

DIGITAL TIMER

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General Specification

- Digital Timer with START/RESET/GATE input and OUT1 & OUT2 outputs
- 2x4 7 Segment LED display
- Selectable 8 different modes
- Counts down hour/minute/second
- Loads Timer value & OUT status at the latest power failure after the first power on
- EEPROM memory to store settings
- 24VDC inputs (compatible with PNP proximity switch output)
- 72x72mm front panel

Warning:

- Use twisted pair and shielded signal cables. Connect shield to ground from the device side. Keep all signal cables away from circuit breakers, devices/cables emitting electrical noise and power cables.
- Take precauitons against environmental conditions like humidity, vibration, pollution and high/low temperature during installation.
- Use a fuse (slow 250mA 250VAC) on supply input of the device. Use appropriate cables for supply connections. Apply safety regulations during installation.

Technical Specification

• Panel Hole Size : 67x67mm

Display : 2x4 Digit 7 Segment display

• Inputs : START / RESET / GATE

3x max. 32VDC (OFF:0....2VDC, ON:7....32VDC)

• Gate Input : Inhibits count-down when GATE is ON.

Output : Out1, Out2; 2xRelay (NO-O-NC), 250VAC, 2A, Resistive load
 Time base : Selectable; 99:59 hours / 99:59 minutes / 599.9 seconds

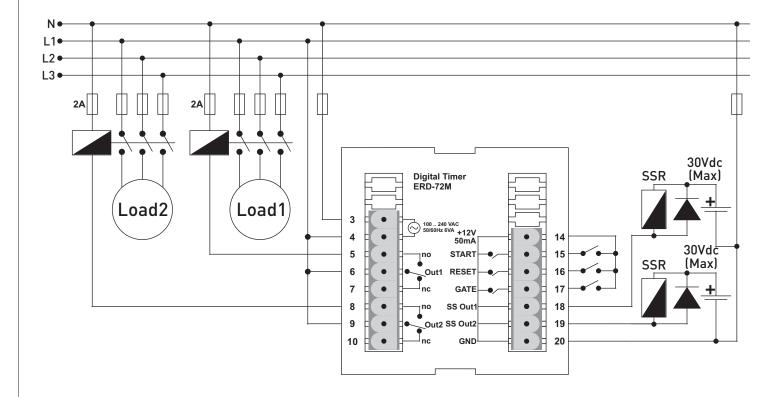
Modes : Selectable 8 different modes

Sensor Supply Out : 12VDC, 50mA max.Supply Voltage : 100....240VAC, 50-60Hz

Pow. Consump. : < 8VA

Operating Temp. : -20 °C....55 °C
Operating Altitude : < 2000m

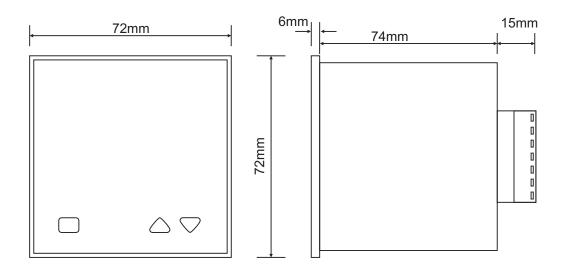
Connection



Notes:

- "SS Out" return should directly connected to "GND pin".
- Use free-wheeling diode to protect "SS Out"

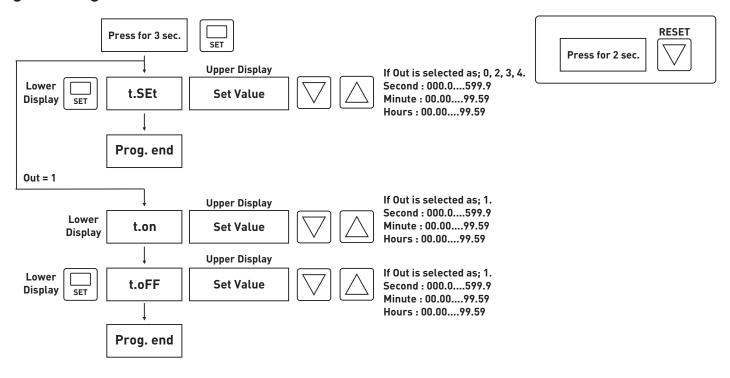
Dimensions:



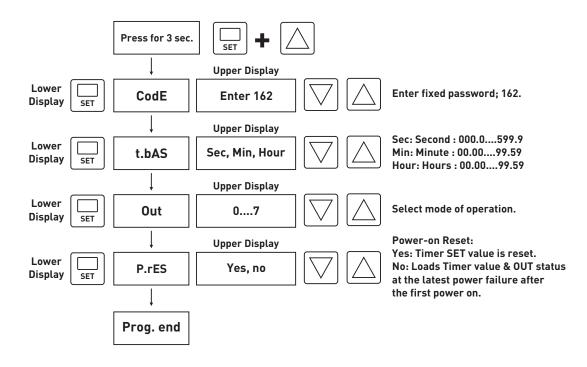
Programming Parameter:

Programming Timer SET Value:

Front Panel RESET:

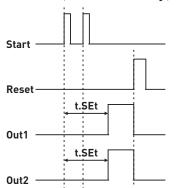


Selecting Time Base & Modes:



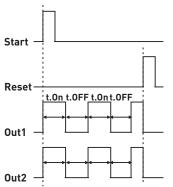
Modes of Operation:

Mode: 0; Pulsed Delay, OFF with RESET



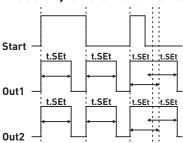
Out1 & Out2 become ON
"t.SEt" after START input is
triggered (OFF→ON).
START input can not
re-triggered timer
until it is reset with
RESET input.
OUT1 & OUT2 are OFF
when RESET input is ON.

Mode: 1; Flashing with START/RESET



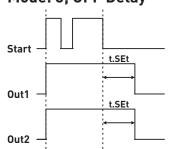
Out1 & Out2 are periodically first ON for "t.On" and then OFF for "t.OFF" after START input is triggered (OFF → ON).
OUT1 & OUT2 are OFF when RESET input is ON.

Mode: 2; One Shot after ON and OFF



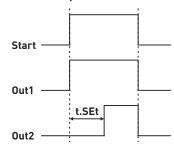
Out1 & Out2 become ON
when START input is triggered
(OFF → ON) or (ON → OFF)
and become OFF after "t.SEt".
START input can re-trigger
when Out1 & 2 are ON.
Out1 & 2 are OFF when
RESET input is ON.

Mode: 3: OFF Delay



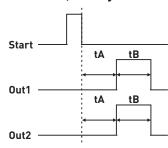
Out1 & 2 become ON when START input is ON. Out1 & 2 become OFF "t.SEt" after START input is triggered (ON → OFF). Out1 & 2 are OFF when RESET input is ON.

Mode: 4; Follow & ON Delay



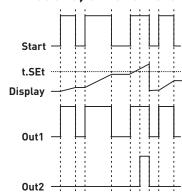
Out1 is ON when Start input is ON. Out2 becomes ON "t.SEt" after START input is ON. Out1 & 2 are OFF when START input is OFF. Out1 & 2 are OFF when RESET input is ON.

Mode: 5; Delayed One Shot after OFF



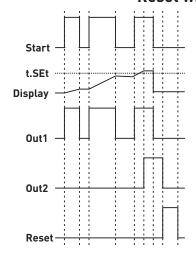
Out1 & 2 are first ON after "tA" and then OFF after "tB" when START is triggered (ON → OFF). START input does not re-triggered before "tB" elapses. Out1 & 2 are OFF when RESET input is ON.

Mode: 6; Chronometer - Count with START



Out1 is ON and timer counts up when START in ON. Timer freezes when START is OFF. Out2 is ON when timer elapses T.SEt. Timer resets and Out1 & 2 are OFF when START is OFF after Timer elapses T.SEt. Out1 & 2 are OFF when RESET input is ON.

Mode: 7; Chronometer - Count with START, Reset with RESET



Out1 is ON and timer counts up when START is ON. Timer freezes when START is OFF. Out2 is ON when timer elapses T.SEt. Timer resets and Out1 & 2 are OFF when RESET input is ON.

Notes:

- For Mode1; t.On and t.OFF are accepted as min. 000.1 sec, 00.01 min, and 00.01 hour.
- Timer counts up for Mode 6 & 7, and down for other modes.
- For all modes; counting is inhibited (or frozen) when GATE in ON.