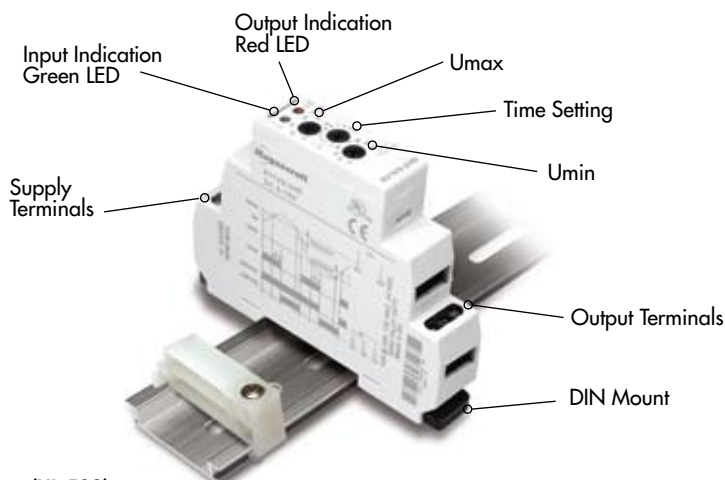


## 831 Voltage Sensing Relay/SPDT 1.5 Amp Rating



### 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		%	5	5
Repeatability		%	1	1
Operate Time		ms	25	25
Release Time		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	2500 AC	2500 AC
		Between Open Contacts	1000 AC	1000 AC
Terminal Wire Capacity		AWG (mm <sup>2</sup> )	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		Storage	-30...+70	-30...+70
around the device		Operation	-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.

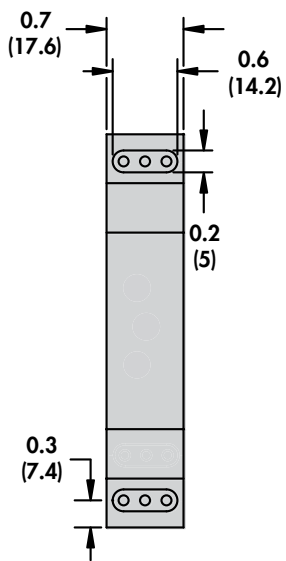
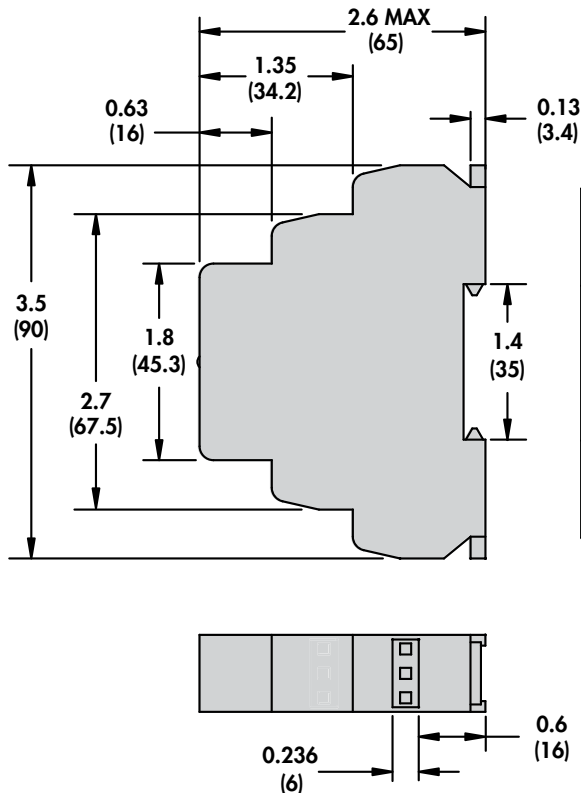
Standard Part Numbers

BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

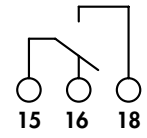
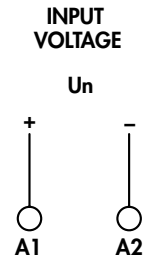
Part Number	Input Voltage	Timing Range	Sensing Voltage Range	Contact Configuration	Rated Load Current
<b>831VS-120A</b>	120 VAC	0s...10s	Upper: 80...150 VAC Lower: 30...99%	SPDT	15 Amps
<b>831VS-240A</b>	240 VAC	0s...10s	Upper: 160...276 VAC Lower: 30...99%	SPDT	15 Amps

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