

## Ideal for Lockout/Tagout Indicating Zero Energy



# DIVERSIFIED ELECTRONICS











The UPA Voltage Alert reduces the risk of electrical arc flash by pre-verifying the electrical isolation from outside of an electrical panel. Hard wired to the circuit breaker or main disconnect, the UPA LED's flash or illuminate (depending on model) to indicate the presence of hazardous conditions, 40-600 VAC & 30-1000 VDC, associated with stored energy.

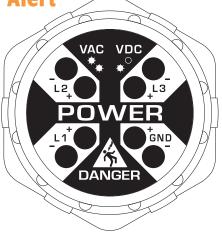
Engineered with fully encapsulated redundant circuitry, the Voltage Alert is powered by the same voltage that it indicates.

Available in 3 configurations, the easy to install UPAs fit through standard push-button and conduit knockouts.

### **UPA-100 Series**

### **Universal Power Alert**

- Detects Single or 3-Phase AC & DC Voltage or Stored Energy
- Redundant Circuitry
- Verification of Zero Energy in a Panel
- Fits 1-1/4" Conduit Knock-Out



The **UPA-100 Power Alert** reduces the risk **of electrical arc flash** by pre-verifying the electrical isolation from outside of a control panel. Hard wired to the circuit breaker or main disconnect, the UPA flashes whenever voltage is present. Engineered with **redundant circuitry**, the Power Alert is powered by the same voltage that it indicates.

The eight detector UPA-100 visually alerts to the presence of dangerous AC or DC (Stored Energy) potentials occurring between any combination of the four monitored input lines (L1, L2, L3, GND). Two LED indicators are assigned to each input line and are designated "+" and "-". For each input line carrying an AC potential (bi-polar), both the "+" and "-" LEDs will be active. A DC or Stored Energy potential will illuminate the "+" LED for the positive line and the "-" LED for the negative line.







### **UPA-130 Series**

### **30mm Universal Power Alert**

- Verification of Stored Energy Inside A Panel
- · Fits 30mm Knockout
- · Redundant Circuitry
- 40-750 VAC, 30-1000 VDC



The **UPA-130 Power Alert** reduces the risk of **electrical arc flash** by pre-verifying the electrical isolation from outside of a control panel. Hard wired to the circuit breaker or main disconnect, the UPA flashes whenever voltage is present. Engineered with redundant circuitry, the Power Alert is powered by the same voltage that it indicates.

The eight detector UPA-130 visually alerts to the presence of dangerous AC or DC (Stored Energy) potentials occurring between any combination of the four monitored input lines (L1, L2, L3, GND). Two LED indicators are assigned to each input line and are designated "+" and "-". For each input line carrying an AC potential (bi-polar), both the "+" and "-" LEDs will be active. A DC or Stored Energy potential will illuminate the "+" LED for the positive line and the "-" LED for the negative line.



D. CONT. EQ. UL TYPE 496Y 4X, 12, 13

#### **UPA-200**

### **Universal Power Alert Zero Energy**

- Ideal for use in Lockout/ Tagout Procedure
- Enhances NFPA 70E & OSHA Compliance
- Reduces Arc Flash & Electrocution Risk
- Detects Stored Energy
- Detects Ground Fault Problems
- No Voltage Present on Enclosure Door Panels
- DIN Rail or Surface Mounted Base



UL TYPE IND. CONT. EQ. 4X, 12, 13 496Y

The **UPA-200 Power Alert** reduces the **risk of electrical** arc flash by pre-verifying the electrical isolation from outside of an electrical panel. Hard wired to the circuit breaker or main disconnect, the UPA LED's flash to indicate the presence of hazardous conditions (20-600 VAC & 20-1000 VDC) associated with stored energy. Engineered with redundant circuitry, the power alert is powered by the same voltage that it indicates. The unit is easily installed into the panels through a standard push-button 30mm knockouts.

The UPA-200 is ideal for mounting on the front controller door panel. The use of fiber-optics on this unit to transmit the LED lights to the enclosure door allows the unit to be mounted on an ungrounded door panel due to no voltage present on panel.

The eight detector UPA-200 visually alerts to the presence of dangerous AC or DC (Stored Energy) potentials occuring between any combination of the four minitored input lines (L1, L2, L3, GND). Two LED indicators are assigned to each input line are designate "+" and "—". For each input line carrying an AC potential (bi-polar), both the "+" and "—" LEDs will be active. A DC or Stored Energy potential will illuminate the "+" LED for the positive line and the "—" LED for the negative line.

#### INDICATOR FLASH RATES (L1, L2, L3, GND) 3- Phase Line-To-Line (VAC) <29 30 120 240 600 750 480 Flashes/Sec (Typical) 0 1.3 4.2 5.8 7.3 8.0 8.8 DC or Stored Energy (VDC) <27 30 48 1000 110 300 600 Flashes/Sec (Typical) 0 1.6 2.5 4.5 6.9 8.8 9.1 **GND DETECTOR THRESHOLDS (LEAKAGE ANY** PHASE-TO-GROUND) 3- Phase Line-To-Line (VAC) 120 240 480 L1, L2, or L3 To Ground Continuity (OHMS) 2M 2M7M 3M 5M

DETECTOR INCLUDED FAULT CURRENT (PHASE-TO-GROUND SHORT)
3- Phase Line-To-Line (VAC)
0 OHM Phase-To-Ground Current (μA)
28 108 219 455 730

7

26

38

60

67

### **UPA-100 Series**

Detector Included Fault Current (µA)

### **Universal Power Alert**

### OPERATIONAL RANGE

AC SINGLE
40 to 600 VAC,
50/60/400 Hz, or
3-Phase (LINE-TO-LINE or LINE-TO-GND)

DC OR STORED ENERGY 30 to 1000 VDC, (LINE-TO-LINE or INE-TO-GND)

### MAXIMUM RATED VOLTAGE

750 VAC/1000 VDC (LINE-TO-LINE or LINE-TO-GND)

### DETECTION THRESHOLDS

29 VAC 3-Phase, 40 VAC SINGLE-Phase, 27 VDC (TYP Cutoff)

### POWER CONSUMPTION

1.2 Watts @ 750 VAC (Approximately)

### TEMPERATURE RATING

Operate: -4° to 131°F (-20° to +55°C)

Storage: -40° to 185°F (-40° to +85°C)

#### **ENCLOSURE**

NEMA 4X 105°C PVC, Totally Encapsulated for Environment Protection

#### **TERMINATIONS**

(4) 8 ft, 18 AWG 1000V, UL-1452

#### INDICATOR FLASH RATES (L1, L2, L3, GND)

3- Phase Line-To-Line (VAC) <29 30 240 480 600 750 Flashes/Sec (Typical) 0 4.2 5.8 7.3 1.3 8.0 8.8 DC or Stored Energy (VDC) <27 30 48 110 300 600 1000 Flashes/Sec (Typical) 0 1.6 2.5 4.5 6.9 8.8 9.1

#### **GND DETECTOR THRESHOLDS (LEAKAGE ANY PHASE-TO-GROUND)**

3- Phase Line-To-Line (VAC) 30 120 240 480 750 L1, L2, or L3 To Ground Continuity (OHMS) 2M 7M 2M 3M 5M Detector Included Fault Current (µA) 26 38 60 67

### DETECTOR INCLUDED FAULT CURRENT (PHASE-TO-GROUND SHORT)

 3- Phase Line-To-Line (VAC)
 30
 120
 240
 480
 750

 0 OHM Phase-To-Ground Current (μA)
 28
 108
 219
 455
 730

### **UPA-130 Series**

### **30mm Universal Power Alert**

### OPERATIONAL RANGE

AC SINGLE OR 3-PHASE 40 to 600 VAC, 50/60/400 Hz, (LINE-TO-LINE or LINE-TO-GND DC OR STORED

DC OR STORED ENERGY 30 to 1000 VDC, (LINE-TO-LINE or LINE-TO-GND)

### MAXIMUM RATED VOLTAGE

750 VAC/1000 VDC (LINE-TO-LINE or LINE-TO-GND)

### DETECTION THRESHOLDS

29 VAC 3-Phase, 40 VAC SINGLE-Phase, 27 VDC (TYP CUTOFF)

### POWER CONSUMPTION

1.2 Watts @ 750 VAC (Approximately)

### TEMPERATURE RATING

Operate -4° to 131°F (-20° to +55°C Storage -40° to 185°F

 $(-40^{\circ} \text{ to } +85^{\circ}\text{C})$ 

#### **ENCLOSURE**

Totally Encapsulated for Environment Protection

#### **TERMINATIONS**

(4) 8 ft, 18 AWG 1000V, UL-1452

RED: L1
YEL: L2
BLU: L3
GRN/YEL: GRD

#### **INDICATOR FLASH RATES (L1, L2, L3, GND)**

3- Phase Line-To-Line (VAC) <14 20 120 240 480 600 750 Flashes/Sec (Typical) 2.6 0 0.9 3.3 3.7 3.8 3.9 DC or Stored Energy (VDC) <15 20 48 110 300 600 1000 0.9 1.9 3.2 3.7 4.0 Flashes/Sec (Typical) 4.0

Epileptic Photosensitivity Compliance: Below 5-30 Flashes/Sec

### **GND DETECTOR THRESHOLDS (LEAKAGE ANY PHASE-TO-GROUND)**

3- Phase Line-To-Line (VAC) 20 120 240 480 750 L1, L2, or L3 To Ground Continuity (OHMS) 2M 5M 7.5M 13M 20M Detector Included Fault Current (μA) 4 12 17 20 21

### **DETECTOR INCLUDED FAULT CURRENT (PHASE-TO-GROUND SHORT)**

3- Phase Line-To-Line (VAC) 20 120 240 480 750 0 OHM Phase-To-Ground Current (μA) 15 105 216 435 684

#### OPERATIONAL RANGE

AC 20-600 VAC/20-1000 VDC

### MAXIMUM RATED VOLTAGE

750 VAC/1000 VDC (LINE-TO-LINE)

### **DETECTION THRESHOLDS**

14 VAC 3-Phase/ 18.5 VAC SINGLE-Phase, 15 VDC Stored Energy

### POWER CONSUMPTION

1.2 Watts @ 750 VAC

### TEMPERATURE RATING

-4° to 131°F (-20° to +55°C)

#### **ENCLOSURE**

Totally Encapsulated

#### **TERMINATIONS**

(4) 6 ft, 18 AWG 1000V, UL-1452

### **UPA-200**

### **Universal Power Alert Zero Energy**



#### OSHA 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Following the application of lockout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained, and otherwise rendered safe. (d)(5)(ii)

If there is a possibility of reaccumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists. (d)(6)

"Verification of Isolation." Prior to starting work on machines or equipment that have been locked out or tagged out, the authorized employee shall verify that isolation and de-energization of the machine or equipment have been accomplished.

### **ORDERING INFORMATION**

| MODEL NUMBER | DESCRIPTION                           |
|--------------|---------------------------------------|
| UPA-100      | Universal Power Alert                 |
| UPA-100S     | Universal Power Alert<br>Solid-ON Red |
| Accessories  |                                       |
| UPA-WP100    | ANSI Warning Plate                    |

| MODEL NUMBER  | DESCRIPTION                       |
|---------------|-----------------------------------|
| UPA-130       | 30mm Universal Power Alert        |
| UPA-130-DIV 2 | Class I, Div 2                    |
| UPA-130S      | Solid ON                          |
| UPA-130-GOV   | Amber LED                         |
| Accessories   |                                   |
| UPA-WP130     | ANSI Warning Plate                |
| UPA-BZL-130   | Flush Mounting Kit for 1-1/4" for |
|               | UPA 130 Conduit Knockout          |
| UPA-BZL-DIV2  | Bezel Kit for UPA-130 Div 2       |
| UPA-BZL-GOV   | Bezel Kit for UPA-130 Gov         |
| UPA-BZL-130S  | Bezel Kit for UPA-130S            |

| MODEL NUMBER | DESCRIPTION          |
|--------------|----------------------|
| UPA-200-12   | 30mm Universal Power |
|              | Fiber Optic Alert    |
|              | 12" Fiber Optic      |
| UPA-200-24   | 24" Fiber Optic      |
| UPA-200-48   | 48" Fiber Optic      |
| Accessories  |                      |
| UPA-WP130    | ANSI Warning Plate   |

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