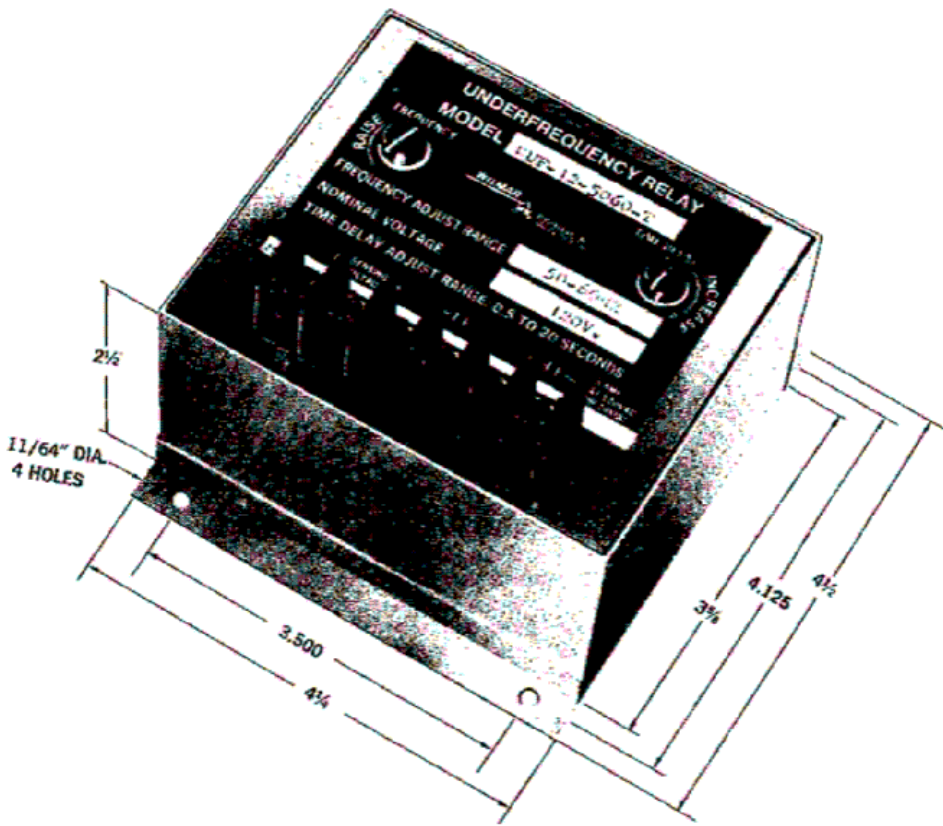


WUF-12-90100-T UNDER FREQUENCY RELAY

REVISIONS

REV.	ECO	DESCRIPTION	DATE	APPROVED
A	-	INITIAL DRAWING	25AUG2020	TN



PRODUCT SPECIFICATIONS	
Part Number	WOF/WUF
Nominal Voltage ( $\pm 20\%$ ) .....	120, 230, 380 and 460 volts
Nominal Frequencies .....	50, 60 and 400 Hz.
Trip Point .....	Screwdriver adjustable. Adjustment range in accordance with ordering information.
Operating Temperature .....	-20°C to +65°C
Differential .....	The frequency pitch-up to drop-out differential is .5% max
Voltage Drift .....	$\pm .05\%$ maximum frequency error for input voltage variation of $\pm 10\%$
Time Delay .....	See Time versus Frequency curves
Surge Withstand Capability .....	In compliance with C37.90B ANS/IEEE
Output Contacts .....	One set N.O., one set N.C.
Contact Ratings .....	5 amp resistive at 120 VAC or 28VDC

**Notes:**

1. Remove black screws for access to the frequency and the time adjustments.
2. Clockwise rotation of the frequency potentiometer will raise the frequency trip point.
3. Clockwise rotation of the time adjustment, option "T" will increase the time for overfrequency relays and dropout time for underfrequency relays..



TITLE		UNDER FREQUENCY RELAY		
TE P.N.		DWG NO.		
1-1618112-1		WUF-12-90100-T		
DS	DATA SHEET	CAGE CODE	SCALE	SHEET
		-	NONE	1 OF 2
				REV
				A

## PART NUMBER SELECTION

Sample Part No. WUF-12-5060-T

Type:

WUF = Underfrequency  
WOF = Overfrequency

Input Voltage (VAC)

12 = 120  
23 = 230  
38 = 380  
46 = 460

Frequency Range

4050 = 40-50 HZ  
5060 = 50-60 HZ  
6070 = 60-70 HZ  
3540 = 350-400 HZ  
4045 = 400-450 HZ (overfrequency only)

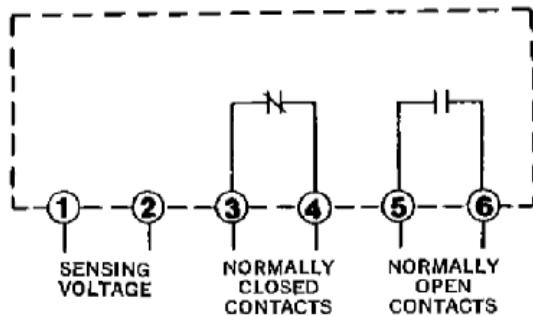
Time Delay Options

blank = Per Time Curve  
T = Adjustable

### EXAMPLE: WUF-12-5060-T

This indicates an Underfrequency Relay with a nominal input voltage of 120VAC and an adjustable underfrequency trip range of 50-60 Hz. Suffix "T" provides an adjustable time delay up to 20 seconds.

## CONNECTIONS



### Time Delay

#### Standard Time Delay

A minimum, fixed inverse time delay is incorporated in all frequency relays to prevent nuisance tripping and is represented by the typical curves shown below.

#### Adjustable Time Delay

If additional time delay is required, a suffix "T" must be added to the part number. This allows the minimum fixed time delay to be field-adjustable up to 20 seconds

### Function: 81 O/U

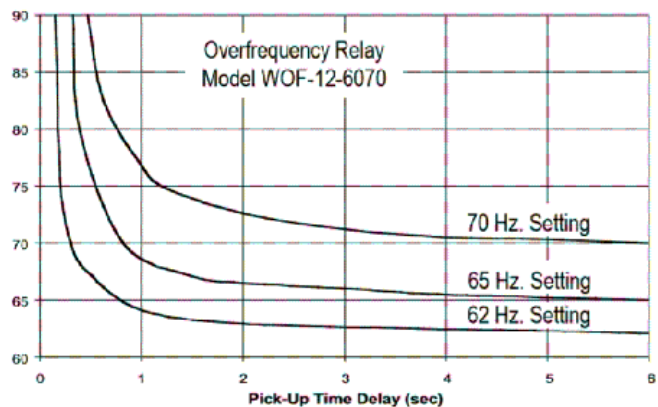
- ANSI/IEEE C37.90-1978
- UL file No. E58048
- CSA file No. LR61158



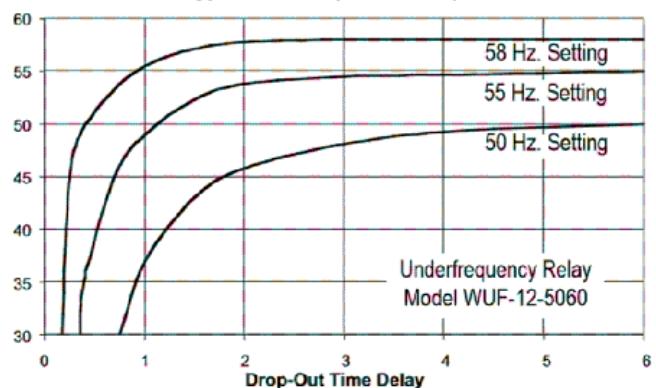
### Application:

The output contacts of frequency relays are energized when the frequency exceeds the adjustable set point. Overfrequency and underfrequency relays are available in 50, 60 and 400Hz. Combination over/underfrequency "band pass" relays are also available. These are energized at rated frequency and de-energized during overfrequency or underfrequency conditions. Frequency Differential relays are energized above the preset frequency. The pick-up and drop-out frequency settings are independently adjustable.

Typical Curves (WOF Series)



Typical Curves (WUF Series)



TE CONNECTIVITY  
CARPINTERIA, CA 93013

TITLE

UNDER FREQUENCY RELAY

TE P.N.

1-1618112-1

DWG NO.

WUF-12-90100-T

CAGE CODE

—

SCALE

NONE

SHEET

2 OF 2

REV

A

DS DATA SHEET