

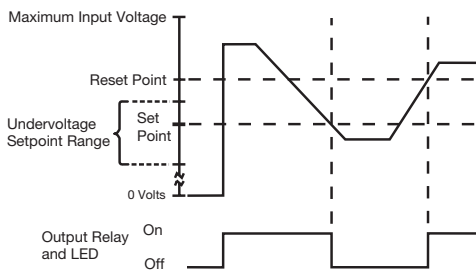
# Single-Phase Undervoltage Monitors

## Models 120AZ and 240AZ

### FEATURES

- 100% functionally tested
- Form C relay output
- On-board Trimpot for setpoint adjustment
- Circuitry completely encapsulated
- Low cost protection against brownouts
- Compact size
- Superior transient protection
- Flame-retardant and solvent-resistant polyester thermoplastic housing
- File #E65038

### LOGIC FUNCTION DIAGRAM



The 120AZ and 240AZ voltage sensors are intended for use as protection devices for electronic equipment in the event of a brown out condition.

**Operating Logic:** When the input voltage to the module is greater than the Reset Point voltage, the relay will be energized and the LED will be illuminated indicating a normal line voltage condition. If, however, the input voltage drops below the Setpoint Voltage selected by the potentiometer, the relay will de-energize and the LED will turn off. The module will remain in this state as long as the input is less than Reset Point voltage.

### SPECIFICATIONS

#### INPUT

**Operating Voltage Ranges:**  
Model 120AZ: 0 to 132 VAC 50/60 Hz  
Model 240AZ: 0 to 264 VAC 50/60 Hz

**Max. Power Consumption:**  
Model 120AZ: 2.6VA at 132 VAC  
Model 240AZ: 4.5VA at 264 VAC

#### CONTROL

**Adjustment:** On-board Trimpot

#### Undervoltage Setpoint Range:

Model 120AZ: 78 to 99 VAC  
Model 240AZ: 156 to 99 VAC

#### Reset Point Voltage:

Model 120AZ: 104 VAC  
Model 240AZ: 209 VAC

**Repeatability:** ±0.5% for fixed conditions; ±1% over temperature range

**Voltage Sense Accuracy:** ±2% at 25°C

**Power Off Reset Time:** 150 ms max.

#### OUTPUT

**Type:** Relay contacts, SPDT (1 form C)

**Rating:** 8 A max. resistive at 250 VAC and 30 VDC; 100 mA at 5 VDC minimum load current

**Indication:** Green LED; ON for normal condition

#### PROTECTION

**Transient Voltage:** 30 joule metal oxide varistor

**Dielectric breakdown:** 3000 Vrms terminal to mounting/1500 Vrms input to output

**Insulation resistance:** 100 megohms min. between terminals and case

#### MECHANICAL

**Termination:** .25" x .032" male fast-on terminals

**Mounting:** Surface mount with one #8 screw

#### Life:

Mechanical: 10,000,000 cycles min.

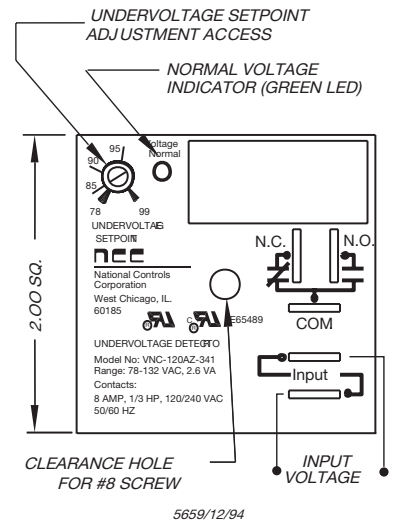
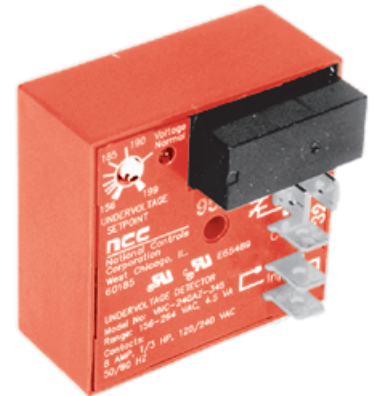
Electrical: 100,000 cycles min.

#### ENVIRONMENTAL

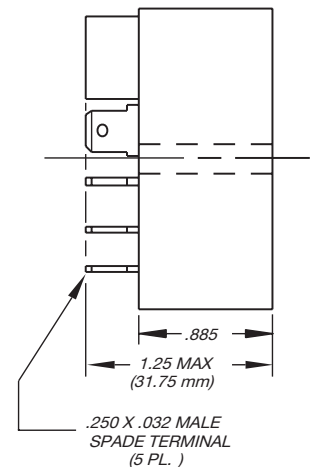
**Storage temperature:** -40°C to 85°C

**Operating temperature:** -23°C to 55°C

**Humidity:** 95% relative max.



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### ORDERING INFORMATION

INPUT VOLTAGE RANGE	UNDervoltage SETPOINT RANGE	RESET POINT VOLTAGE	PART NUMBER
0 to 132 VAC 50/60 Hz	78 to 99 VAC	104 VAC	VNC-120AZ-341
0 to 264 VAC 50/60 Hz	156 to 199 VAC	209 VAC	VNC-240AZ-345