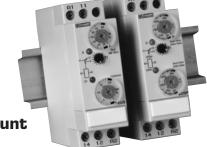


# EUS and EUSF SERIES OLTAGE CONTROL RELAY

Crouzet

- 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:**

## 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

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.

FUS:

FUSE:

Fixed at 5%

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

# **SPECIFICATIONS:**

Input power.....

	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:
	EUS: 9.6 to 15.6 VDC	EUSF:
		EUSF: — 20 to 80 VAC/VDC
	9.6 to 15.6 VDC 20 to 80 VAC/VDC	_

5 to 20% Adjustable Display accuracy . . . . . . . . ±10% of full scale 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)

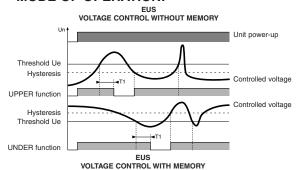
### **ORDERING INFORMATION:**

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

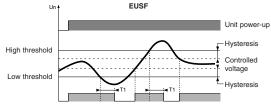
Products and specifications subject to change without notice. Consult factory for application assistance.

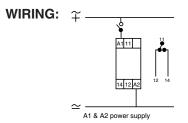
# **MODE OF OPERATION:**

 $C \in$ 



Unit power-up Threshold Ue Hysteresis Controlled voltage UPPER function Controlled voltage Hysteresis Threshold Ue UNDER function





(57)

2.25"

(3.5)

3.94" (100)

