



## TF48 Dual Digital Timers

The Tempatron TF48 dual 4 digit digital timer is a multifunction, multi-time range digital timer suitable for controlling operation of equipment, machinery, systems or processes in a wide range of industrial applications.

Thirteen timing functions can be selected together with time ranges from 0.01 seconds to 9999 hours, to operate two independent relay output contacts which are isolated from the supply voltage. The output contacts can be configured as two timed outputs, or one timed and one instantaneous output.

These timers are housed in a compact DIN48 square panel mounting enclosure and are powered from 7-24Vac/9-30Vdc or 90-250Vac.

### Models Available

**TF48ML** Digital Timer 7-24Vac/9-30Vdc

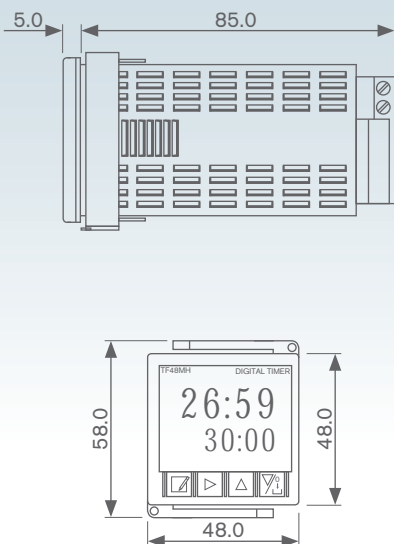
**TF48MH** Digital Timer 90-250Vac

### Product Features

- Dual 4 digit green LCD display timer
- 13 programmable timing modes
- 9 time ranges from 99.99sec to 9999hrs
- 7-24Vac/9-30Vdc or 90-250Vac
- 1 changeover and 1 N/O relay output
- 2 SSR drive outputs
- Programmable start, gate and reset
- EEPROM memory (minimum 10 years)
- Security passcode
- Standard DIN48 square size
- IP65 front enclosure code
- Panel mounting
- Selectable up/down timing
- Status and timing indicators

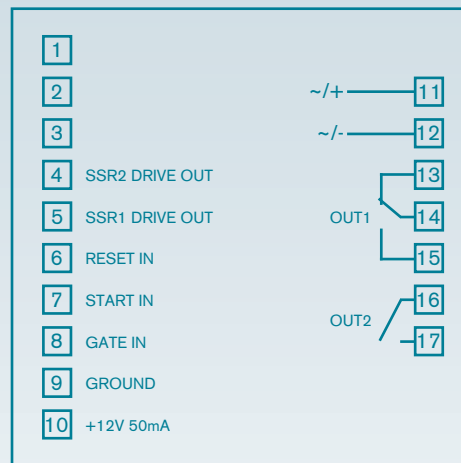
## For timing control of machinery, systems and operational processes

### Dimensions



Panel cutout 45mm square (-0.0/+0.6)

### Connections

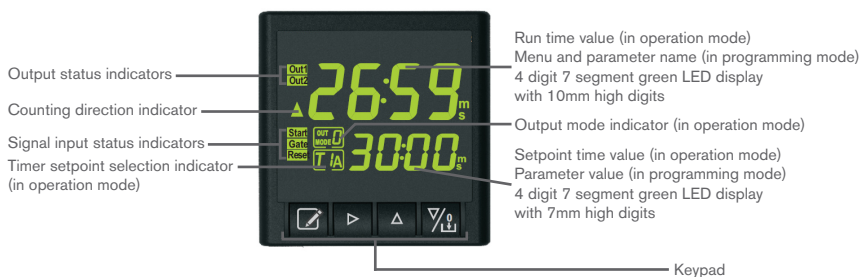


View on rear

## Timing Modes

Timing Mode	Timing Function Description	Start / Reset / Restart / Count
Mode 0	Delay on Energise, Interval or Delayed Pulse	Close to Start, Reset when Start Opens
Mode 1	Delay on Energise, Interval or Delayed Pulse	Pulse to Start
Mode 2	Delay on Energise, Interval or Delayed Pulse	Close to Start, Restarts when Start Opens
Mode 3	Delay on Energise, Interval or Delayed Pulse	Open to Start, Close Start to Reset
Mode 4	Delayed Cycle or Immediate Cycle with Equal On and Off Time	Pulse to Start
Mode 5	Delayed Cycle or Immediate Cycle with Equal On and Off Time	Close to Start, Reset when Start Opens
Mode 6	Delay on Energise, Interval or Delayed Pulse	Count only with Start Closed
Mode 7	Delay on Energise, Interval or Delayed Pulse	Count only with Start Closed, Restarts when Start Closed again
Mode 8	Delayed Cycle or Immediate Cycle with Single Cycle and Equal On and Off Time	Pulse to Start
Mode 9	Delayed Cycle or Immediate Cycle with Variable On and Off Times	Pulse to Start
Mode A	Delayed Cycle or Immediate Cycle with Variable On and Off Times	Close to Start, Reset when Start Opens
Mode b	Double Output Delayed Cycle or Immediate Cycle with Variable On and Off Times	Pulse to Start
Mode C	Delay on Energise, Interval or Delayed Pulse	Count only with Start Closed, Restarts when Start Opens

## Front Panel Display Functions



## Ordering information

Model	Code	Description
	TF48ML	Dual Digital Timer 7-24Vac/9-30Vdc
	TF48MH	Dual Digital Timer 90-250Vac

**Example** TF48MH

## Specification

### Accuracy:

- $\pm 0.01\%$   $\pm 1\text{ms}$

### Power Supply Voltage:

- TF48ML 7-24Vac/9-30Vdc ( $\pm 10\%$ )
- TF48MH 90-250Vac ( $\pm 10\%$ )

### Burden:

- $< 5\text{VA}$

### Frequency:

- 50/60Hz

### Time Ranges:

- 0.01 to 99.99sec, 0.1 to 999.9sec, 1 to 9999sec, 00:01 to 99:59min, 0.1 to 999.9min, 1 to 9999min, 00:01 to 99:59hrs, 0.1 to 999.9hrs, 1 to 9999hrs

### Relay Output:

- Single pole changeover contact and single pole N/O contact

### Contact Rating:

- OP1 10A at 250Vac/30Vdc (resistive)
- OP2 5A at 250Vac/30Vdc (resistive)

### Relay Contact Life:

- Electrical: 200,000 operations
- Mechanical: 5,000,000 operations

### SSR Drive Output:

- Open collector output  
maximum 30Vdc, 100mA

### Start, Gate & Reset Inputs:

- PNP or NPN programmable
- minimum pulse/void durations adjustable from 5 to 100ms
- PNP active level is a 5 to 30V pulse
- NPN active level is a 0 to 2V pulse

### Operating Temperature:

- $0^{\circ}\text{C}$  to  $50^{\circ}\text{C}$

### Storage Temperature:

- $-25^{\circ}\text{C}$  to  $70^{\circ}\text{C}$

### Enclosure:

- Panel mounting to DIN 43700
- Self extinguishing plastic case
- Plug in connection terminals

### Enclosure Code:

- Case front IP65
- Case rear IP20

### Weight:

- 230g

### Markings:

- CE marked (meets EN61010-1:2010 low voltage and EN61326-1:2013 EMC directives)

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# TEMPATRON

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Specification subject to change without notice.