

## VFD-3P-208V-2HP-9.6A-DCM-M1

2HP Variable Frequency Device - 208V AC 3PH Input/Output - 9.6 Amps - 1.5kW

Product ID: 312215



Image: VFD-3P-208V-2HP-9.6A-DCM-M1

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

### VFD-3P-208V-2HP-5.2A-DCM-M1 Variable Frequency Device

**Unit Type:** 3 Phase Delta, 3 Wire Variable Frequency Device

**Dimensions:** 9.29" x 5.12" x 6.89" (236 x 130 x 175 mm)

**Weight:** 6.6 lbs (3 kg)

**Input Voltage:** Three Phase 208V AC, 50/60Hz

**Input Voltage Range:**  $\pm 20\%$

**Voltage Unbalance Tolerance:**  $< 3\%$

**Frequency Tolerance:**  $\pm 5\%$

**Rated Input Current:** 9.6A

**Power Capacity:** 1.5 kW

**Horsepower:** 2 HP

**Output Voltage:** 0–208V AC

**Operating Frequency:** 0–3000Hz

**Frequency Resolution:** 0.01Hz

**Overload Capacity:** 150% rated current for 60 seconds, 180% rated current for 3 seconds

**Control Modes:** V/F Control, Sensorless Vector Control (SVC), Speed Sensor Vector Control (FVC)

**Torque Control Accuracy:**  $\pm 5\%$  (FVC)

**Start Frequency:** 0.40Hz – 20.00Hz

**Torque boost:** Automatic torque boost; manual torque boost: 0.1%~30.0%

**V/f curve:** Constant torque V/F, 1 user-defined curve, 3 down-torque curves (2.0 / 1.7 / 1.2 times power)

**Acceleration/Deceleration:** Linear or S-Curve, 7 selectable time settings, Time unit

### Features/Ratings

Automatic Voltage Regulation

LED Display

3 Phase Delta, 3-Wire Configuration

selectable (seconds/minutes), Maximum accel/decel time: 6000 minutes

**DC Braking:**

- Braking Frequency: 0Hz – Max Frequency
- Braking Time: 0.0 – 36.0 sec
- Braking Current: 0.0 – 100%

**Energy Consuming Braking:** Built-in energy consuming braking unit, External braking resistor optional

**Jog Operation:** Jog frequency range: 0.1Hz~50.00Hz, JOG Acc./Dec. time: 0.1~60.0s

**Build-in Double PID:** Closed-loop control capability

**Multi-Stage Speed:** Up to 16 preset speeds via PLC or terminals

**Textile Swing Frequency:** Swing frequency available with preset and central frequency adjustable

**Automatic Voltage Regulation:** Maintains stable output during grid voltage transients

**Automatic Energy Saving:** Optimizes V/F curve according to load

**Automatic Current Limiting:** Prevents frequent overcurrent trip

**Multi-Pump Control:** Available with optional water supply card

**Frequency Accuracy:**

- Digital Setting: Highest frequency  $\times \pm 0.01\%$
- Analog Setting: Highest frequency  $\times \pm 0.2\%$

**Frequency Resolution:**

- Digital Setting: 0.01Hz
- Analog Setting: Highest frequency  $\times 0.1\%$

**Frequency Setting Channels:**

- Control panel potentiometer
- Control panel ▲/▼ keys
- Function code setting
- Serial port setting
- Terminal up/down setting
- Analog voltage input
- Analog current input
- Pulse input
- Combination setting methods

**Digital Inputs:** 8 total (1 supports up to 100kHz high-speed pulse)

**Analog Inputs:** (2) Analog inputs, 0–10V or 0–20mA selectable

**Digital Outputs:** 1 digital output terminal

**High-Speed Pulse Output:** 0–100kHz (optional open collector type)

**Relay Outputs:** (1) relay (<5.5kW models), (2) relays ( $\geq 5.5$  kW models)

**Analog Outputs:** 0–20mA or 0–10V, (1) output for <5.5kW, (2) outputs for  $\geq 5.5$  kW

**Communication:** Fieldbus Support (Modbus, Profibus, CANlink, CANopen), RS485 Communication Interface

**Display:** LED digital display, Displays frequency, voltage, current, etc.

**Key Lock:** All keys lockable

**Parameter Copy:** Function code copy via remote control panel

**Protection Features:** Overcurrent Protection, Overvoltage Protection, Undervoltage Protection, Overheating Protection, Overload Protection, Input Phase Loss Protection (Models  $> 2.2$  kW)

**Operating Temperature:**  $-10^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$

**Storage Temperature:**  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$

**Humidity:** <90% RH (non-condensing)

**Altitude:**  $\leq 1000$  m (derating required above 1000m)

**Vibration:**  $< 5.9 \text{ m/s}^2$  (0.6g)

**Environment:** Indoor use only, free from direct sunlight, corrosive gas, dust, oil mist, steam, water droplets, and salt exposure

**Optional Accessories:** Braking Unit, Remote Control Panel, Cable, Panel Mounting Feet

**Special Orders - Special Requirements**

Contact us for special requirements

**Toll Free:** 1-800-369-6671

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**The VFD-3P-208V-2HP-9.6A-DCM-M1 from Larson Electronics is a 3 Phase, 3-Wire Configuration Variable Frequency Drive that is suitable for improving AC motor performance in industrial operations. This fan-cooled unit features a three-phase 208V AC input/output voltage comparability. Designed for steady speed error, fast torque rise and protection from resonance vibrations, the device provides an output current of 9.6 amps and an operating frequency range of 0 to 3000 Hz with 2 horsepower.**

The VFD-3P-208V-2HP-9.6A-DCM-M1 offers accurate AC motor control in industrial facilities. This 1.5KW unit is compatible with three-phase 208V AC input/output voltage, provides an output current of 9.6 amps and an operating frequency range of 0 to 3000 Hz. This device supports seven on-off programmable digital inputs, one high-speed pulse input and two programmable analog inputs, as well as one programmable open collector output, one analog output (open collector or high-speed pulse), two relay outputs and two analog outputs. The device also features a total of four operating modes: Keypad control, Terminal control, Serial communication control, and Frequency Setting Mode for digital setting, analog setting, pulse frequency setting, serial communication setting, multi-step speed setting & simple PLC, PID setting, Building Automation and Control Network, etc.

The VFD-3P-208V-2HP-9.6A-DCM-M1 is designed for indoor applications and operating temperatures ranging between -10°C to +40°C. Operators may mount the variable frequency drive on compatible surfaces. This device measures 9.29" x 5.12" x 6.89" (236 x 130 x 175 mm) and weighs approximately 6.6 lbs.

**Applications:** Speed control of AC motors, industrial machines, large compressors, energy savings and more.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message [sales@larsonelectronics.com](mailto:sales@larsonelectronics.com) for more information about our custom options tailored to meet your specific industry needs.

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MODEL: KE384A-04-6040-S2  
POWER: 40W  
INPUT: AC 19V 220V/115V 50/60Hz  
OUTPUT: 3.3A AC 19V 5-24V 0-300mA  
CE

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## Frequently Asked Questions (FAQ)

There are no Faqs