EUS and EUSF SERIES
VOLTAGE CONTROL RELAY

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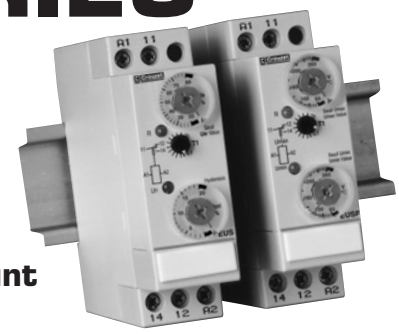
- **Units Check Their Own Supply Voltage Level**
- **EUS SERIES – Over or Under Voltage Selectable**
- **EUSF SERIES – Monitors High and Low Voltage**
- **Space Saving 22.5mm Wide – DIN-Rail / Surface Mount**



OPERATING PRINCIPLE:

EUS SERIES

Control of AC / DC voltage without memory

When the value of the controlled voltage, AC or DC, reaches the threshold Ue displayed on the front face, the output relay changes state at the end of a time delay T which can be set on the front face at between 0.1 and 3 s.

Once the voltage drops below 5 to 50% of the threshold (hysteresis), the output relay changes state again instantly. Changing the hysteresis on the front face does not therefore modify the value of the preset threshold.

Control of AC / DC voltage with memory

When the value of the controlled voltage, AC or DC, reaches the threshold Ue displayed on the front face, the output relay changes state at the end of a time delay T which can be set on the front face at between 0.1 and 3 s, and stays locked in this position.

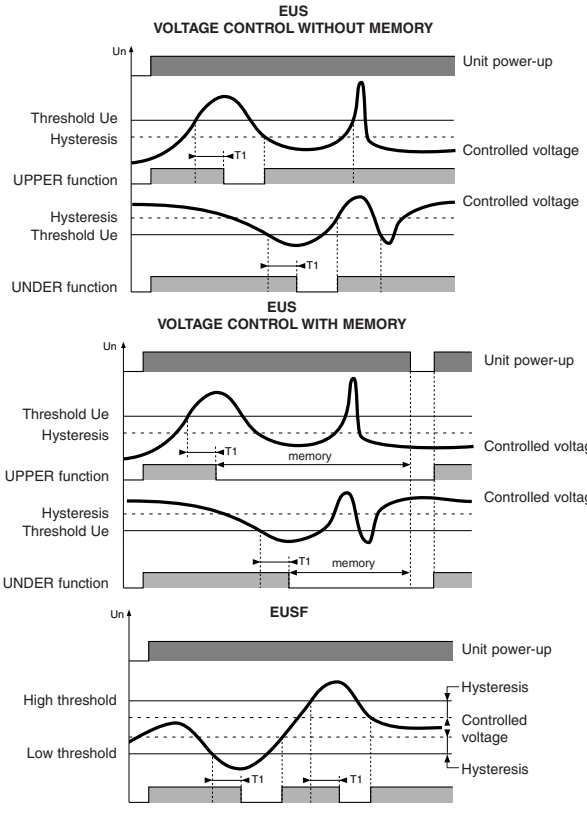
EUSF SERIES

The EUSF window threshold relay monitors an electrical voltage which acts as its own power supply (simplified wiring). When the value of the controlled voltage, AC or DC, goes outside the window, the output relay deenergises at the end of a time delay T which can be set on the front face at between 0.1 and 3 s.

It switches back on when the voltage returns within the window and stays between the upper and lower thresholds displayed by two potentiometers on the front face. Fixed hysteresis ensures bounce-free relay switching around the thresholds.

Note: Time delay T1 on crossing the upper and lower thresholds offers immunity to transient phenomena, thus preventing spurious triggering of the output relay.

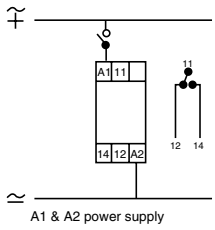
MODE OF OPERATION:



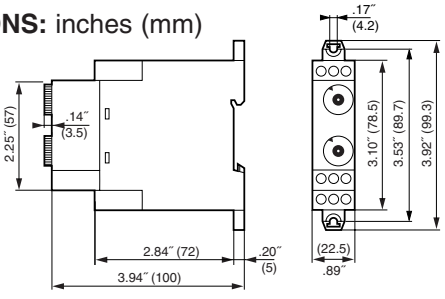
SPECIFICATIONS:

Input power	**EUS:**	**EUSF:**
	12 VDC,	—
	20 to 80 VAC/VDC	20 to 80 VAC/VDC
	90 to 270 VAC/VDC	90 to 270 VAC/VDC
Max. power consumption	3.5 VA	
Frequency of measured signal	50/60 Hz	
Threshold value	**EUS:**	**EUSF:**
	9.6 to 15.6 VDC	—
	20 to 80 VAC/VDC	20 to 80 VAC/VDC
	65 to 260 VAC/VDC	65 to 260 VAC/VDC
Hysteresis	**EUS:**	**EUSF:**
	5 to 20% Adjustable	Fixed at 5%
Display accuracy	±10% of full scale	
Delay on threshold overun	.1 to 3 sec.	
Output	SPDT relay	
Contact material	AgCdO	
Maximum loading	8 Amp resistive	
Maximum switching voltage	250 VAC	
Operating temperature	-4°F to 140°F, (-20°C to 60°C)	
Storage temperature	-22°F to 158°F, (-30°C to 70°C)	
Weight	4.9 oz. (140g)	

WIRING:



DIMENSIONS: inches (mm)



ORDERING INFORMATION:

Part Number	Type	Supply Voltage
84 872 040	EUS	12 VDC
84 872 046	EUS	20 to 80 VAC/VDC
84 872 047	EUS	90 to 270 VAC/VDC
84 872 056	EUSF	20 to 80 VAC/VDC
84 872 057	EUSF	90 to 270 VAC/VDC

Products and specifications subject to change without notice.

Consult factory for application assistance.