

# TIME-LAG RELAYS (I)

Model	TDF-2	TDF-4	TDF-22
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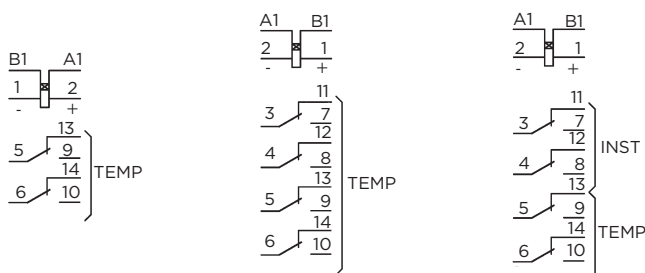
Applications

Electrical command timing

### Construction characteristics

Timing Contacts no.	2 Changeover	4 Changeover	2 Changeover
Instantaneous contact no.	0 Changeover	0 Changeover	2 Changeover

Connections



Options

With OP options

Weight (g)	265		
Dimensions (mm)	42,5 x 50,4 x 96,6		

Coil

Standard voltages <sup>(1)</sup>	24, 48, 72, 96, 110, 125, 250 <sup>(4)</sup> Vdc/Vac (50-60 Hz)		
Voltage range	+25% -30% U <sub>N</sub> (except range 250) <sup>(4)</sup> ; +10% -20%		
Pick-up voltage			
Release voltage	See power supply-temperature charts for time-lag relays		
Consumptions In permanence (U <sub>N</sub> )	≤3,2 W	≤4 W	≤5,5 W

Operating time

Time range	between 0,03 s y 99 h		
Pick-up time	< 23 ms		
Drop-out time	< 40 ms		

Contacts

Contact type	2 Changeover	4 Changeover	
Contact material	AgNi (FF Range)		
Contact resistance <sup>(2)</sup>	≤30 mΩ / ≤15 mΩ (FF Range)		
Distance between contacts	1,2 mm		
Permanent current	10 A		
Instantaneous current	30 A 0 A during 1s / 80 A during 200 ms / 200 A during 10 ms		
Max. making capacity	40 A / 0,5 s / 110 Vdc 30 A / 1 s / 36 Vdc / 30.000 operations (1 op / 15 s)		
Breaking capacity	See breaking capacity curves (Contact configuration type B)		
Max. breaking capacity	See value for 50,000 operations		
Max switching voltage	250 Vdc / 400 Vac		

Performance data

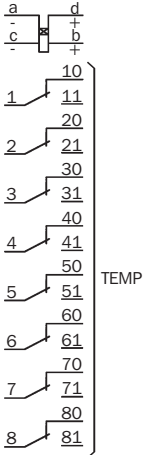
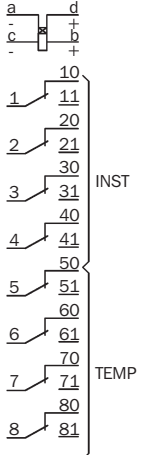
Mechanical endurance	10 <sup>7</sup> operations		
Operating temperature	-40°C +70°C		
Storage temperature	-40°C +70°C		
Max. operating humidity	93% / +40°C		
Operating altitude <sup>(3)</sup>	<2000 m		

<sup>(1)</sup> Other voltage upon request  
<sup>(2)</sup> Guarantee data for relays just manufactured

<sup>(3)</sup> Ask for higher altitudes  
<sup>(4)</sup> Voltage not recognized by UL



# TIME-LAG RELAYS (II)

Model	TDJ-8	TDJ-44
Applications	Electrical Command Timing	
Construction characteristics		
Timing Contacts no.	8 Changeover	4 Changeover
Instantaneous contact no.	0 Changeover	4 Changeover
Connections		
Options	With OP options	
Weight (g)	500	
Dimensions (mm)	82,5 x 50,4 x 96,6	
Coil characteristics		
Standard voltages <sup>(1)</sup>	24, 48, 72, 96, 110, 125, 250 <sup>(4)</sup> Vdc/Vac (50-60 Hz)	
Voltage range	+25% -30% U <sub>N</sub> (except range 250 <sup>(4)</sup> : +10% -20%)	
Pick-up voltage / Release voltage	See power supply-temperature charts for time-lag relays	
in permanence	≤7,5 W	≤10 W
Operating time		
Time Range	between 0,03 s y 99 h	
Pick-up time	<23 ms	
Drop-out time	<40 ms	
Contacts		
Contact type	8 Changeover	
Contact material	AgNi (Gama FF)	
Contact resistance <sup>(2)</sup>	≤30 mΩ / ≤15 mΩ (FF Range)	
Distance between contacts	1,2 mm	
Permanent current	10 A	
Instantaneous current	30 A 0 A during 1s / 80 A during 200 ms / 200 A during 10 ms	
Max. making capacity	40 A / 0,5 s / 110 Vdc 30 A / 1 s / 36 Vdc / 30.000 operations (1 op / 15 s)	
Breaking capacity	See breaking capacity curves (Contact configuration type B)	
Max. breaking capacity	See value for 50,000 operations	
Max switching voltage	250 Vdc / 400 Vac	
Performance data		
Mechanical endurance	10 <sup>7</sup> operations	
Operating temperature	-40°C +70°C	
Storage temperature	-40°C +70°C	
Max. operating humidity	93% / +40°C	
Operating altitude <sup>(2)</sup>	<2000 m	

<sup>(1)</sup> Other voltage upon request

<sup>(2)</sup> Guarantee data for relays just manufactured

<sup>(3)</sup> Ask for higher altitudes

<sup>(4)</sup> Voltage not recognized by UL