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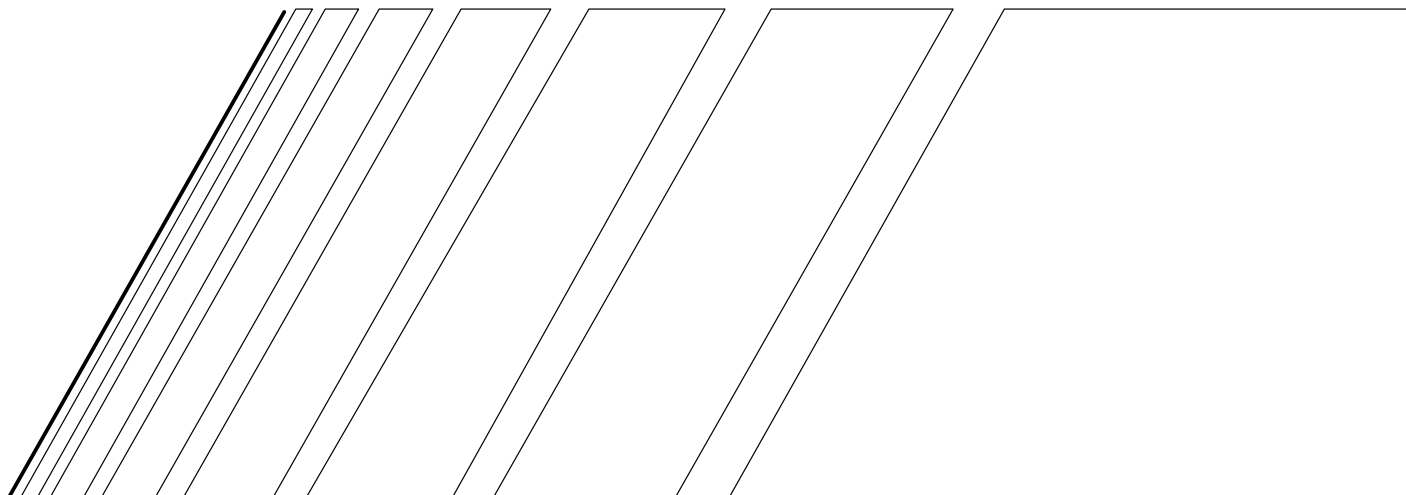
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# **USER'S MANUAL**

## **SYSDRIVE 3G3JV**

**Compact Simplified Inverters**

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Thank you for choosing this SYSDRIVE 3G3JV-series product. Proper use and handling of the product will ensure proper product performance, will lengthen product life, and may prevent possible accidents.

Please read this manual thoroughly and handle and operate the product with care.

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1. To ensure safe and proper use of the OMRON Inverters, please read this USER'S MANUAL (Cat. No. I528-E1) to gain sufficient knowledge of the devices, safety information, and precautions before actual use.
2. The products are illustrated without covers and shieldings for closer look in this USER'S MANUAL. For actual use of the products, make sure to use the covers and shieldings as specified.
3. This USER'S MANUAL and other related user's manuals are to be delivered to the actual end users of the products.
4. Please keep this manual close at hand for future reference.
5. If the product has been left unused for a long time, please inquire at our sales representative.

## **NOTICE**

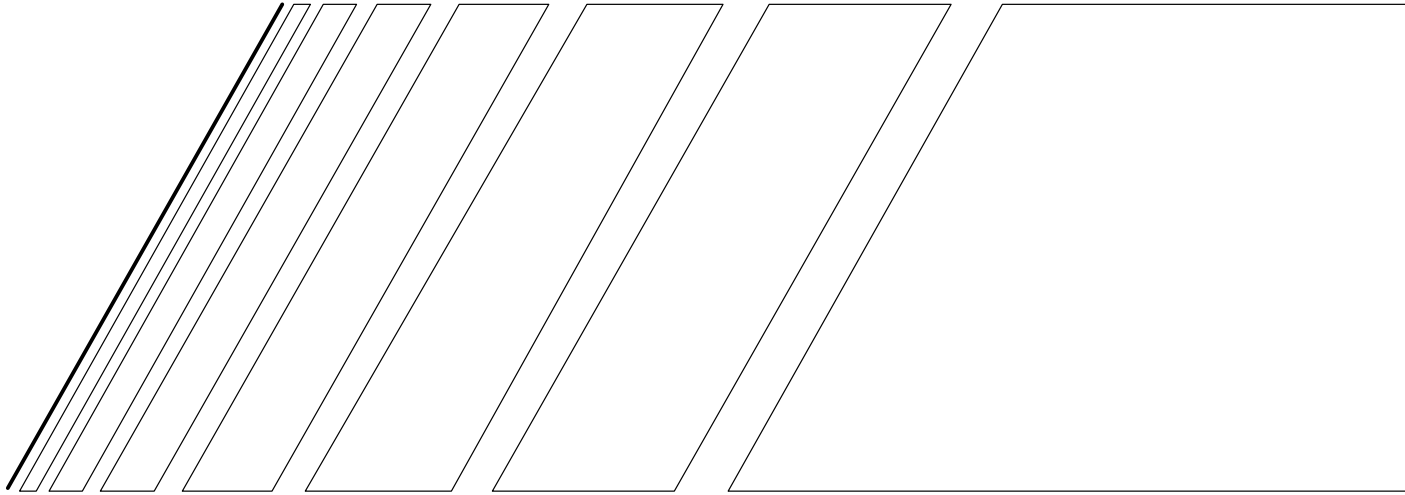
1. This manual describes the functions of the product and relations with other products. You should assume that anything not described in this manual is not possible.
2. Although care has been given in documenting the product, please contact your OMRON representative if you have any suggestions on improving this manual.
3. The product contains potentially dangerous parts under the cover. Do not attempt to open the cover under any circumstances. Doing so may result in injury or death and may damage the product. Never attempt to repair or disassemble the product.
4. We recommend that you add the following precautions to any instruction manuals you prepare for the system into which the product is being installed.
  - Precautions on the dangers of high-voltage equipment.
  - Precautions on touching the terminals of the product even after power has been turned OFF. (These terminals are live even with the power turned OFF.)
5. Specifications and functions may be changed without notice in order to improve product performance.

## **Items to Check Before Unpacking**

Check the following items before removing the product from the package:

- Has the correct product been delivered (i.e., the correct model number and specifications)?
- Has the product been damaged in shipping?
- Are any screws or bolts loose?

**OMRON**



# **USER'S MANUAL**


**SYSDRIVE 3G3JV** SERIES


**Compact Simplified Inverter**


## **Notice:**

OMRON products are manufactured for use according to proper procedures by a qualified operator and only for the purposes described in this manual.

The following conventions are used to indicate and classify precautions in this manual. Always heed the information provided with them. Failure to heed precautions can result in injury to people or damage to property.

 **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. Additionally, there may be severe property damage.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. Additionally, there may be severe property damage.

 **Caution** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury, or property damage.

## **OMRON Product References**

All OMRON products are capitalized in this manual. The word “Unit” is also capitalized when it refers to an OMRON product, regardless of whether or not it appears in the proper name of the product.

The abbreviation “Ch,” which appears in some displays and on some OMRON products, often means “word” and is abbreviated “Wd” in documentation in this sense.

The abbreviation “PC” means Programmable Controller and is not used as an abbreviation for anything else.

## **Visual Aids**

The following headings appear in the left column of the manual to help you locate different types of information.

**Note** Indicates information of particular interest for efficient and convenient operation of the product.

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No patent liability is assumed with respect to the use of the information contained herein. Moreover, because OMRON is constantly striving to improve its high-quality products, the information contained in this manual is subject to change without notice. Every precaution has been taken in the preparation of this manual. Nevertheless, OMRON assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained in this publication.

## General Precautions




Observe the following precautions when using the SYSDRIVE Inverters and peripheral devices.

This manual may include illustrations of the product with protective covers removed in order to describe the components of the product in detail. Make sure that these protective covers are on the product before use.






Consult your OMRON representative when using the product after a long period of storage.

-  **WARNING** Do not touch the inside of the Inverter. Doing so may result in electrical shock.
-  **WARNING** Operation, maintenance, or inspection must be performed after turning OFF the power supply, confirming that the CHARGE indicator (or status indicators) are OFF, and after waiting for the time specified on the front cover. Not doing so may result in electrical shock.
-  **WARNING** Do not damage, pull on, apply stress to, place heavy objects on, or pinch the cables. Doing so may result in electrical shock.
-  **WARNING** Do not touch the rotating parts of the motor under operation. Doing so may result in injury.
-  **WARNING** Do not modify the product. Doing so may result in injury or damage to the product.
-  **Caution** Do not store, install, or operate the product in the following places. Doing so may result in electrical shock, fire or damage to the product.
  - Locations subject to direct sunlight.
  - Locations subject to temperatures or humidity outside the range specified in the specifications.
  - Locations subject to condensation as the result of severe changes in temperature.
  - Locations subject to corrosive or flammable gases.
  - Locations subject to exposure to combustibles.
  - Locations subject to dust (especially iron dust) or salts.
  - Locations subject to exposure to water, oil, or chemicals.
  - Locations subject to shock or vibration.
-  **Caution** Do not touch the Inverter radiator, regenerative resistor, or Servomotor while the power is being supplied or soon after the power is turned OFF. Doing so may result in a skin burn due to the hot surface.
-  **Caution** Do not conduct a dielectric strength test on any part of the Inverter. Doing so may result in damage to the product or malfunction.
-  **Caution** Take appropriate and sufficient countermeasures when installing systems in the following locations. Not doing so may result in equipment damage.
  - Locations subject to static electricity or other forms of noise.
  - Locations subject to strong electromagnetic fields and magnetic fields.
  - Locations subject to possible exposure to radioactivity.
  - Locations close to power supplies.





## ***Transportation Precautions***







-  **Caution** Do not hold by front cover or panel, instead, hold by the radiation fin (heat sink) while transporting the product. Doing so may result in injury.
-  **Caution** Do not pull on the cables. Doing so may result in damage to the product or malfunction.
-  **Caution** Use the eye-bolts only for transporting the Inverter. Using them for transporting the machinery may result in injury or malfunction.

## ***Installation Precautions***








-  **WARNING** Provide an appropriate stopping device on the machine side to secure safety. (A holding brake is not a stopping device for securing safety.) Not doing so may result in injury.
-  **WARNING** Provide an external emergency stopping device that allows an instantaneous stop of operation and power interruption. Not doing so may result in injury.
-  **Caution** Be sure to install the product in the correct direction and provide specified clearances between the Inverter and control panel or with other devices. Not doing so may result in fire or malfunction.
-  **Caution** Do not allow foreign objects to enter inside the product. Doing so may result in fire or malfunction.
-  **Caution** Do not apply any strong impact. Doing so may result in damage to the product or malfunction.

## ***Wiring Precautions***






-  **WARNING** Wiring must be performed only after confirming that the power supply has been turned OFF. Not doing so may result in electrical shock.
-  **WARNING** Wiring must be performed by authorized personnel. Not doing so may result in electrical shock or fire.
-  **WARNING** Be sure to confirm operation only after wiring the emergency stop circuit. Not doing so may result in injury.
-  **WARNING** Always connect the ground terminals to a ground of 100  $\Omega$  or less for the 200-V AC class, or 10  $\Omega$  or less for the 400-V AC class. Not connecting to a proper ground may result in electrical shock.

-  **Caution** Install external breakers and take other safety measures against short-circuiting in external wiring. Not doing so may result in fire.
-  **Caution** Confirm that the rated input voltage of the Inverter is the same as the AC power supply voltage. An incorrect power supply may result in fire, injury, or malfunction.
-  **Caution** Connect the Braking Resistor and Braking Resistor Unit as specified in the manual. Not doing so may result in fire.
-  **Caution** Be sure to wire correctly and securely. Not doing so may result in injury or damage to the product.
-  **Caution** Be sure to firmly tighten the screws on the terminal block. Not doing so may result in fire, injury, or damage to the product.
-  **Caution** Do not connect an AC power to the U, V, or W output. Doing so may result in damage to the product or malfunction.







## ***Operation and Adjustment Precautions***

-  **WARNING** Turn ON the input power supply only after mounting the front cover, terminal covers, bottom cover, Operator, and optional items. Not doing so may result in electrical shock.
-  **WARNING** Do not remove the front cover, terminal covers, bottom cover, Operator, or optional items while the power is being supplied. Doing so may result in electrical shock or damage to the product.
-  **WARNING** Do not operate the Operator or switches with wet hands. Doing so may result in electrical shock.
-  **WARNING** Do not touch the inside of the Inverter. Doing so may result in electrical shock.
-  **WARNING** Do not come close to the machine when using the error retry function because the machine may abruptly start when stopped by an alarm. Doing so may result in injury.
-  **WARNING** Do not come close to the machine immediately after resetting momentary power interruption to avoid an unexpected restart (if operation is set to be continued in the processing selection function after momentary power interruption is reset). Doing so may result in injury.
-  **WARNING** Provide a separate emergency stop switch because the STOP Key on the Operator is valid only when function settings are performed. Not doing so may result in injury.



-  **WARNING** Be sure to confirm that the RUN signal is turned OFF before turning ON the power supply, resetting the alarm, or switching the LOCAL/REMOTE selector. Doing so while the RUN signal is turned ON may result in injury.
-  **Caution** Be sure to confirm permissible ranges of motors and machines before operation because the Inverter speed can be easily changed from low to high. Not doing so may result in damage to the product.
-  **Caution** Provide a separate holding brake when necessary. Not doing so may result in injury.
-  **Caution** Do not perform a signal check during operation. Doing so may result in injury or damage to the product.
-  **Caution** Do not carelessly change settings. Doing so may result in injury or damage to the product.

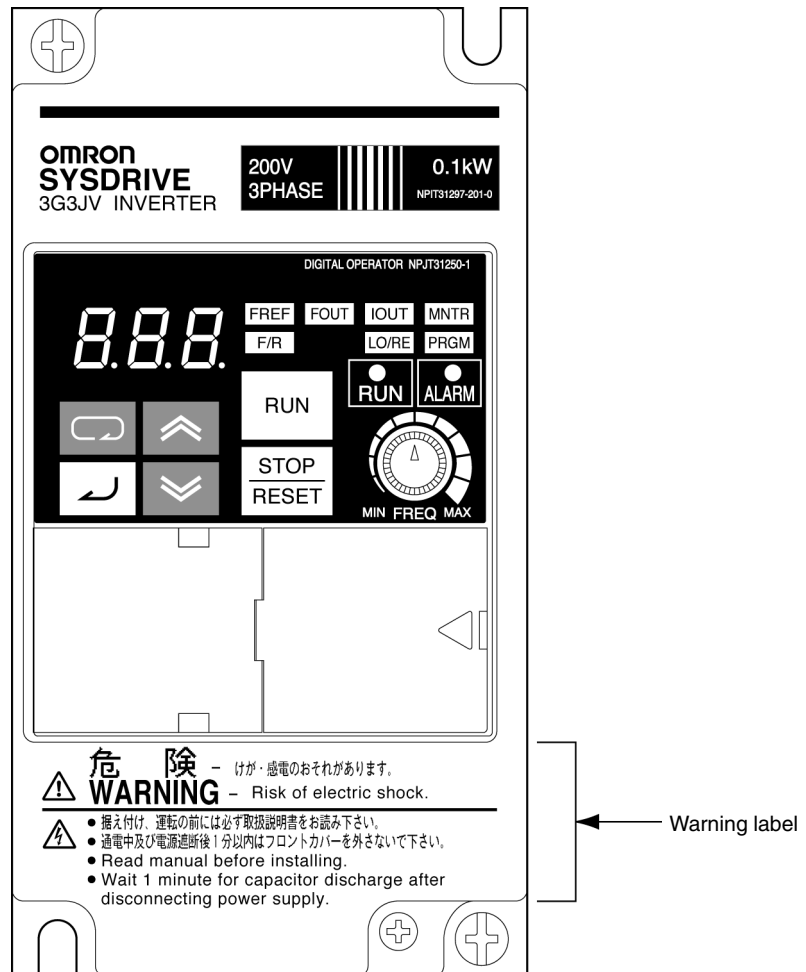
## ***Maintenance and Inspection Precautions***

-  **WARNING** Do not touch the Inverter terminals while the power is being supplied.
-  **WARNING** Maintenance or inspection must be performed only after turning OFF the power supply, confirming that the CHARGE indicator (or status indicators) is turned OFF, and after waiting for the time specified on the front cover. Not doing so may result in electrical shock.
-  **WARNING** Maintenance, inspection, or parts replacement must be performed by authorized personnel. Not doing so may result in electrical shock or injury.
-  **WARNING** Do not attempt to take the Unit apart or repair. Doing either of these may result in electrical shock or injury.
-  **Caution** Carefully handle the Inverter because it uses semiconductor elements. Careless handling may result in malfunction.
-  **Caution** Do not change wiring, disconnect connectors, the Operator, or optional items, or replace fans while power is being supplied. Doing so may result in injury, damage to the product, or malfunction.

# Warning Labels

Warning labels are pasted on the product as shown in the following illustration. Be sure to follow the instructions given there.

## ■ Warning Labels





## ■ Contents of Warning

- For 3G3JV-A2001 to A2007 (0.1 to 0.75 kW) and 3G3JV-AB001 to AB004 (0.1 to 0.4 kW):

	<b>危険</b> - けが・感電のおそれがあります。 <b>WARNING</b> - Risk of electric shock.
	<ul style="list-style-type: none"><li>• 据え付け、運転の前には必ず取扱説明書をお読み下さい。</li><li>• 通電中及び電源遮断後1分以内はフロントカバーを外さないで下さい。</li><li>• Read manual before installing.</li><li>• Wait 1 minute for capacitor discharge after disconnecting power supply.</li></ul>

- For 3G3JV-A2015 to A2037 (1.5 to 3.7 kW), 3G3JV-AB007 to AB015 (0.75 to 1.5 kW), and 3G3JV-A4002 to A4037 (0.2 to 3.7 kW):

	<b>危険</b> - けが・感電のおそれがあります。	<b>WARNING</b> - Risk of electric shock.
	<ul style="list-style-type: none"><li>• 据え付け、運転の前には必ず取扱説明書をお読み下さい。</li><li>• 通電中及び電源遮断後1分以内はフロントカバーを外さないで下さい。</li><li>• 400V級インバータの場合は、電源の中性点が接地されていることを確認して下さい。(CE対応)</li></ul>	<ul style="list-style-type: none"><li>• Read manual before installing.</li><li>• Wait 1 minute for capacitor discharge after disconnecting power supply.</li><li>• To conform to CE requirements, make sure to ground the supply neutral for 400V class.</li></ul>

## Checking Before Unpacking

### ■ Checking the Product

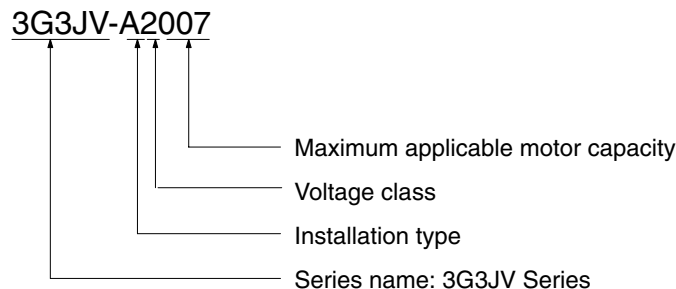
On delivery, always check that the delivered product is the SYSDRIVE 3G3JV Inverter that you ordered. Should you find any problems with the product, immediately contact your nearest local sales representative.

### ● Checking the Nameplate

Inverter model →  
Input specifications →  
Output specifications →

<b>OMRON INVERTER 3G3JV-A2001</b>	
INPUT :	AC3PH 200-230V 50/60Hz 1.1A
OUTPUT :	AC3PH 0-230V 0-400Hz 0.8A 0.3kVA
LOT NO :	MASS : 0.5kg
SER NO :	PRG :
FILE NO : E179149 INSTALLATION CATEGORY II	
IP20 OMRON Corporation      MADE IN JAPAN MS	

### ● Checking the Model



## Maximum Applicable Motor Capacity

001	0.1 (0.1) kW
002	0.25/0.37 (0.2) kW
004	0.55 (0.4) kW
007	1.1 (0.75) kW
015	1.5 (1.5) kW
022	2.2 (2.2) kW
037	3.7 (3.7) kW

**Note** The figures in parentheses indicate capacities for motors used outside Japan.

## Voltage Class

2	Three-phase 200-V AC input (200-V class)
B	Single-phase 200-V AC input (200-V class)
4	Three-phase 400-V AC input (400-V class)

## Installation Type

A	Panel-mounting models (IP10 min.) or Closed wall mounting
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### ● Checking for Damage

Check the overall appearance and check for damage or scratches resulting from transportation.

### ■ Checking the Accessories

This manual is the only accessory provided with the 3G3JV. Set screws and other necessary parts must be provided by the user.

## ***About this Manual***

This manual is divided into the chapters described in the following table. Information is organized by application area to enable you to use the manual more efficiently.

<b>Chapter</b>	<b>Contents</b>
Chapter 1 Overview	Describes features and nomenclature.
Chapter 2 Design	Provides dimensions, installation methods, wiring methods, peripheral device design information, and peripheral device selection information.
Chapter 3 Preparing for Operation and Monitoring	Describes nomenclature and Digital Operator procedures for operating and monitoring Inverters.
Chapter 4 Test Run	Describes the method for controlling a motor through the frequency adjuster on the front of the Inverter. This can be used for trial operation of the system.
Chapter 5 Basic Operation	Describes basic Inverter control functions for users not familiar with Inverters. The functions that must be understood to drive a motor with an Inverter are described.
Chapter 6 Advanced Operation	Describes all of the functions provided by the Inverter. These functions will enable more advanced applications, and includes functions that will improve motor control through the Inverter, such as responsiveness (torque characteristics), increasing speed accuracy, PID control, overtorque detection, and other functions.
Chapter 7 Communications	Describes the RS-422/485 Communications Unit and the general-purpose RS-422/485 communications functions provided by the Inverter, including connection methods and sample programming for SYSMAC Programmable Controllers.
Chapter 8 Maintenance Operations	Provides maintenance, inspection, and troubleshooting information.
Chapter 9 Specifications	Provides Inverter specifications, as well as the specifications and dimensions of peripheral devices.
Chapter 10 List of Parameters	Lists basic information on Inverter parameters as a reference for users already familiar with Inverter operation. Parameters are listed in order with the page numbers of further information for easy reference.
Chapter 11 Using the Inverter for a Motor	Describes information on using the Inverter for a motor.

## ***Read and Understand this Manual***

Please read and understand this manual before using the product. Please consult your OMRON representative if you have any questions or comments.

## ***Warranty and Limitations of Liability***

### ***WARRANTY***

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

### ***LIMITATIONS OF LIABILITY***

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY.

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

# ***Application Considerations***

## ***SUITABILITY FOR USE***

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this manual.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

**NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.**

## ***PROGRAMMABLE PRODUCTS***

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

# ***Disclaimers***

## ***CHANGE IN SPECIFICATIONS***

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

## ***DIMENSIONS AND WEIGHTS***

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

## ***PERFORMANCE DATA***

Performance data given in this manual is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

## ***ERRORS AND OMISSIONS***

The information in this manual has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.





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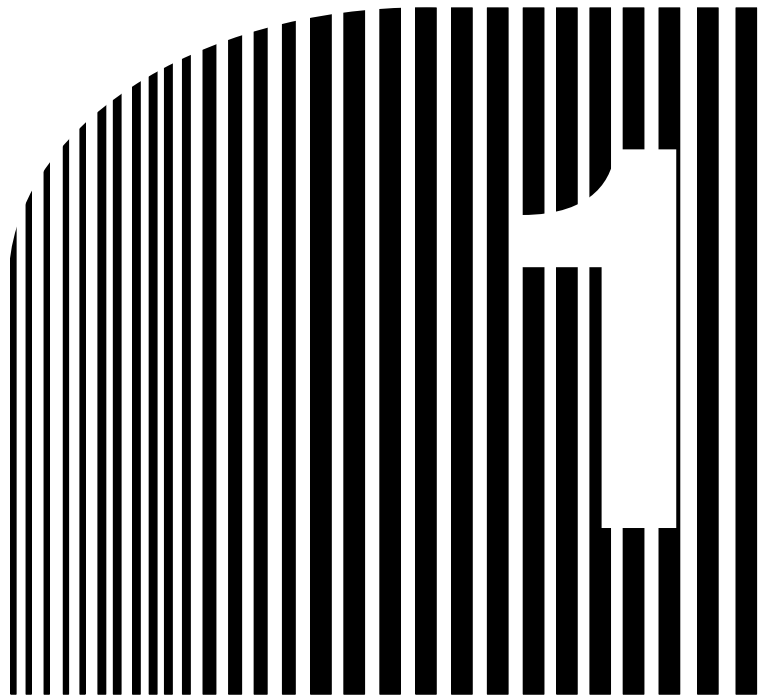
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# Chapter 1

## • Overview •

1-1 Function

1-2 Nomenclature

## 1-1 Function

The compact simple SYSDRIVE 3G3JV-Series Inverter ensures greater ease of use than any conventional model.

The 3G3JV Inverter meets EC Directives and UL/cUL standard requirements for world-wide use.

### ■ SYSDRIVE 3G3JV Inverter Models

- The following 3-phase and single-phase 200-V AC-class, and 3-phase 400-V AC-class 3G3JV models are available.

Rated voltage	Protective structure	Maximum applied motor capacity	Model
3-phase 200 V AC	Panel-mounting models (conforming to IP20)	0.1 (0.1) kW	3G3JV-A2001
		0.25 (0.2) kW	3G3JV-A2002
		0.55 (0.4) kW	3G3JV-A2004
		1.1 (0.75) kW	3G3JV-A2007
		1.5 (1.5) kW	3G3JV-A2015
		2.2 (2.2) kW	3G3JV-A2022
		3.7 (3.7) kW	3G3JV-A2037
Single-phase 200 V AC	Panel-mounting models (conforming to IP20)	0.1 (0.1) kW	3G3JV-AB001
		0.25 (0.2) kW	3G3JV-AB002
		0.55 (0.4) kW	3G3JV-AB004
		1.1 (0.75) kW	3G3JV-AB007
		1.5 (1.5) kW	3G3JV-AB015
3-phase 400 V AC	Panel-mounting models (conforming to IP20)	0.37 (0.2) kW	3G3JV-A4002
		0.55 (0.4) kW	3G3JV-A4004
		1.1 (0.75) kW	3G3JV-A4007
		1.5 (1.5) kW	3G3JV-A4015
		2.2 (2.2) kW	3G3JV-A4022
		3.7 (3.7) kW	3G3JV-A4037

**Note 1.** The figures in parentheses indicate typical motor capacities in Japan.

**Note 2.** It is not possible to connect a Braking Resistor or Braking Unit to a 3G3JV-series Inverter. Select an Inverter from another series if the application requires braking control.

### ■ International Standards (EC Directives and UL/cUL Standards)

The 3G3JV Inverter meets the EC Directives and UL/cUL standard requirements for worldwide use.

Classification		Applicable standard
EC Directives	EMC Directive	EN50081-2 and EN5008-2
	Low-voltage Directive	prEN50178
UL/cUL		UL508C

**■ Versatile Easy-to-use Functions**

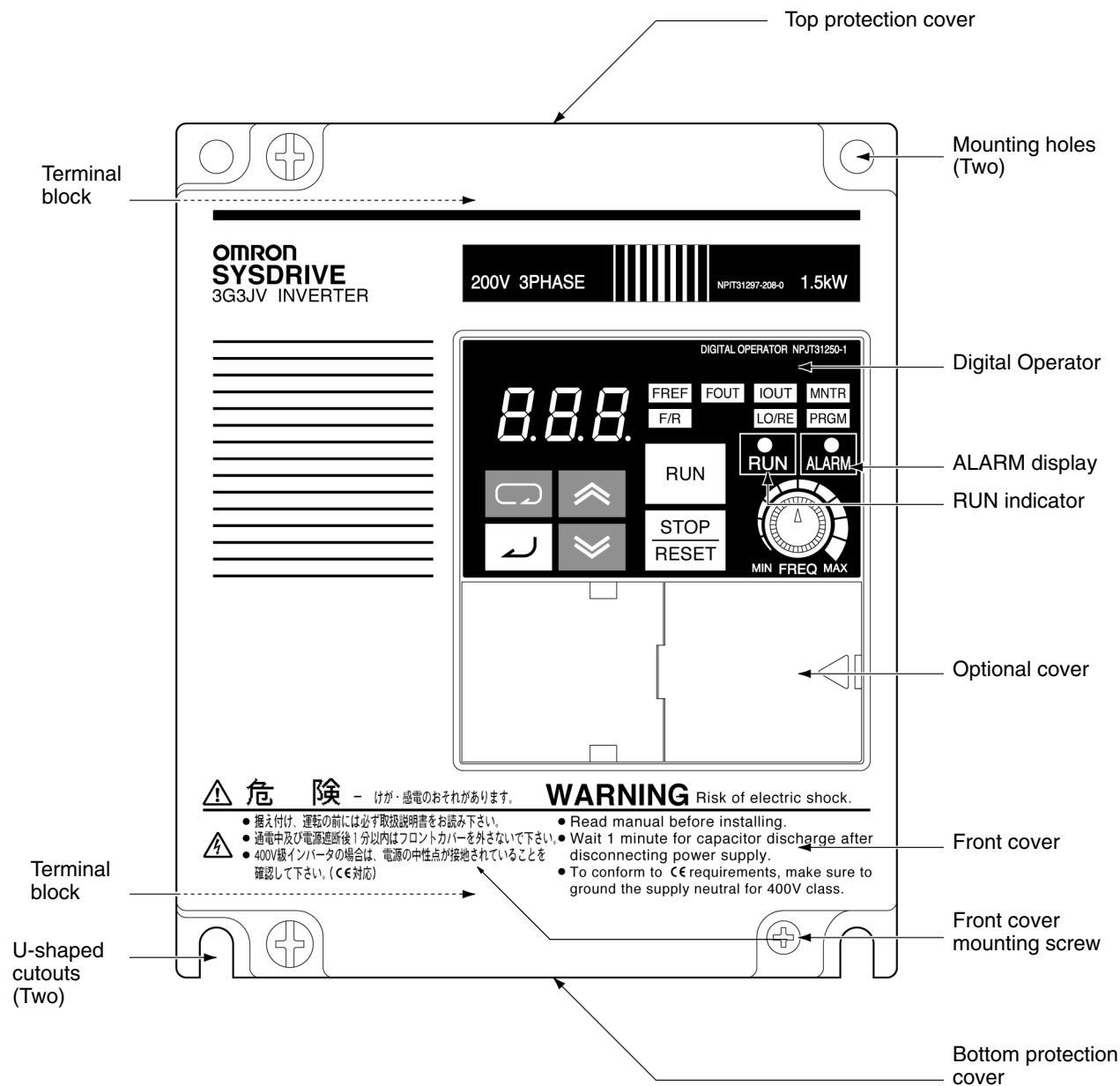
- Incorporates the functions and operability ensured by the conventional 3G3EV Series.
- Easy to initialize and operate with the FREQ adjuster on the Digital Operator.
- Ease of maintenance. The cooling fan is easily replaceable. The life of the cooling fan can be prolonged by turning on the cooling fan only when the Inverter is in operation.

**■ Suppression of Harmonics**

Connects to DC reactors, thus suppressing harmonics more effectively than conventional AC reactors. Further improvement in the suppression of harmonics is possible with the combined use of the DC and AC reactors.

## 1-2 Nomenclature

### ■ Panel



**Note 1.** The front cover functions as a terminal cover. The Digital Operator Unit cannot be removed.

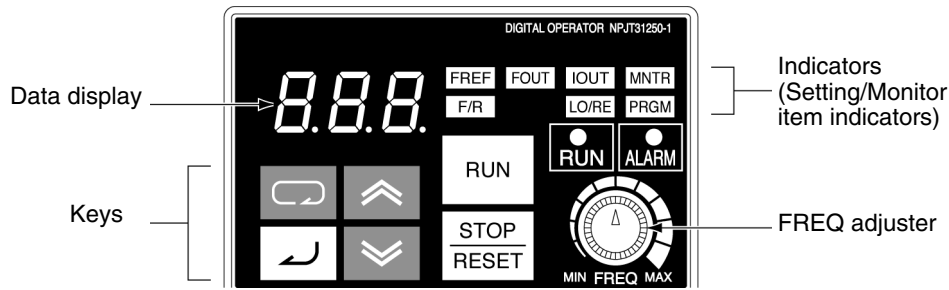
**Note 2.** Instead of mounting holes, each of the following models has two U-shaped cutouts located diagonally.

3G3JV-A2001 (0.1 kW), 3G3JV-A2002 (0.25 kW), 3G3JV-A2004 (0.55 kW), and 3G3JV-A2007 (1.1 kW)




3G3JV-AB001 (0.1 kW), 3G3JV-AB002 (0.25 kW), and 3G3JV-AB004 (0.55 kW)



■ Digital Operator



Appearance	Name	Function
	Data display	Displays relevant data items, such as frequency reference, output frequency, and parameter set values.
	FREQ adjuster	Sets the frequency reference within a range between 0 Hz and the maximum frequency.
	FREF indicator	The frequency reference can be monitored or set while this indicator is lit.
	FOUT indicator	The output frequency of the Inverter can be monitored while this indicator is lit.
	IOUT indicator	The output current of the Inverter can be monitored while this indicator is lit.
	MNTR indicator	The values set in U01 through U10 are monitored while this indicator is lit.
	F/R indicator	The direction of rotation can be selected while this indicator is lit when operating the Inverter with the RUN Key.
	LO/RE indicator	The operation of the Inverter through the Digital Operator or according to the set parameters is selectable while this indicator is lit.  <b>Note</b> This status of this indicator can be only monitored while the Inverter is in operation. Any RUN command input is ignored while this indicator is lit.
	PRGM indicator	The parameters in n01 through n79 can be set or monitored while this indicator is lit.  <b>Note</b> While the Inverter is in operation, the parameters can be only monitored and only some parameters can be changed. Any RUN command input is ignored while this indicator is lit.
	Mode Key	Switches the setting and monitor item indicators in sequence.  Parameter being set will be canceled if this key is pressed before entering the setting.
	Increment Key	Increases multi-function monitor numbers, parameter numbers, and parameter set values.
	Decrement Key	Decreases multi-function monitor numbers, parameter numbers, and parameter set values.

Appearance	Name	Function
	Enter Key	Enters multi-function monitor numbers, parameter numbers, and internal data values after they are set or changed.
	RUN Key	Starts the Inverter running when the 3G3JV is in operation with the Digital Operator.
	STOP/RESET Key	Stops the Inverter unless parameter n06 is set to disable the STOP Key. Functions as a Reset Key when an Inverter error occurs. (See note.)

**Note** For safety reasons, the reset will not work while a RUN command (forward or reverse) is in effect. Wait until the RUN command is OFF before resetting the Inverter.