DIN Timers TD

- 22.5mm DIN rail mounting Electronic Timers
- ⊠ AC/DC coil operation
- ⊠ Multi-time range
- ⊠ Multi-function, On-delay, Off-delay and Star/Delta versions
- \boxtimes Voltage range selectable
- Marking plate cover

Options and ordering codes



IMO

TD	MA	Multi Voltage Options					
DIN rail mount timers							
Multi-function	МА						
4 function	MC	All timers are Multi-voltage					
Multi-function 2 C/O	MB	I/P 24VAC/DC and 100-230VAC selectable	Multi Voltage Options				
On-delay	EA	on unit. Except EA+RA	multi voltage options				
Off-delay	RA	models					
Asymmetrical recycling	IA	EA + RA models only	110VAC + 24VAC/DC				
True off-delay 3 minutes	AA	EA + RA models only	230VAC + 24VAC/DC				
True off-delay 10 minutes	AB	SF model only	24VAC/DC				
Star/Delta	SD	SF model only	110VAC				
On delay single function	SF	SF model only	230VAC				

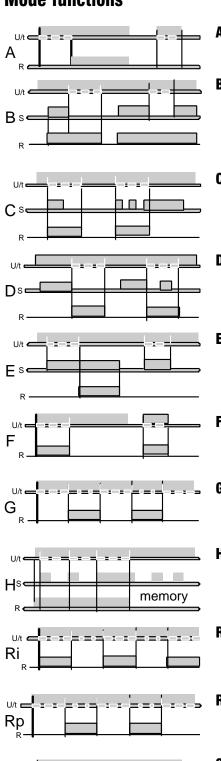
Specification

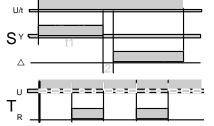
		TDMA	TDMC	TDMB	TDEA	TDRA	TDIA	TDAA	TDAB	TDSD	TDSF		
Operation modes		A,B,C,D E,F,G,H	A,B,F,G	A,B,C,D E,F,G,H	A	В	Rp,Ri	Т	Т	S	A		
Time range		0.05sec 10 days	0.05sec- 10 days	0.05sec 10 days	0.05sec 10 days	0.05sec 10 days	0.05sec 10 days	0.1sec 3 min	0.1sec 10 min	0.5sec-3minY 40-100ms Y	1-10 min		
Accuracy			•	•	•	±0.	5% FS		•				
Supply voltage		24VDC ±10%, 24VAC-15% +10%, 110-230VAC-15% +10%											
Nominal power consumption		24V 1.5VA/ 1W-110V 2VA 230V 8VA	24V 1.5VA/ 1W-110V 2VA 230V 8VA	24V 1.5VA/ 1W-110V 2VA 230V 11VA	24V 1.5VA/ 1W-110V 2VA 230V 8VA	24V 1.5VA/ 1W-110V 2VA 230V 11VA	24V 1.5VA/ 1W-110V 2VA 230V 8VA	24V 1.5VA/ 1W-110V 4VA 230V 15VA	24V 1.5VA/ 1W-110V 4VA 230V 15VA	24V 1.5VA/ 1W-110V 2VA 230V 11VA	24V 1.5VA/ 1W-110V 2VA 230V 11VA		
Input signal Control contact mu 90% of A1-A2	ist be	Power on control contact	Power on control contact	Power on control contact	Power on	Power on control contact	Power on	Power on	Power on	Power on	Power on		
Contact configurati	on	1 C/O	1 C/O	2 C/O programmable	1 C/O	1 C/O	1 C/O	1 C/O	1 C/O	1 C/O with rest position	1 C/O		
Control output		8A@250VAC	8A@250VAC	8A@250VAC	5A@250VAC	5A@250VAC	5A@250VAC	5A@250VAC	5A@250VAC	8A@250VAC	5A@250VAC		
Life expectancy	Electrical Mechanical	400,000 30 x 10 ⁶	400,000 30 x 10 ⁶	400,000 30 x 10 ⁶	100,000 10 x 10⁵	100,000 10 x 10 ⁶	400,000 30 x 10 ⁶	100,000 30 x 10 ⁶	100,000 30 x 10 ⁶	400,000 30 x 10 ⁶	100,000 10 x 10⁵		
Allowable ambient temperature		-25 °C upto +55 °C											
IP rating	Enclosures Terminals	IP40 IP20											
Terminals		Box clamp screw terminal upto 4mm ²											

DIN Timers TD continued



Mode functions





A On Delay

On application of supply voltage the time period starts to run. On completion of time the relay energises. Power off reset.

B Off delay

Supply to the unit must be continuous. On closure of the control contact (S) the relay energises immediately. On re-opening of S the time period starts to run and (R) de-energises If the control contact (S) is reclosed before "the actual time period is completed, this period will be deleted" and a new one starts on re-opening of (S).

C Single shot leading edge pulse started

Supply to the unit must be continuous. On closure of the control contact (S) the relay energises immediately and the time starts to run. On completion of the time the relay will de-energise. Activation of (S) during the time out period has no effect.

D Single shot trailing edge

Supply to the unit must be continuous. The first closure of (S) has no effect. On opening of (S) the time period starts to run and (R) energises immediately. On completion of time the relay de-energises. Activation of the control contact (S) during the time out period has no effect.

E On delay with control contact

Supply to the unit must be continuous. On closure of (S) the time period starts to run. On completion of time the relay energises and stays energised as long as (S) is closed. Opening the control contact before the time out is complete will reset the time period.

F Single shot leading edge

On application of supply voltage the time starts and (R) energises immediately. Following time out the relay will de-energise. For a new start of function the supply voltage must be interrupted.

G Flasher pause first

On application of supply voltage the time period starts to "run. The relay switches on and off for the periods, beginning" with a pause. The time period for pause and pulse is equal.

H Pulse detection

On application of supply voltage the relay energises. The first pulse of (S) starts the time period. Receiving pulses during the time period extends it and (R) stays energised. Receiving no pulses during the time period completes it and (R) de-energises. (R) stays latched until supply voltage has been interrupted.

Ri Cyclic timer pulse started

On application of supply voltage the time period starts to run. "The relay switches on and off for the periods, beginning with a" pulse. The time period for t1 and t2 can be different. The function continues as long as voltage is applied.

Rp Cyclic timer pause started

On application of supply voltage the time period starts to run. "The relay switches on and off for the periods, beginning with a" pause. The time period for t1 and t2 can be different. The function continues as long as voltage is applied.

S Star Delta

On application of supply voltage the contact 17 - 18 of the star relay is closed and the star time t1 begins to run. On completion of the t1 the star relay de-energises and the dwell time t2 starts. On completion of t2 the contact 17 - 28 of the delta relay is closed and remains in operation as long as the supply voltage is applied.

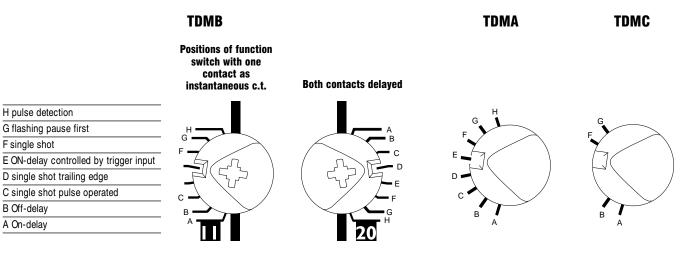
T True Off Delay

When supply voltage U is engaged the relay energises (contacts 15-18). When the supply voltage is removed the set time t begins to run. On completion of time t the output falls back to the off position (contacts 15-16). If the supply voltage U is re-engaged to "the unit before t has elapsed, the time already elapsed is cancelled" and starts again next time the supply voltage is interrupted.

DIN Timers TD continued

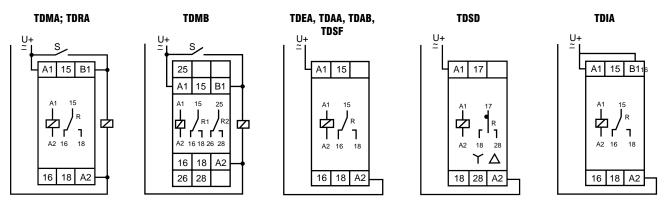


Function switches



Start function B, C, D, E and H by control contact A1-B1 if instantaneous option is selected R1 becomes timed and R2 becomes instantaneous

Connection diagrams

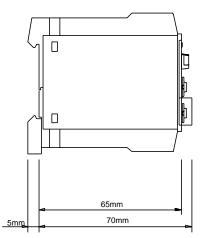


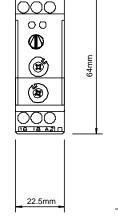
Control Function Funct

Function Rp: without link Function Ri: link A1-B1

Dimensions







TDMB

