

# Electronic Timers

## Asymmetrical Recycler XT



### DESCRIPTION

Asymmetrical recycler with 2 functions and 4 time ranges. The function is selected by mounting a jumper and the time range is selectable via the front mounted rotary switch.

The pulse and pause time ranges cover 0.6sec.-60min. or 0.6min.-60hrs. Pulse and pause time are individually adjustable on the timer front. The timer can directly be connected to the supply voltage in the range of 10.5-265V AC/DC.

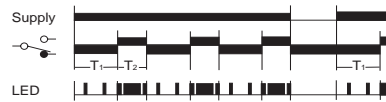
Single or double relay output with LED indication of energized relay. Intermittent flashing of LED indicating timing period (over 6 sec.). Versions available for DIN rail or 11-pole plug-in mounting.

### OPERATION

#### Asymmetrical recycler with pause start.

When supply voltage is connected and the pause time has elapsed, the output relay is energized. The relay remains energized through the pulse period. The sequence is repeated until the supply voltage is disconnected.

When the supply voltage is disconnected, the timer resets.



#### Asymmetrical recycler with pulse start.

By connecting terminals 5 and 7 (B1 and B2) the recycler starts with a pulse i.e. the relay is energized when supply voltage is applied.



Please note that the function: Pause start/pulse start is determined at power up. If the terminals 5 and 7 (B1 and B2) are connected or disconnected after power up, it will not change function.

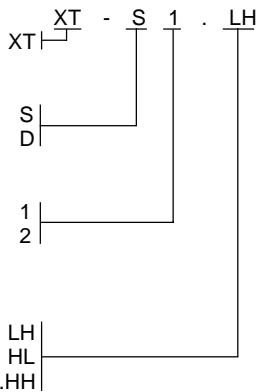
### VERSIONS/ORDERING CODES

**Type:**  
Asymmetrical recycler.

**Mounting:**  
11 pole plug-in.  
DIN rail.

**Output relay:**  
SPDT.  
DPDT <sup>1)</sup>.

**Timing range (pause/pulse):**  
0.6sec-60min./0.6sec-60min.  
0.6sec-60min./0.6min-60hours. LH  
0.6min-60hours. /0.6sec-60min. HL  
0.6min-60hours. /0.6min-60hours.HH



## TECHNICAL DATA

Time ranges:	Code	Time ranges
		0.6-6sec. 6-60sec. 0.6-6min. 6-60min.
	H	0.6-6min. 6-60min. 0.6-6hrs. 6-60hrs.

Full linearity between the ranges is provided i.e. an adjustment made to a specific time in seconds will give the same time in minutes just by operating the range switch.

### Timer accuracy:

Repeating accuracy:  $\pm 0.5\%$  at constant conditions.  
Setting accuracy:  $\pm 10\%$ .  
Temperature drift: Max. 0.15% per °C.

### Reset time:

Max. 100msec.

### Output relay:

SPDT or DPDT. <sup>1)</sup>  
Load ( $\cos\phi=1$ ):  
D1/S1: Max. 8A/240V AC <sup>3)</sup>  
Min. 10mA/24VDC  
S2: Max. 5A/240V AC <sup>3)</sup>  
Min. 100mA/24VDC

Contact material: D1/S1: AgNi 0,15  
S2: AgCdO  
Frequency: Max. 1000 operations per hour at max. load.  
Mechanical life time: Min.  $10 \times 10^6$  operations.  
Electrical life time: Min. 100,000 operations at max. load.  
Operate time: Max. 50msec.  
Release time: Max. 20msec.

### Mounting:

S1/S2: 11-pole plug-in.  
D1: Directly on DIN rail TS35 (EN50022).

**Terminals:** (D1 only) Max. conductor size 4 mm<sup>2</sup>.  
Screw type terminals with self-lifting clamps shrouded in accordance to VDE0106 (finger and back of hand protection).

**Supply voltage:** 10.5-265V AC/DC

**Mains frequency:** 40-440Hz.

**Consumption:** 0.5-3VA.

### Cable lengths:

Supply voltage: Max. 50 m.

### Protection:

S1/S2: IP40.  
D1: IP20.

### EMC:

Conforming to EN 50081-1/EN 50082-2.

### Isolation:

Supply to relay contacts: 2kV AC according to EN 60950 class I.

**Ambient temperature:** -20 to +55°C.

### Housing:

Black Noryl SE-1.

### Weight:

Typically 80 g.

## NOTES/REMARKS

- 1) Double output relay only available in S2 versions.
- 2) Terminals 2 & 7 (A1 & B2) are internally connected.
- 3) When inductive or DC loads are switched the load capacity of the output relay is reduced, see the output load diagrams on fig. 1 and 2. When inductive loads are switched, it is recommended to use a RC-network, see accessories on page 130, to protect the relay contacts.

## WIRING DIAGRAMS

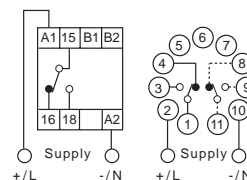
### Supply voltage above 50V.

The installation (all terminals) must be carried out according to the safety regulations! The control input and the supply input must be connected to the same circuit (phase and main switch). The output relay may only be used in circuits made according to the safety regulations.

### Supply voltage below 50V.

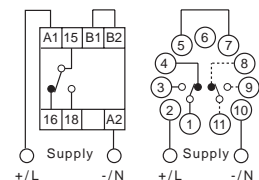
The output relay may NOT be used for voltages above 50V unless the entire supply circuit is made according to the safety regulations.

### Pause start



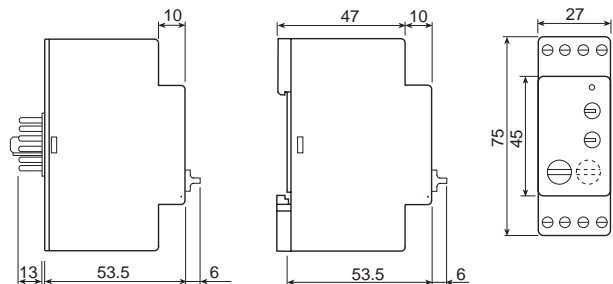
note 1, 2

### Pulse start



note 1, 2

## MECHANICAL DIMENSIONS



## OUTPUT LOAD DIAGRAMS

Fig. 1

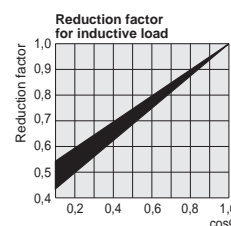


Fig. 2

