

VFD-3P-460-7.5HP-8A-DCM

7.5HP Variable Frequency Device - 460V AC 3PH Input/Output - 8 Amps - 5.5kW

Product ID: 324998

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image: VFD-3P-460-7.5HP-8A-DCM

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-460-7.5HP-8A-DCM Variable Frequency Device

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

Dimensions: 11.02" x 7.13" x 7.20"

Weight: 14.3 lb

Input/Output Voltage: 460V (414–506V) AC 3PH

Output Current: 8 Amps

Operating Frequency: 0 to 400.00 Hz

Kilowatts: 5.6 kw

HP: 7.5

Starting Torque: 1 Hz/150%

Frequency Precision: Digital setting: max frequency $\pm 0.01\%$; Analog setting: max frequency $\pm 0.2\%$

Frequency Resolution: Analog setting: 0.1% of max frequency; Digital setting: 0.01Hz

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

V/f curve: Linear, multiple point and square type (1.2 power, 1.4 power, 1.6 power, 1.8 power, square)

Inputs: 7 on-off programmable digital, 1 high-speed pulse, 2 programmable analog (AI1: 0~10V or 0/4~20mA AI2: 0~10V or 0/4~20mA)

Outputs: 1 programmable open collector, 1 analog (open collector or high-speed pulse), 2 relay, 2 analog (0/4~20mA or 0~10V)

Analog Input/Output: 2 Input (0~10V or 0/4~20mA), 2 Output (0/4~20mA or 0~10V)

Communication Terminal: RS485 communication interface, support MODBUS-RTU

Features/Ratings

Automatic Voltage Regulation

LED Display

3 Phase Delta, 3-Wire Configuration

communication protocol

Comms Card: BACnet/IP

Overload Capacity: 150% of rated current for 1 minute, 180% of rated current for 3 seconds

Accessories:

Bypass: Integrated Bypass Circuit

Disconnect: Fusible Safety Switch Disconnect, Padlockable, 65 KAIC Rated

Control Transformer: 120V Control Power Transformer (VCPT)

Control Selector: Hand-Off-Auto (H-O-A) Switch

Indicator Lights:

- Amber – Fault Pilot Light
- Blue – Run Pilot Light
- Red – “Not in Auto” Pilot Light

Operating Temp: -10°C to +40°C

Humidity: 5%-95%, without condensation

Enclosure Rating: IP20

Mounting: Surface

Color: Gray

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

E-mail: sales@larsonelectronics.com

The VFD-3P-460-7.5HP-8A-DCM from Larson Electronics is a 3 Phase, 3-Wire Configuration Variable Frequency Drive designed to enhance AC motor performance in demanding industrial environments. This fan-cooled unit supports a three-phase 460 VAC input/output voltage and delivers approximately 8 amps of output current at 7.5 horsepower (5.6 kW). Operators may access a wide operating frequency range of 0 to 400.00 Hz with fast torque rise, steady speed error correction, and vibration protection for reliable motor control.

The VFD-3P-460-7.5HP-8A-DCM offers advanced features for precision AC motor control. This device includes an integrated bypass circuit and a fusible safety switch disconnect (padlockable, 65 KAIC rated). A 120V control power transformer (VCPT), hand-off-auto (H-O-A) switch, and LED pilot lights (amber fault, blue run, and red “not in auto”) are provided for straightforward monitoring and operation. The VFD is also equipped with a BACnet/IP communications card, enabling compatibility with building automation and industrial networks.

The VFD-3P-460-7.5HP-8A-DCM supports seven on-off programmable digital inputs, one high-speed pulse input, two programmable analog inputs, and multiple outputs (one programmable open collector, one analog, two relay, and two analog outputs). Four control modes are available: keypad control, terminal control, serial communication control, and frequency setting mode. Frequency settings include digital, analog, pulse frequency, serial communication, multi-step speed, simple PLC, and PID control.

This unit measures 11.02" x 7.13" x 7.20", weighs approximately 14.3 lb, and is rated for indoor use with an operating temperature range of -10°C to +40°C.

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 for more information about our



custom options tailored to meet your specific industry needs.



Frequently Asked Questions (FAQ)

There are no Faqs



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Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **Operations Manual**(<https://www.larsonelectronics.com/images/product/Manual/324998.PDF>)
- **HigResPic1**(<https://www.larsonelectronics.com/images/product/HigResPic1/324998.JPG>)
- **HigResPic2**(<https://www.larsonelectronics.com/images/product/HigResPic2/324998.JPG>)
- **HigResPic3**(<https://www.larsonelectronics.com/images/product/HigResPic3/324998.JPG>)
- **HigResPic4**(<https://www.larsonelectronics.com/images/product/HigResPic4/324998.JPG>)
- **HigResPic5**(<https://www.larsonelectronics.com/images/product/HigResPic5/324998.JPG>)
- **HigResPic6**(<https://www.larsonelectronics.com/images/product/HigResPic6/324998.JPG>)
- **HigResPic7**(<https://www.larsonelectronics.com/images/product/HigResPic7/324998.JPG>)
- **HigResPic8**(<https://www.larsonelectronics.com/images/product/HigResPic8/324998.JPG>)
- **HigResPic9**(<https://www.larsonelectronics.com/images/product/HigResPic9/324998.JPG>)
- **HigResPic10**(<https://www.larsonelectronics.com/images/product/HigResPic10/324998.JPG>)
- **Video1**(<https://www.youtube.com/watch?v=FM7BXInKJaY>)
- **Video4**(<https://www.youtube.com/watch?v=FM7BXInKJaY>)
- **ISO 9001 Certification**(<http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF>)
- **Business Certificate**(<https://www.larsonelectronics.com/images/pdfdocs/w9.PDF>)
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