

VFD-3P-460-3HP-6A-DCM-ER-10C-EXP-CS-R1

3HP Variable Frequency Device - 460V AC 3-phase Input/Output - 6 Amps, 2.2kW - EXP Remote Control Pendant

Product ID: 281525



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-460-3HP-6A-DCM-ER-10C-EXP-CS-R1 Variable Frequency Device

Unit Type: 3 Phase Delta, 3 Wire Variable Frequency Device w/ EXP Remote Control

Dimensions: 7.24" x 3.85" x 5.31"

Weight: 4.4 lbs (without the Remote)

Input/Output Voltage: 460V (415-500V) AC 3-phase

Output Current: 6 Amps

Operating Frequency: 0 to 3000 Hz

Kilowatts: 2.2kw

HP: 3

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 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 communication protocol

Overload: 150% @ 60s, 180% @ 10s, 200% @ 3s

Explosion Proof Remote Control Type: Hardwired Pendant

Remote Control Functions: Emergency Stop Mushroom Switch, Start Push Button, Forward/Reverse Switch, Jog/Run Switch and 0-100 Speed Control Dial

Operating Temp: -10°C to +40°C

Max Operating Humidity: 90% (non condensing)

Features/Ratings

Automatic Voltage Regulation

LED Display

3 Phase Delta, 3-Wire Configuration

Explosion Proof Remote Control Ratings

NRTL Listed for United States and Canada

Class I, Divisions 1 & 2, Groups C,D

Class I, Zones 1 & 2, Groups IIB, IIA

Class II, Divisions 1 & 2, Groups E,F,G

Class III

NEMA 7(C,D) 9(E,F,G)

Special Orders- Requirements

Contact us for special requirements

Phone: 1-214-616-6180

Materials: -

Mounting: Surface

Remote Cord: 10'

Toll Free: 1-800-369-6671

Fax: 1-903-498-3364

E-mail: sales@larsonelectronics.com

The VFD-3P-460-3HP-6A-DCM-ER-10C-EXP-CS-R1 from Larson Electronics is a 3 Phase, 3-Wire Configuration Variable Frequency Drive with Explosion Proof Remote Control that is suitable for improving AC motor performance in industrial operations. This fan-cooled unit features three-phase 460V 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 6 amps and an operating frequency range of 0 to 3000 Hz with 3 horsepower. The system is equipped with an explosion proof pendant remote control that is hardwired to the VFD. This remote control can be used in combustible sites (the VFD does not have explosion proof protection and must only be used in general/non-combustible locations).

The VFD-3P-460-3HP-6A-DCM-ER-10C-EXP-CS-R1 offers accurate AC motor control in industrial facilities. This 2.2kw unit is compatible with three-phase nominal 460V (within the range of 415-500V) AC input/output voltage, provides an output current of 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, etc.

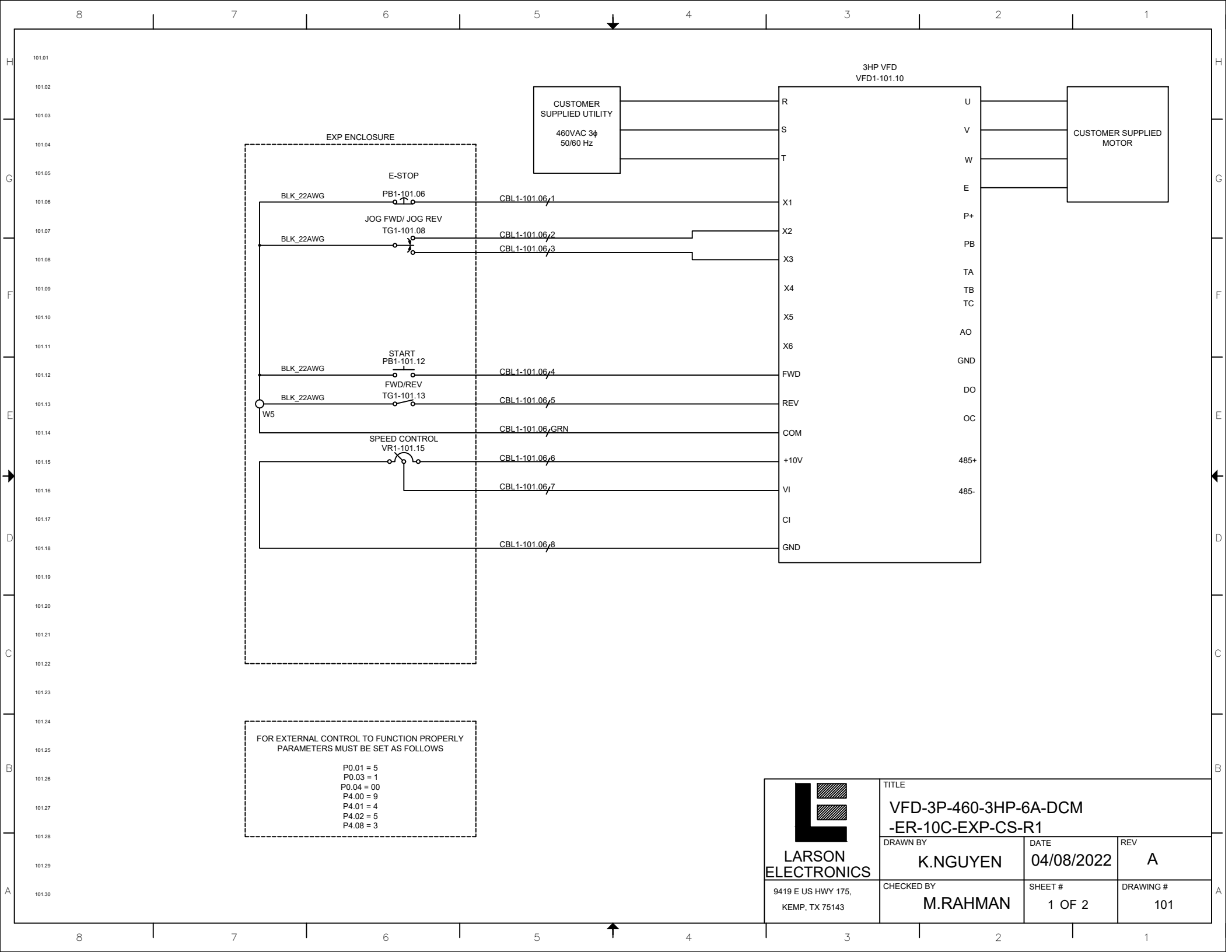
Explosion Proof Remote Control: This system comes with an explosion proof remote control pendant that is hardwired to the non-explosion proof VFD unit. The remote control features explosion proof protection and the control device can be used in combustible areas (the VFD does not have explosion proof protection and must be installed in a non-combustible location). Operators may access the following controls on the remote: emergency stop mushroom switch, start push button, forward/reverse switch, jog/run switch and 0-100 speed control dial. The explosion proof remote is connected to the VFD via a 10-foot cord.

The VFD-3P-460-3HP-6A-DCM-ER-10C-EXP-CS-R1 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 7.24" x 3.85" x 5.31" and weighs approximately 4.4 lbs (without the remote).

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.

8	7	6	5	4	3	2	1
REV	DESCRIPTION						DATE
A	PRODUCTION RELEASE						04/08/2022
VFD-3P-460-3HP-6A-DCM -ER-10C-EXP-CS-R1							
							
8	7	6	5	4	3	2	1



TAGS	QTY	CATALOG	DESCRIPTION
VFD1-101.10	1	GK3000-4T0022G	3HP VFD 3P 460V 2.2KW
PB1-101.06	1	UNV00005429	EMG PUSH BUTTON, MUSHROOM 10 A AT 600V C1D1
PB1-101.12	1	UNV00016079	EXP PUSH BUTTON SWITCH GREEN MOMENTARY10A
TG1-101.08	1	UNV00016660	3 POSITION 1P MOMENTARY ROTARY SWITCH RETURN TO CENTER
TG1-101.13	1	UNV00005291	EXP ON/OFF SELECTOR SWITCH
W5	1	UNV00009803	5 HOLE WAGO
VR1-101.15	1	UNV00001284	10K OHMS POTENTIOMETER
CBL1-101.06	1	UNV00016661	$\frac{22}{12}$ PVC INSULATION CONTROL CABLE

 LARSON ELECTRONICS	TITLE VFD-3P-460-3HP-6A-DCM -ER-10C-EXP-CS-R1		
	DRAWN BY K.NGUYEN	DATE 04/08/2022	REV A
	CHECKED BY M.RAHMAN	SHEET # 2 OF 2	DRAWING # 102
9419 E US HWY 175, KEMP, TX 75143			









Frequently Asked Questions (FAQ)