



YASKAWA AC Drive V/J1000

External Heatsink Attachment

Option Manual

Type: CIMR-J

Type: CIMR-V

To properly use the product, read this manual thoroughly and retain for easy reference, inspection, and maintenance. Ensure the end user receives this manual.

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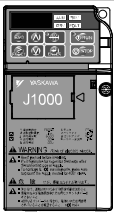

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1 Preface and Safety

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◆ Applicable Documentation

The following manuals are available for the J1000 and V1000 Drives:

	<p>J1000 Series AC Drive Quick Start Guide</p> <p>Read this manual first. This guide contains basic information required to install and wire the drive. This guide provides basic programming and simple setup and adjustment. Refer to the J1000 Technical Manual for complete descriptions of drive features and functions.</p>
	<p>V1000 Series AC Drive Quick Start Guide</p> <p>Read this manual first. This guide contains basic information required to install and wire the drive. This guide provides basic programming and simple setup and adjustment. Refer to the V1000 Technical Manual for complete descriptions of drive features and functions.</p>

2 General Safety

◆ Supplemental Safety Information

Read and understand this manual before installing, operating, or servicing this option. The option must be installed according to this manual and local codes.

The following conventions are used to indicate safety messages in this manual. Failure to heed these messages could result in serious or possibly even fatal injury or damage to the products or to related equipment and systems.

General Precautions

- The diagrams in this manual may be indicated without covers or safety shields to show details. Replace the covers or shields before operating the drive and run the drive according to the instructions described in this manual.
- Any illustrations, photographs, or examples used in this manual are provided as examples only and may not apply to all products to which this manual is applicable.
- The products and specifications described in this manual or the content and presentation of the manual may be changed without notice to improve the product and/or the manual.
- When ordering a new copy of the manual due to damage or loss, contact your Yaskawa representative or the nearest Yaskawa sales office and provide the manual number shown on the front cover.
- Order a replacement from your Yaskawa representative or the nearest Yaskawa sales office if nameplate becomes worn or damaged.

WARNING

Read and understand this manual before installing, operating or servicing this drive. The drive must be installed according to this manual and local codes.

The following conventions are used to indicate safety messages in this manual. Failure to heed these messages could result in serious or fatal injury or damage to the products or to related equipment and systems.

DANGER

Indicates a hazardous situation, which, if not avoided, will result in death or serious injury.

WARNING

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

WARNING! *may also be indicated by a bold key word embedded in the text followed by an italicized safety message.*

CAUTION

Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

CAUTION! *may also be indicated by a bold key word embedded in the text followed by an italicized safety message.*

NOTICE

Indicates a property damage message.

NOTICE: *may also be indicated by a bold key word embedded in the text followed by an italicized safety message.*

◆ Safety Messages

DANGER

Electrical Shock Hazard

Do not connect or disconnect wiring while the power is on.

Failure to comply will result in death or serious injury.

Before installing the option, disconnect all power to the drive. The internal capacitor remains charged even after the power supply is turned off. The charge indicator LED will extinguish when the DC bus voltage is below 50 Vdc. To prevent electric shock, wait at least five minutes after all indicators are off and measure the DC bus voltage level to confirm safe level.

WARNING

Electrical Shock Hazard

Do not operate equipment with covers removed.

Failure to comply could result in death or serious injury.

The diagrams in this section may show drives without covers or safety shields to show details. Be sure to reinstall covers or shields before operating the drives and run the drives according to the instructions described in this manual.

Do not remove covers or touch circuit boards while the power is on.

Failure to comply could result in death or serious injury.

Do not allow unqualified personnel to use equipment.

Failure to comply could result in death or serious injury.

Installation, maintenance, inspection, and servicing must be performed only by authorized personnel familiar with installation, adjustment, and maintenance of this product.

Do not touch any terminals before the capacitors have fully discharged.

Failure to comply could result in death or serious injury.

Before installing the option, disconnect all power to the drive. The internal capacitor remains charged even after the power supply is turned off. The charge indicator LED will extinguish when the DC bus voltage is below 50 Vdc. To prevent electric shock, wait at least five minutes after all indicators are off and measure the DC bus voltage level to confirm safe level.

Do not use damaged wires, stress the wiring, or damage the wire insulation.

Failure to comply could result in death or serious injury.

Fire Hazard

Tighten all terminal screws to the specified tightening torque.

Loose electrical connections could result in death or serious injury by fire due to overheating of electrical connections.

NOTICE

Observe proper electrostatic discharge procedures (ESD) when handling the drive and circuit boards.

Failure to comply may result in ESD damage to the drive circuitry.

Do not use unshielded cable for control wiring.

Failure to comply may cause electrical interference resulting in poor system performance. Use shielded, twisted-pair wires and ground the shield to the designated shield ground location.

Check all the wiring to ensure that all connections are correct after installing the option and connecting any other devices.

Failure to comply could result in damage to the option.

3 About this Option

The installation of the External Heatsink Mounting Kit to V1000 or J1000 AC drives allows the drive heatsink, a major heat generating component of the drive, to protrude to the exterior of a customer supplied enclosure. Large amounts of heat that would normally be trapped inside the enclosure, are dissipated outside the enclosure, thus facilitating a more compact and less costly enclosure selection. Mounting attachments to secure the drive within a panel cutout are supplied. A convective back plate, mounted to the backside of the heatsink, is supplied with certain kits to improve natural convection air flow over the heatsink.

This option may be used when the installation environment conforms to the specifications in [Table 1](#).

◆ Installation Environment

Install the drive in an environment matching these specifications to help prolong the optimum performance life of the drive.

Table 1 Installation Environment

Environment	Conditions
Installation Area	Indoors
Ambient Temperature	IP20/NEMA Type 1 enclosure: -10 °C to +40 °C (14 °F to 104 °F) IP20/IP00 Open-Chassis enclosure: -10 °C to +50 °C (14 °F to 122 °F) Finless Type: IP20/IP00 enclosure: -10 °C to +50 °C (14 °F to 122 °F) NEMA Type 4X/IP66 enclosure: -10 °C to +40 °C (14 °F to 104 °F) Drive reliability improves in environments without wide temperature fluctuations. When using an enclosure panel, install a cooling fan or air conditioner in the area to ensure that the air temperature inside the enclosure does not exceed the specified levels. Do not allow ice to develop on the drive.
Humidity	95% RH or less and free of condensation
Storage Temperature	-20 °C to +60 °C (-4 °F to +104 °F)
Surrounding Area	Install the drive in an area free from: <ul style="list-style-type: none"> • oil mist and dust • metal shavings, oil, water or other foreign materials • radioactive materials • combustible materials (e.g., wood) • harmful gases and liquids • excessive vibration • chlorides • direct sunlight
Altitude	
Vibration	10 to 20 Hz at 9.8 m/s ² 20 to 55 Hz at 5.9 m/s ²
Orientation	Install the drive vertically to maintain maximum cooling effects.

Table 2 Installation Environment

Environment	Conditions
Installation Area	Indoors
Ambient Temperature	IP20/NEMA Type 1 enclosure: -10 °C to +40 °C (14 °F to 104 °F) IP20/IP00 Open-Chassis enclosure: -10 °C to +50 °C (14 °F to 122 °F) Finless Type: IP20/IP00 enclosure: -10 °C to +50 °C (14 °F to 122 °F) NEMA Type 4X/IP66 enclosure: -10 °C to +40 °C (14 °F to 104 °F) Drive reliability improves in environments without wide temperature fluctuations. When using an enclosure panel, install a cooling fan or air conditioner in the area to ensure that the air temperature inside the enclosure does not exceed the specified levels. Do not allow ice to develop on the drive.
Humidity	95% RH or less and free of condensation
Storage Temperature	-20 °C to +60 °C (-4 °F to +104 °F)

3 About this Option

Environment	Conditions
Surrounding Area	Install the drive in an area free from: <ul style="list-style-type: none">• oil mist and dust• metal shavings, oil, water or other foreign materials• radioactive materials• combustible materials (e.g., wood)• harmful gases and liquids• excessive vibration• chlorides• direct sunlight
Altitude	
Vibration	10 to 20 Hz at 9.8 m/s ² 20 to 55 Hz at 5.9 m/s ²
Orientation	Install the drive vertically to maintain maximum cooling effects.

NOTICE: Prevent foreign matter such as metal shavings and wire clippings from falling into the drive during installation. Failure to comply could result in damage to the drive. Place a temporary cover over the top of the drive during installation. Remove the temporary cover before drive start-up, as the cover will reduce ventilation and cause the drive to overheat.

4 External Heatsink Option Installation Procedure

◆ Drive Dimensions with External Heatsink Option Installed

This section provides figures and tables of drive dimensions with the External Heatsink Option installed.

Table 3 Drive Models and Dimensions

Series	Drive Model Number	Reference
J1000	CIMR-J□B□0001 to 0010	<i>Figure 1</i>
	CIMR-J□2□0001 to 0020	
	CIMR-J□4□0001 to 0011	
V1000	CIMR-V□B□0001 to 0018	<i>Figure 1</i>
	CIMR-V□2□0001 to 0020	
	CIMR-V□4□0001 to 0011	
	CIMR-V□2□0030 to 0069	<i>Figure 2</i>
	CIMR-V□4□0018 to 0038	

4 External Heatsink Option Installation Procedure

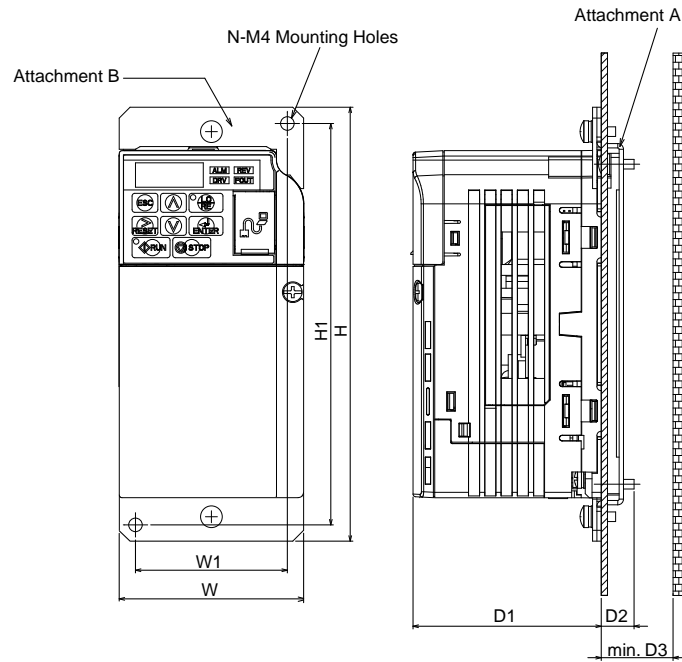


Figure 1 External Heatsink Option Outline Dimensions

Table 4 External Heatsink Option Outline Dimensions by Model (Figure 1)

Drive Model CIMR-V or J	Dimensions mm (in)							
	W	W1	H	H1	D1	D2	D3	N
□B□0001 □B□0002	68 (2.7)	56 (2.2)	160 (6.3)	148 (5.8)	69.5 (2.7)	12 (0.5)	30 (1.2)	2 (0.1)
□B□0003	68 (2.7)	56 (2.2)	160 (6.3)	148 (5.8)	69.5 (2.7)	42 (1.7)	50 (2.0)	2 (0.1)
□B□0006	108 (4.3)	96 (3.8)	158 (6.2)	144 (5.7)	79.5 (3.1)	58 (2.3)	70 (2.8)	4 (0.2)
□B□0010	108 (4.3)	96 (3.8)	158 (6.2)	144 (5.7)	96 (3.8)	58 (2.3)	70 (2.8)	4 (0.2)
□B□0012	140 (5.5)	128 (5.0)	158 (6.2)	144 (5.7)	98 (3.9)	65 (2.5)	70 (2.8)	4 (0.2)
□B□0018	170 (6.7)	158 (6.2)	158 (6.2)	144 (5.7)	115 (4.5)	65 (2.5)	70 (2.8)	4 (0.2)
□2□0001 □2□0002	68 (2.7)	56 (2.2)	160 (6.3)	148 (5.8)	69.5 (2.7)	12 (0.5)	30 (1.2)	2 (0.1)
□2□0004	68 (2.7)	56 (2.2)	160 (6.3)	148 (5.8)	69.5 (2.7)	42 (1.7)	50 (2.0)	2 (0.1)
□2□0006	68 (2.7)	56 (2.2)	160 (6.3)	148 (5.8)	69.5 (2.7)	62 (2.4)	70 (2.8)	2 (0.1)
□2□0008 □2□0010	108 (4.3)	96 (3.8)	158 (6.2)	144 (5.7)	71 (2.8)	58 (2.3)	70 (2.8)	4 (0.2)
□2□0012	108 (4.3)	96 (3.8)	158 (6.2)	144 (5.7)	79.5 (3.1)	58 (2.3)	70 (2.8)	4 (0.2)
□2□0018 □2□0020	140 (5.5)	128 (5.0)	158 (6.2)	144 (5.7)	78 (3.0)	65 (2.5)	70 (2.8)	4 (0.2)
□4□0001	108 (4.5)	96 (3.8)	158 (6.2)	144 (5.7)	71 (2.8)	13.5 (0.5)	30 (1.2)	4 (0.2)
□4□0002	108 (4.5)	96 (3.8)	158 (6.2)	144 (5.7)	71 (2.8)	28 (1.1)	40 (1.6)	4 (0.2)
□4□0004	108 (4.5)	96 (3.8)	158 (6.2)	144 (5.7)	79.5 (3.1)	58 (2.3)	70 (2.8)	4 (0.2)
□4□0005 □4□0007 □4□0009	108 (4.5)	96 (3.8)	158 (6.2)	144 (5.7)	96 (3.8)	58 (2.3)	70 (2.8)	4 (0.2)
□4□0011	140 (5.5)	128 (5.0)	158 (6.2)	144 (5.7)	78 (3.0)	65 (2.5)	70 (2.8)	4 (0.2)

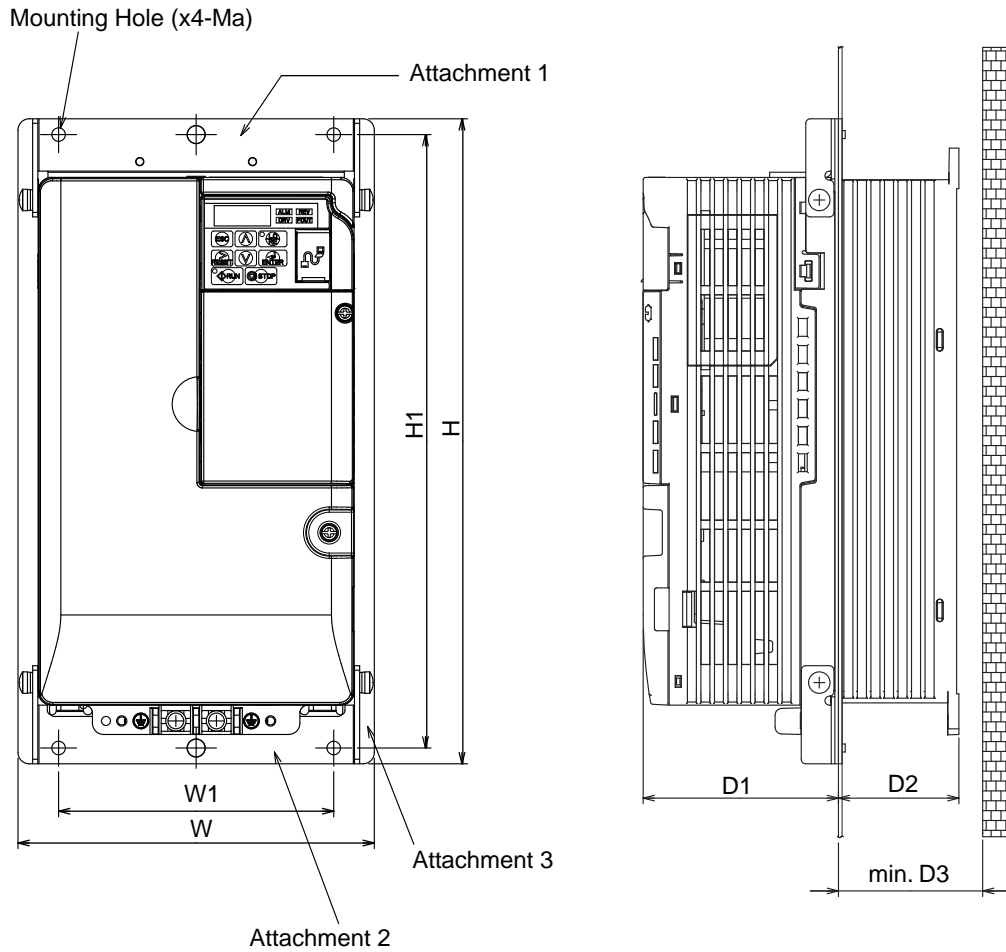


Figure 2 External Heatsink Option Outline Dimensions

Table 5 External Heatsink Option Outline Dimensions by Model (Figure 2)

Drive Model CIMR-V	Dimensions mm (in)							
	W	W1	H	H1	D1	D2	D3	a
□2□0030	158 (6.2)	122 (4.8)	286 (11.3)	272 (10.7)	86.6 (3.4)	53.4 (2.1)	60 (2.4)	5 (0.2)
□2□0040	158 (6.2)	122 (4.8)	286 (11.3)	272 (10.7)	86.6 (3.4)	53.4 (2.1)	60 (2.4)	5 (0.2)
□2□0056	198 (7.8)	160 (6.3)	322 (12.7)	308 (12.1)	89.6 (3.4)	73.4 (2.9)	80 (3.1)	5 (0.2)
□2□0069	241 (9.5)	192 (7.5)	380 (15.0)	362 (14.2)	110.6 (4.4)	76.4 (3.0)	85 (3.3)	5 (0.2)
□4□0018	158 (6.2)	122 (4.8)	286 (11.3)	272 (10.7)	86.6 (3.4)	53.4 (2.1)	60 (2.4)	5 (0.2)
□4□0023	158 (6.2)	122 (4.8)	286 (11.3)	272 (10.7)	86.6 (3.4)	53.4 (2.1)	60 (2.4)	5 (0.2)
□4□0031	198 (7.8)	160 (6.3)	322 (12.7)	308 (12.1)	89.6 (3.5)	53.4 (2.1)	60 (2.4)	5 (0.2)
□4□0038	198 (7.8)	160 (6.3)	322 (12.7)	308 (12.1)	69.5 (2.7)	73.4 (2.9)	80 (3.1)	5 (0.2)

5 Installation Procedure by Drive Model

Table 6 External Heatsink Option Installation Procedure by Model

Drive Model CIMR-V or J	Installation Procedure	Page	Figure
<input type="checkbox"/> B <input type="checkbox"/> 0001 <input type="checkbox"/> B <input type="checkbox"/> 0002	1	13	Figure 3
<input type="checkbox"/> B <input type="checkbox"/> 0003			
<input type="checkbox"/> B <input type="checkbox"/> 0006 <input type="checkbox"/> B <input type="checkbox"/> 0010	3	15	Figure 5
<input type="checkbox"/> B <input type="checkbox"/> 0012			
<input type="checkbox"/> B <input type="checkbox"/> 0018	3, 4	15, 15	Figure 5 Figure 6
<input type="checkbox"/> 2 <input type="checkbox"/> 0001 <input type="checkbox"/> 2 <input type="checkbox"/> 0002	1	13	Figure 3
<input type="checkbox"/> 2 <input type="checkbox"/> 0004			
<input type="checkbox"/> 2 <input type="checkbox"/> 0006			
<input type="checkbox"/> 2 <input type="checkbox"/> 0008 <input type="checkbox"/> 2 <input type="checkbox"/> 0010	3, 4	15, 15	Figure 5 Figure 6
<input type="checkbox"/> 2 <input type="checkbox"/> 0012			
<input type="checkbox"/> 2 <input type="checkbox"/> 0018 <input type="checkbox"/> 2 <input type="checkbox"/> 0020			
<input type="checkbox"/> 4 <input type="checkbox"/> 0001	2	14	Figure 4
<input type="checkbox"/> 4 <input type="checkbox"/> 0002 <input type="checkbox"/> 4 <input type="checkbox"/> 0004	3	15	Figure 5
<input type="checkbox"/> 4 <input type="checkbox"/> 0005 <input type="checkbox"/> 4 <input type="checkbox"/> 0007 <input type="checkbox"/> 4 <input type="checkbox"/> 0009			
<input type="checkbox"/> 4 <input type="checkbox"/> 0011	3, 4	15, 15	Figure 5 Figure 6
<input type="checkbox"/> 2 <input type="checkbox"/> 0030 <input type="checkbox"/> 2 <input type="checkbox"/> 0040 <input type="checkbox"/> 2 <input type="checkbox"/> 0056 <input type="checkbox"/> 2 <input type="checkbox"/> 0069 <input type="checkbox"/> 4 <input type="checkbox"/> 0018 <input type="checkbox"/> 4 <input type="checkbox"/> 0023 <input type="checkbox"/> 4 <input type="checkbox"/> 0031 <input type="checkbox"/> 4 <input type="checkbox"/> 0038	5	18	Figure 8

◆ External Heatsink Installation Procedures

■ Procedure 1 (Enclosure: IP20)

1. Remove the front cover according to the drive instruction manual.
2. Mount Attachment A to the standard drive mounting legs using the associated M4×10 pan-head screws.
3. Mount Attachment B (2 units) to Attachment A with the associated M4×10 pan-head screws as shown in *Figure 3*.
4. Reattach the front cover according to the drive instruction manual.

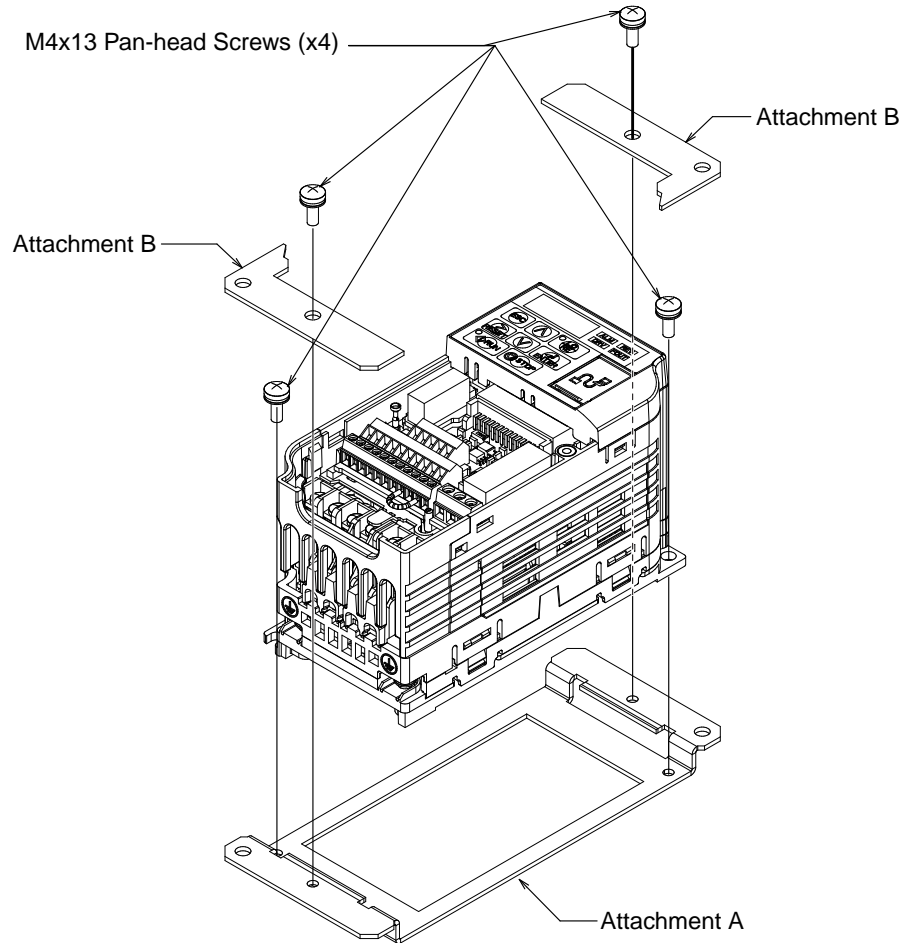


Figure 3 Procedure 1 Diagram (Example Model: CIMR-V□□0001)

5 Installation Procedure by Drive Model

■ Procedure 2 (Enclosure: IP20)

1. Remove the front cover according to the drive instruction manual.
2. Mount Attachment A (2 units) to the standard inverter mounting legs using the associated M4×10 pan-head screws.
3. Mount Attachment B (2 units) to Attachment A with the associated M4×10 pan-head screws as shown in *Figure 4*.
4. Reattach the front cover according to the drive instruction manual.

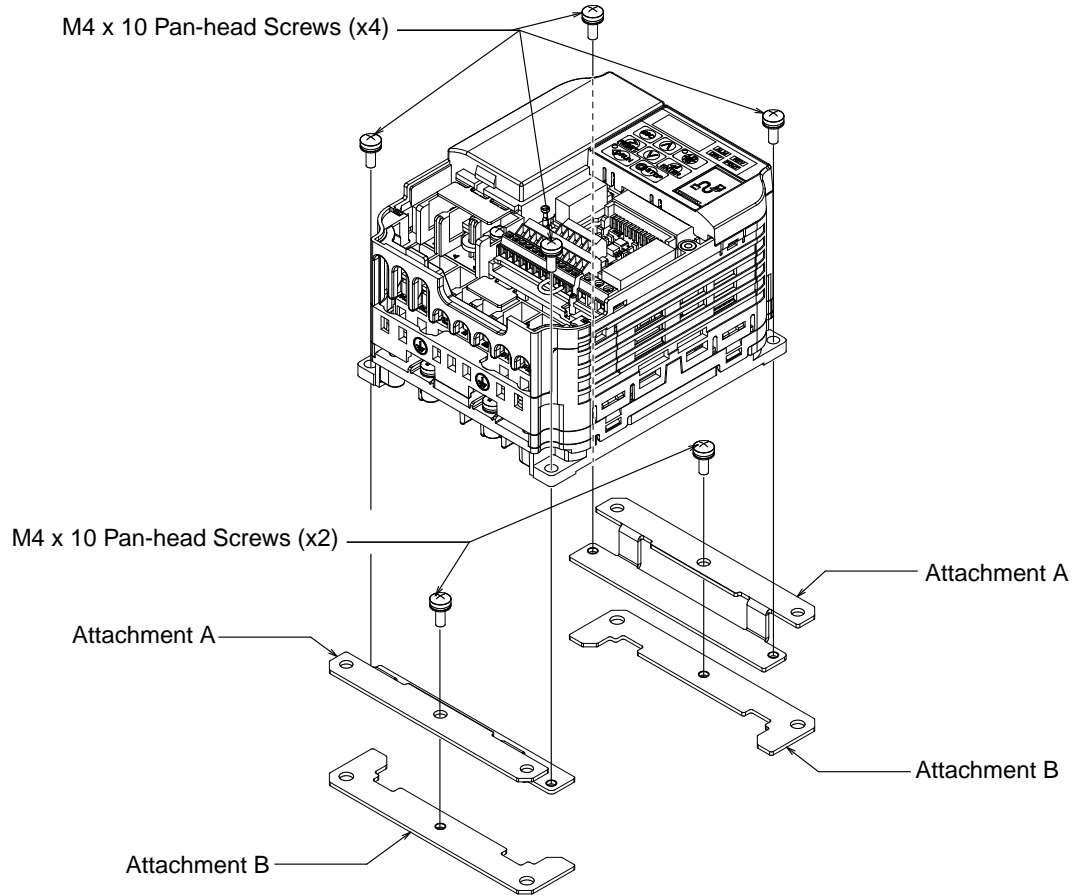


Figure 4 Procedure 2 Diagram (Example Model: CIMR-V□4□0001)

■ Procedure 3 (Enclosure: IP20)

1. Mount Attachment A (2 each) to the mounting holes on the side of the heatsink using the M4×10 pan-head screws.

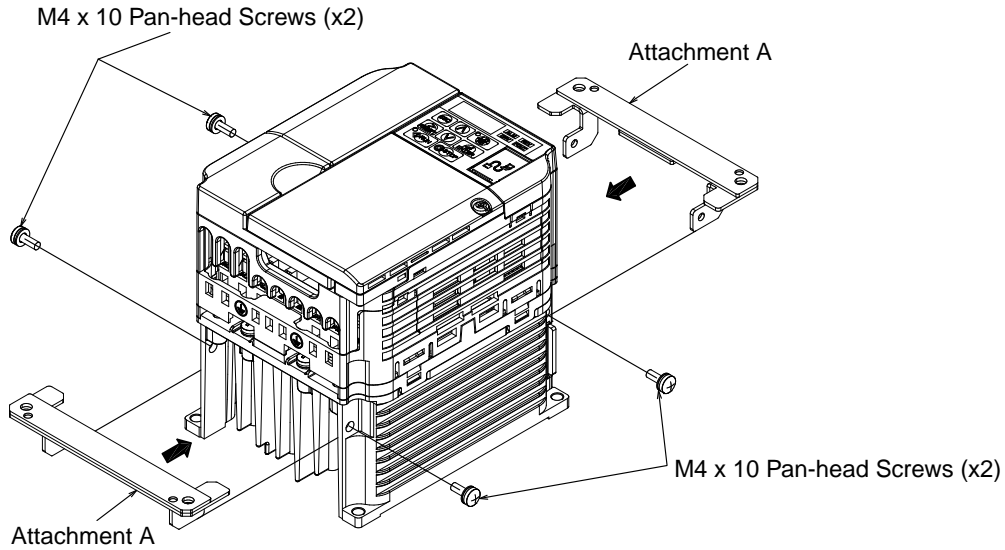


Figure 5 Procedure 3 Diagram (Example Model CIMR-V□2□0010)

■ Procedure 4 (Enclosure: IP20)

1. Mount the Convective Back Plate to the mounting holes on underside of the heatsink using M4×10 pan-head screws.

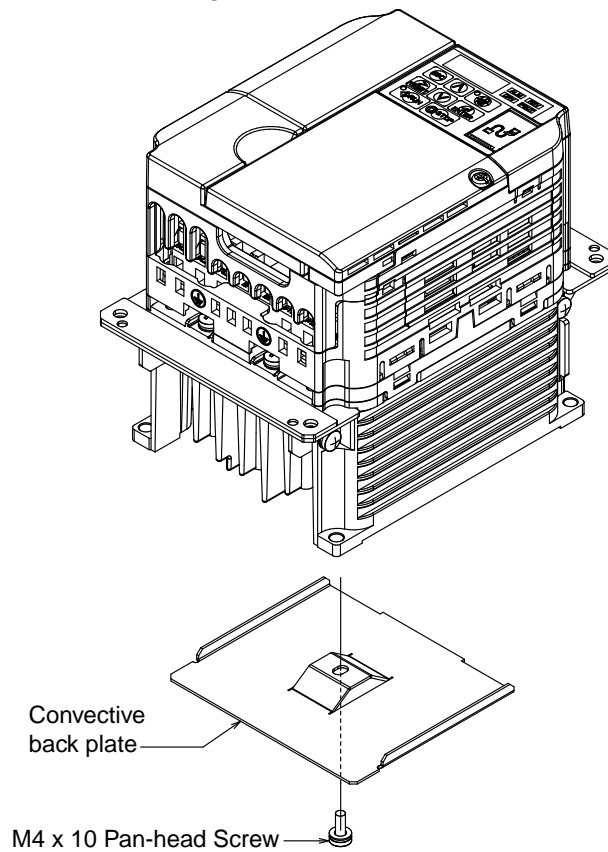
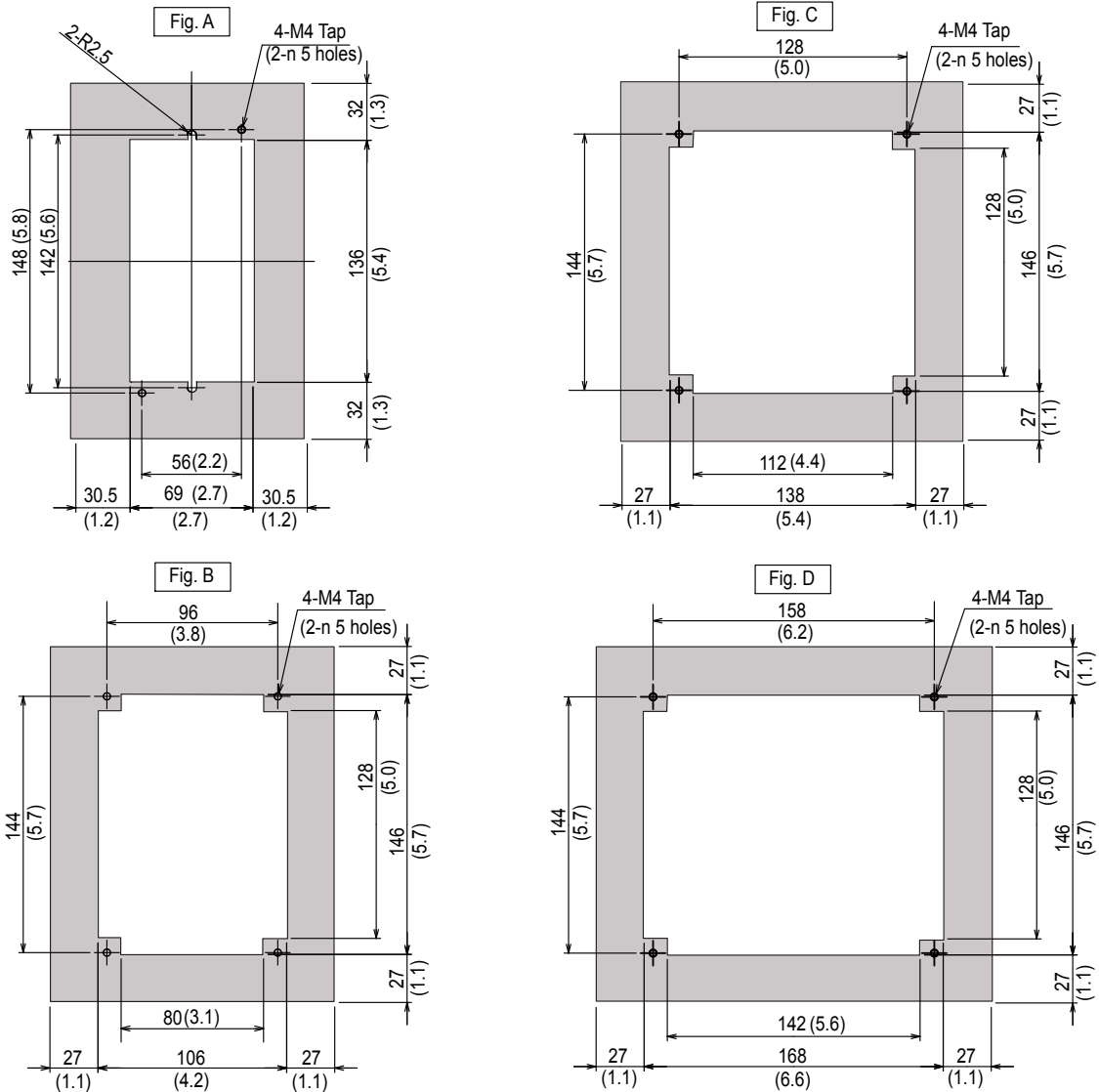


Figure 6 Procedure 4 Diagram (Example Model: CIMR-V□2□0010)

◆ Panel Cutout Dimensions and Optional Gasket (Procedures 1 to 4)

Refer to [Table 9](#) on page [21](#) to determine the appropriate Panel Cutout and Gasket Drawing below (Fig. A, B, C, or D) for your specific drive model.



■ Optional Gasket or Sealant (Procedures 1 to 4)

Note: Gasket or sealant is customer supplied.

If an undesirable air gap exists between Attachment A, B and the drive, attach a CR-Series or EPDM-Series gasket to the mounting panel surface or apply sealant to fill the gap. Refer to [Figure 7](#) for sealant placement. Refer to Figure A, B, C, or D for gasket dimensions for your specific model.

Gasket type: CR-Series or EPDM-Series made of foam rubber, approximately 2 mm in thick.

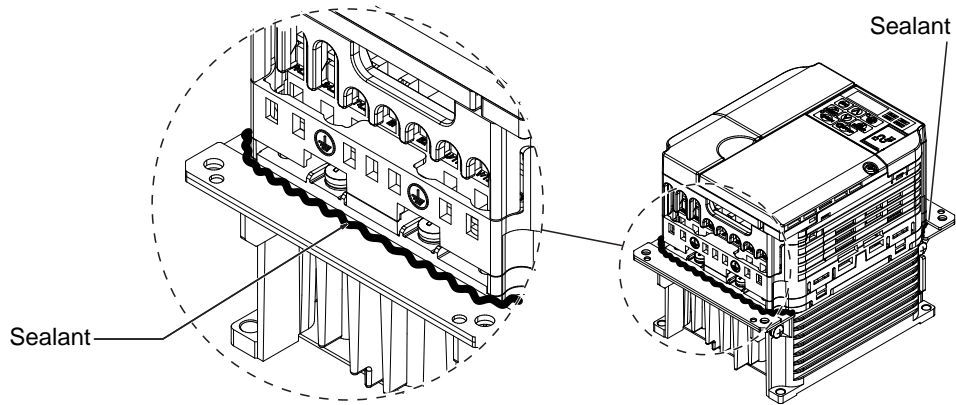


Figure 7 Sealant Placement

◆ Procedure 5 (Enclosure: NEMA Type 1)

1. Remove Drive Covers and Brackets
 - a. Remove the Terminal Cover.
 - b. Remove Top Cover.
 - c. Remove NEMA Type 1 Cover.
 - d. Remove Conduit Bracket.

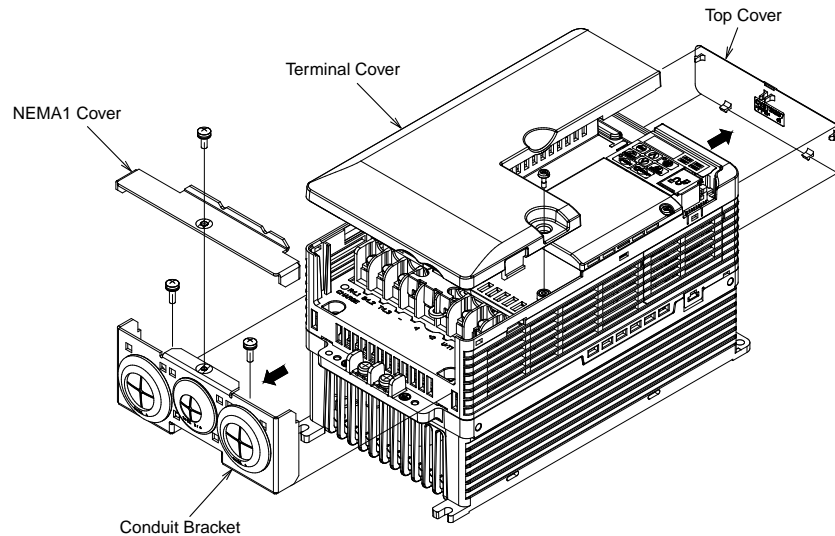


Figure 8 Drive Cover and Bracket Removal

2. Install Attachments 1 and 2
 - a. Install Attachment 1 and Attachment 2 to the mounting holes on the side of the heatsink using M5 x12 pan-head screws as shown in [Figure 4](#).

Table 7 Installation Fasteners by Model for [Figure 4](#)

Drive Model	Installation Fasteners
CIMR-V□2□0030 to 0056 CIMR-V□4□0018 to 0038	M5 x 12 Pan-head Screws (x4)
CIMR-V□2□0069	M6 x 14 Pan-head Screws (x4)

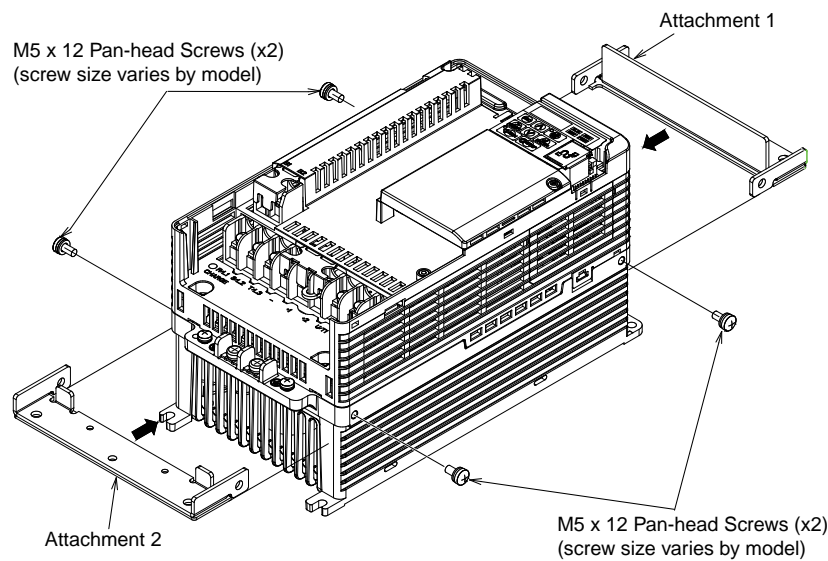


Figure 9 Diagram shown for Model CIMR-V□2□0030

3. Install Attachment 3

- a. Install Attachment 3 to the mounting holes of Attachment 1 and Attachment 2 using M4 x10 pan-head screws.

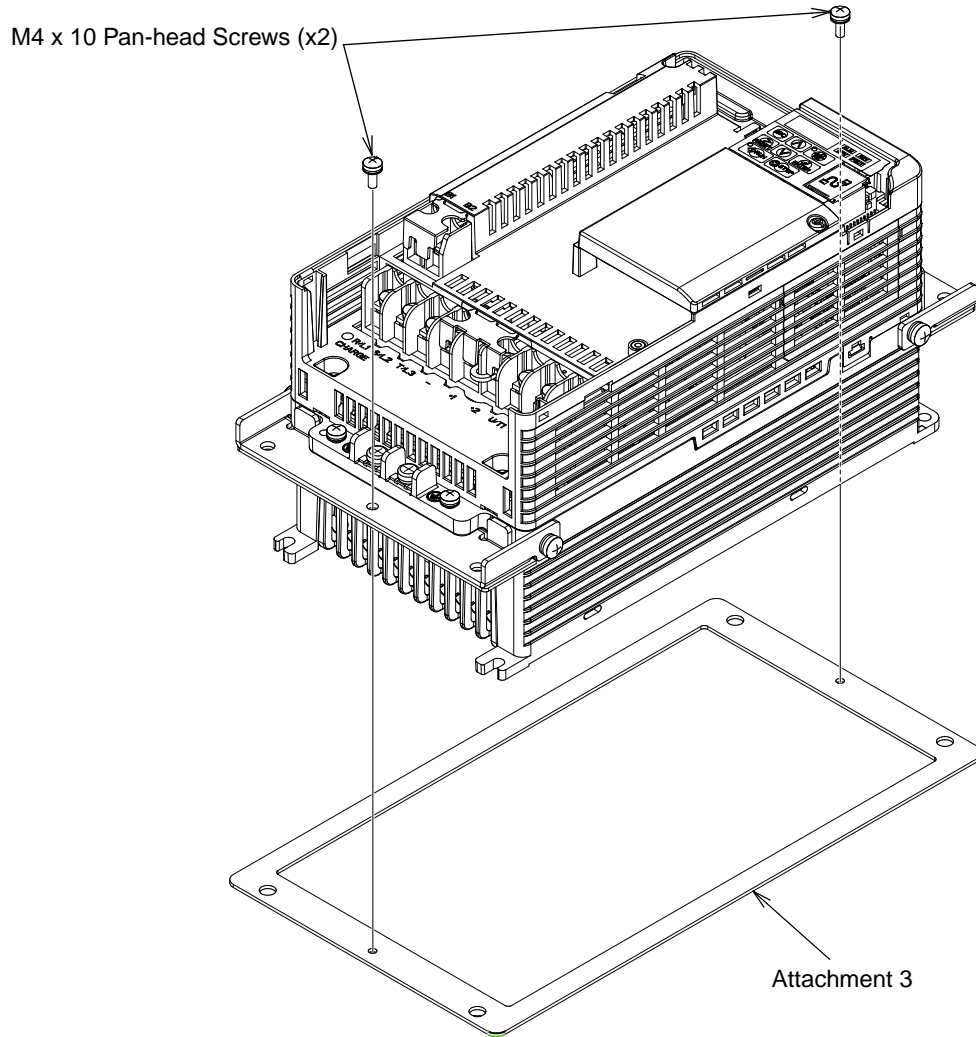


Figure 10 Attachment 3

- 4. Complete the assembly.
 - a. Install the terminal cover.

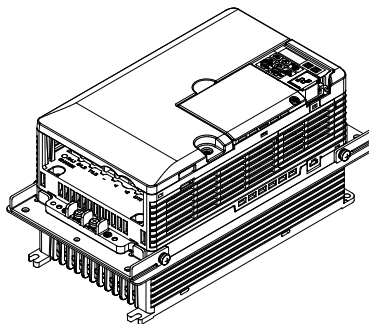


Figure 11 Completed Assembly

5 Installation Procedure by Drive Model

Optional Gasket or Sealant (Procedure 5 NEMA Type1 Enclosure)

Note: Gasket or sealant is customer supplied.

If an undesirable gap is found between Attachments 1, 2 or 3 and the drive, attach a CR-Series or EPDM-Series gasket to the mounting panel surface or apply sealant to fill the gap. Refer to [Figure 12](#) for sealant placement. Refer to [Figure 13](#) for gasket dimensions.

Gasket type: CR-Series or EPDM-Series made of foam rubber, approximately 2 mm in thick.

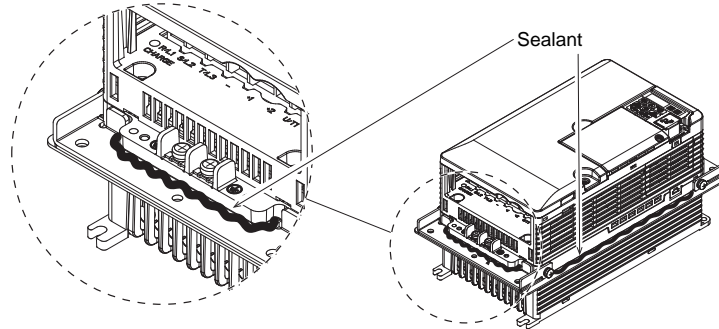


Figure 12 Sealant Placement

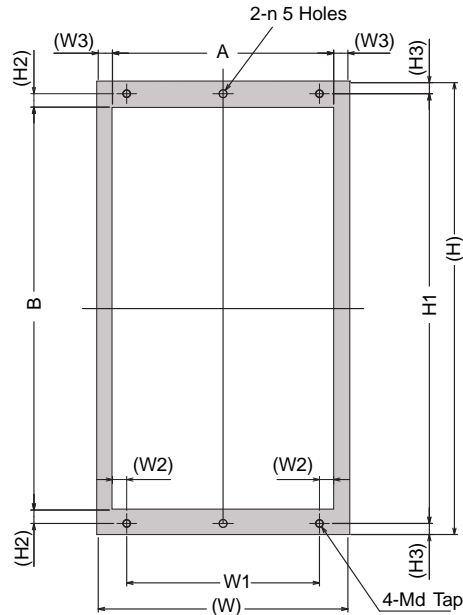


Figure 13 Panel Cutout and Optional Gasket Dimensions (Procedure 5 NEMA Type1 Enclosure)

Table 8 Panel Cutout and Optional Gasket Dimensions (Procedure 5 NEMA Type1 Enclosure)

Drive Model CIMR-	Dimensions mm (in)										
	W	H	W1	(W2)	(W3)	H1	(H2)	(H3)	A	B	d
V□2□0030	158 (6.2)	286 (11.3)	122 (4.8)	9 (0.4)	9 (0.4)	272 (10.7)	60 (2.4)	7 (0.3)	140 (5.5)	255 (10.0)	5 (0.2)
V□2□0040	158 (6.2)	286 (11.3)	122 (4.8)	9 (0.4)	9 (0.4)	272 (10.7)	60 (2.4)	7 (0.3)	140 (5.5)	255 (10.0)	5 (0.2)
V□2□0056	198 (7.8)	322 (12.7)	160 (6.3)	10 (0.4)	9 (0.4)	308 (12.1)	80 (3.1)	7 (0.3)	180 (7.0)	287 (11.2)	5 (0.2)
V□2□0069	241 (9.5)	380 (15.0)	192 (7.5)	14 (0.5)	10.5 (0.4)	362 (14.2)	85 (3.3)	9 (0.4)	280 (8.6)	341 (13.4)	5 (0.2)
V□4□0018	158 (6.2)	286 (11.3)	122 (4.8)	9 (0.4)	9 (0.4)	272 (10.7)	60 (2.4)	7 (0.3)	140 (5.5)	255 (10.0)	5 (0.2)
V□4□0023	158 (6.2)	286 (11.3)	122 (4.8)	9 (0.4)	9 (0.4)	272 (10.7)	60 (2.4)	7 (0.3)	140 (5.5)	255 (10.0)	5 (0.2)
V□4□0031	198 (7.8)	322 (12.7)	160 (6.3)	10 (0.4)	9 (0.4)	308 (12.1)	60 (2.4)	7 (0.3)	180 (7.0)	287 (11.2)	5 (0.2)
V□4□0038	198 (7.8)	322 (12.7)	10 (0.4)	308 (12.1)	9 (0.4)	308 (12.1)	80 (3.1)	7 (0.3)	180 (7.0)	287 (11.2)	5 (0.2)

6 External Heatsink Option Part Numbers by Drive Model

Table 9 External Heatsink Option Part Numbers (V1000 and J1000 Series Drives)

Drive Model CIMR- # = V or J Series	Part Number	Product Code 72606–	Attachment A	Attachment B	Convective Back Plate	Mounting Screw	Panel Cutout and Gasket Drawing (Page 16)	Notes
#□B□0001 #□B□0002	100-034-075	EZZ020568A	SPAT35091-1	SPAT45945-1 (×2)	—	M4×10 Pan-head Screws (×4)	Figure A	
#□B□0003	100-034-076	EZZ020568B	SPAT35092-1	SPAT45945-1 (×2)	—	M4×10 Pan-head Screws (×4)	Figure A	
#□B□0006	100-034-076	EZZ020568B	SPAT35092-1	SPAT45945-1 (×2)	—	M4×10 Pan-head Screws (×4)	Figure B	
#□B□0010	100-036-418	EZZ020568C	SPAT35095-A(×2)	—	—	M4×10 Pan-head Screws (×4)	Figure B	
#□B□0012	100-034-079	EZZ020568D	SPAT35095-A(×2)	—	SPAT35097-1	M4×10 Pan-head Screws (×5)	Figure C	
#□B□0018	100-034-080	EZZ020568E	SPAT35096-A(×2)	—	SPAT35098-1	M4×10 Pan-head Screws (×5)	Figure D	
#□2□0001 #□2□0002	100-034-075	EZZ020568A	SPAT35091-1	SPAT45945-1 (×2)	—	M4×10 Pan-head Screws (×4)	Figure A	
#□2□0004	100-034-076	EZZ020568B	SPAT35092-1	SPAT45945-1 (×2)	—	M4×10 Pan-head Screws (×4)	Figure A	<1>
#□2□0006	100-034-077	EZZ020568G	SPAT35093-1	SPAT45945-1 (×2)	—	M4×10 Pan-head Screws (×4)	Figure A	
#□2□0008 #□2□0010 #□2□0012	100-034-079	EZZ020568D	SPAT35095-A(×2)	—	SPAT35097-1	M4×10 Pan-head Screws (×5)	Figure B	
#□2□0018 #□2□0020	100-034-080	EZZ020568E	SPAT35096-A(×2)	—	SPAT35098-1	M4×10 Pan-head Screws (×5)	Figure C	
#□4□0001	100-034-078	EZZ020568L	SPAT45974-1(×2)	SPAT45975-1 (×2)	—	M4×10 Pan-head Screws (×4)	Figure B	
#□4□0002 #□4□0004	100-036-418	EZZ020568C	SPAT35095-A(×2)	—	—	M4×10 Pan-head Screws (×5)	Figure B	
#□4□0005 #□4□0007 #□4□0009	100-034-079	EZZ020568D	SPAT35095-A(×2)	—	SPAT35097-1	M4×10 Pan-head Screws (×5)	Figure B	
#□4□0011	100-034-080	EZZ020568E	SPAT35096-A(×2)	—	SPAT35098-1	M4×10 Pan-head Screws (×5)	Figure C	
Drive Model CIMR-	Part Number	Product Code 72606–	Attachment 1	Attachment 2	Attachment 3	Mounting Screw	Panel Cutout and Gasket Drawing (Page 20)	Notes
V□2□0030 V□2□0040	100-036-300	EZZ020568H	SPAT35163-A	SPAT35164-A	SPAT35165-1	M4×10 Pan-head Screws (×4)	Figure 13	<1>
V□2□0056	100-036-301	EZZ020568J	SPAT35166-A	SPAT35167-A	SPAT35168-1	M4×10 Pan-head Screws (×4)		
V□2□0069	100-036-302	EZZ020568K	SPAT35169-A	SPAT35170-A	SPAT35171-1	M4×10 Pan-head Screws (×4)		
V□4□0018 V□4□0023	100-036-300	EZZ020568H	SPAT35163-A	SPAT35164-A	SPAT35165-1	M4×10 Pan-head Screws (×4)		
V□4□0031 V□4□0038	100-036-301	EZZ020568J	SPAT35166-A	SPAT35167-A	SPAT35168-1	M4×10 Pan-head Screws (×5)		


<1> Use of this option kit on certain NEMA Type 1 standard drives, requires removal of the drive top cover, NEMA Type 1 cover and conduit bracket.

6 External Heatsink Option Part Numbers by Drive Model

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7 Revision History

The revision dates and the numbers of the revised manuals appear on the bottom of the back cover.

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External Heatsink Attachment

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