

TH-K Series Thermal Relay

Application

TH-K thermal relay is suitable for overload protection of AC motor operated on 8-hours duty or uninterrupted duty. The overload protected AC motor with frequency 50Hz, voltage up to 660V, current up to 105A. Several functions provided by these relays are: phase-failure protection, temperature compensation, ON/OFF indication and manual/automatic reset. The product conforms to IEC60947-4-1 standard.



TH-K-12

Motion characteristic: three-phase balance motion time

No	Times of the setting current	Motion time			Start condition	Ambient temperature
1	1.05	>2h			Cold state	20±5℃
2	1.2	<2h			Heat state (Following the No.1 test)	
3	1.5	<4min				
4	7.2	10A	2s<Tp≤ 10s	≤ 63A	Cold state	
		10	4s<Tp≤ 10s	>63A		



TH-K-20

Phase-losing motion characteristic

No	Times of the setting current		Motion time	Start condition	Ambient temperature
	Any two phases	Another phase			
1	1.0	0.9	>2h	Cold state	20±5℃
2	1.15	0	<2h	Heat state (Following the No.1 test)	

Specification

Type	Setting range (A)	For contactor	Type	Setting range (A)	For contactor	
TH-K-12	0.2~0.28	S-K10 S-K11 S-K12 S-K18 S-K20 S-K21	TH-K-20	2~3	S-K18 S-K20 S-K21 S-K25 S-K35	
	0.28~0.42			2.8~4.4		
	0.4~0.6			4~6		
	0.55~0.85			5.2~8		
	0.7~1.1			7~11		
	1~1.6			9~13		
	1.4~2			12~18		
	1.7~2.5			16~22		
	2~3			18~26		
	2.8~4.4			24~34		
	4~6			30~40		
	5.2~8			12~18		S-K50 S-K65 S-K80 S-K95
	7~11			16~22		
9~13	18~26					
0.2~0.28	24~34					
0.28~0.42	30~40					
0.4~0.6	34~50					
0.55~0.85	43~65					
0.7~1.1	54~80	TH-K-60				
1~1.6	65~93					
1.4~2	85~105					
1.7~2.5						



TH-K-60