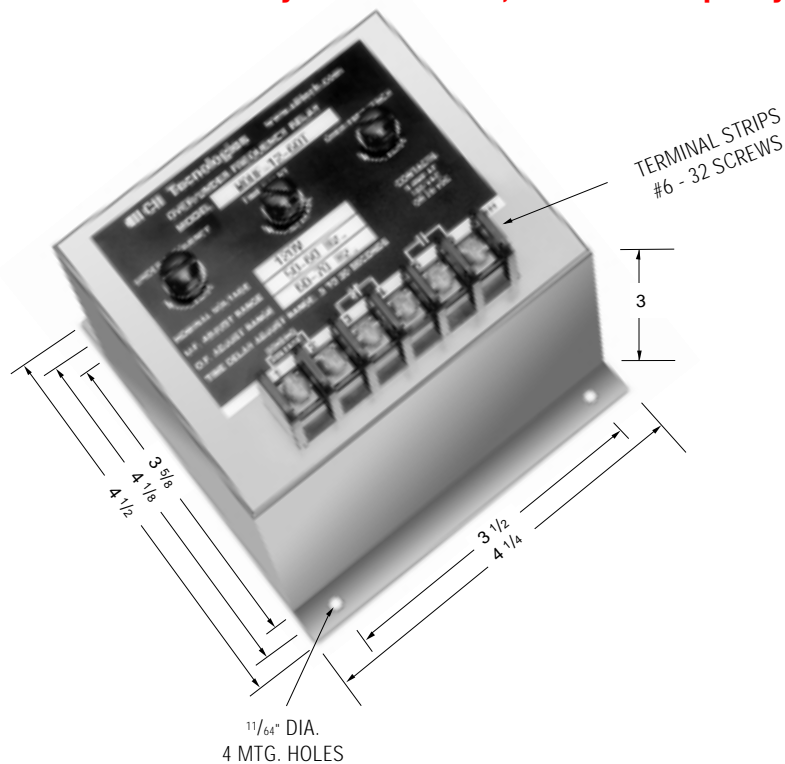


**WILMAR™ Protective Relays – WOUF Series, Over/Underfrequency**



**Note:** Dimensions in inches. Multiply values by 25.4 for dimensions in mm.

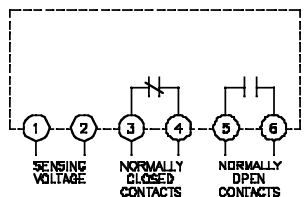
**Time Delay**

**Standard Time Delay**

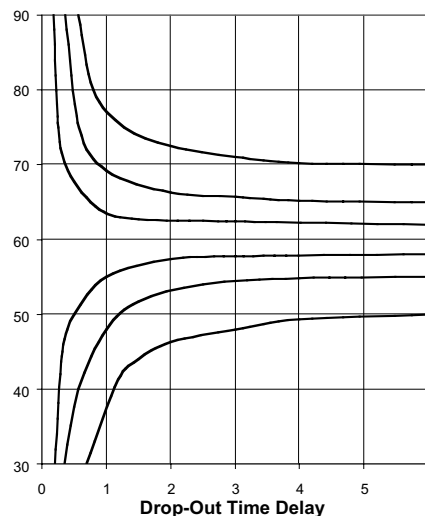
A minimum, fixed inverse time delay is incorporated in all frequency relays to prevent nuisance tripping and is represented by the typical curves shown below.

**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



**Typical Curves (WOUF Series)**



**PRODUCT SPECIFICATIONS**

Part Number	WOUF Series
Nominal Voltage (±20%) .....	120, 230, 380 and 460 volts
Nonimal Frequencies .....	50, 60 and 400 Hz.
Trip Point .....	Screwdriver adjustable. Adjustment range in accordance with ordering information.
Operating Temperature .....	-40°C to +65°C
Differential .....	The frequency pick-up to drop-out differential is .5% max
Voltage Drift .....	± 0.05% maximum frequency error for input voltage variation of ±10%
Time Delay .....	See Time versus Frequency curves
Surge Withstand Capability .....	In compliance with C37-90B ANSI/IEEE
Output Contacts .....	One set N.O., one set N.C.
Contact Ratings .....	5 amp resistive at 120 VAC or 28 VDC

**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 drop-out time delay.

**Function:** 81 O/U

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



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.

**Operation:**

The relay will energize at normal frequency; The normally closed contacts will open and the normally open contacts will close. The relay will drop-out after time delay at overfrequency or underfrequency.

**PART NUMBER SELECTION**

Sample Part No. WOUF-12-5060-T

Type: WOUF = Over/Underfrequency

Input Voltage (VAC) 12 = 120  
23 - 230  
38 = 380  
46 = 460

Frequency Range UF Adj. OF Adj.  
50 = 40-50 Hz 50-60 Hz  
60 = 50-60 Hz 60-70 Hz  
400 = 350-400 Hz 400-450 Hz

Time Delay Options blank = Per Time Curve  
T = Adjustable

Consult factory for additional models.