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## VFD-3P-380.480V-125HP-160A-DCM-N4X

# 125HP Variable Frequency Device - 480V 3PH Input to 380-480V 3PH Output - 3PH - 160 Amps - 90kW - NEMA 4X

**Product ID: 346106**

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




Image: VFD-3P-380.480V-125HP-160A-DCM-N4X

**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-380.480V-125HP-160A-DCM-N4X Variable Frequency Device**

**Unit Type:** 3 Phase Delta, 3 Wire Variable Frequency Device
**Dimensions:** 29.92" x 19.09" x 12.75"
**Weight:** 187 lbs
**Input Voltage:** 480V 3 Phase
**Output Voltage:** 380-480V 3 Phase
**Output Current:** 160 Amps
**Operating Frequency:** 0 to 3000 Hz
**Kilowatts:** 90 kW
**HP:** 125
**Starting Torque:** 1 Hz/150%
**Carrier Frequency:** 1.0-16kHz, auto adjusted according to temperature and load
**Frequency Accuracy:** Digital setting: 0.01Hz, Analog Setting: Max frequency X 0.05%
**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 A12: 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)

**Features/Ratings**

Automatic Voltage Regulation
LED Display
3 Phase Delta, 3-Wire Configuration
NEMA 4X Rated
Full Compatibility with Generator Operation
Soft Starter and Motor Protection Function
Programmable Control Interface

**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 communication protocol
**Fault Diagnostics and Event Logging:** SCADA Integration and Network Communication Capabilities
**Harmonics and Surge:** Included, Line Reactor
**Overload:** 150% @ 60s, 180% @ 10s, 200% @ 3s
**Enclosure Rating:** NEMA 4X
**Operating Temp:** –10°C to +40°C
**Max Operating Humidity:** 90% (non condensing)
**Materials:** -
**Mounting:** Surface
**Color:** Gray

**Special Orders - Special Requirements**
Contact us for special requirements
**Toll Free:** 1-800-369-6671
**Intl:** 1-903-270-1187
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**The VFD-3P-380.480V-125HP-160A-DCM-N4X 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 three-phase 480V AC input and 380-480V AC output voltage comparability. Designed for steady speed error, fast torque rise and protection from resonance vibrations, the device provides an output current of 160 amps and an operating frequency range of 0 to 3000 Hz with 125 horsepower.**

The VFD-3P-380.480V-125HP-160A-DCM-N4X offers accurate AC motor control in industrial facilities. This 90kW unit is compatible with three-phase nominal 480V AC input voltage and 3-phase 480V (within the range of 380-480V) AC output voltage, provides an output current of 160 amps and has 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, etc.

The VFD-3P-380.480V-125HP-160A-DCM-N4X 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 29.92" x 19.09" x 12.75" and weighs approximately 187 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 for more information about our custom options tailored to meet your specific industry needs.

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# Frequently Asked Questions (FAQ)

There are no Faqs

**Export Control Classification Number (ECCN):** EAR99

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Links (Click on the below items to view):

- **HigResPic1**( https://www.larsonelectronics.com/images/product/HigResPic1/346106.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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