

VFD-380.480-3P-200HP-N3R

200HP Variable Frequency Device - 380-480V AC Input/380-480V AC Output 3PH - 237 Amps - IP21

Product ID: 150141

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



Image: VFD-380.480-3P-200HP-N3R

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-380.480-3P-200HP-N3R Variable Frequency Device

Unit Type: Variable Frequency Device

Dimensions: 33.5"-H x 12.6"-W x 15.4"-D

Weight: 181 lbs

Input Voltage: 380-480V AC 3PH

Output Voltage: 380-480V AC 3PH

Output Current: 237A 380 V normal duty / 213A 480 V normal duty / 201A 380 V heavy duty / 165A 480 V heavy duty

Operating Frequency: 0 - 599 Hz

Switching Frequency: 2 - 8 kHz

Nominal Switching Frequency: 2.5 kHz

HP: 200

KW: 132 kW (normal duty) 110 kW (heavy duty)

Digital Inputs: 8 Inputs

Digital Outputs: 3 Outputs - Relay

Analog Input/Output: 3 Inputs, 2 Outputs

Insulation Resistance: > 1 MOhm 500 V DC for 1 minute to earth

Noise Level: 69.9 dB 86/188/EEC

Power Dissipation in W: 2755 W forced convection 380 V 2.5 kHz

Volume of Cooling Air: 158506.07 Gal/hr(US) (600 m3/h)

Features/Ratings

IP00 IEC 61800-5-1

IP00 IEC 60529

Forced Convection Cooling

16 Preset Speeds

Integrated Filter EN/IEC 61800-3 Cat. C3

IP21

EN/IEC 61800-3

EN/IEC 61800-3 environment 1 Cat. C3 & 2 Cat. C3

UL 508C

EN/IEC 61800-5-1

IEC 61000-3-12

IEC 60721-3

IEC 61508

IEC 13849-1

ATEX zone 2/22

CSA

UL

CE

Operating Position: Vertical +/- 10 Degree
THDI: <= 48 % full load IEC 61000-3-12
Pollution Degree: 2 EN/IEC 61800-5-1
Vibration Resistance: 1.5 mm peak to peak 2...13 Hz IEC 60068-2-6 1 gn 13...200 Hz IEC 60068-2-6
Shock Resistance: 15 gn 11 ms IEC 60068-2-27
Relative Humidity: 5...95 % without condensation IEC 60068-2-3
Operating Altitude: 1000...4800 m with current derating 1 % per 100 m <= 3280.84 ft (1000 m) without derating
Chemical Pollution Resistance: Class 3C3 EN/IEC 60721-3-3
Dust Pollution Resistance: Class 3S3 EN/IEC 60721-3-3
Integrated Communications: ModBus Serial, ModBus TCP, Ethernet
Operating Temp: -15°C to +50°C
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
E-mail: sales@larsonelectronics.com

Made in the USA

The Larson Electronics VFD-380.480-3P-200HP-N3R Variable Frequency Drive is suitable for improving AC motor performance in industrial operations. This fan-cooled unit features three-phase 380-480V AC input voltage and 380-480V AC output voltage compatibility (180-amp output current). The IP21 rated device supports three digital inputs, two analog outputs, five analog inputs.

The VFD-380.480-3P-200HP-N3R offers accurate AC motor control in industrial facilities. This unit is compatible with three-phase 380-480V AC input voltage and 380-480V AC output. Designed for steady speed error, fast torque rise and protection from resonance vibrations, the device provides an output current of 237 amps @ 380V AC and 213 amps @ 480V AC normal duty, and an operating frequency range of 0 - 599 Hz with a switching frequency range of 2 - 8 kHz. The nominal switching frequency is 2.5 kHz. The motor has 132 kW power during normal duty operation and 110 kW power during heavy duty operation, with a continuous output current of 250 amps @ 2.5 kHz (normal duty). This 200-horsepower unit comes with a total of eight digital inputs and three relay outputs, as well as three analog inputs and two analog outputs.

This VFD comes with several features to improve motor control. The unit comes with seven preset speeds and three critical speed lockout bands. Operators can set ramp to stop or coast to stop options. For fault functions, the VFD offers the following pre-programmed features: AI (1,2 loss), encoder error, panel loss, assistant external fault, motor thermal protection, stall protection, underload, motor phase loss, ground fault and communications fault. The unit also comes with standard pre-programmed safety features: safe torque off motor and off drive, motor phase break motor and drive, overheating, short-circuit, overspeed, overvoltages, overload, phase loss, undervoltage, overcurrent, and thermal protection of the motor and drive. The motor control profile includes optimized torque mode, constant torque standard and variable torque standard, with a permanent magnetic motor.

The VFD-380.480-3P-200HP-N3R is protected by a IP21 rated enclosure, and may be mounted on compatible surfaces. This device measures 33.54" x 12.6" x 15.35" and weighs 181 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.



Frequently Asked Questions (FAQ)

There are no Fags



Export Control Classification Number (ECCN): EAR99



Links (Click on the below items to view):

- **Operations Manual**(<https://www.larsonelectronics.com/images/product/Manual/150141.PDF>)
- **HigResPic1**(<https://www.larsonelectronics.com/images/product/HigResPic1/150141.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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