

# Motor Control Timers

- Compact 17.5mm wide
- Brown Out Timer with many functional options
- Detects Voltage Dips and Momentary Loss of Supply & Resets the control panel
- Low Power Consumption
- Fast Response Time
- Excellent Noise Immunity to the latest IEC standards



## Ordering Information

Cat. No.	Description
17UDT0	230 VAC, Brown Out Timer (ON Delay), 1 C/O
17UDT1	230 VAC, Brown Out Timer (Interval), 1 C/O
13UDT0	110 VAC, Brown Out Timer (ON Delay), 1 C/O
13UDT1	110 VAC, Brown Out Timer (Interval), 1 C/O
1FUDT0F	110 VAC, Brown Out Timer (Normally Energized / ON Delay Mode), Fast Response (5 msec max), 1C/O
1FUDT1F	110 VAC, Brown Out Timer (Momentary / Pulse Mode), Fast Response (5 msec max), 1C/O
1FUDT2F	110 VAC, Brown Out Timer (Normally De-energized / Pulse Mode), Fast Response (5 msec max), 1C/O

# Motor Control Timers



Cat. No.	17UDT0	13UDT1
Parameters	<b>Brown Out Timer</b>	
Timer Description	<b>Brown Out Timer</b>	
Modes	ON Delay	Interval
Functional Diagram		
Supply Voltage (φ)	230 VAC	110 VAC
Supply Variation	-30% to +10%	
Frequency	50 Hz	60 Hz
Power Consumption (Max.)	10 VA	
Timing Range	0.3s to 30s	
Initiate Time	Max. 100 ms	
Trip Voltage	168 V (± 5 V)	82 V (± 5 V)
Recovery Voltage	Trip Voltage + 14 V (± 5 V)	Trip Voltage + 14 V (± 5 V)
Response Time	25 ms (Max.) (Voltage Dips & Interruptions)	
Setting Accuracy	± 10% @ 30s & ± 20% @ 0.3s	
Repeat Accuracy	± 1%	
Output	Relay Output	1 C/O
	Contact Rating	5A @ 240 VAC / 28 VDC (Resistive)
	Electrical Life	1x10 <sup>5</sup>
	Mechanical Life	1x10 <sup>7</sup>
Utilization Category	AC - 15	Rated Voltage (Ue): 120/240 V, Rated Current (Ie): 3.0/1.5 A
	DC - 13	Rated Voltage (Ue): 24/125/250 V, Rated Current (Ie): 2.0/0.22/0.1 A
Operating Temperature	-10°C to +55°C	
Storage Temperature	-15°C to +60°C	
Humidity (Non Condensing)	80% (Rh)	
LED Indication	Green	Healthy
	Red	Relay ON
Enclosure	Flame Retardant UL94-V0	
Dimension (W x H x D) (in mm)	17.5 X 58.5 X 90	
Weight (unpacked)	70 g	
Mounting	Base / DIN rail	
Certification		
Degree of Protection	IP 20 for Terminals, IP 40 for Enclosure	

## EMI / EMC

Harmonic Current Emissions	IEC 61000-3-2
ESD	IEC 61000-4-2
Radiated Susceptibility	IEC 61000-4-3
Electrical Fast Transients	IEC 61000-4-4
Surges	IEC 61000-4-5
Conducted Susceptibility	IEC 61000-4-6
Voltage Dips & Interruptions (AC)	IEC 61000-4-11
Conducted Emission	CISPR 14-1
Radiated Emission	CISPR 14-1

## Environmental

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

## BROWN OUT

A dip in voltage causes electro-mechanical devices such as relays and contactors to drop out and electronic devices such as Timers, Programmable Relays, PLC's remain energized. As a result of this the switch sequence of the panel is lost. This can lock out all or a part of the control system causing the entire system to malfunction.

## BROWN OUT TIMER

The 'Brown-Out' Timer also known as 'Mains restoration auto restart timer' is used for detection of voltage dips or momentary loss of supply known as 'Brown out' and initiation of a control panel reset following the Brown out.