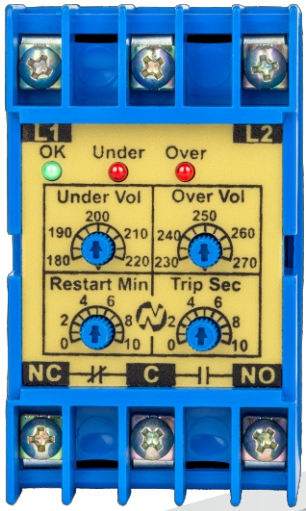
NASSAR® ELECTRONICS

SINCE 1973

User Manual

SINGLE PHASE VOLTAGE
MONITOR RELAY
FASEALERT-3®
MODEL F2P





The best solutions for
automation and protection

www.nassarelectronics.com

Description

The F2P series is a family of voltage monitors. It continuously measures voltage with microcontroller accuracy and compares the value with preset trip points. It separately senses over and under voltages.

Protection is assured during periods of large voltage fluctuations or when regenerated voltages are present.

Adjustable time delays are included to prevent nuisance tripping and short cycling of sensitive equipment.

The isolated 10A SPDT output relay contact trips when the voltage exceeds the trip limit after the time established by the trip delay.

Operation

The F2P protects motors against under voltage and over voltage.
To adjust the Under and Over Voltage limits, set the knobs to the desired level.
You can also adjust the Trip and Restart knobs to the required delays.

UPON APPLICATION OF LINE VOLTAGES

- The output relay is de-energized
- The failure red LEDs are OFF
- The "OK" green LED flashes during the restart delay, and when it ends the green LED stays ON and the output relay is energized.

IN NORMAL VOLTAGES

- The output relay is energized
- The "OK" green LED is ON.
- All the red failure LEDs are OFF.

UPON A VOLTAGE FAILURE

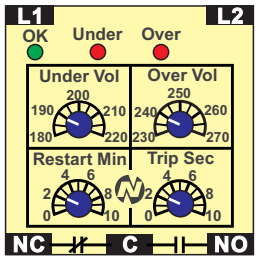
- The LED of the corresponding failure is ON and the "OK" green LED goes OFF.
- Once the adjusted period in the trip delay has passed, the output relay is de-energized
- to disconnect the motor.
- The red LED of the corresponding failure starts flashing.

Features

- **Protects against over and under voltages.**
- **Surface mounting or 35mm DIN rail**
- **Isolated, 10A, relay contacts**
- **LEDs indicate each fault, status, and time delays.**

WHEN VOLTAGES GO BACK TO NORMAL

- All the red failure LEDs are OFF.
- The output relay stays de-energized.
- The "OK" green LED flashes during the restart delay, and once it's finished, the green LED stays ON and the output relay is energized to reconnnect the motors and start running again.



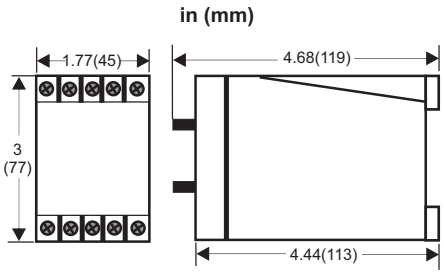
LED Indicators
OK: Voltages are normal.
Under: Under voltage fault.
Over: Over voltage fault.

DANGER!

Potentially hazardous voltages are present. Electrical shock can cause death or serious injury. Installation should be done by qualified personnel following all National, State & Local Codes.

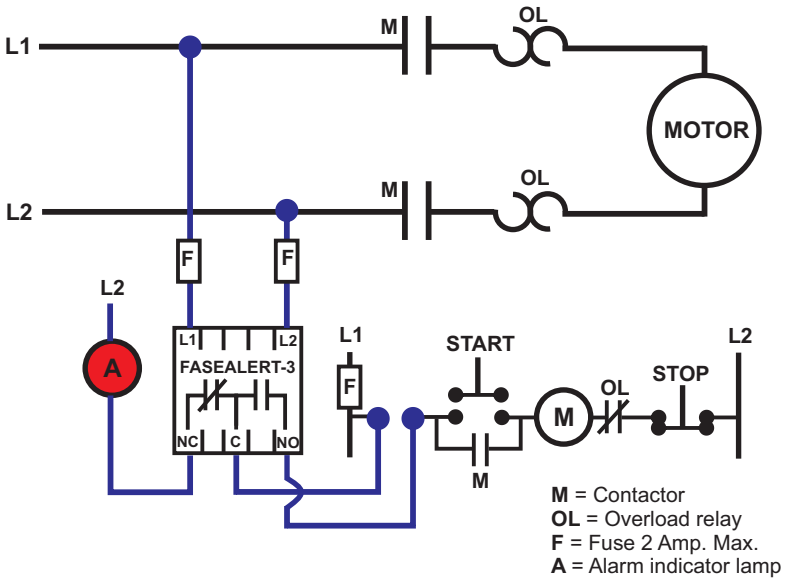
BE SURE TO REMOVE ALL POWER SUPPLYING THIS EQUIPMENT BEFORE CONNECTING OR DISCONNECTING THE WIRING.
READ THE INSTRUCTIONS BEFORE INSTALLING OR OPERATING THIS DEVICE.
KEEP THIS MANUAL FOR FUTURE REFERENCE.

Dimensions



Typical example of connection

Connect the terminals L1 and L2 ,through the fuses, to the motor contactor and the terminals C and NO with #14 gauge, 600 V wire. The F2P may be installed in SINGLE PHASE MOTORS OF ANY CAPACITY AND IN ALL TYPES OF STARTERS. The diagram shown below is a common example of installation.
When the NO and C contact closes, it allows the motor to start running. When it opens, it disconnects the coil and stops the motor. An indicator lamp may be used as an alarm as indicated on the diagram below.



M = Contactor
OL = Overload relay
F = Fuse 2 Amp. Max.
A = Alarm indicator lamp

Specifications	F2P-220	F2P-120
NOMINAL / MAXIMUM VOLTAGE	220/270 V	120/150 V
UNDER VOLTAGE ADJUSTMENT	180-220 V	90-120 V
OVER VOLTAGE ADJUSTMENT	230-270 V	120-150 V
HYSTERESIS	2 %	
OUTPUT CONTACT RATING	1PDT 10 Amp. @ 220 VCA resistive.	
CONTACT LIFE	100,000 Operations at nominal capacity.	
FREQUENCY	50 / 60 Hz.	
TRIP DELAY	Adjustable, 0 to 10s	
RESTART DELAY	Adjustable, 0 to 10 minutes.	
TRANSIENT PROTECTION	3 K V for 10 ms.	
STORAGE TEMPERATURE	-4 to + 158 °F (-20 to + 70 °C).	
OPERATION TEMPERATURE	14 to + 122 °F (-10 to + 50 °C).	
POWER CONSUMPTION	3 Watts approximately.	
WEIGHT	11 oz (390 g.) approximately.	

*Specifications subject to change without notice.

WARRANTY

These products are warranted to be free from defects in workmanship or material under normal service and use for a period of five (5) years from date of manufacture. Nassar Electronics shall, at its option, repair or replace F.O.B. point of manufacture the portion of the product found by Nassar Electronics to be defective. All replacements or repairs necessitated by inadequate maintenance, normal wear and usage, unsuitable power sources or environmental conditions, accident, misuse, improper installation, modification, repair, use of unauthorized replacement parts, storage or handling, or any other cause not the fault of Nassar Electronics are not covered by this limited warranty, and shall be at the buyer's expense. All costs of dismantling, reinstallation and freight, and the time and expenses shall be borne by the buyer.

LIMITATION OF REMEDY AND LIABILITY

NASSAR ELECTRONICS SHALL NOT BE LIABLE FOR DAMAGES CAUSED BY DELAY IN PERFORMANCE. THE REMEDIES OF THE BUYER SET FORTH IN THIS AGREEMENT ARE EXCLUSIVE. IN NO EVENT, REGARDLESS OF THE FORM OF THE CLAIM OR CAUSE OF ACTION (WHETHER BASED IN CONTRACT, INFRINGEMENT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE), SHALL NASSAR ELECTRONIC'S LIABILITY TO THE BUYER AND/OR ITS CUSTOMERS EXCEED THE PRICE TO THE BUYER OF THE SPECIFIC GOODS MANUFACTURED OR SERVICES PROVIDED BY NASSAR ELECTRONICS GIVING RISE TO THE CLAIM OR CAUSE OF ACTION. THE BUYER AGREES THAT IN NO EVENT SHALL NASSAR ELECTRONIC'S LIABILITY TO THE BUYER AND/OR ITS CUSTOMERS EXTEND TO INCLUDE INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES. THE TERM "CONSEQUENTIAL DAMAGES" SHALL INCLUDE, BUT NOT BE LIMITED TO, LOSS OF ANTICIPATED PROFITS, REVENUE OR USE AND COSTS INCURRED INCLUDING WITHOUT LIMITATION FOR CAPITAL, FUEL AND POWER, AND CLAIMS OF THE BUYER'S CUSTOMERS

NASSAR ELECTRONICS

Nassar Electronics
J. M. Salas 124 Pte.
64290 Monterrey, N. L. México
email: sales@nassarelectronics.com
Ph.+ 52 (81)-8351-0006