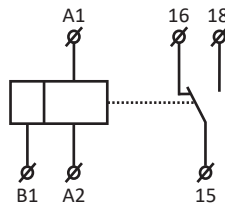# Timetec-17F-1D

Digital Multifunction Time Relay

The Timetec-17F-1D is a Digital Multifunction Time Relay that can be used for controlling lights, heating, motors, pumps, machines and appliances where you need various timing function.

- 17 selectable functions
- Set precise times via the digital and programming buttons
- Time range 0.1s - 999 hours
- Supply 24Vac/dc - 240Vac/dc
- Output contact: 1 x changeover 8A
- 1-module, DIN-Rail mounting

Order Code

Timetec-17F-1D

Timetec-17F-1D Technical Specification

Number of Functions	17
Supply Terminals	A1 - A2
Voltage Range	24Vac/dc - 240Vac/dc (50 - 60Hz)
Consumption (Apparent / Loss)	AC max. 1 - 4VA / DC max. 1 - 3W
Max. Dissipated Power (Un + Terminals)	4W
Supply Voltage Tolerance	-15%, +10%
Time Ranges	0.1s - 999 hrs
Time Setting	Buttons SET / ADJ
Repeat Accuracy	± 0.5% (of selected range)
Variation in Timing due to Voltage change	± 2%
Variation in Timing due to Temp. change	± 5%
Control Terminals	A1 - B1
Changeover Contacts	1 x Changeover / SPDT (AgNi)
Rated Current	8A / AC1
Breaking Capacity	2000VA / AC1, 192W / DC
Inrush Current	10A / < 3s

Techna TIMER RELAYS

Timetec-17F-1D Technical Specification

|	
Switching Voltage	250Vac / 24Vdc
Output Indication	Multifunction Red LED
Mechanical Life	10,000,000 Cycles
Electrical Life (AC1)	50,000 Cycles
Operating Temperature	-10°C to +55°C
Storage Temperature	-30°C to +70°C
Isolation (between Input and Output)	2.5kV
Operating Position	Any
Mounting	DIN-Rail EN 60715
Protection Degree	IP30 from Front Panel / IP20 Terminals
Overvoltage Category	III
Pollution Degree	2
Max. Cable Size (mm²)	Solid Wire max. 1x 2.5 or 2x 1.5 / Stranded Wire with Ferrule max. 1x 2.5 (AWG 12)
Dimensions	85 x 18.2 x 76mm
Weight	78g

Timetec-17F-1D Functions

0 - ON Delay

Timing commences when supply is present. R energises at the end of the timing period.

1 - Cyclic OFF/ON {OFF Start, (Sym, Asym)}

T_{ON} and T_{OFF} can be the same or different. The relay (R) keeps on changing its status until the power is removed.
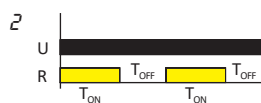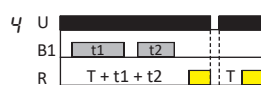
2 - Cyclic ON/OFF {ON Start, (Sym, Asym)}

This function is similar to 1, but initially the relay (R) is ON for period T_{ON} after the power is applied.
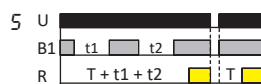
3 - Impulse ON Energising

After power ON, R energises and timing starts. R de-energises after timing is over.

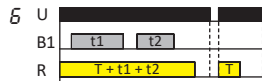**4 - Accumulative Delay ON Signal**

Time commences as supply is present and switch B1 is open. Closing switch B1 pauses timing. Timing resumes when switch B1 is opened again. R energises at the end of timing.

5 - Accumulative Delay ON Inverted Signal

Time commences as supply is present and switch B1 is closed. Opening switch B1 pauses timing. Timing resumes when switch B1 is closed again. R energises at the end of timing.

Timetec-17F-1D Functions

6 - Accumulative Impulse ON Signal

When supply is ON, R energises. When switch B1 is closed, timing is suspended and remains suspended until switch B1 is opened again. Interrupting supply resets timer.
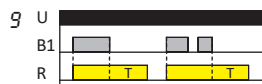
7 - Signal ON Delay

Permanent supply is required. Timing starts when switch B1 is closed. R energises at end of timing period and de-energises when B1 is opened.

8 - Inverted Signal ON Delay

Timing will commence when supply is present and switch B1 is open. R energises after timing. If B1 is closed during timing period, timing resets to the beginning of cycle.

9 - Signal OFF Delay

Permanent supply is required. R energises when switch B1 is closed. Timing commences after S is opened and then the relay de-energises.

A - Impulse ON/OFF

Permanent supply is required. R energises for the timing period when B1 is opened or closed. When timing commences, changing state of B1 does not affect R but resets timer.

B - Signal OFF/ON

When switch B1 is closed or opened for preset time, the relay (R) changes its state after time duration T.

C - Leading Edge Impulse 1

A permanent supply is needed. When B1 is closed, the output relay energises until timing, irrespective of any further action of B1.

D - Leading Edge Impulse 2

A permanent supply is required. When switch B1 is closed and remains closed, the output relay energises until timing is over. If B1 is opened during timing, R resets.
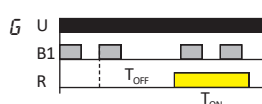
E - Trailing Edge Impulse 1

A permanent supply is required. When switch B1 is opened, R energises and de-energises when timing is over. If B1 is closed during timing, R resets.

F - Trailing Edge Impulse 2

A permanent supply is required. When switch B1 is opened, R energises and de-energises when timing is over. If B1 is pulsed during timing period it will have no effect on R.

G - Delayed Impulse

When switch B1 is closed, T_{OFF} starts. Relay energises at the end of T_{OFF} period. Then T_{OFF} starts irrespective of signal level and relay de-energises at the end of T_{ON} period.