LVSEDTAL LSLV0040G100-4EONN

LVSEDTAL G100 Series Low Voltage Inverter Frequency Converter User Manual

Models: LSLV0015G100-4EONN, LSLV0022G100-4EONN, LSLV0040G100-4EONN

Brand: LVSEDTAL

1. Introduction

This manual provides essential information for the safe and efficient operation, installation, and maintenance of the LVSEDTAL G100 Series Low Voltage Inverter Frequency Converter. Please read this manual thoroughly before attempting to install, operate, or service the device. Retain this manual for future reference.

1.1 Safety Information

WARNING: Risk of Electric Shock. Only qualified personnel should perform installation and maintenance.

- Always disconnect power before installation, inspection, or maintenance.
- Ensure proper grounding to prevent electric shock.
- Do not operate the inverter with damaged cables or if the casing is open.
- Protect the unit from moisture, dust, and direct sunlight.
- Observe all local and national electrical codes.

2. Product Overview

The LVSEDTAL G100 Series is a low voltage inverter frequency converter designed for various automatic control equipment applications. It offers precise motor control with a wide speed regulating range.

2.1 Features

- Durable shell material construction.
- Humanized keyboard design for ease of operation.
- Digital display screen for clear readability.

- Unique control method for high torque and wide speed regulating range.
- Good anti-trip performance.
- Enhanced stability and adaptability to varying power, temperature, and humidity conditions.

2.2 Components

The inverter unit consists of a main body with a control panel, cooling vents, and terminal blocks for electrical connections.

Figure 1: Front view of the LVSEDTAL G100 Series Inverter. Shows the digital display, control buttons (RUN, MODE, UP, DOWN, ENT), and a rotary knob for frequency adjustment.

2.3 Specifications

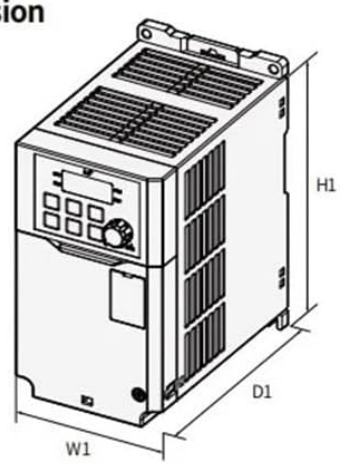
Specification	Value
Output Current	1.1 A
Output Frequency	0-400 Hz
Model Numbers	LSLV0015G100-4EONN, LSLV0022G100-4EONN, LSLV0040G100-4EONN
Output Power	51 - 100 W
Type	DC/AC Inverter
Weight	3 kg (6.61 pounds)
Dimensions (L x W x H)	130 x 128 x 150.9 mm (approximate for LSLV0040G100-4EONN)
Output Type	Triple
Input Voltage	380 VAC
Manufacturer	LVSEDTAL

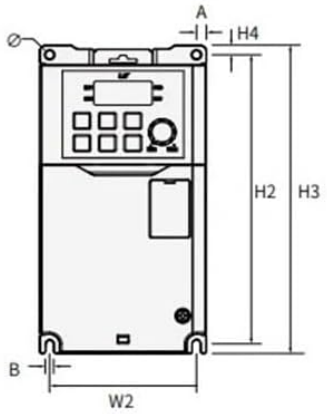
3. Installation

3.1 Mounting

The inverter should be mounted vertically in a well-ventilated area, away from direct heat sources, corrosive gases, and excessive dust. Ensure sufficient clearance around the unit for proper airflow and heat dissipation.

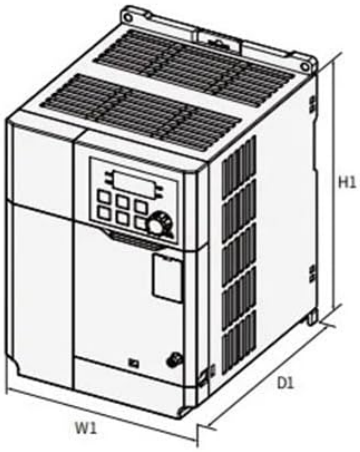
Product Dimension





Unit: mm (inches)

Model	W1	W2	H1	H2	H3	H4	D1	A	B	Ø
0004G100-2	86.2 (3.39)	76.2 (3.00)	154 (6.06)	154 (6.06)	164 (6.46)	5 (0.20)	131.5 (5.18)	5 (0.20)	4.5 (0.18)	4.5 (0.18)
0008G100-2										
0004G100-4										
0008G100-4										
0015G100-2	101 (3.98)	90 (3.54)	167 (6.57)	167 (6.57)	177 (6.97)	5 (0.20)	150.5 (5.93)	5.5 (0.22)	4.5 (0.18)	4.5 (0.18)
0022G100-2										
0015G100-4										
0022G100-4										



Unit: mm (inches)

Model	W1	W2	H1	H2	H3	H4	D1	A	B	Ø
0040G100-2	135 (5.31)	125 (4.92)	183 (7.20)	183 (7.20)	193 (7.60)	5 (0.20)	150.5 (5.93)	5 (0.20)	4.5 (0.18)	4.5 (0.18)
0040G100-4										
0055G100-2	180 (7.09)	Top: 162 (6.38) Bottom: 170 (6.70)	220 (8.66)	229.5 (9.04)	240 (9.45)	5.5 (0.22)	144 (5.67)	Top: 9 (0.35) Bottom: 5 (0.20)	4.5 (0.18)	Ø-1: 4.5 (0.18) Ø-2: 6 (0.24)
0075G100-2										
0055G100-4										
0075G100-4										

Figure 2: Product dimension diagram. Provides measurements (W1, W2, H1, H2, H3, H4, D1, A, B, Ø) for various G100 models, including mounting hole details, in both inches and millimeters.

Figure 3: Side view of the inverter, highlighting the cooling fins for heat dissipation.

Figure 4: Bottom view of the inverter, showing the cooling fan and access points for electrical terminals.

3.2 Wiring

CAUTION: Wiring must be performed by a qualified electrician.

- Connect the main power supply to the designated input terminals (R, S, T for 3-phase).
- Connect the motor to the output terminals (U, V, W).
- Ensure all connections are secure and properly insulated.
- Connect the ground terminal to a reliable earth ground.
- Refer to the wiring diagram provided with the product packaging for specific terminal assignments.

4. Operation

4.1 Control Panel

The front panel features a digital display and several buttons for controlling the inverter:

- **Digital Display:** Shows operating status, frequency, voltage, current, and parameter values.
- **RUN Button:** Starts the motor.
- **STOP/RESET Button:** Stops the motor or clears fault indications.

- **MODE Button:** Switches between display modes or parameter groups.
- **UP/DOWN Arrows:** Adjust frequency, navigate menus, or change parameter values.
- **ENT Button:** Confirms selections or enters parameter editing mode.
- **Rotary Knob (MIN/MAX):** Provides fine adjustment of output frequency.

4.2 Basic Operation

1. **Power On:** Apply power to the inverter. The display will light up.
2. **Set Frequency:** Use the UP/DOWN arrows or the rotary knob to set the desired output frequency.
3. **Start Motor:** Press the **RUN** button. The motor will start and accelerate to the set frequency.
4. **Stop Motor:** Press the **STOP/RESET** button. The motor will decelerate and stop.

4.3 Parameter Settings

The inverter has various parameters that can be adjusted to customize its operation for specific applications. These parameters control motor characteristics, acceleration/deceleration times, input/output functions, and protection settings. Refer to the detailed programming manual for a complete list of parameters and their functions. Use the MODE, UP/DOWN, and ENT buttons to navigate and modify parameters.

5. Maintenance

WARNING: Disconnect all power before performing any maintenance.

- **Regular Cleaning:** Keep the inverter clean and free from dust and debris. Use a soft, dry cloth. Do not use liquid cleaners.
- **Fan Inspection:** Periodically check the cooling fan for obstructions or excessive noise. Clean the fan blades if necessary.
- **Terminal Check:** Ensure all wiring terminals are tight and free from corrosion.
- **Environmental Check:** Verify that the operating environment remains within specified temperature and humidity ranges.

6. Troubleshooting

If the inverter malfunctions, refer to the following common issues before contacting support:

Problem	Possible Cause	Solution
Inverter does not power on	No input power; Blown fuse	Check power supply; Replace fuse (by qualified personnel)
Motor does not run	Incorrect wiring; Parameter settings; Overload	Verify wiring; Check motor parameters; Reduce load
Overcurrent/Overvoltage fault	Sudden load change; Unstable power supply	Check motor and load; Verify input voltage stability
Overheat fault	Poor ventilation; Clogged fan	Improve ventilation; Clean fan and heatsink

For specific fault codes displayed on the inverter, refer to the detailed programming manual or contact technical support.

7. Warranty and Support

For warranty information, technical support, or service inquiries, please contact your authorized dealer or the manufacturer directly. Ensure you have your product model number and purchase details available when contacting support.