

# Time Relays

MCB - SER - ERTC - SSR - DG Series



SER-Y/U



DG-60



MCB-20



MCB-9



ERTC-01

## PRODUCT SELECTION TABLE

Product Code	Time	ON Delay (Er)	OFF Delay (Em)	OFF Delay with Control Input (R)	ON Delay with Control Input (Es)	Single shot leading edge with control input (Ts)	Single shot trailing edge with control input (Ta)	Symmetric Flasher (Ef)	Control Input	ON Delay with Control Input Leading Edge	OFF Delay with Control Input Trailing Edge	Single Shot Leading and Trailing Edge with Control Input	ON Flasher	OFF Flasher	Down-timer	Star-Delta	Left-Right	No Voltage, Delayed impulse	Pcs / Box
ERT-01-72	Multi-function T. Relay	1 s - 100 Hours	●	●	●	●			●				●	●	●				16
ERTC-01-DIN	Multi-function T. Relay	1 s - 100 Hours	●	●	●	●			●				●	●	●				16
MCB-7	Time Relay	0,1 s - 30 Hours	●	●															28
MCB-8	Time Relay	0,1 s - 999 min	●	●															28
MCB-9	Time Relay	0,5 s - 30 Hours	●	●									●	●					28
MCB-15	Multi-function T. Relay	0,05 s - 100 Hours	●	●	●			●	●										28
MCB-20	Multi-function T. Relay	0,1 s - 100 Hours	●	●	●	●	●	●	●										28
MCB-25	Multi-function T. Relay	0,1 s - 999 Hours	●	●	●			●	●	●		●	●	●					20
MCB-30	Time Relay	2-30 s	●																28
MCB-60	Time Relay	4-60 s	●																28
SER-YU	Star - Delta Relay	(λ/U) 20-500 ms (λ) 1-60 s														●			16
SSR-2X	Right - Left Relay	0,1 s - 60 Hours															●		28
DG-10	Time Relay	0,6 s - 10 min																●	16
DG-60	Time Relay	0,1 s - 60 min																●	16
EF-10	Flasher Relay	1 - 10 s / 0,5 s											●						10
EF-10T	Flasher Relay	1 - 10 s / 0,5 s											●						10
ERB-50	Dishwasher Relay	Washing 30, 60, 90,120,180 s, Waiting 3 s, Rinsing 1-30 s																	10

## SPECIFICATIONS

	MCB-15	MCB-20	MCB-25	EF-10	MCB-7/8/9	MCB-30	MCB-60	SSR-2X	ERB-50	ERT-01	ERTC-01	SER-Y/U	DG-10/60	EF-10T
<b>ENCLOSURE</b>														
Dimensions	PK27	PK22	PK22	PK22	PK22	PK22	PK21	PK20	PK28	PK10				
Protection Class	IP40				IP20				IP40-IP20		IP20			
Weight			0,1kg/pcs				0,1kg/pcs	0,3kg/pcs	0,25kg/pcs	0,1kg/pcs		0,3kg/pcs		
<b>SUPPLY</b>														
Operating Voltage	24-240 VAC/DC	12-240 VAC/DC	24-240 VAC/DC	12-240 VAC/DC	12-240 VAC/DC	230 VAC	230 VAC	230 VAC	230 VAC	110 VAC	230 VAC	24 VAC/DC	230 VAC	
Operating Range	for Un±%20(AC) ; for Un±%10(DC)													
Power Consumption	< 4 VA			< 8 VA				< 4 VA	< 3 VA	< 8 VA	< 3 VA			
<b>OUTPUT</b>														
Repeat Accuracy	±5ms.	±%0.5	±%0.1											
Reset Time	100 ms.		< 150 ms.				100 ms.	80 ms.	120 ms.	-				
Output Contact	1 CO; 8A, 2000 VA, cosφ=1				2 CO; 10A, 2500VA, cosφ=1			1 CO; 8A, 2000VA, cosφ=1		2 NO; 5A,1250VA		1 CO; 16A,4000VA	Triyac; 8A,600VA	
<b>AMBIENT CONDITIONS</b>														
Ambient Temperature; Humidity	-5 / +55 C ; %85		-10 / +55 C ; %93			-5 / +55°C ; %85								
<b>CONNECTIONS</b>														
Mounting	Rail Mounting, Terminals with Screw													
Connection Types	Single phase 2 wires													

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## Functions of MCB-15 and MCB-20 (12~240 VAC/DC)

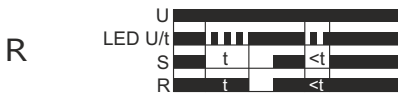
### Single shot leading edge voltage controlled input (Em) [MCB-20 & MCB-8/9]



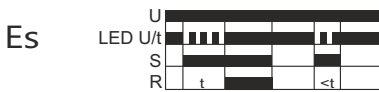
### ON Delay (Er) [MCB-15 & MCB-20 & MCB-30/60/7/8/9]



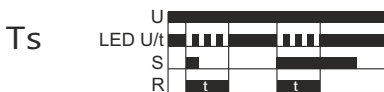
### OFF Delay with control input (R) [MCB-15 & MCB-20]



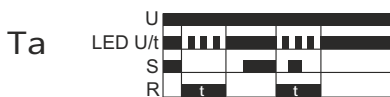
### ON Delay with control input (Es) [MCB-20]



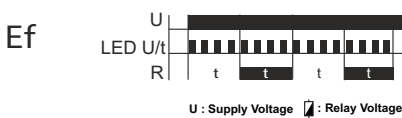
### Single shot leading edge with control input (Ts) [MCB-20]



### Single shot trailing edge with control input (Ta) [MCB-20]

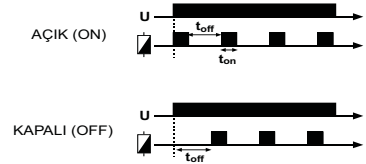


### Flasher (Ef) [MCB-15 & MCB-20]

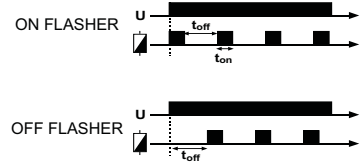


## Common Functions of MCB-7/8/9; ERTC-01; EF-10/10T

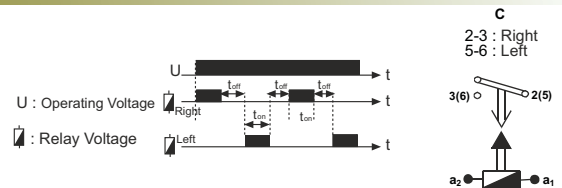
### On Delay (Er)



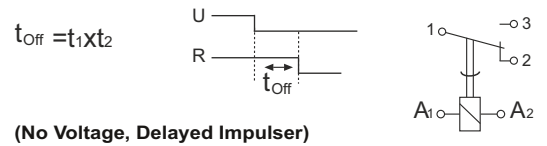
### Flasher



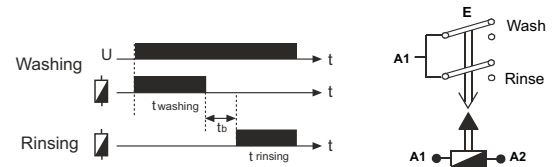
## Functions of SSR-2x



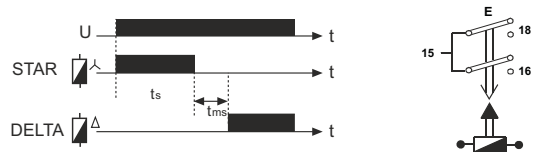
## Functions of DG-06 / DG-10 / DG-60



## Washing Machine Relay (ERB-30/50)



## Functions of SER-Y/U

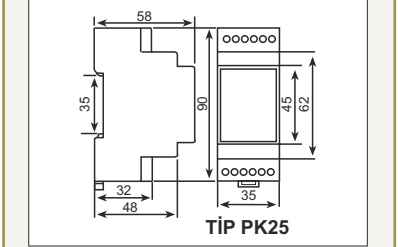
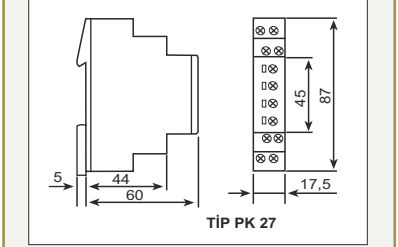
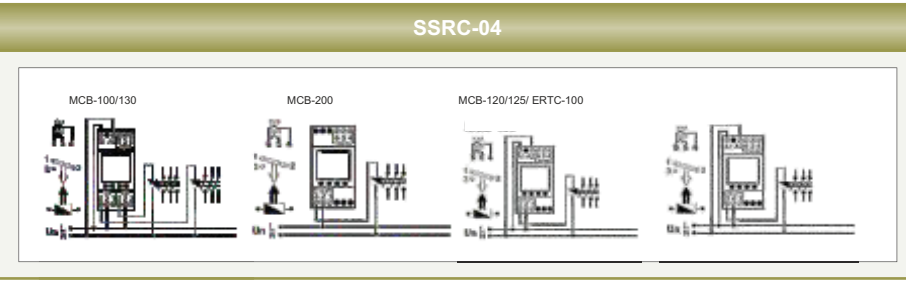
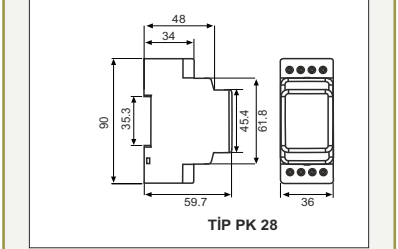
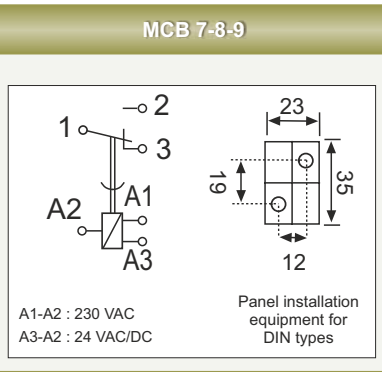
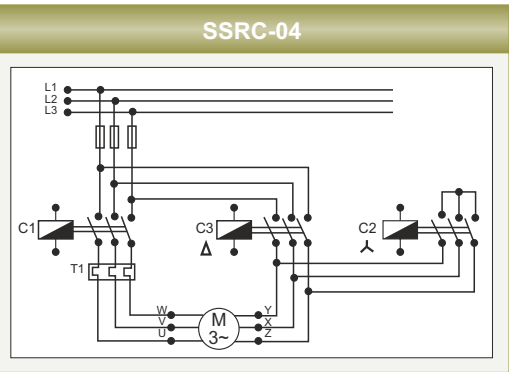
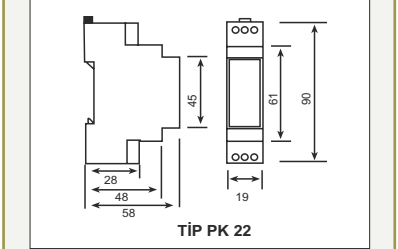
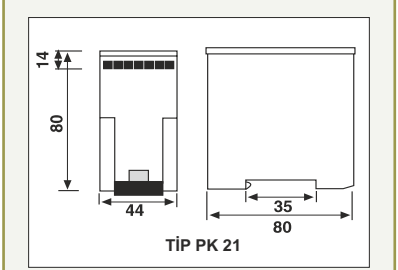
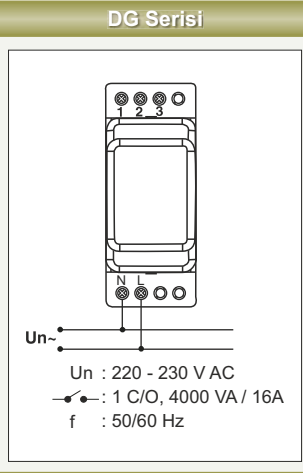
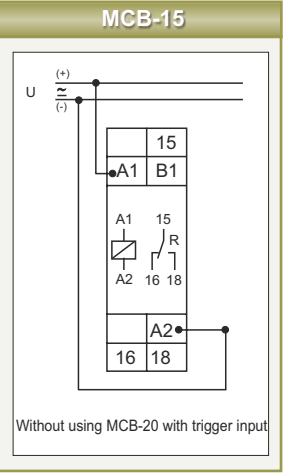
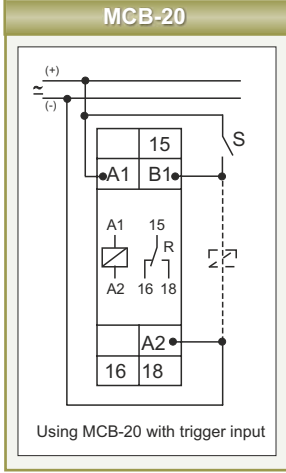
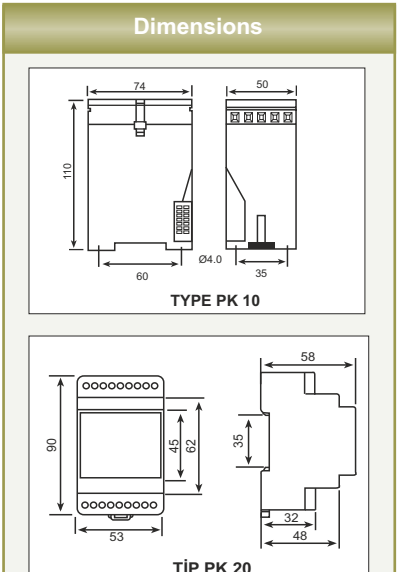
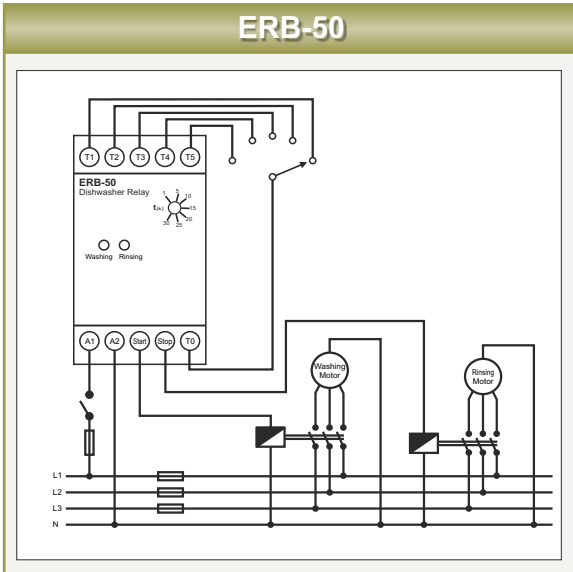
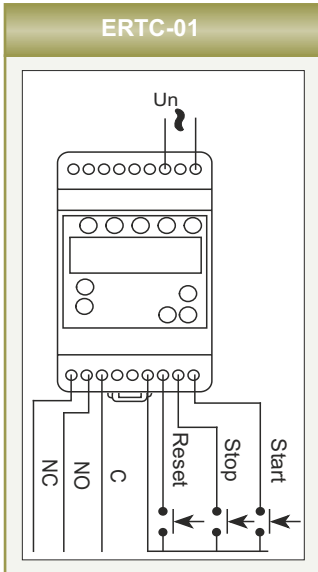


\* 24 VAC/DC supply of SER - Y/U is applied between A2-A3



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Connection diagrams are given for reference. Please always check the latest user manual given with product or download from [www.entec.com.tr](http://www.entec.com.tr)