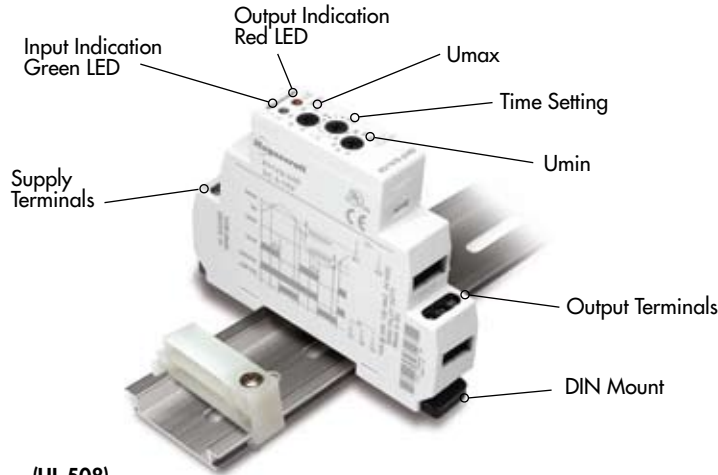


831 Voltage Sensing Relay/SPDT 15 Amp Rating



General Specifications (@ 25°C) (UL 508)

| Output Characteristics | | Units | 831VS-120A | 831VS-240A |
|---|--|-----------------------------------|------------------|------------------|
| Number and type of Contacts | | | SPDT | SPDT |
| Contact Material | | | Silver Alloy | Silver Alloy |
| Current rating | @ 240 VAC, 24 VDC | A | 15 | 15 |
| Switching voltage | | V | 240 AC, 50/60 Hz | 240 AC, 50/60 Hz |
| | | V | 24 DC | 24 DC |
| | | HP | 1/2 @ 120VAC | 1/2 @ 120VAC |
| | | HP | 1 @ 240 VAC | 1 @ 240 VAC |
| | | Pilot Duty | B300 | B300 |
| Minimum Switching Requirement | | mA | 100 | 100 |
| Indication | LED | Blinks = Timing On = Energized | Red | Red |
| Input/Sensing Characteristics | | | | |
| Voltage Range | | V | 120 AC | 240 AC |
| Absolute Input Voltage Maximum | | V | 200 AC | 280 AC |
| Upper Sensing Voltage Range | | V | 80...150 AC | 160...276 AC |
| Lower Sensing Voltage Range | | % | 30...99 | 30...99 |
| Maximum consumption | AC/DC | VA | 1.2 | 1.2 |
| Indication | LED | | Green | Green |
| Timing Characteristics | | | | |
| Time Scales | | | 1 | 1 |
| Time Ranges Available | | sec | 0...10 | 0...10 |
| Tolerance | Mechanical Setting | % | 5 | 5 |
| Repeatability | Constant Voltage and Temperature | % | 1 | 1 |
| Operate Time | Maximum | ms | 25 | 25 |
| Release Time | Maximum | ms | 20 | 20 |
| Performance Characteristics | | | | |
| Electrical Life | Operations @ Rated Current (Resistive) | | 100,000 | 100,000 |
| Mechanical Life | Unpowered | | 10,000,000 | 10,000,000 |
| Dielectric strength | Input to Contacts | V | 2500 AC | 2500 AC |
| | Between Open Contacts | V | 1000 AC | 1000 AC |
| Terminal Wire Capacity | | AWG (mm ²) | 14 (2.1) | 14 (2.1) |
| Terminal Torque (maximum) | | in lb (Nm) | 7.1 (0.8) | 7.1 (0.8) |
| Environment | | | | |
| Product certifications | Standard version | | UL, CE | UL, CE |
| Ambient air temperature around the device | Storage | °C | -30...+70 | -30...+70 |
| | Operation | °C | -20...+55 | -20...+55 |
| Degree of protection | | | IP 20 | IP 20 |
| Weight | | grams | 71 | 71 |



Optional Panel Adapter
(16-788C1)
See Section 3 p.18

The 831 voltage sensor is a single phase AC voltage sensing device that is capable of monitoring and reacting to over and under voltage conditions. This product is designed to be wired across terminals A1 and A2 with the voltage that is being monitored. The two LED lamps indicate both when the input voltage is present (Green LED) and also when the output is energized (Red LED). The Umax dial is used to set the upper trip-point for the voltage sensor. The Umin dial is a percentage of the Umax dial and is used to set the lower trip-point for the voltage sensor. The timing dial is used to delay the transfer of the contacts, from 0 to 10 seconds, when a set point has been violated.

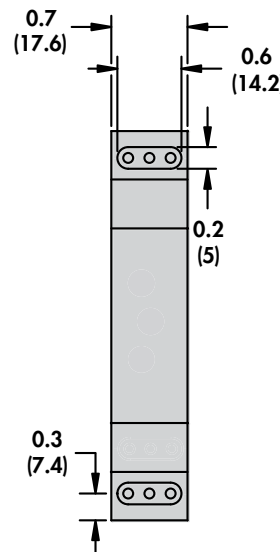
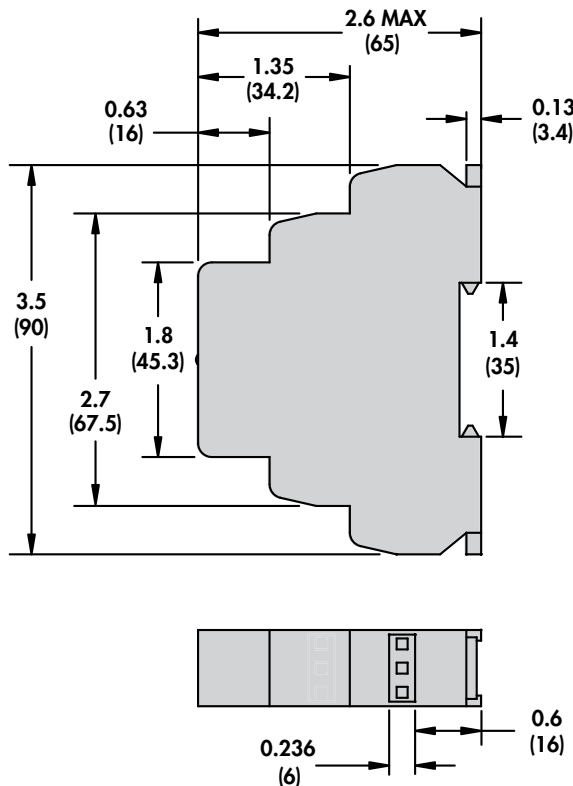
Standard Part Numbers

BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

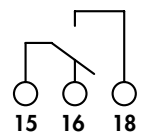
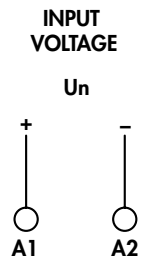
| Part Number | Input Voltage | Timing Range | Sensing Voltage Range | Contact Configuration | Rated Load Current |
|-------------------|---------------|--------------|---|-----------------------|--------------------|
| 831VS-120A | 120 VAC | 0s...10s | Upper: 80...150 VAC Lower: 30...99% | SPDT | 15 Amps |
| 831VS-240A | 240 VAC | 0s...10s | Upper: 160...276 VAC Lower: 30...99% | SPDT | 15 Amps |

Part Number Builder

| Series | Relay Style | - | Input Voltage |
|------------|---------------------|---|----------------|
| 831 = SPDT | VS = Voltage Sensor | | 120A = 120 VAC |
| | | | 240A = 240 VAC |



WIRING DIAGRAM



15 - COMMON
16 - NORMALLY CLOSED
18 - NORMALLY OPEN