

Operating voltage 24 .. 300V AC/DC (T1-LR, T1-XS, PH1-20L , SD1-24, SD1C-24)  
150 .. 500V AC/DC (SD1, SD1C)

### Adjustment values

Time range :  
(T1-LR)



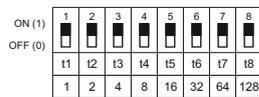
$t_{off}$  (1,2,3,4)  $t_{on}$  (5,6,7,8)

0000	: 1 second	1000	: 10 minutes
0001	: 5 seconds	1001	: 30 minutes
0010	: 10 seconds	1010	: 1 hour
0011	: 20 seconds	1011	: 5 hours
0100	: 30 seconds	1100	: 10 hours
0101	: 60 seconds	1101	: 30 hours
0110	: 100 seconds	1110	: 100 hours
0111	: 5 minutes	1111	: 10 days



$t_{on}$ ,  $t_{off}$  multiplier values :  
(T1-LR)  
0.9 - 1

$t_{on}$ ,  $t_{off}$  time adjustment :  
(T1-LR)  
(time range) x (multiplier)



multiplier values ( $t_m$ ) :  
(T1-XS)  
1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

addition values ( $t_a$ ) :  
(T1-XS)  
0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9

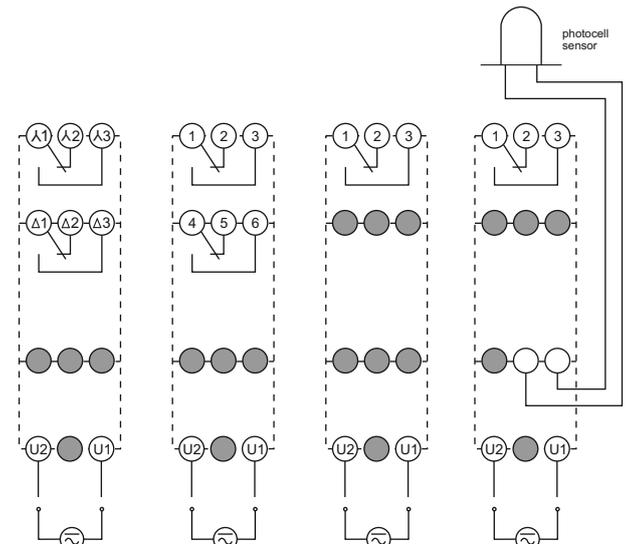
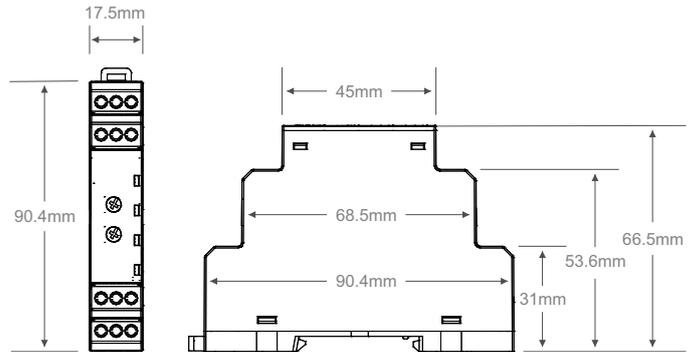
$t_{off}$  time adjustment :  
(T1-XS)  
( $t_1 + t_2 + t_3 + t_4 + t_5 + t_6 + t_7 + t_8$ ) x  $t_m + t_a$

time adjustment ranges :  
(All SD1 and SD1C)  
 $t_{\lambda}$  : 1 .. 30 second (star time)  
 $t_{\lambda-\Delta}$  : 20 .. 500 millisecond (star-delta delay)

time adjustment ranges :  
(PH1-20L)  
1 - 5 - 10 - 15 - 20 - 25 - 30 - 35 - 40 - 45 second

Output contact	1 C/O (T1-XS, PH1-20L, SD1C, SD1C-24) 2 C/O (T1-LR, SD1, SD1-24)
Maximum switching current	10A
Maximum switching voltage	250V AC
Maximum switching power	1250VA
Lux adjustment range (PH1-20L)	1-20 lux
Sensor cable length (PH1-20L)	2 x 10m
Operating temperature	-20°C .. 60°C
Storage temperature	-40°C .. 75°C
Protection class	IP20
Connection	Rail mounted

type	output contact	time adjustment range	order no
PH1-20L	1	1 .. 45sec	270 050
T1-LR	2	0.1sec .. 10day	270 356
T1-XS	1	0 sec .. 2559sec	270 357
SD1	2	1 .. 30sec, 20 .. 500msec	270 358
SD1-24	2	1 .. 30sec, 20 .. 500msec	270 362
SD1C	1	1 .. 30sn, 20 .. 500msn	270 364
SD1C-24	1	1 .. 30sn, 20 .. 500msn	270 365

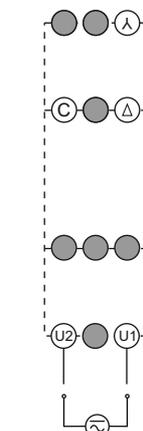


150..500V ac/dc  
24..300V ac/dc  
SD1 / SD1-24

24..300V ac/dc  
T1-LR

24..300V ac/dc  
T1-XS

24..300V ac/dc  
PH1-20L



150..500V ac/dc  
24..300V ac/dc  
SD1C / SD1C-24

DEVICE	FUNCTION DEFINITION	FUNCTION DESCRIPTION
T1-LR (Left-right relay)		Initially first relay is energized. After the adjustable time delay $t_{on}$ relay is de-energized. Both relays are de-energized during the adjustable time delay $t_{off}$ . At the end of $t_{off}$ second relay energizes. Second relay stays in this position during $t_{on}$ . When $t_{on}$ finished both relays are de-energized. This cycle is repeated continuously.
T1-XS (On-delay timer)		TR17-XS is an ON delay timer that allows a sensitive time setting from 0 to 2559 second with 1 second increments. The output relay is initially de-energized and energized after the time delay $t$ is expired.
SD1 (Star-delta relay)		When energy applied to device, star relay is energized until the end of the adjustable $t_{\lambda}$ time. At the end of the adjusted delay time $t_{\lambda-\Delta}$ , delta relay is energized until the device is powered off.
PH1-20L (Photocell relay)		PH1-20L photocell relay measures the luminous intensity by means of a photocell sensor. On-off threshold value is adjusted in the range of 1-20 lux, via the front adjustment dial. The output relay is energized when the ambient light level is below the adjusted limit. On and off delays are adjustable between 1 and 45 seconds, via the front panel knobs. On delay is adjusted by $t_m$ knob, and off delay is adjusted by $t_{off}$ knob.

**Warning :** If adjustments are accomplished after device is turned on, operator should power down the device, wait at least 0.3 seconds and power up the device (except PH1-20L).