

## Yaskawa CIMR-7.5G2

# Yaskawa CIMR-7.5G2 Variable Frequency Drive User Manual

Model: CIMR-7.5G2 | Brand: Yaskawa

## 1. INTRODUCTION AND OVERVIEW

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Yaskawa CIMR-7.5G2 Variable Frequency Drive (VFD). The CIMR-7.5G2 is a robust industrial drive designed for precise speed control of three-phase AC induction motors, operating on a 200-220V, 50-60 Hz, 3-phase power supply. It is crucial to read and understand this manual completely before attempting any installation, operation, or maintenance procedures.



Figure 1: Yaskawa CIMR-7.5G2 Variable Frequency Drive with top cover open, revealing internal components and wiring terminals.

## 2. SAFETY INFORMATION

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### **WARNING: ELECTRIC SHOCK HAZARD**

- Only qualified and trained personnel should install, operate, or maintain this equipment.
- Always disconnect all power sources to the drive and wait for the charge indicator to extinguish before performing any work on the drive or connected equipment. Residual voltage may be present even after power is disconnected.
- Ensure proper grounding of the drive and motor to prevent electrical shock.
- Do not operate the drive with covers removed.
- Protect the drive from moisture, dust, and corrosive gases.

### **CAUTION: EQUIPMENT DAMAGE**

- Do not connect the AC power supply to the output terminals (U, V, W).
- Ensure correct wiring and proper terminal connections.
- Verify that the input voltage matches the drive's specifications (200-220V, 3-phase).

## 3. SETUP

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### 3.1 Unpacking and Inspection

Carefully unpack the CIMR-7.5G2 drive. Inspect the unit for any signs of physical damage that may have

occurred during shipping. If any damage is found, contact your supplier immediately.

## 3.2 Mounting

Mount the drive vertically on a flat, stable, and non-flammable surface. Ensure adequate clearance around the drive for proper ventilation and heat dissipation. Refer to the drive's dimensions for specific spacing requirements. Avoid mounting in direct sunlight or areas with excessive vibration.

## 3.3 Wiring

All wiring must comply with local and national electrical codes. Use appropriate wire gauges for the power and motor connections.

1. **Grounding (E):** Connect the ground terminal of the drive to a reliable earth ground. This is critical for safety.
2. **Input Power (R, S, T):** Connect the 200-220V, 3-phase AC power supply to the R, S, and T input terminals. Ensure the phase sequence is correct.
3. **Motor Output (U, V, W):** Connect the three-phase motor leads to the U, V, and W output terminals of the drive.
4. **Control Wiring:** Connect any necessary control signals (e.g., start/stop commands, speed reference, fault outputs) to the designated control terminals. Refer to the terminal diagram on the drive for specific connections.



Figure 2: Yaskawa CIMR-7.5G2 wiring terminals for power and motor connections.

## 4. OPERATING INSTRUCTIONS

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## 4.1 Control Panel Overview

The CIMR-7.5G2 features a user-friendly control panel with a digital display and several function buttons for operation and parameter setting.



Figure 3: Close-up view of the Yaskawa CIMR-7.5G2 control panel.

- **Digital Display:** Shows operational status, frequency, current, voltage, and parameter values.
- **MODE/DATA Button:** Used to switch between display modes and enter/confirm parameter settings.
- **RUN Button:** Initiates motor operation.
- **STOP/RESET Button:** Stops motor operation and resets fault conditions.
- **Up/Down Arrows:** Used to navigate through parameters and adjust values.

## 4.2 Basic Operation

1. **Power On:** Apply 3-phase power to the drive. The display will illuminate.
2. **Start Motor:** Press the **RUN** button. The motor will accelerate to the set speed.
3. **Stop Motor:** Press the **STOP/RESET** button. The motor will decelerate and stop.
4. **Adjust Speed:** Use the **Up/Down Arrows** to adjust the output frequency (motor speed) while the drive is running or in standby, depending on the parameter settings.

## 4.3 Parameter Settings

The CIMR-7.5G2 has various parameters that can be configured to customize its operation for specific applications. These include acceleration/deceleration times, maximum/minimum frequencies, motor data, and control modes. Refer to the detailed parameter list in the complete Yaskawa CIMR-7.5G2 technical manual for comprehensive information on each parameter and its function.

## 5. MAINTENANCE

Regular maintenance is essential to ensure the long-term reliability and performance of your Yaskawa CIMR-7.5G2 drive.

- **Dust Removal:** Periodically clean dust and debris from the drive's heatsink and ventilation openings using compressed air. Ensure power is disconnected before cleaning.
- **Terminal Inspection:** Check all wiring terminals for tightness and signs of corrosion. Loose connections can lead to overheating and drive malfunction.
- **Cooling Fan:** Inspect the cooling fan for proper operation and signs of wear. Replace if necessary.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges.

## 6. TROUBLESHOOTING

This section provides general guidance for common issues. For detailed troubleshooting and error code explanations, refer to the comprehensive Yaskawa CIMR-7.5G2 technical manual.

Problem	Possible Cause	Solution
Drive does not power on	No input power; Blown fuse; Internal fault	Check power supply; Inspect fuses; Contact Yaskawa support.
Motor does not run	Incorrect wiring; Drive in fault state; No run command	Verify wiring; Check display for fault codes and reset; Ensure run command is active.
Overcurrent fault	Motor overload; Short circuit in motor/wiring; Rapid acceleration	Check motor load; Inspect motor/wiring; Increase acceleration time.
Overvoltage fault	High input voltage; Rapid deceleration; Regenerative load	Check input voltage; Increase deceleration time; Consider braking resistor.

If you encounter persistent issues or error codes not listed here, please contact Yaskawa technical support.

## 7. SPECIFICATIONS

Key technical specifications for the Yaskawa CIMR-7.5G2 Variable Frequency Drive:

- **Model Number:** CIMR-7.5G2
- **Input Voltage:** 200-220V AC, 3-Phase
- **Input Frequency:** 50-60 Hz
- **Manufacturer:** Yaskawa
- **Item Weight:** 15 Pounds
- **ASIN:** B01MQ237XQ
- **First Available Date:** October 27, 2016

## 8. WARRANTY AND SUPPORT

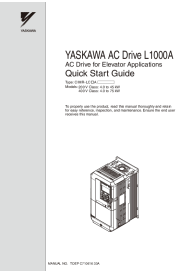


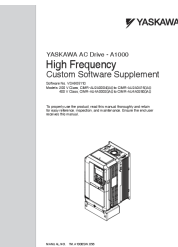

For information regarding the warranty terms and conditions for your Yaskawa CIMR-7.5G2 drive, please

refer to the documentation provided at the time of purchase or visit the official Yaskawa website. For technical assistance, troubleshooting beyond this manual, or spare parts inquiries, please contact Yaskawa customer support directly. Ensure you have your model number (CIMR-7.5G2) and serial number ready when contacting support.

You can find more information and support resources on the official Yaskawa website:[www.yaskawa.com](http://www.yaskawa.com)

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Related Documents - CIMR-7.5G2

	<p><a href="#">YASKAWA AC Drive L1000A: Quick Start Guide for Elevator Applications</a></p> <p>This Yaskawa AC Drive L1000A Quick Start Guide provides essential information for the safe and effective installation, wiring, and initial setup of AC drives for elevator applications. It covers critical safety precautions, mechanical and electrical installation, keypad operation, and startup procedures.</p>
	<p><a href="#">AC Electric Motor Speed Control with Variable Frequency Drives (VFDs)   Precision Electric</a></p> <p>Explore the fundamentals of AC electric motor speed control, the advantages of Variable Frequency Drives (VFDs), their operational principles, and diverse applications. Learn about compatibility with single-phase and three-phase motors, and essential implementation best practices from Precision Electric.</p>
	<p><a href="#">Yaskawa V7 &amp; V74X Drives Modbus Communication Manual</a></p> <p>Guide to Modbus communication for Yaskawa V7 and V74X AC drives, covering network setup (RS-232, RS-422, RS-485), parameter access, message formats, and troubleshooting for industrial automation.</p>
	<p><a href="#">Yaskawa AC Drive - A1000 High Frequency Custom Software Supplement</a></p> <p>This document supplements the Yaskawa A1000 Quick Start Guide and Technical Manual, detailing modifications and new functions for the High Frequency Custom Software. It covers changes to parameters, functions, and application notes for high-speed motor applications.</p>
	<p><a href="#">3-Phase Motor VFDs: A Comprehensive Guide to Variable Frequency Drives   Precision Electric, Inc.</a></p> <p>Explore the world of 3-Phase Motor Variable Frequency Drives (VFDs) with this comprehensive guide from Precision Electric, Inc. Learn how VFDs work, their benefits like energy savings and enhanced motor protection, implementation best practices, and real-world applications across various industries.</p>

