

## WOUF Series, Over/Underfrequency

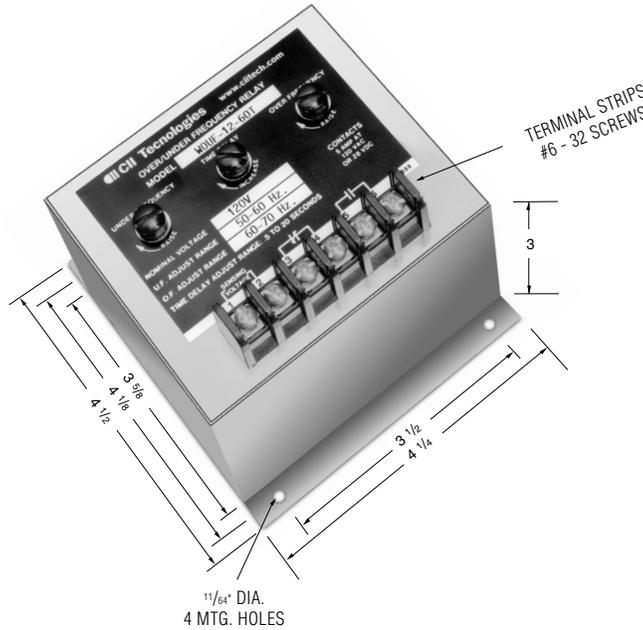
### Product Facts

- Function 81 O/U
- ANSI/IEEE C37.90-1978
- UL File No. E58048
- CSA File No. LR61158

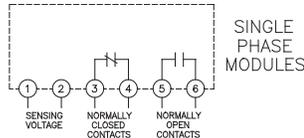
The output contacts of frequency relays are energized when the frequency exceeds the adjustable set point. Overfrequency and underfrequency relays are available in 50, 60 and 400Hz. Combination over/underfrequency "band pass" relays are also available. These are energized at rated frequency and de-energized 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.



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



### Ordering Information

<b>Sample Part Number</b> ▶	<b>WOUF -12 -5060 -T</b>
<b>Type:</b>	WOUF = Over/Underfrequency
<b>Input Voltage (VAC)</b>	12 = 120 23 = 230 38 = 380 46 = 460
<b>Frequency Range</b>	50 = 40-50 Hz 60 = 50-60 Hz 400 = 350-400 Hz
	<b>UF Adj.</b> <b>OF Adj.</b>
	40-50 Hz      50-60 Hz
	50-60 Hz      60-70 Hz
	350-400 Hz    400-450 Hz
<b>Time Delay Options</b>	blank = Per Time Curve T = Adjustable

### Product Specifications

- Nominal Voltage (±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** — -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

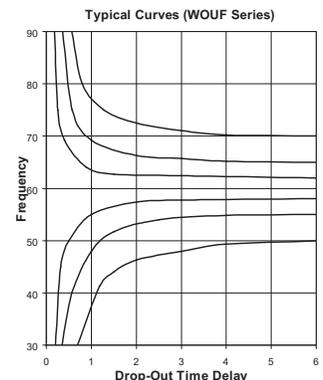
### Notes:

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.

### 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.



Consult factory for additional models.