

Nfixin 9100-1T3-00750G

Nfixin 9100-1T3-00750G Variable Frequency Drive User Manual

Model: 9100-1T3-00750G | Brand: Nfixin

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of the Nfixin 9100-1T3-00750G Variable Frequency Drive (VFD). Please read this manual thoroughly before using the product to ensure proper functionality and to prevent damage or injury.

2. SAFETY INFORMATION

WARNING: Electrical shock hazard. Only qualified personnel should perform installation, wiring, and maintenance.

- Always disconnect power before performing any work on the VFD.
- Wait at least 10 minutes after disconnecting power before opening the cover to allow capacitors to discharge.
- Ensure proper grounding of the VFD and connected equipment.
- Do not operate the VFD with damaged cables or if the enclosure is open.
- Protect the VFD from moisture, dust, and corrosive environments.



Image: Front panel of the VFD, showing the display, control buttons, and a warning label. The warning advises users to read the manual before installing and to wait 10 minutes after disconnecting power before opening the cover.

3. PRODUCT FEATURES

- **User-Friendly Interface:** Humanized keyboard design for convenient operation and clear display.
- **Robust Construction:** Smart and efficient motherboard with comprehensive three-proof paint treatment (dust-proof, moisture-proof, anti-corrosion) for stability and durability.
- **Enhanced Safety:** Double-layer panel design ensures reasonable structure and safety, significantly reducing the failure rate.
- **Durable Casing:** High-quality industrial flame-retardant ABS plastic shell, resistant to heat, flame, and impact.
- **Efficient Cooling:** Features a super large all-aluminum base fan heating plate combined with an imported powerful fan for strong airflow and ultra-fast heat dissipation.
- **Versatile Control:** Supports low frequency and high torque, sensorless vector control, standard V/F control, and multi-speed adjustable settings.
- **Communication:** Integrated RS485 communication capability.



Image: An angled view of the Nfixin 9100-1T3-00750G VFD, showcasing its robust industrial design and cooling fins.

4. SETUP AND INSTALLATION

Proper installation is crucial for the VFD's performance and longevity. Ensure the installation environment meets the specified conditions (e.g., temperature, humidity, ventilation).

4.1 Mounting

Mount the VFD vertically on a stable, non-flammable surface, ensuring adequate clearance for ventilation. Avoid direct sunlight and areas with excessive vibration.



Image: A diagram illustrating the dimensions of the Nflinx 9100-1T3-00750G VFD. The measurements are approximately 220mm (8.7in) height, 170mm (6.7in) width, and 150mm (5.9in) depth.

4.2 Electrical Connections

Connect the single-phase 220V AC input power to the designated terminals. Connect the three-phase 380V AC output to the motor. Ensure all wiring adheres to local electrical codes and the VFD's specifications. Use appropriate wire gauges and ensure secure connections.

5. OPERATING INSTRUCTIONS

The VFD features a humanized keyboard design for intuitive control. Refer to the detailed programming manual (not included in this general overview) for specific parameter settings and advanced functions.

5.1 Basic Operation

1. **Power On:** Apply single-phase 220V AC power to the VFD. The display will illuminate.
2. **Start/Stop:** Use the 'FWD' (Forward) or 'REV' (Reverse) buttons to start the motor. Use the 'STOP/RESET'

button to stop the motor.

3. **Frequency Adjustment:** Use the up/down arrow keys or the rotary encoder (if present) to adjust the output frequency, thereby controlling motor speed.
4. **Monitoring:** The display shows operational parameters such as output frequency, current, and voltage.

5.2 Control Methods

The Nflixin 9100-1T3-00750G VFD supports various control methods:

- **PWM Control:** Pulse Width Modulation for output voltage regulation.
- **Current Vector Control:** Provides precise control over motor torque and speed, even at low frequencies.
- **Standard V/F Control:** Constant voltage-to-frequency ratio control, suitable for general-purpose applications.
- **Multi-Speed Adjustable:** Allows for pre-set multiple operating speeds.

6. MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your VFD.

- **Cleaning:** Periodically clean the VFD's exterior and cooling fins to prevent dust accumulation, which can hinder heat dissipation. Ensure power is disconnected before cleaning.
- **Fan Inspection:** Check the cooling fans for proper operation and clear any obstructions. The VFD's powerful fans are critical for ultra-fast heat dissipation.
- **Connection Checks:** Regularly inspect all electrical connections for tightness and signs of corrosion.
- **Environmental Control:** Maintain a clean, dry, and well-ventilated environment to protect the VFD's internal components and its three-proof treated motherboard.



Image: The bottom view of the VFD, highlighting the dual cooling fans responsible for efficient heat dissipation.

7. TROUBLESHOOTING

If the VFD is not operating as expected, perform the following basic checks. For complex issues, consult a qualified technician.

- **No Power:** Check the input power supply and all circuit breakers. Ensure connections are secure.
- **Motor Not Running:** Verify that the VFD is receiving a start command (FWD/REV). Check motor wiring and ensure the motor is not overloaded.
- **Overload/Overcurrent Fault:** Reduce the motor load. Check for mechanical issues with the motor or driven equipment. Verify VFD parameters are set correctly for the motor.
- **Overheating:** Ensure adequate ventilation around the VFD. Clean cooling fins and check fan operation.
- **Display Errors:** Note any error codes displayed and refer to the comprehensive programming manual for specific fault descriptions and remedies.

8. SPECIFICATIONS

Parameter	Value
Item Type	Variable Frequency Drive
Brand	Nflixin
Model	9100-1T3-00750G
Input Voltage	AC 1PH 220 V \pm 15% 50 Hz-60 Hz
Output Voltage	AC 3PH 0 V-380 V 0 Hz-650 Hz
Rated Current	16 A
Matching Motor Power	7.5 kW (10 HP)
Voltage Type	AC220V to AC380V (Boost)
Output Voltage Adjustment Mode	PWM Control
Control Method	Current Vector
Filter	Built-in Filter
Protection Level	IP20
Machine Size (approx.)	220 x 170 x 150 mm / 8.7 x 6.7 x 5.9 inches

8.1 Typical Applications

- Crushers
- Grinders
- Water Pumps
- Textile Machines
- Wood Cutters
- Exhaust Fans and Blowers

9. WARRANTY AND SUPPORT

9.1 Warranty

This Nflixin VFD comes with a **12-month warranty** from the date of purchase, covering manufacturing defects. Please retain your proof of purchase for warranty claims.

9.2 Technical Support

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact your vendor or the manufacturer's support channel. Provide your product model number and a detailed description of the issue for efficient service.

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