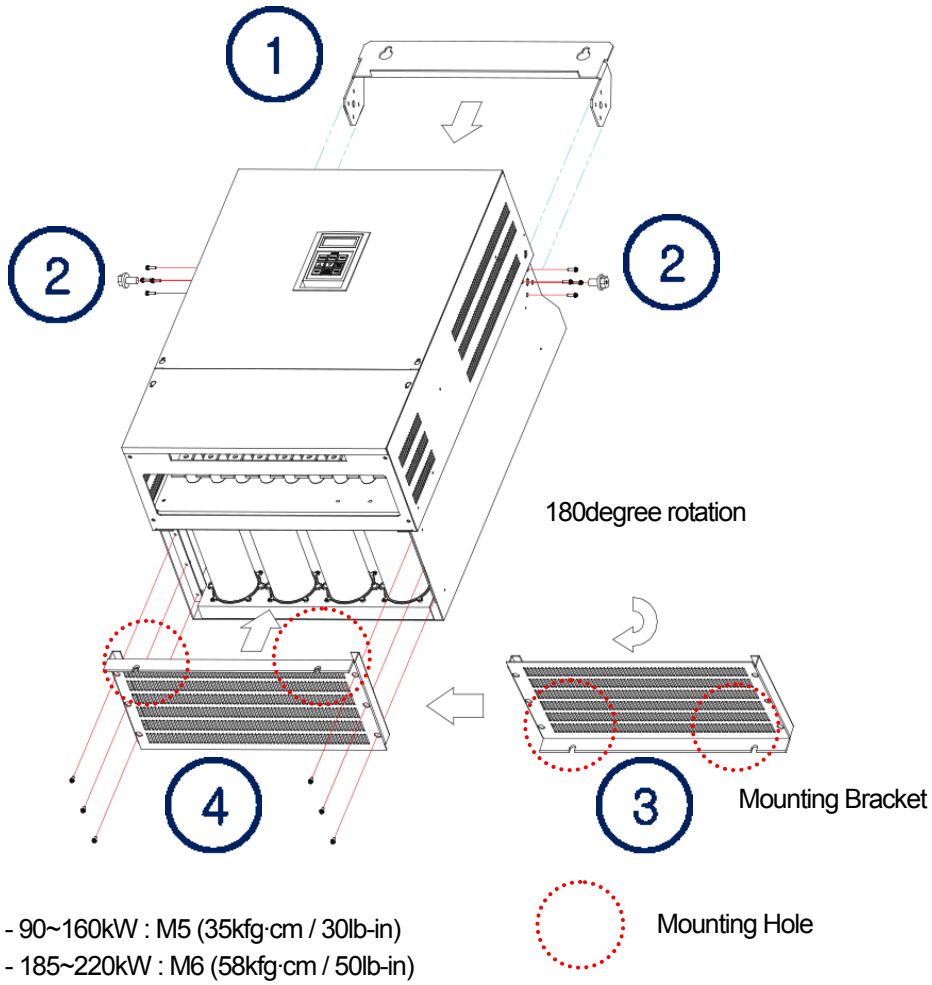
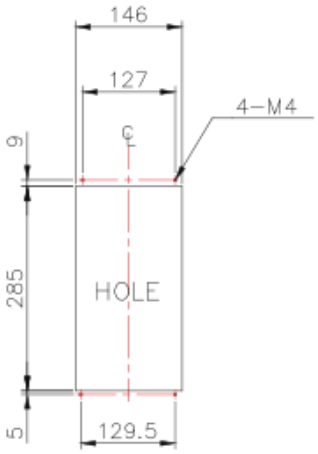


Figure 3. 90 – 220kW Flange Install and Side View

6. Flange Option Opening Size



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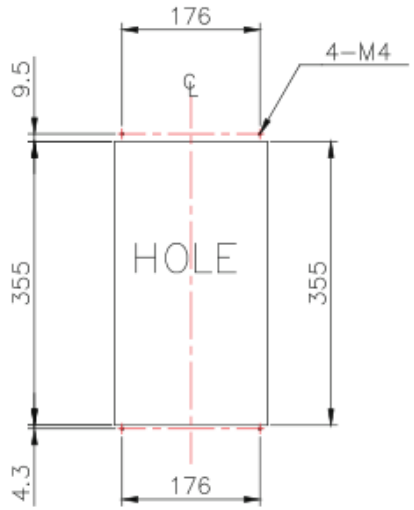

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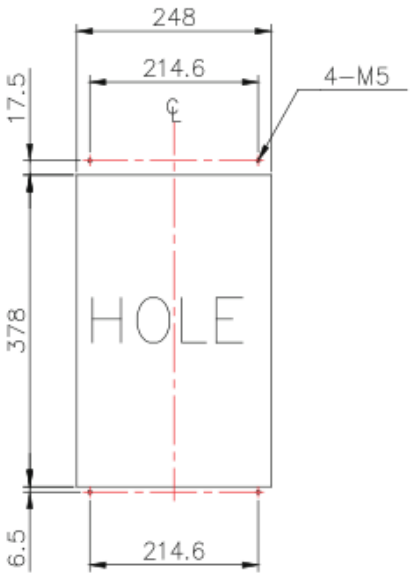

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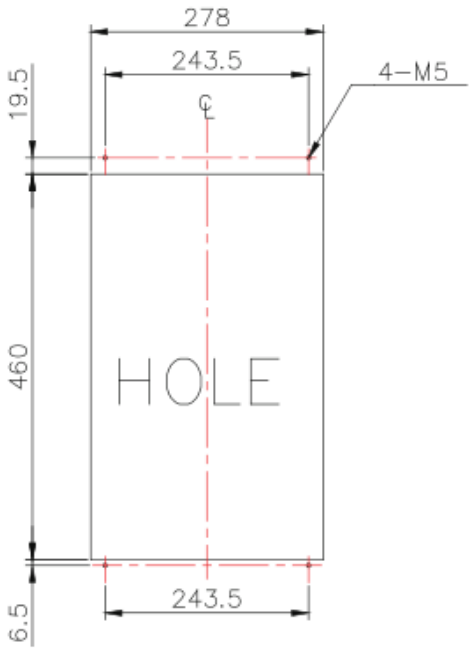

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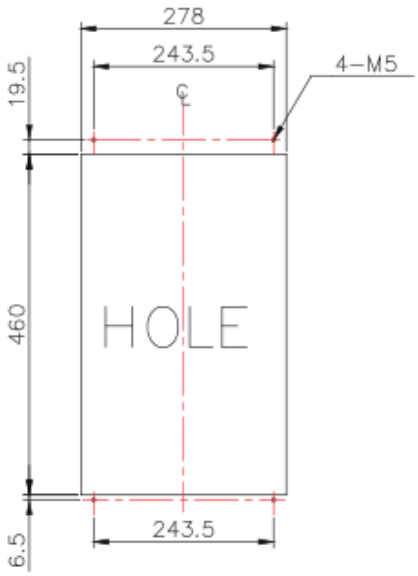

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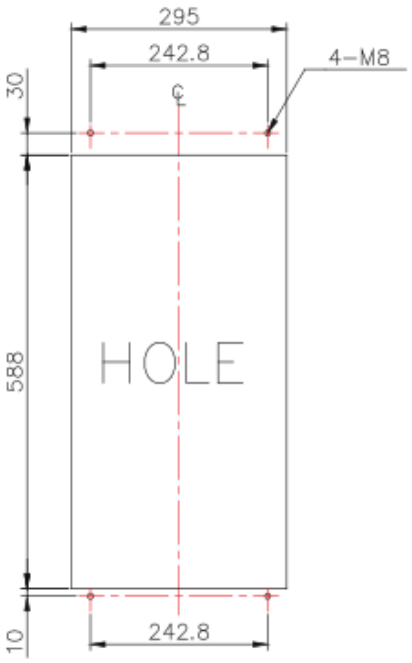

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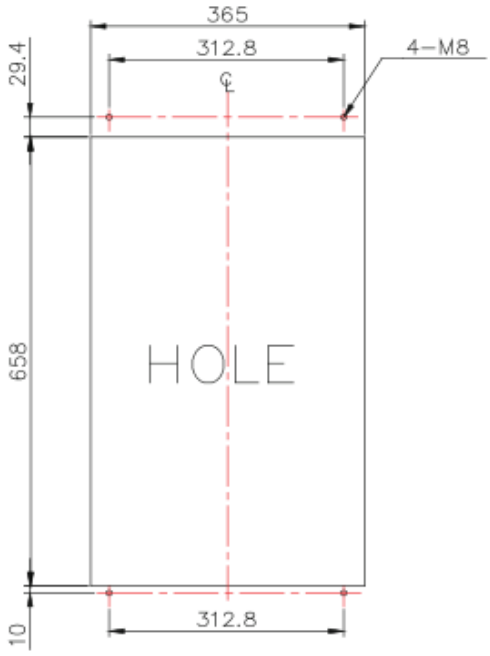

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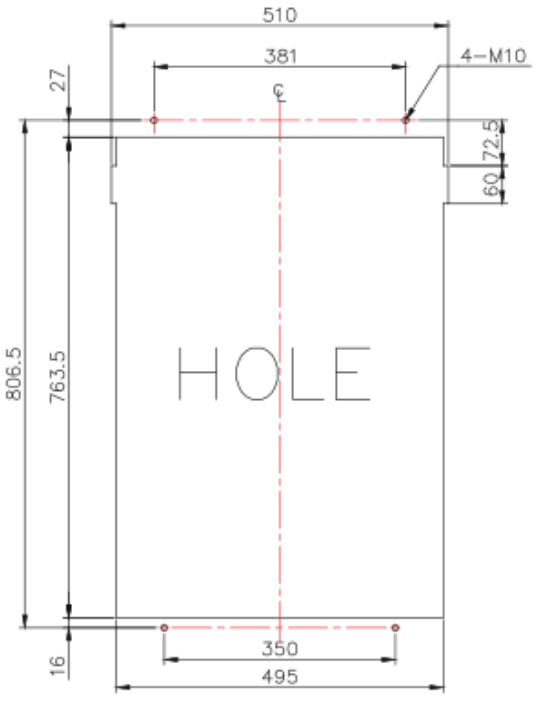

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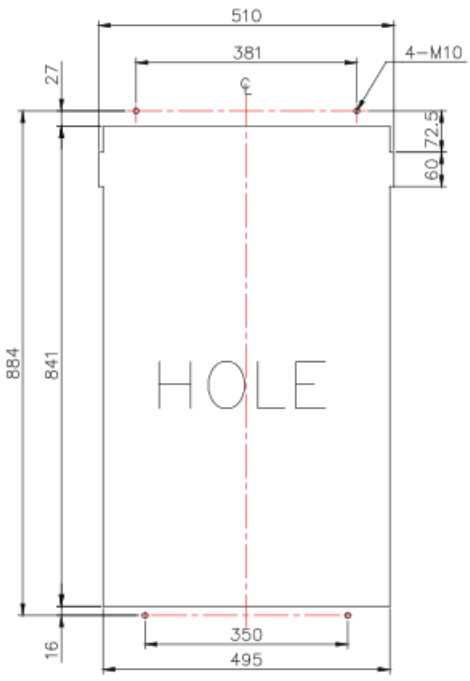

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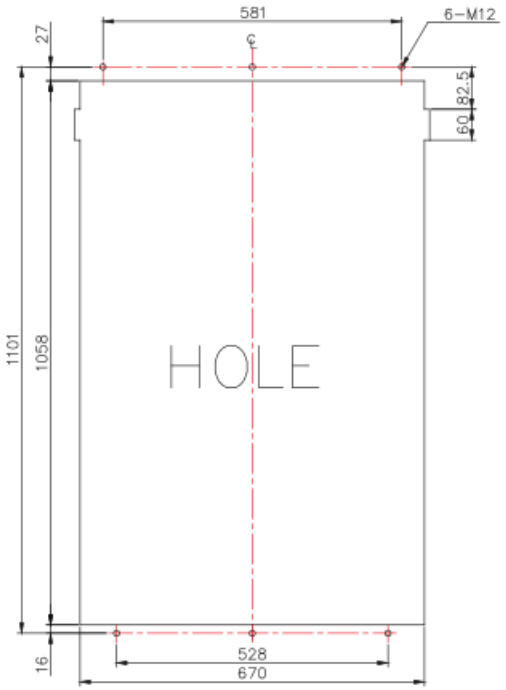

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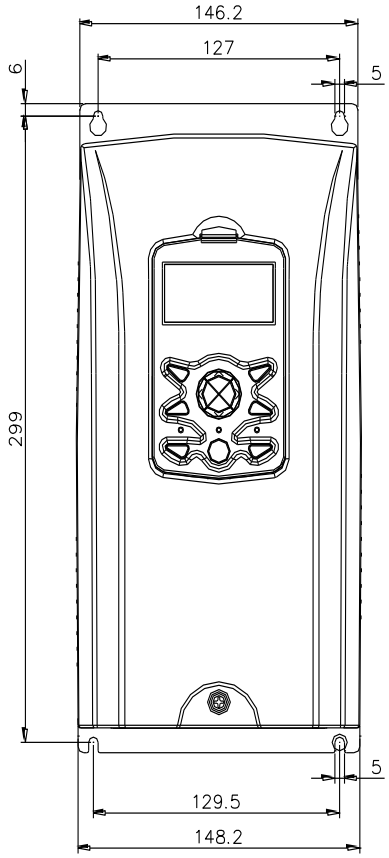
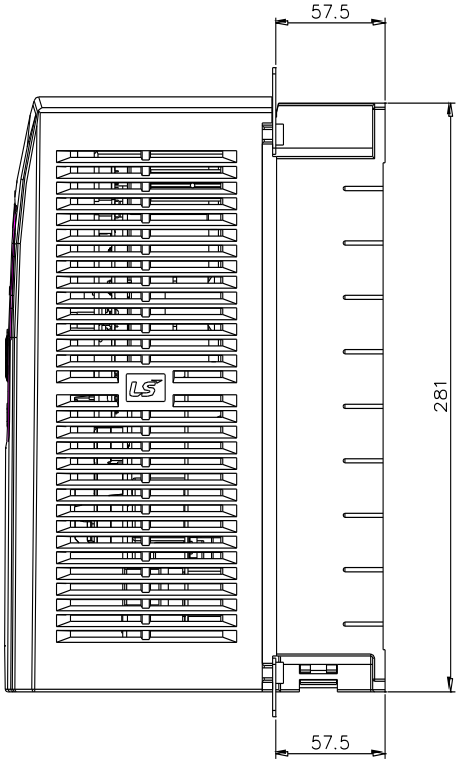
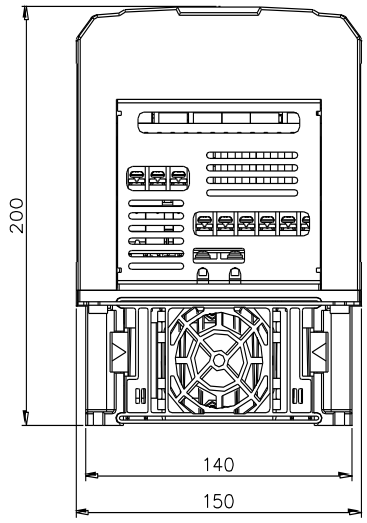
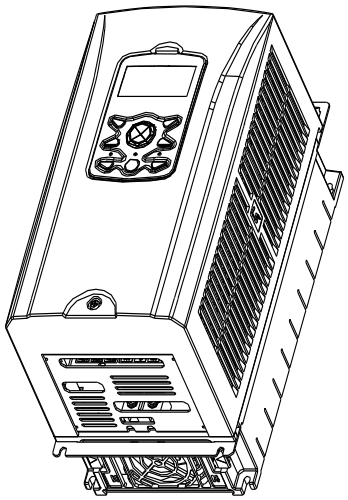
7. Product Size (Drive with Flange Option)

SV-IS7 0.75KW-200V/400V



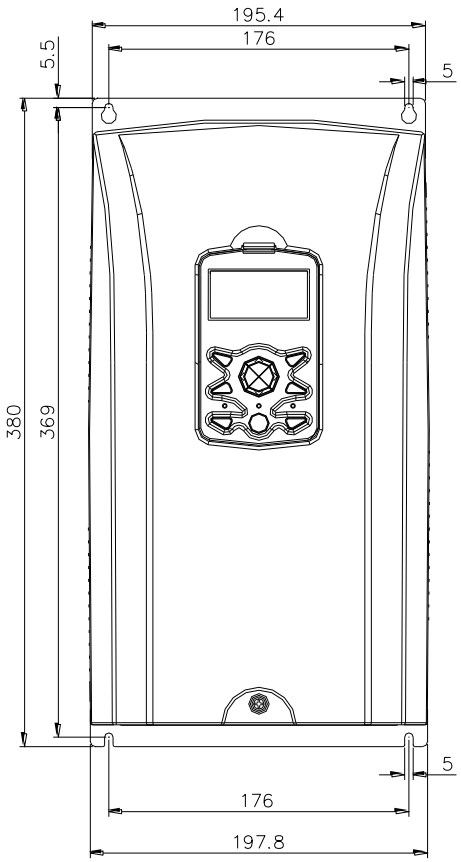


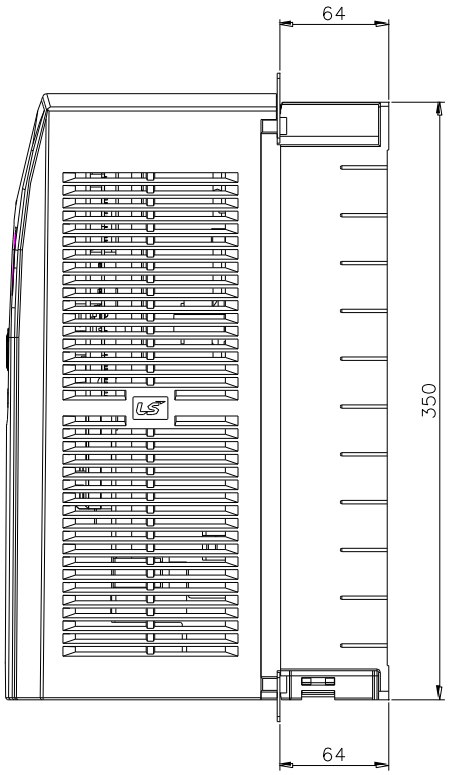


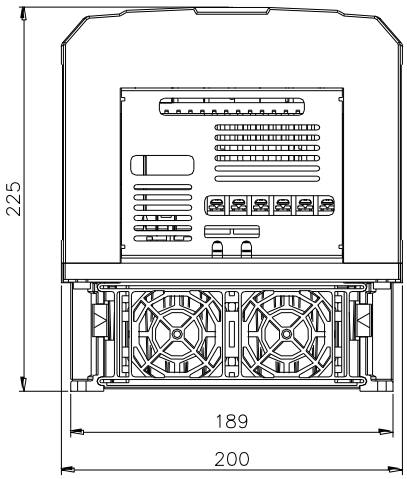


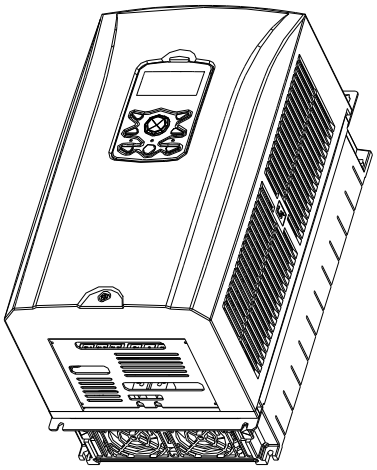
Drive + Flange

SV-IS7 5.5.~7.5KW-200V/400V



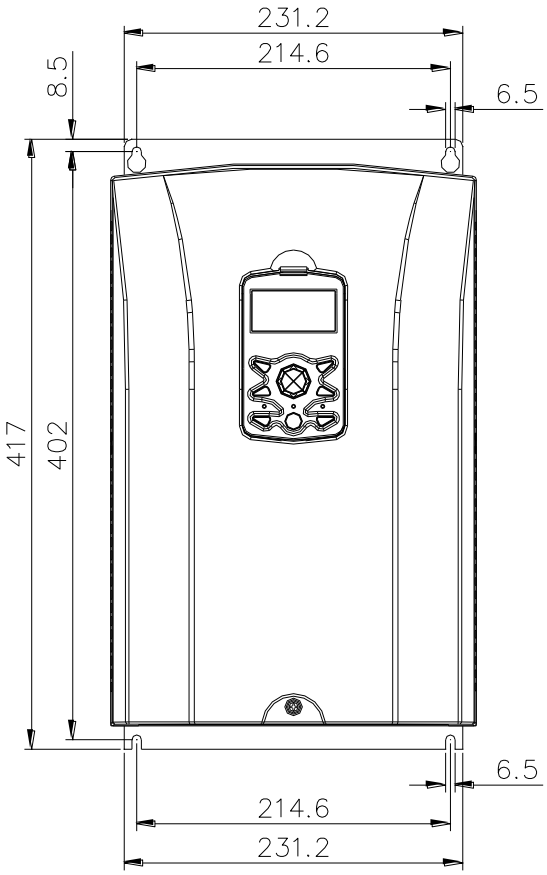


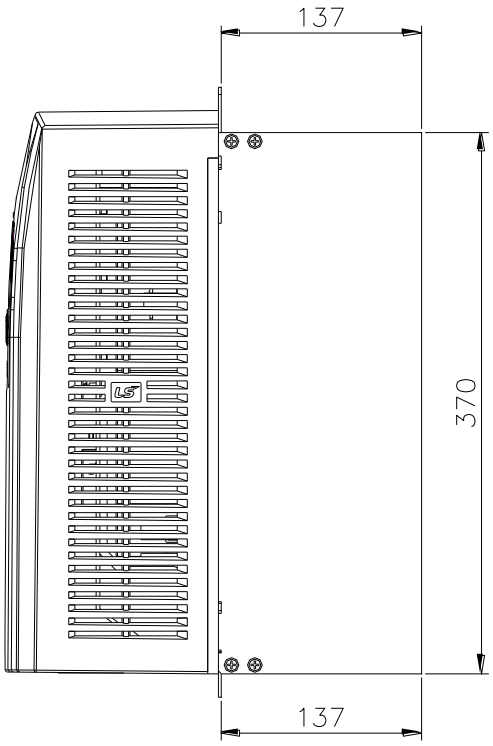


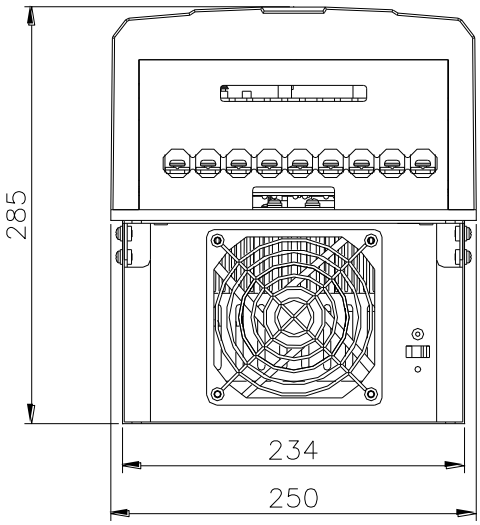


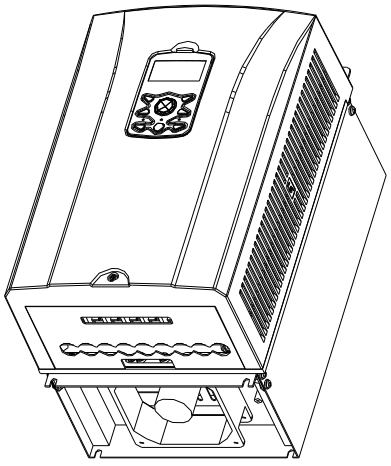
Drive + Flange

SV-IS7 11~15KW-200V/400V



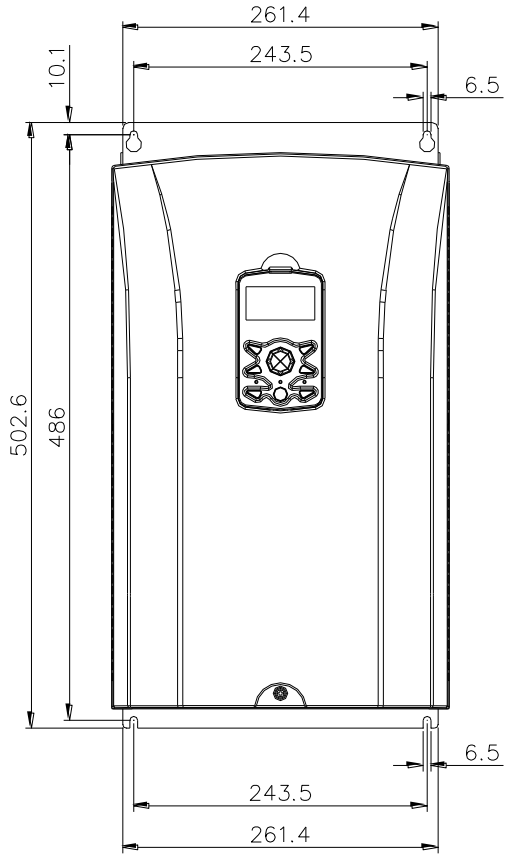


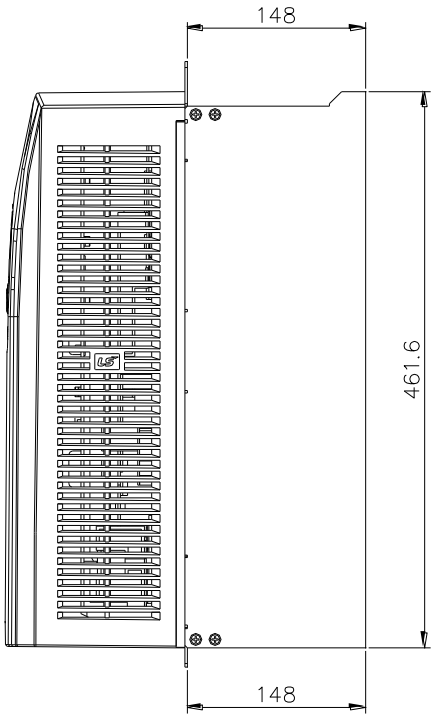


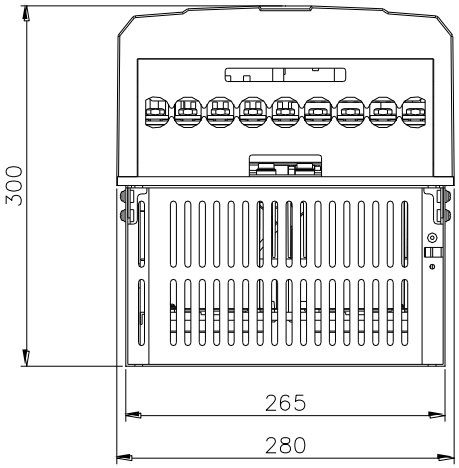


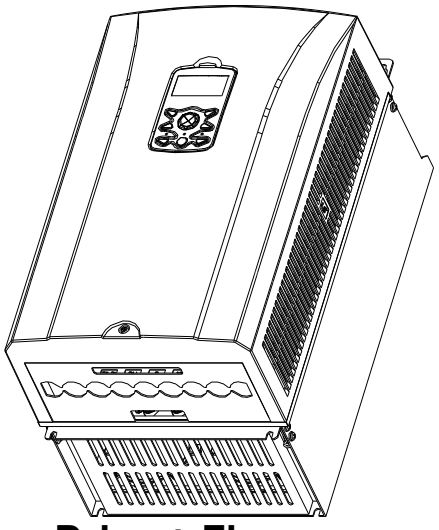
Drive + Flange

SV-IS7 18.5~22KW-200V



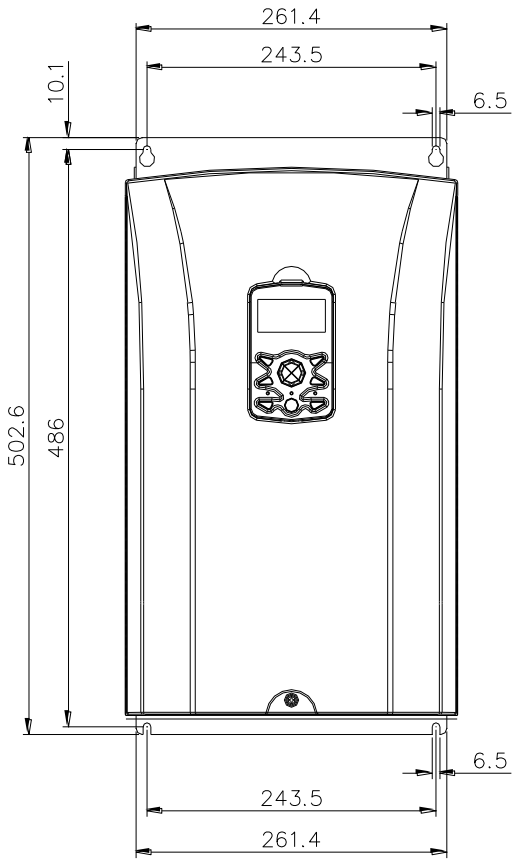


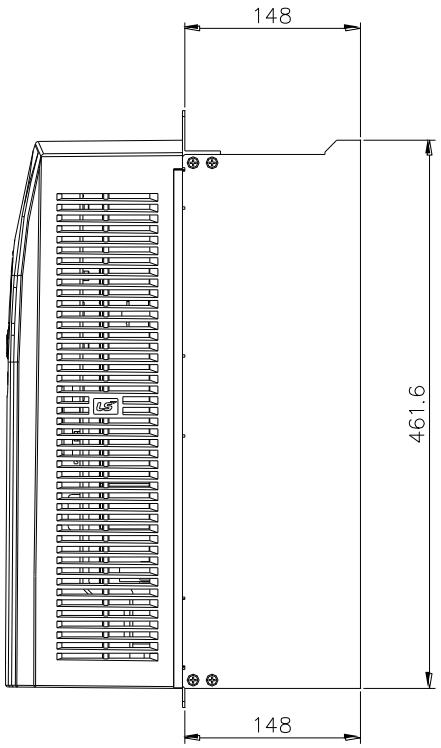


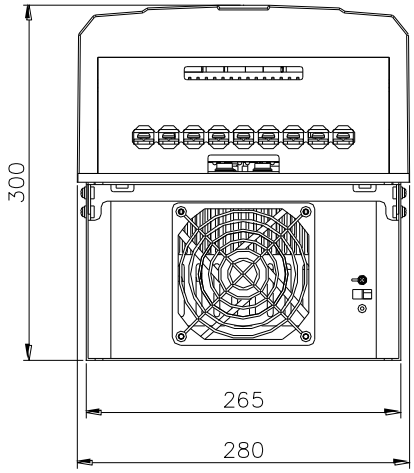


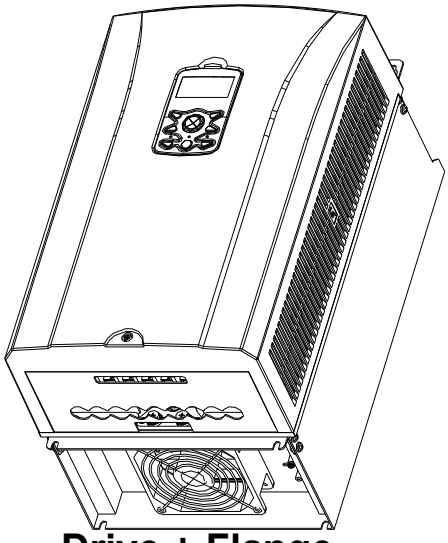
Drive + Flange

SV-IS7 18.5~22KW-400V



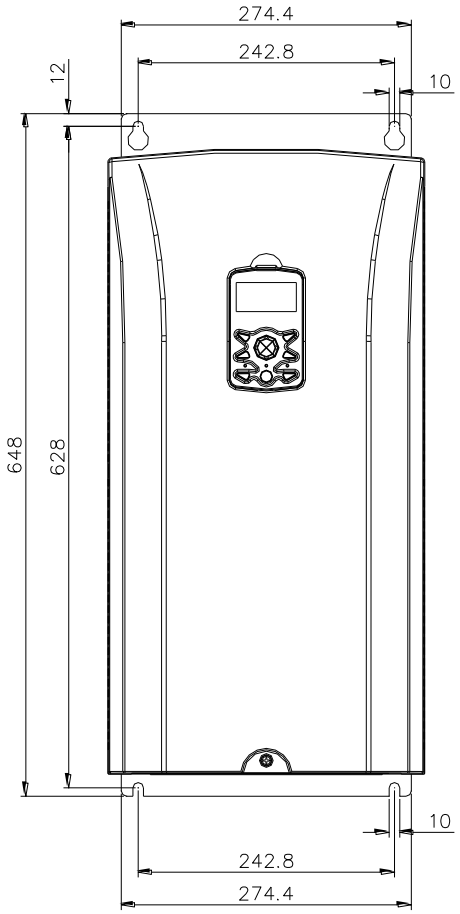


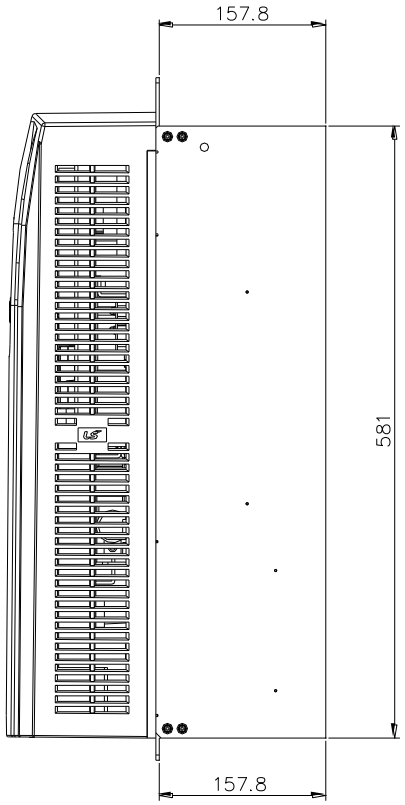


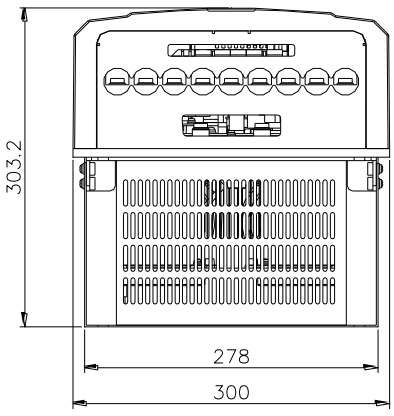


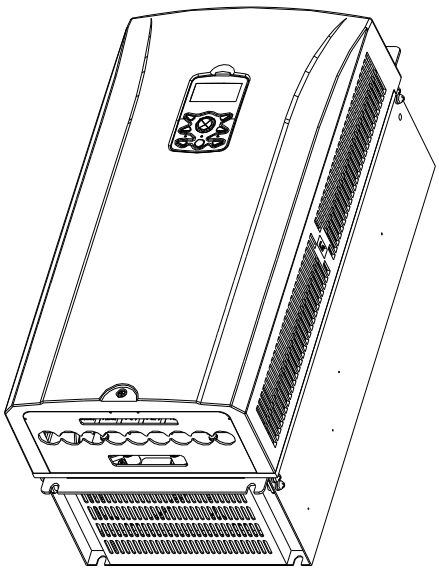
Drive + Flange

SV-IS7 30~45KW-400V



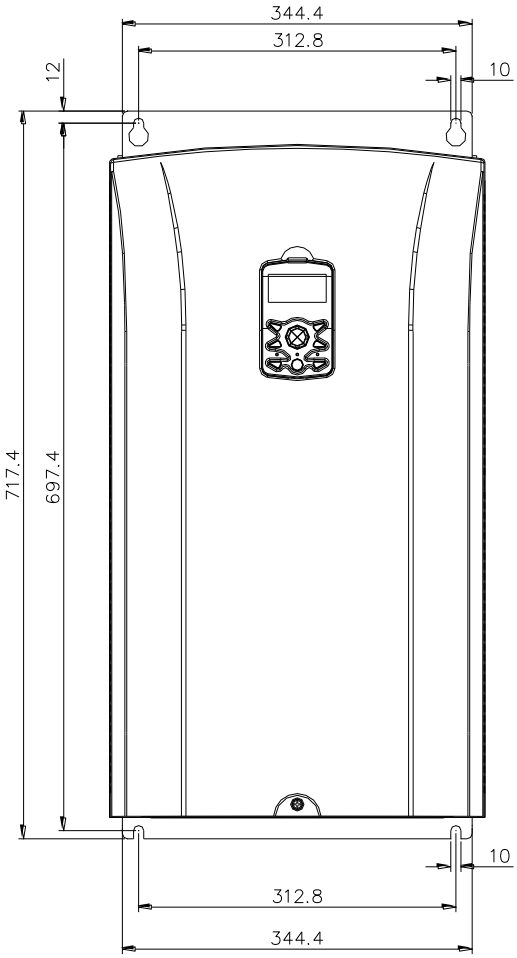


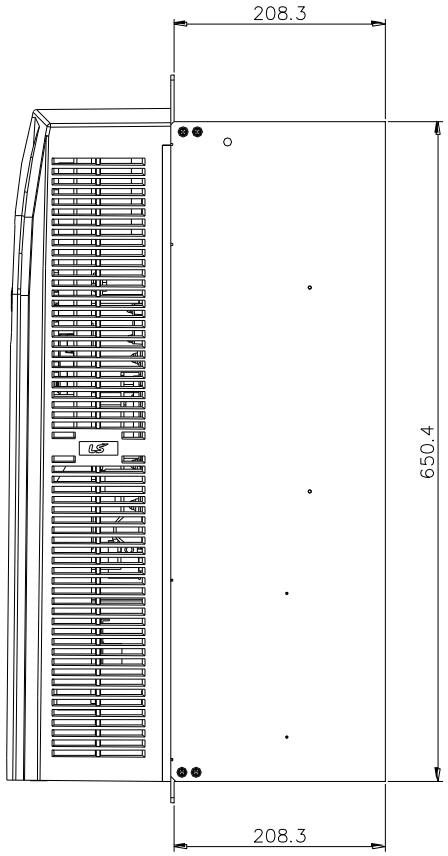


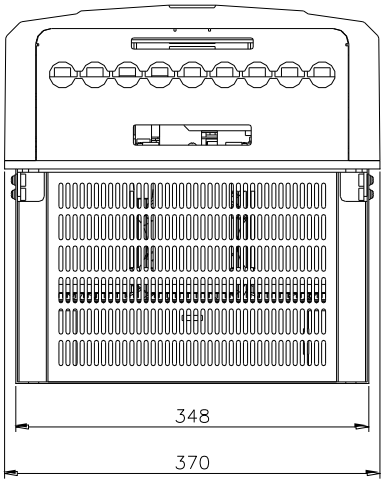


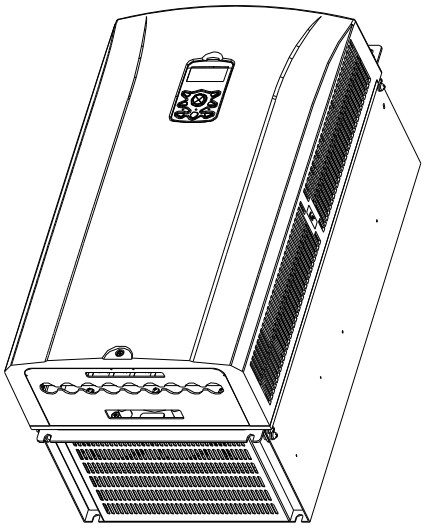
Drive + Flange

SV-IS7 55~75KW-400V



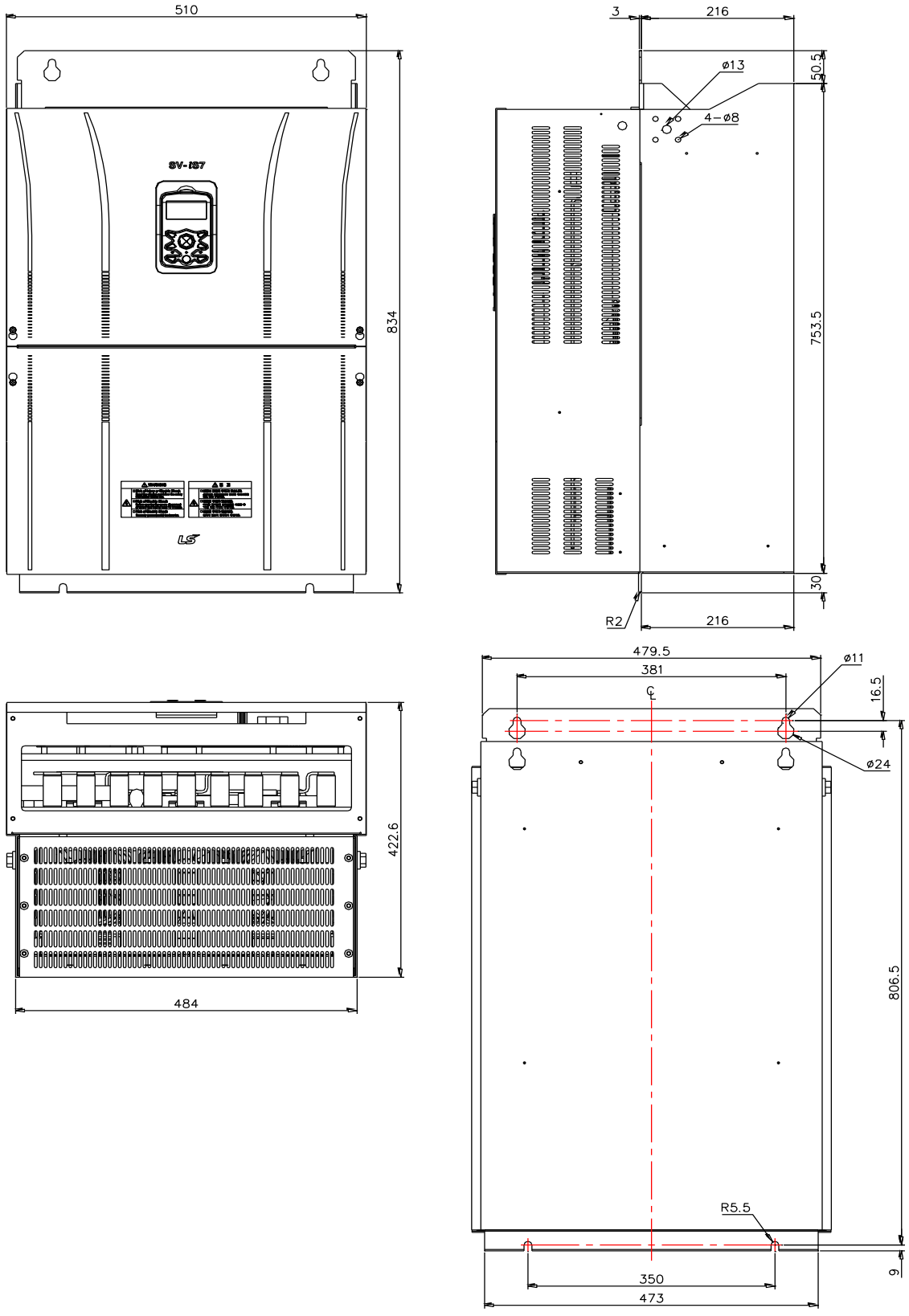






Drive + Flange

SV-IS7 90~110KW-400V



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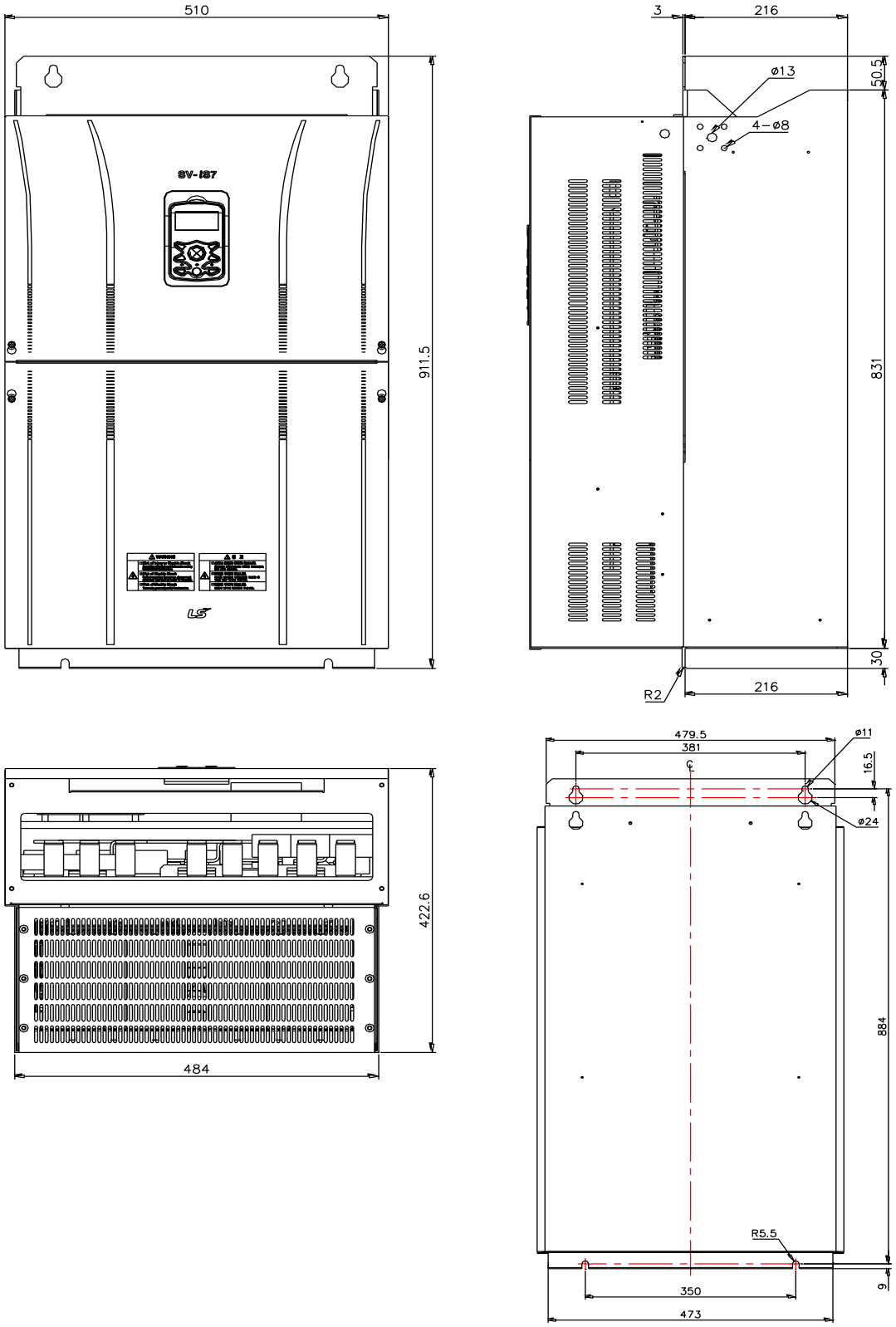
SV-IS7 132~160KW-400V



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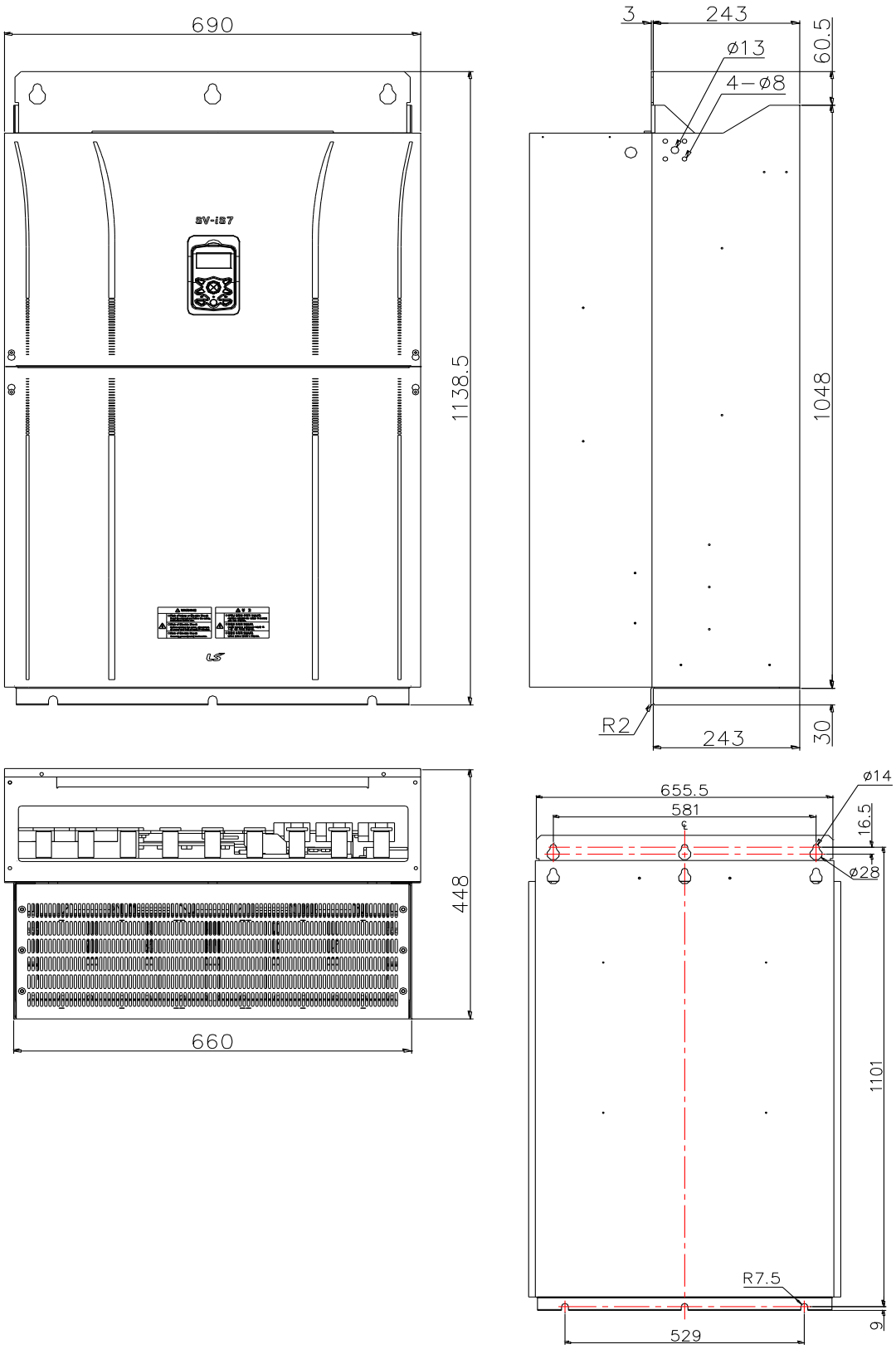
SV-IS7 185~220KW-400V



<BACK VIEW>

8. Revision History

No	Date	Editioin	Changes
1	2016.04	First Edition	-