

EXP-VFD-3P-480-7.5HP-14A-DCM-TRS-50C

Explosion Proof VFD Phase Converter - 480V AC 1PH Input/3PH Output - Remote Control

Product ID: 234766

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



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.

EXP-VFD-3P-480-7.5HP-14A-DCM-TRS-50C Explosion Proof Variable Frequency Device

Unit Type: 1 Phase Input/3 Phase Output Delta, 3 Wire Variable Frequency Device

Dimensions: 12.00" x 12.00" x 10.00"

Weight: 79.3 lbs

Input/Output Voltage: 1 Phase 480 V AC/3 Phase AC 0-Input Voltage

Output Current: 14 Amps

Operating Frequency: 0 to 400 Hz

Kilowatts: 5.5 kw

HP: 7.5

Speed Regulation: 1:100

Speed Control Accuracy: $\pm 0.5\%$ of rating synchronous speed

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

Frequency Precision: Digital setting: 0.01% max, Analog Setting: Max frequency X 0.2% max

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

Communication Terminal: RS485 communication interface

Control Mode: V/F Control; Sensorless Vector Control

Main Control Functions: Emergency Stop, Forward/Reverse Selector Switch, Green "Start" Push Button

Tethered Remote Functions: Emergency Stop, Potentiometer (Speed Control), Forward/Reverse Selector Switch, Green "Start" Push Button

Overload Capacity: 150% @ 60s, 180% @ 3s

Operating Temp: -10°C to +40°C

Max Operating Humidity: 95% (non condensing)

Materials: -

Mounting: Surface

Features/Ratings

Class I, Divisions 1 & 2

Class II, Divisions 1 & 2

Automatic Voltage Regulation

LED Display

1 Phase Input/3 Phase Output Delta, 3-Wire Configuration

Automatic Energy Save Running

Automatic Current Limiting

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

Remote Cord Length: 50' Coiled Cord
Color: Gray

Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The EXP-VFD-3P-480-7.5HP-14A-DCM-TRS-50C from Larson Electronics is an Explosion Proof Single-Phase Input, 3 Phase Output, 3-Wire Configuration Variable Frequency Drive Phase Converter that is suitable for improving AC motor performance in industrial operations. This fan-cooled unit features a 480 V 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 14 amps and an operating frequency range of 0 to 400 Hz with 7.5 horsepower. Equipped with a tethered remote control and 50` of coiled cord, the EXP-VFD-3P-480-7.5HP-14A-DCM-TRS-50C is rated for use in Class I Divisions 1 & 2 and Class II Divisions 1 & 2 hazardous locations. This explosion proof drive phase converter is ideal for indoor or outdoor applications where flammable vapors, gases, or dusts exist or stand the potential to exist.

The EXP-VFD-3P-480-7.5HP-14A-DCM-TRS-50C offers accurate AC motor control in industrial facilities. This 5.5 kw unit is compatible with single-phase input and three-phase output 480 V AC voltage, provides an output current of 14 amps and an operating frequency range of 0 to 400 Hz. This device has a V/F control mode and sensorless vector control mode with an interior PID controlled, automatic energy save running to optimize the V/F curve, an automatic voltage regulator and automatic current limiting.

Operators may access a tethered pendant remote control, which can be used to issue commands to the explosion proof VFD. The wired remote control contains the following functions: emergency stop, potentiometer for speed control, forward/reverse selector switch and green "start" push button. A 50` coiled cord connects the tethered pendant remote control to the main explosion proof unit. Speed controls can only be set using the wired remote control.

The EXP-VFD-3P-480-7.5HP-14A-DCM-TRS-50C is designed for indoor applications and operating temperatures ranging between -10°C to +40°C. Operators may mount the VFD phase converter on compatible surfaces. This device measures 12.00" x 12.00" x 10.00" and weighs approximately 79.3 lb.

Applications: Speed control of AC motors, industrial machines, large compressors, energy savings and more within Class I & II Divisions 1 & 2 hazardous locations.

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)



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Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- [ATEX Certificate \(European Explosion Proof\)](#)
- [Canadian CEC Certificate \(Commonly referred to as CSA Certificate\)](#)
- [CE Certificate](#)
- [Certificate 1, Misc](#)
- [Certificate 2, Misc](#)
- [Certificate 3, Misc](#)
- [IEC Ex Certificate \(International Explosion Proof\)](#)
- [MSDS \(Material Safety Data Sheet\)](#)
- [Operations Manual](#)
- [RoHS Certificate \(Restriction of Hazardous Substances\)](#)
- [USA NEC Certificate \(Commonly referred to as UL Certificate\)](#)
- [HigResPic1](#)
- [Video1](#)
- [ISO 9001 Certification](#)
- [Business Certificate](#)
- [Shipping Time Map](#)