

# Etsilon



## Multifunction Timer PTR725

### Features

- ▶ 3 digit white display
- ▶ Single set point
- ▶ ON delay / Interval / Cyclic On first, Cyclic Off first
- ▶ 48 x 48mm size
- ▶ 2 Relay (SPDT)

# INDEX

## CONTENTS

Page No.

### A) SAFETY PRECAUTIONS

SAFETY SUMMARY.....	03
LOAD CONNECTION.....	03
MODE OF OPERATION.....	03

### B) OVERVIEW

SPECIFICATIONS.....	04
MECHANICAL INSTALLATION.....	04

### C) TERMINAL CONNECTION.....05

### D) PROGRAMMING

PROTECTION LEVEL.....	06
CONFIGURATION INSTRUCTION.....	06
TO PROGRAM SET VALUE.....	07

## A) SAFETY PRECAUTIONS

### ⚠ SAFETY SUMMARY

All safety related modifications, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure the safety of the operating personnel as well as the instrument.

If the equipment is not handled in a manner specified by the manufacturer it might impair the protection provided by the equipment.

- Read complete instructions prior to installation and operation of the unit.

⚠ **WARNING:** Risk of electric shock.

### INSTALLATION GUIDELINES

#### ⚠ INSTALLATION GUIDELINES:

1. This equipment, being built-in-type, normally becomes a part of main control panel and in such case the terminals do not remain accessible to the end user after installation and internal wiring.
2. Do not allow pieces of metal, wire clippings, or fine metallic fillings from installation the product or else it may lead to a safety hazard that may in turn endanger life or cause electrical shock to the operator.
3. Circuit breaker or mains switch must be installed between power source and supply terminals to facilitate power 'ON' or 'OFF' function. However this switch or breaker must be installed in a convenient position normally accessible to the operator.
4. Use and store the temperature controller within the specified ambient temperature and humidity ranges as mentioned in this manual.

#### ⚠ CAUTION:

1. When powering up for the first time, disconnect the output connections.
2. Fuse protection: The unit is normally supplied without a power switch and fuses. Make wiring so that the fuse is placed between the mains power supply switch and the controller. (2 pole breaker fuse-rating: 275V AC, 1A for electrical circuitry is highly recommended)
3. Since this is a built-in-type equipment (finds place in main control panel), its output terminals get connected to host equipment. Such equipment shall also comply with basic EMI/EMC and other safety requirements like BSEN61326-1 and BSEN61010 respectively.
4. Thermal dissipation of equipment is met through ventilation holes provided on chassis of equipment. Such ventilation holes shall not be obstructed else it can lead to a safety hazard.
5. The output terminals shall be strictly loaded to the manufacturer specified values / range.

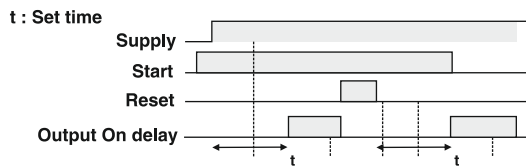
### LOAD CONNECTION

For load current less than 0.5A	For bigger loads, use interposing relay / contactor

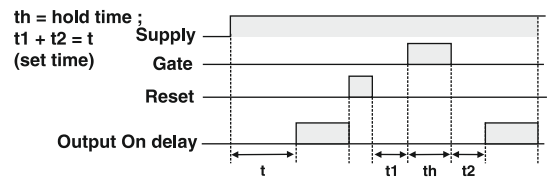
### MODE OF OPERATION

<p><b>1.On delay, Interval modes:</b></p> <p>t : Set time</p>	<p><b>2.Cyclic ON first, Cyclic OFF first modes:</b></p> <p>t1 : ON time ; t2 : OFF time</p>
---	--

## Typical application of Continuous start and reset in On delay mode:



## Typical application of Gate start :



## USER GUIDE

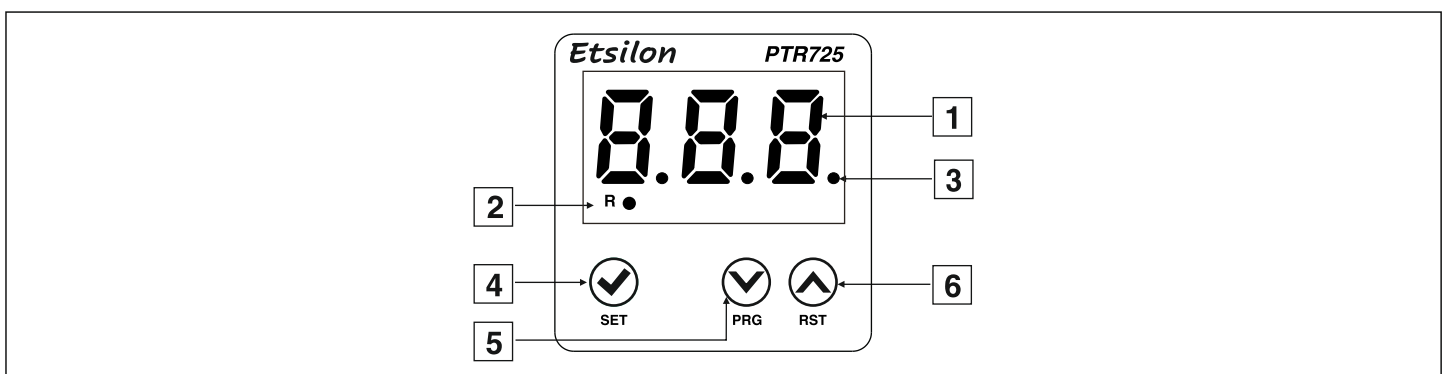
USER GUIDE	START: Pulse / Gate
<b>A) Pulse:</b> Timing starts on momentary closure of switch connected between START and COMMON terminals. <b>B) Gate:</b> Timing starts at power ON. When START & COMMON is closed timing freezes and it resumes only when the shorting is opened.	

## B) OVERVIEW

### SPECIFICATIONS

Display	3 digit, 0.56" 7 segment LED display (white)
Supply	90 to 270V AC/DC, 50/60 Hz, 5VA max
Operating modes	On delay, Interval, Cyclic On first, Cyclic Off first
Time ranges	9.99/99.9/999 sec, 9.59 min: sec, 99.9/999 min, 9.59 hour: min, 99.9/999 hour
Direction	Down / Up
Relay rating	5A @250V AC / 24V DC, Resistive
Start input	Pulse, Gate (programmable)
Reset	On interruption of power (selectable), Front panel reset & terminal reset
Outputs	2 Relay (SPDT)
Memory retention	10 years
Accuracy	<b>Setting:</b> $\pm 0.05\%$ of set time or 50 msec (whichever is greater) <b>Repeat:</b> $\pm 0.05\%$
Temperature	Operating: 0 °C to 50 °C, Storage: -20 °C to 75 °C
Humidity	95% RH (non condensing)
Housing	PC trans black
Weight	120 gm

### LED INDICATIONS AND DISPLAY



1	Process time
2	Output status ( light when output is ON )
3	Timer Indicator ( blink in online mode )
4	To set process time
5	Configuration mode
6	For reset

## MECHANICAL INSTALLATION

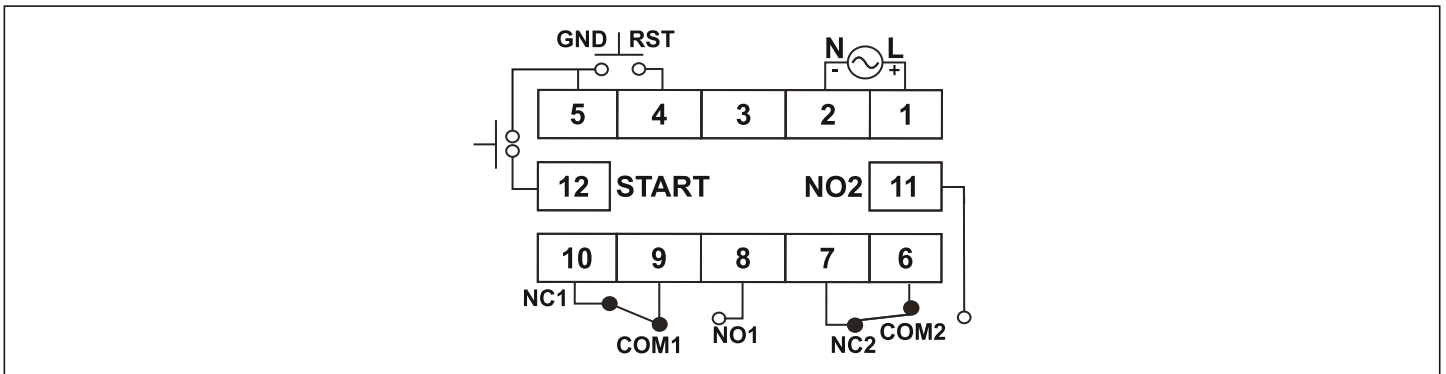
For installing the timer

1. Prepare the panel cutout with proper dimensions as shown below :

Outline Dimensions (in mm)	Panel cutout Dimensions (in mm)
<p>Front bezel: 52mm x 52mm</p> <p>Side view: 76mm x 45mm (4mm flange)</p> <p>Panel Cutout: 46mm x 46mm</p>	<p>Panel Cutout: 46mm x 46mm</p>

2. Remove the clamp from the controller and push the controller into the panel cutout. Insert the clamp from the rear side until the main is securely fit into the panel.

## C) TERMINAL CONNECTION



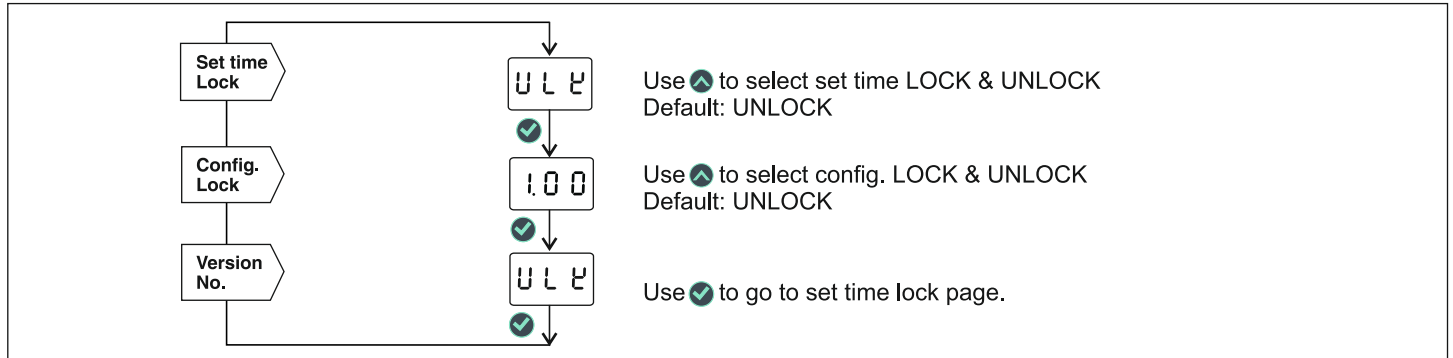
## RESET METHOD

Press (RST) key continuously for 3sec. to reset the unit.

## D) PROGRAMMING

### PROTECTION LEVEL

NOTE: Press + together continuously for 3 sec. to enter into protection level.



The unit will auto exit lock mode after 30sec. of key inactivity or by pressing + keys together continuously for 3 sec to exit the function.


### CONFIGURATION INSTRUCTION



1. Enter configuration by pressing key for 3 sec.
2. Scroll various function ranges by pressing & key.
3. Scroll various parameter by pressing the key.

The unit will auto exit program mode after 30 sec. of key inactivity or by pressing (PROG) key continuously for 3 sec.


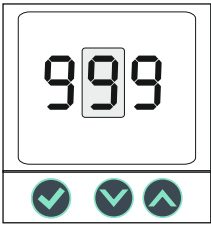









MODE	DISPLAY	DISCRIPTION
Config Lock	000	Prompt only if configuration lock enabled in PROTECTION LEVEL Lock code = 85 [fixed]
Output Modes	0n	Use  &  keys to select various modes ON delay, Interval, Cyclic ON first, Cyclic OFF first Default: ON delay
Time Range	<div>  99.9   99.9   99.9 </div>	<p>This parameter prompted only in ON delay &amp; Interval mode. Default: 99.9s</p> <p>This parameter prompted only in cyclic mode Default: For ON time - 99.9s For OFF time - 9.99s</p>
Direction	down	Use  &  keys to select direction Up or Down Default: Down
Start	Gate	Use  &  keys to select Gate or Pulse. Default: Gate
Front panel reset	YES	Use  &  keys to select Yes or No Default: Yes
Power on reset	No	Use  &  keys to select Yes or No Default: No
Default	No	Use  &  keys to select Yes or No Default: No

## TO PROGRAM SET VALUE


**Note 1:** Press  key continuous for 3 sec to edit the set value.

**Note 2:** The corresponding digit will increment or decrement from 0 to 9 using  &  key respectively.

**Note 3:** Press  key to shift the digit.

Only if mode selected is on delay / Interval					
Set 1st digit		Set 2nd digit		Set 3rd digit	
<b>Note :</b> Press  key continuous for 3 sec to exit set value function.					
Only if mode selected is cyclic					
Set 1st digit		Set 2nd digit		Set 3rd digit	
<b>Note :</b> Press  key continuous for 3 sec to store the On time value and move to next parameter that is off time value.					
Set 1st digit		Set 2nd digit		Set 3rd digit	

**Note :**

- 1) Press  key continuous for 3 sec to exit set value function.
- 2) If the set value is 000 then timer must hold (not work) & all indications will be OFF.
- 3) The unit will auto exit set value mode after 30 sec of key inactivity

**Etsilon**

**Factory Address :** EL-27/1, Electronic Zone, TTC Industrial Area, MIDC, Mahape, Navi Mumbai - 400710, India.

**Website :** [www.etsilon.com](http://www.etsilon.com) | **Customer Care No.** 7304413724 | **Email :** [support@etsilon.com](mailto:support@etsilon.com)

**For Service :** Tel. No. : 9136977317 | **Email :** [service@etsilon.com](mailto:service@etsilon.com)