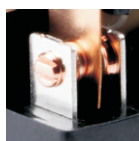


- Built-in dedicated timing IC chip, accurate timing
- Equipped with power and action status indicator
- Laser marking, clear and durable
- Adjustment plate positioning buckle design, shockproof
- Comply with IEC60947-5-1:2016

**Time dial**  
Various delay time  
is optional.

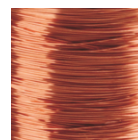
### Silver alloy contacts

It can carry more current,  
with stronger conductivity  
and more sensitive response,  
and greatly extend electrical  
life, and works more stable.



### Top copper coil material

Standard turns and  
electromagnetic coils  
make the pick-up more  
reliable and enduring,  
which can reach more  
than 20 million cycles.

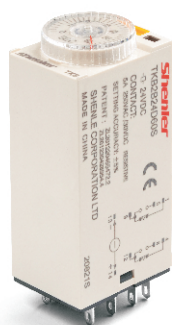


**Metal clip**  
The relay is firmly attached  
to the socket by metal clip SK52M.



**Silver alloy pins**  
High-quality silver alloy  
pins, strong contact,  
instantaneous conductivity  
and stable performance.





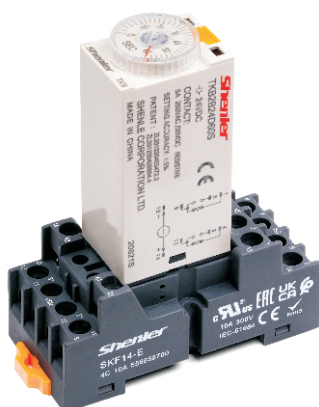
Relay

+



Socket

=



Relay module

TKB 2 B 230A 5S

**Rated time**

1S: 0.1S-1S  
10S: 0.5S-10S  
60S: 2.0S-60S  
5M: 0.2min-5min  
30M: 1min-30min  
5S: 0.2S-5S  
30S: 1S-30S  
3M: 0.1min-3min  
10M: 0.5min-10min

**Supply voltage**

120A: 120VAC  
230A: 230VAC  
24D: 24VDC

**Function**

B: On-delay  
E: Interval time-delay operation  
F: Repeat-cycle off time delay

**Terminal Type**

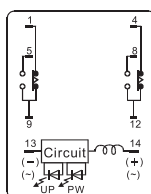
2: 2CO  
4: 4CO

**Series name**

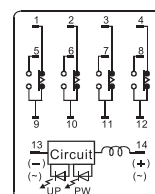
**Characteristics**

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		100MΩ(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 <sup>7</sup> (under no load, at 1,800 operations/hour)			
	Electrical	＞10 <sup>5</sup>			
Unit weight		approx. 60g			

## Wiring Diagrams



TKB2B TKB2E



TKB4B TKB4E

## Timing charts

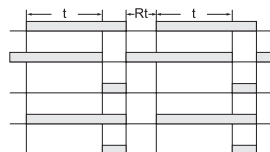
Power13-14

Time-limit contact (NC)9-1, 12-4

Time-limit contact (NO)9-5, 12-8

Power indicator

Output indicator



TKB2B

NOTE: t :set time, Rt: reset time

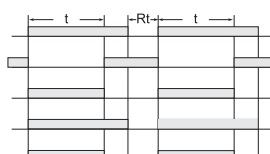
Power13-14

Time-limit contact (NC)9-1, 12-4

Time-limit contact (NO)9-5, 12-8

Power indicator

Output indicator



TKB2E

NOTE: t :set time, Rt: reset time

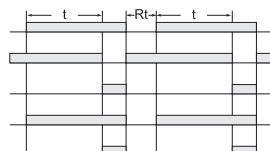
Power13-14

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

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

Power indicator

Output indicator



TKB4B

NOTE: t :set time, Rt: reset time

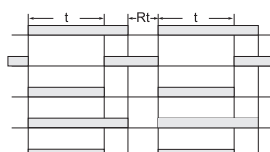
Power13-14

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

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

Power indicator

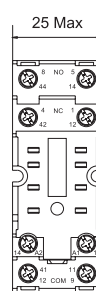
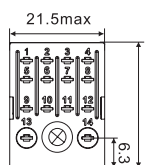
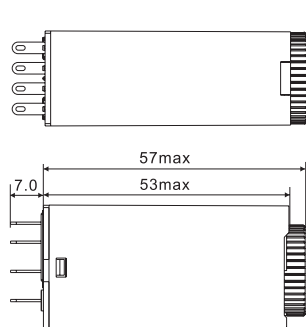
Output indicator



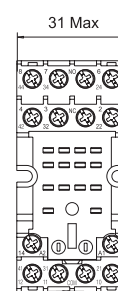
TKB4E

NOTE: t :set time, Rt: reset time

## Dimensions(mm)



SKF08-E



SKF14-E

