



3UG306

Features

- Low Voltage Protection
- Phase Loss
- Phase Reversal
- SPDT Output Contacts
- 1 Second Pull In-Drop Out Delay
- 4% Accuracy
- Transient Protected
- -20° to +60°C Operating Temperature
- Optional Adjustable-Trip Voltage
- DIN Rail Mounting
- UL and CSA, CE Approved



Extra Options

- Overvoltage
- Phase imbalance

The New 3UG306 Voltage Monitor: A simple and easy way to protect your equipment

Description

The new micro-processor based 3UG306 Voltage Monitor is a voltage and phase sensing relay which is a simple and easy way to help protect your machinery and equipment. Not only does the new 3UG306 allow you to detect undervoltage, phase loss and phase reversal but you can also choose to detect phase imbalance and overvoltage as well. If a fault should occur during use, the outputs will drop out after one second and the convenient LED will let you easily see which one of 5 possible faults is the problem. The 3UG306 will automatically reset after the fault condition is corrected and all other requirements for the contacts to pull in are met.

Installation

Easy To Use

The 3UG306 Voltage monitor is easy to use, just set the undervoltage adjustment to 5% above the lowest anticipated line to line voltage at which the protected equipment should operate. The output contacts will pull in at undervoltage setting and drop out at 5% below the undervoltage setting.

If the unit has the optional overvoltage feature, then set the overvoltage adjustment to 5% below the highest anticipated line to line voltage at which the the protected equipment should operate. The output contacts will drop out at 5% above the overvoltage setting and pull in at overvoltage setting.

Features

Low Voltage Protection

The pull in-drop out voltage differential and time delay have been designed into the voltage monitor for stable performance. This prevents chattering, rapid recycling and nuisance drop out caused by momentary voltage drops that occur during motor starting.

The sleek 3UG306 is also easy to mount, just snap on using DIN rail or by adding the 3RP1903 mounting pieces for panel mounting. Once the 3UG306 voltage monitors' adjustable settings are in place a 3RP1902 dial guard can be placed on the face of the 3UG306 to discourage tampering of the monitoring settings.

Worldwide Use

The 3UG306 has a wide, adjustable voltage monitoring range covered in two unit sizes, 200 – 240V AC or 380 – 600V AC at 50/60 Hz. The 3UG306 meets worldwide standards (UL, CSA, and CE) which along with the wide voltage range make the 3UG306 ideal for worldwide use.

LED Status Indicator

Once you turn on the 3 phase power, the output contacts should pull in and the LED indicator should turn on steady after a one (1) second delay. If the output contacts fail to pull in, the LED indicator will remain off or blink one of the following listed codes to indicate the type of fault condition keeping the voltage monitor from operating its output contacts.

Fault Condition	Status LED	N.O.Contacts
No Fault	on steady	Closed
Phase Loss or No Power	off steady	Open
Phase Reverse	1 blink	Open
Under Voltage	2 blinks	Open
Over Voltage	3 blinks	Open
Voltage Imbalance (5%)	4 blinks	Open

Loss of Phase

The voltage monitor will not pull in unless all three phases are present. Furthermore, it will drop out after a one second delay if a phase loss occurs during operation.

Phase Reversal

The voltage monitor will pull in after a one second delay, only if it senses the proper phase sequence: A-B-C to terminals A-B-C respectively.

Output

The voltage monitor provides a set of single pole double throw relay contacts for the output circuit. The normally open contact is typically used in the control circuit, while the normally closed contact can be used to initiate an alarm circuit. The output relay has a NEMA C300 rating.

If a fault condition is present, disconnect power, correct fault and verify proper operation. Once proper operation is verified turn off 3 phase power and wire the control circuit as shown in the wiring diagram.

Always remember that maintenance and installation should only be performed by qualified personnel.

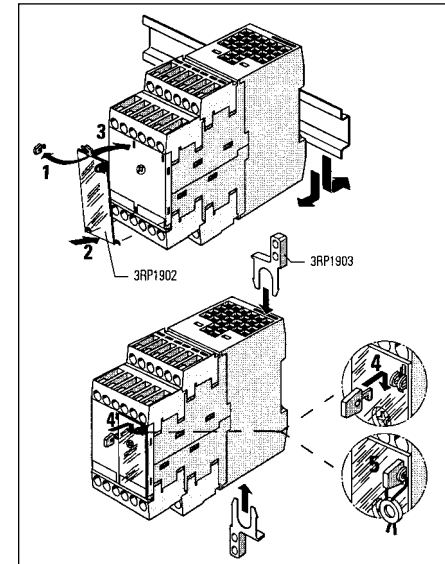
3UG3 Adjustable range/frequency Hz	175-265V/ 50/60 Hz Catalog No	330-630V/ 50/60Hz Catalog No	Price \$
3UG3 Adjustable Voltage Monitor, Undervoltage, Phase Loss, Phase Reversal	3UG3061-1AL7	3UG3061-1AR7	145.
3UG3 Adjustable Voltage Monitor, Undervoltage, Overvoltage, Phase Loss, Phase Reversal	3UG3062-1AL7	3UG3062-1AR7	150.
3UG3 Adjustable Voltage Monitor, Undervoltage, Phase Loss, Phase Reversal, Phase Imbalance	3UG3063-1AL7	3UG3063-1AR7	150.
3UG3 Adjustable Voltage Monitor, Undervoltage, Overvoltage, Phase Loss, Phase Reversal, Phase Imbalance	3UG3064-1AL7	3UG3064-1AR7	165.

Technical Data	
Agency Approval	UL, CSA, CE
Degree of Protection	IP20
Operating Temperature Range	-20 to 60°C
Storage and Transportation Temperature Range	-20 to 80°C
Relative Humidity	10 to 95% Non-condensating
Vibration	2gs 9 to 200 Hz
Power Consumption	1.5 VA
Terminal Wire Capacity	(2) 14 to 20 AWG per terminal
European Wire Size	1 x 0.5 ... 4 / 2.5mm ² 2 x 0.5 ... 2.5 / 1.5 mm ²
Output Contacts	100,000 operations at rated load 1/4 HP @ 120 VAC, 1/2 HP @ 230 VAC Pilot Duty B300 Resistive 8 Amps
Dropout	-5% of undervoltage setting +5% overvoltage setting +/-4% accuracy tolerance of specified condition
Repeat Accuracy	+/-1%

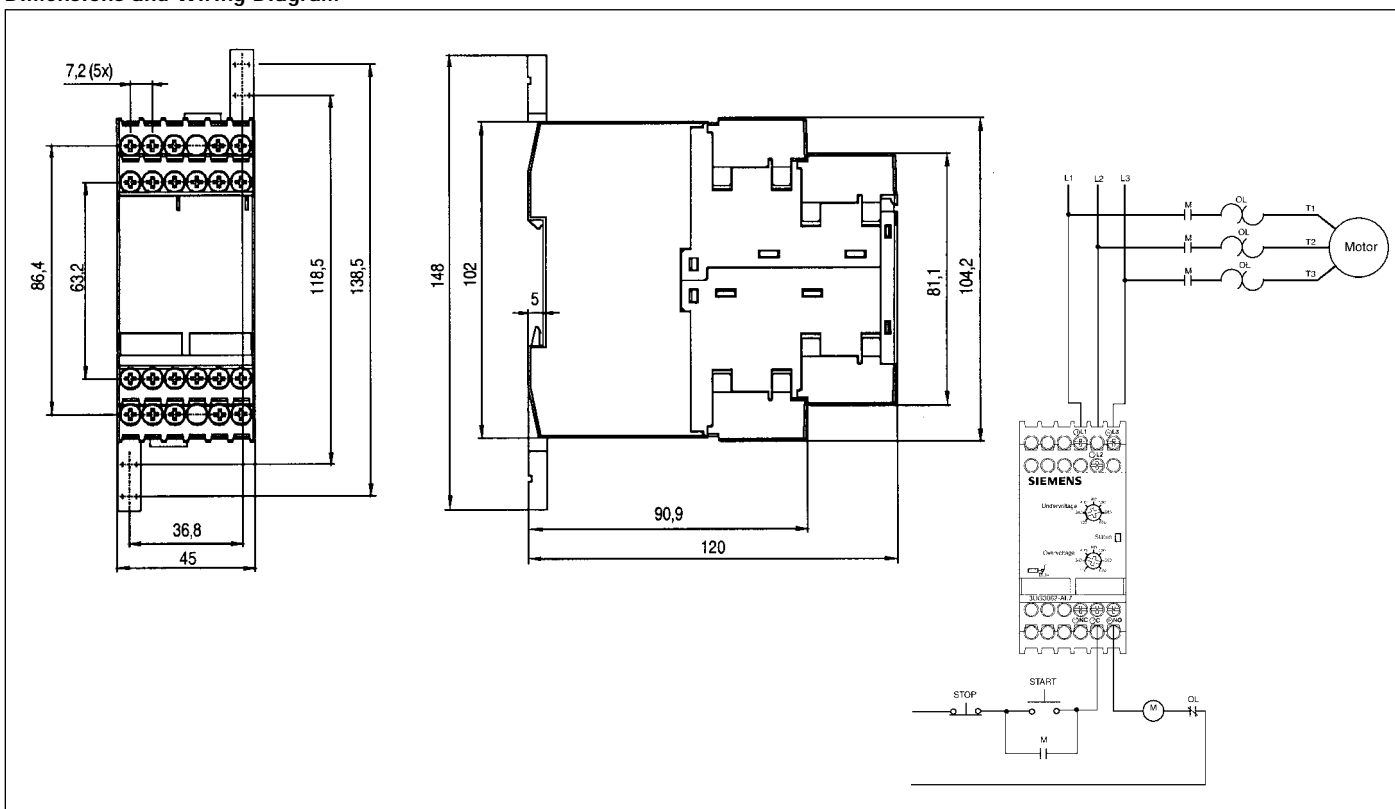
Accessories

Catalog No	Description	Price \$	Packaging Quantity
3RP1902	Cover for protection against unauthorized adjustment	18.①	5 Units per pack
3RP1903	Plug in tab for screw fixing	14.①	5 Sets two items per set

Installation



Dimensions and Wiring Diagram



①Discount Code: SIRIUS 3R Relays and Timers