

WITH MEMORY, 4 RELAY FUNCTIONS, SETPOINT ON PUSHWHEEL SWITCH



- Non-volatile memory
- 1 setpoint, on pushwheel switches
- 9 user selectable ranges, 0.01 s to 9999 h
- 4 user selectable relay functions
- Incrementing / decrementing display
- 4 control inputs
- Fixed/Configurable control inputs
- ± 0.01% quartz crystal accuracy
- Supply voltage : 85 ~ 265 V AC OR 24 V DC

## SPECIFICATIONS

All specifications at ambient of 25 °C, unless specified otherwise

<b>Range</b>	See Table 1
<b>Resolution</b>	See Table 1
<b>Accuracy</b>	± 0.01% of reading ± 0.2 second
<b>Timing start delay (after application of power)</b>	0.05 Sec (max)
<b>OUTPUTS</b>	
<b>No. of relays</b>	1
<b>Relay contacts</b>	1 x NO-C-NC + 1 x NO-C
<b>Relay contact rating</b>	5A / 230V AC, resistive
<b>Functions</b>	See Fig.1, 2
<b>Mutual isolation between Input/Output/Supply</b>	1500 V AC / 1 Minute
<b>CONTROL INPUTS</b>	
<b>No. of control inputs</b>	4
<b>Control input function configuration</b>	a) Fixed b) User configurable See Table 2, 3
<b>Control input functions</b>	
<b>Assignment of control input functions to control inputs</b>	a) Fixed : See Table 2 b) User configurable : i) Any control function can be assigned to any control input ii) One control function can be assigned to any one control input only (See Table 3)
<b>Front panel reset</b>	Will have the same function as reset function selected for control input
<b>POWER SUPPLY</b>	
<b>Supply voltage</b>	85~265 V AC OR 24 V DC
<b>INDICATION</b>	
<b>Display</b>	4 digit, 7 segment 0.52" (13.2 mm) red LED display
<b>MEMORY</b>	
	Non volatile, indefinite retention (for elapsed time)
<b>PROGRAMMABLE PARAMETERS</b>	
<b>Setpoint</b>	1x4 digit pushwheel switches
<b>Timer Start (After timer start)</b>	Power ON, Control input 1(Start)
<b>Control input 1</b>	Refer Table 3 (For order code 2247-02)
<b>Control input 2</b>	Refer Table 3 (For order code 2247-02)

<b>Control input 3</b>	Refer Table 3 (For order code 2247-02)
<b>Control input 4</b>	Refer Table 3 (For order code 2247-02)
<b>Units</b>	Seconds / Minutes / Hours
<b>Resolution</b>	0.01, 0.1, 1
<b>Functions</b>	a) ON delay b) OFF delay c) Cyclic C1(Relay ON at power ON) d) Cyclic C2(Relay OFF at power ON) (See Fig 1,2)
<b>Direction</b>	Up (incrementing) Down (decrementing)
<b>Reset lock (For front key reset)</b>	ON, OFF
<b>Program lock</b>	ON, OFF
<b>OTHER</b>	
<b>Keyboard</b>	Tactile, 2 keys
<b>Enclosure construction</b>	Plug-in (circuit removable without affecting terminal wiring)
<b>Dimensions (in mm)</b>	72(H) x 72(W) x 100(D)
<b>Mounting</b>	Panel mount
<b>Panel cutout</b>	68 x 68 mm
<b>Operating ambient temperature</b>	0~50 °C
<b>Relative humidity</b>	Below 90%, non condensing

**TABLE 1 - RANGE SELECTION**

UNIT	RANGE	RESOLUTION
s	99.99 s	0.01 s
s	999.9 s	0.1 s
s	9999 s	1 s
m	99 m 59 s	1 s
m	999.9 m	0.1 m
m	9999 m	1 m
h	99 h 59 m	1 m
h	999.9 h	0.1 h
h	9999 h	1 h

## OPERATING MODES

t = SETPOINT      RELAY ON      RELAY OFF      SUPPLY ON      START PULSE

### POWER ON START

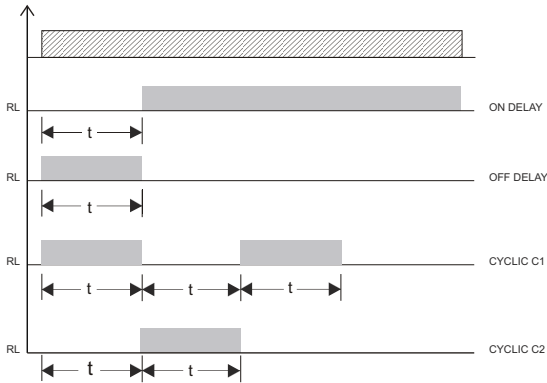


Fig 1

### START PULSE

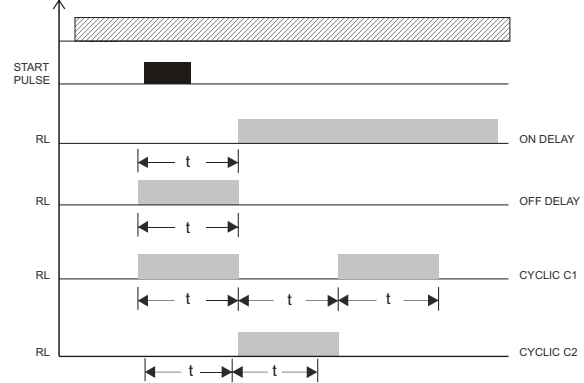


Fig 2

TABLE 2 - FIXED CONTROL INPUTS (ORDER CODE : 2247-01)

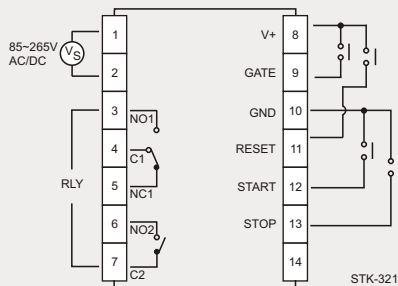
CONTROL INPUT FUNCTION	DESCRIPTION	CONTROL INPUT FUNCTION	DESCRIPTION
1 Start	Start the timer	3 Gate	Freeze the timer as long as input is present & relay maintain status.
2 Reset	Timer is reset as long as input is present, timer starts when input is removed.	4 Stop	Stop the timer & relay turn OFF.

TABLE 3 - CONFIGURABLE CONTROL INPUTS (ORDER CODE : 2247-02)

CONTROL INPUT FUNCTION	DESCRIPTION	CONTROL INPUT FUNCTION	DESCRIPTION
1 Start	Start the timer	6 Gate2	Freeze the timer as long as input is present & relay turn ON.
2 Reset1	Timer is reset as long as input is present, timer starts when input is removed.	7 Gate3	Freeze the timer as long as input is present & relay turn OFF.
3 Reset2	Pulse reset, reset the timer & start immediate.	8 Stop1	Stop the timer & relay maintain status.
4 Reset3	Reset the timer, start pulse is require to start the timer.	9 Stop2	Stop the timer & relay turn ON.
5 Gate1	Freeze the time count as long as input is present & relay maintain status.	10 Stop3	Stop the timer & relay turn OFF.

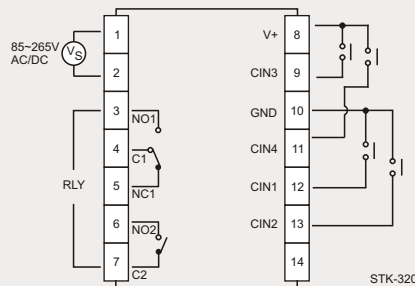
## CONNECTION DIAGRAM

### FIXED INPUTS



ORDER CODE : 2247-01

### CONFIGURABLE INPUTS



ORDER CODE : 2247-02

## ORDERING INFORMATION

ORDER CODE	
2247	A
A	Control Inputs
01	Fixed
02	Configurable

### Ordering Options

The following ordering options are available on request. Minimum order quantity and/or minimum order value may apply.

	Option	Details
1.	Supply voltage	24 V DC
2.	Supply voltage	24 V AC

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