Selection manual of industrial control relay

TKB

Timer Relay

- Built-in dedicated timing IC chip, accurate timing
- Equipped with power and action status indicator
- Laser marking, clear and durable
- Adjustment plate positioning buckle design, shockproof
- Comply with IEC60947-5-1:2016





Relay

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Socket

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Relay module

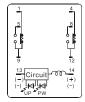
TKB 2 B 230A 5S **Rated time** 1s: 0.1s-1s 5s: 0.2s-5s 10s: 0.5s-10s 30s: 1s-30s 60s: 2.0s-60s 3min: 0.1min-3min 5min: 0.2min-5min 10min: 0.5min-10min 30min: 1min-30min **Supply voltage** 120A: 120VAC 230A: 230VAC 24D: 24VDC **Function** B: On-delay E: Interval time-delay opeartion F: Repeat-cycle off time delay **Terminal Type** 2: 2CO 4:4CO Series name

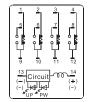
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Character	ristics				
Configuration		TKB2B	TKB2E	TKB4B	TKB4E
Rated supply voltage		120VAC, 230VAC 50/60Hz; DC24V			
Operating voltage range		Rated voltage 85-110% (90%-110% is DC12V)			
Power consumption		3.5W			
Max.output load		5A, 250 VAC (p.f.=1) 3A, 250 VAC (p.f.=1)			
Min. output load		10 mA, 17 VDC			
Repetitive error		±2% (FS max.)			
Setting error		±5% (FS max.)			
Voltage error		±2% (FS max.)			
Temperature error		±2% (FS max.)			
Resetting time		Min.time: 0.2 sec			
Insulation resistance		100ΜΩ(DC500V)			
Dielectric strength		Between current-carrying and Non-current-carrying parts 2000V 50/60Hz min			
		Between control output terminals and operating circuit1500V 50/60Hz min			
		Between contacts 1000V 50/60Hz min			
Vibration resistance	Destruction	10~55Hz with 0.75mm single amplitude each in 3directions for 2 hours each			
	Malfunction	10~55Hz with 0.5mm single amplitude each in 3 directions for 10 minutes each			
Shock resistance	Destruction	30G			
	Malfunction	10G			
Storage temperature		-55~+85°C/ 5%~68%RH (18 months)			
Ambient temperature		-10°C~55°C			
Ambient humidity		35~85%RH (No condensation)			
Life expectancy	Mechanical	>10 ⁷ (under no load, at 1,800 operations/hour)			
	Electrical	>10 ⁵			
Unit weight		approx. 60g			

TKB

Timer Relay

Wiring Diagrams





TKB2B TKB2E

TKB4B TKB4E

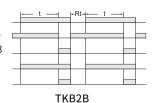
Timing charts

Power13-14

Time-limit contact (NC)9-1、12-4 Time-limit contact (NO)9-5、12-8

Power indicator

Output indicator



NOTE: t:set time, Rt: reset time

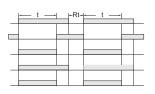
Power13-14

Time-limit contact (NC)9-1、12-4

Time-limit contact (NO)9-5、12-8

Power indicator

Output indicator



NOTE: t :set time, Rt: reset time

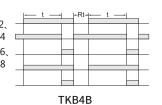
TKB2E

Power13-14

Time-limit contact (NC)9-1、10-2、 11-3、12-4

Time-limit contact (NO)9-5、10-6、 11-7、12-8

Power indicator Output indicator



NOTE: t :set time, Rt: reset time

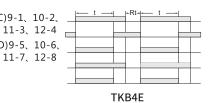
Power13-14

Time-limit contact (NC)9-1、10-2、11-3、12-4

Time-limit contact (NO)9-5、10-6、

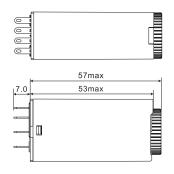
Power indicator

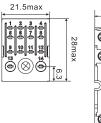
Output indicator

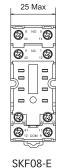


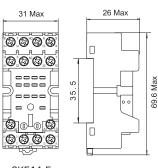
NOTE: t :set time, Rt: reset time

Dimensions(mm)









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