

TC Type Magnetic Contactors



Frame size

Frame size			18AF				22AF			
Type			TC-6a	TC-9a	TC-12a	TC-18a	TC-9b	TC-12b	TC-18b	TC-22b
	screws clamp terminals		●	●	●	●	●	●	●	●
Number of poles			3pole				3pole			
Rated operational voltage, Ue			690V				690V			
Rated insulation voltage, Ui			690V				690V			
Rated frequency			50/60Hz				50/60Hz			
Rated impulse withstand voltage, Uimp			6kV				6kV			
Maximum operating rate in operating cycles per hour(AC3)			1800 operations per hour				1800 operations per hour			
Durability	Mechanical		15 mil. operations				15 mil. operations			
	Electrical		2.5 mil. operations				2.5 mil. operations			
Current and power	AC-1, Thermal current	A	25	25	25	32	25	25	32	40
	AC-3 200/240V	kW	2.2	2.5	3.5	4.5	2.5	3.5	4.5	5.5
		A	9	11	13	18	11	13	18	22
	380/440V	kW	3	4	5.5	7.5	4	5.5	7.5	11
		A	7	9	12	18	9	12	18	22
	500/550V	kW	3	4	7.5	7.5	4	7.5	7.5	15
		A	6	7	12	13	7	12	13	20
	690V	kW	3	4	7.5	7.5	4	7.5	7.5	15
	A	4	5	9	9	6	9	9	18	
UL rating (50/60Hz)	Continuous current	A	25	25	25	32	25	25	40	40
	Single phase 110~120V	HP	0.5	0.5	0.75	1	0.5	0.75	1	2
	220~240V	HP	1.5	1.5	2	3	1.5	2	3	3
	Three phase 200~208V	HP	2	2	3	5	2	3	5	7.5
	220~240V	HP	3	3	5	7.5	3	5	7.5	10
	440~480V	HP	5	5	7.5	10	5	7.5	10	15
	550~600V	HP	7.5	7.5	10	15	7.5	10	15	20
Size and weight	NEMA size		00	00	0	0	00	00	0	1
	AC control	Weight kg	0.33				0.34			
	Size(W × H × D) mm	45 × 73.5 × 82				45 × 73.5 × 86				
	DC control	Weight kg	0.5				0.51			
	Size(W × H × D) mm	45 × 73.5 × 113.7				45 × 73.5 × 117.7				
Auxiliary(standard) [optional]		1a or 1b				1a1b				
Auxiliary	Side mount	TSU-01				TSU-01				
	Front mount	TSU-20, 11, 02, 40, 31, 22, 13, 04				TSU-20, 11, 02, 40, 31, 22, 13, 04				

Note: Minimum conduct current of Auxiliary contactor is DC 17V 5mA.

TK Type Thermal Overload Relays



Type		TK-12a	TK-32a / 32e
	Screws clamp terminals	●	●
Rated operational voltage, Ue		690V	690V
Rated insulation voltage, Ui		690V	690V
Rated impulse withstand voltage, Uimp		6kV	6kV
Trip class		10A, 20*	10A, 20*
Setting range		0.1~18A	0.1~40A
Size and weight	Weight	0.1	0.17
	Size(W × H × D) mm	45 × 73.2 × 63.7	45 × 75 × 90

Class 20 (Type 3D) overload to be ordered separately based on indent.
The safety cover of magnetic contactor and thermal overload relay is optional.



40AF

TC-32a TC-40a

3pole
690V
1000V
50/60Hz
8kV
1800 operations per hour
12 mil. operations
2 mil. operations

50	60
7.5	11
32	40
15	18.5
32	40
18.5	22
28	32
18.5	22
20	23
50	60
2	3
5	7.5
7.5	15
10	15
20	30
25	30
1	1

0.55
69 × 83 × 93
0.77
69 × 83 × 120

2a2b [00]

TSU-01

TSU-20, 11, 02, 40, 31, 22, 13, 04

65AF

TC-50a TC-65a

3pole
690V
1000V
50/60Hz
8kV
1800 operations per hour
12 mil. operations
2 mil. operations

70	100
15	18.5
55	65
22	30
50	65
30	33
43	60
30	33
28	35
70	100
3	5
10	15
20	25
25	30
40	50
50	60
2	2

1.05
79 × 106 × 122
1.3
79 × 106 × 149

2a2b [00]

TSU-01

TSU-20, 11, 02, 40, 31, 22, 13, 04

100AF

TC-75a TC-85a TC-100a

3pole
690V
1000V
50/60Hz
8kV
1800 operations per hour
12 mil. operations
2 mil. operations

110	135	160
22	25	30
75	85	105
37	45	55
75	85	105
37	45	55
64	75	85
37	45	45
42	45	65
110	135	160
5	7.5	10
15	15	20
25	30	30
30	40	40
50	60	75
60	75	75
2	3	3

1.93
94 × 140 × 137
2.8
94 × 140 × 174

2a2b [00]

TSU-01

TSU-20, 11, 02, 40, 31, 22, 13, 04



TK-32a / 32e

690V
690V
6kV
10A, 20*
0.1~40A

0.17

45 × 75 × 90

TK-63a / 63e

690V
690V
6kV
10A, 20*
4~65A

0.31/0.33

55 × 81 × 100

TK-95a / 95e

690V
690V
6kV
10A, 20*
7~100A

0.48/0.5

70 × 97 × 110

TC Type Magnetic Contactors



Frame size

Type	screws clamp terminals		
Number of poles			
Rated operational voltage, Ue			
Rated insulation voltage, Ui			
Rated frequency			
Rated impulse withstand voltage, Uimp			
Maximum operating rate in operating cycles per hour(AC3)			
Durability	Mechanical		
	Electrical		
Current and power	AC-1, Thermal current	A	
	AC-3	200/240V	kW
		380/440V	kW
			A
		500/550V	kW
		690V	kW
UL rating (50/60Hz)	Continuous current	A	
	Single phase	110~120V	HP
		220~240V	HP
	Three phase	200~208V	HP
		220~240V	HP
		440~480V	HP
	550~600V	HP	
Size and weight	AC control	Weight	kg
	DC control	Weight	kg
Auxiliary(standard)	Side mount		
	Front mount		



150AF	
TC-130a	TC-150a
●	●
3pole	
690V	
1000V	
50/60Hz	
8kV	
1200 operations per hour	
5 mil. operations	
1 mil. operations	
160	210
37	45
130	150
60	75
130	150
60	70
90	100
55	55
60	60
160	210
10	15
20	25
40	40
40	50
75	100
75	75
3	4
2.4	
95 × 158 × 132	
2.3	
95 × 158 × 132	
2a2b	
TSU-01	
TSU-20, 11, 02, 40, 31, 22, 13, 04	

225AF	
TC-185a	TC-225a
●	●
3pole	
690V	
1000V	
50/60Hz	
8kV	
1200 operations per hour	
5 mil. operations	
1 mil. operations	
230	275
55	75
185	225
90	132
185	225
110	132
180	200
110	140
120	150
230	275
15	15
30	40
60	60
60	75
125	150
125	150
4	4
5.4	
138 × 203 × 181	
2a2b	
TSU-100 (Max.4NO4NC)	

Note: Minimum conduct current of Auxiliary contactor is DC 17V 5mA.

TK Type Thermal Overload Relays



Type	Screws clamp terminals		
Rated operational voltage, Ue			
Rated insulation voltage, Ui			
Rated impulse withstand voltage, Uimp			
Trip class			
Setting range			
Size and weight	Weight	kg	
	Size(W × H × D)	mm	



TK-150a
●
690V
690V
6kV
10A, 20*
34~150A
0.67
95 × 109 × 113

TK-225a
●
690V
690V
6kV
10A, 20*
65~240A
2.5
147 × 141 × 184

Class 20 (Type 3D) overload to be ordered separately based on indent.
The safety cover of magnetic contactor and thermal overload relay is optional.



400AF

TC-265a	TC-330a	TC-400a
●	●	●
	3pole	
	690V	
	1000V	
	50/60Hz	
	8kV	
	1200 operations per hour	
	5 mil. operations	2.5 mil. operations
	1 mil. operations	0.5 mil. operations
300	350	450
80	90	125
265	330	400
147	160	200
265	330	400
147	160	225
225	280	350
160	200	250
185	225	300
300	350	450
-	-	-
-	-	-
75	100	125
100	125	150
200	250	300
200	250	300
5	5	5

9.2
163 × 243 × 198

2a2b

TSU-100 (Max.4NO4NC)

800AF

TC-500a	TC-630a	TC-800a
●	●	●
	3pole	
	690V	
	1000V	
	50/60Hz	
	8kV	
	1200 operations per hour	
	2.5 mil. operations	
	0.5 mil. operations	
580	660	900
147	190	220
500	630	800
265	330	440
500	630	800
265	330	500
400	500	720
300	400	500
380	420	630
580	660	900
-	-	-
-	-	-
150	200	200
200	250	300
400	500	600
400	500	600
6	6	7

22.4
285 × 312 × 242

2a2b

TSU-100 (Max.4NO4NC)



TK-400a

●
690V
690V
6kV
10A, 20*
85-400A

2.6

151 × 171 × 198

TK-800a

●
690V
690V
6kV
10A, 20*
200-800A

11.5

360 × 530 × 212