

Mini industrial contactors

Type 6K.04.x.xxx.4x09

- 9 A - 400 V AC3
- 4 kW - 400 V AC3

Type 6K.04.x.xxx.4x12

- 12 A - 400 V AC3
- 5.5 kW - 400 V AC3

- 3 NO contacts + 1 NC (2 A 400 V AC15)
- Version 47xx
- 3 NO contacts + 1 NO (2 A 400 V AC15)
- Version 48xx
- 4 NO contacts
- Version 43xx
- According to IEC EN 60947-4-1
- Nominal voltage: 24 V AC, 48 V AC, 110 V AC, 230 V AC or 12 V DC, 24 V DC, 48 V DC, 60 V DC, 72 V DC, 110 V DC
- NC auxiliary contact in "mirror contact" configuration according to EN 60947-4-1
- Auxiliary block contact 2 A (AC15 - 400 V) in various configurations availables
- AgSnO₂ contacts
- 35 mm rail (EN 60715) mount

6K.04
Box clamp



* Mirror contact configuration

For outline drawings see page 19

Contact specification

Contact configuration	3 NO + 1 NC* or 3 NO + 1 NO or 4 NO	
Rated current AC3	A	9
Rated voltage	V AC	400
Rated power AC3 @ 440 V	kW	4
Rated power AC3 @ 690 V	kW	5.5
Rated current AC1 @ 690 V	A	20

Breaking capacity DC1: 24/110/220 V	A	20/5/0.6
Breaking capacity DC3: 24/110/220 V	A	20/1/0.15
Contact material	AgSnO ₂	

Coil specification

Nominal voltage (U _N)	V AC (50/60 Hz)	24 - 48 - 110 - 230
	V DC	12 - 24 - 48 - 60 - 72 - 110
Rated power AC/DC	VA (50 Hz)/W	4/1.2
Operating range	V AC (50/60 Hz)	(0.85...1.1) U _N
	V DC	(0.8...1.1) U _N

Technical data

Mechanical life AC/DC	cycles	5 · 10 ⁶ / 15 · 10 ⁶
Electrical life at rated load AC3	cycles	For electric life see page 10
Operate/release time	ms	15/8
Ambient temperature range	°C	-40...+70 (+90)**
Protection category	IP 20	

Approvals (according to type)



** with reduced voltage range (0.9...1.0) U_N

NEW 6K.04.x.xxx.4x09

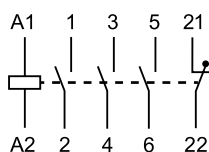


• AgSnO₂ contacts

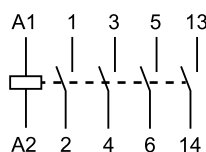
NEW 6K.04.x.xxx.4x12



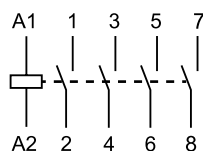
• AgSnO₂ contacts



3 NO + 1 NC
(47xx)



3 NO + 1 NO
(48xx)

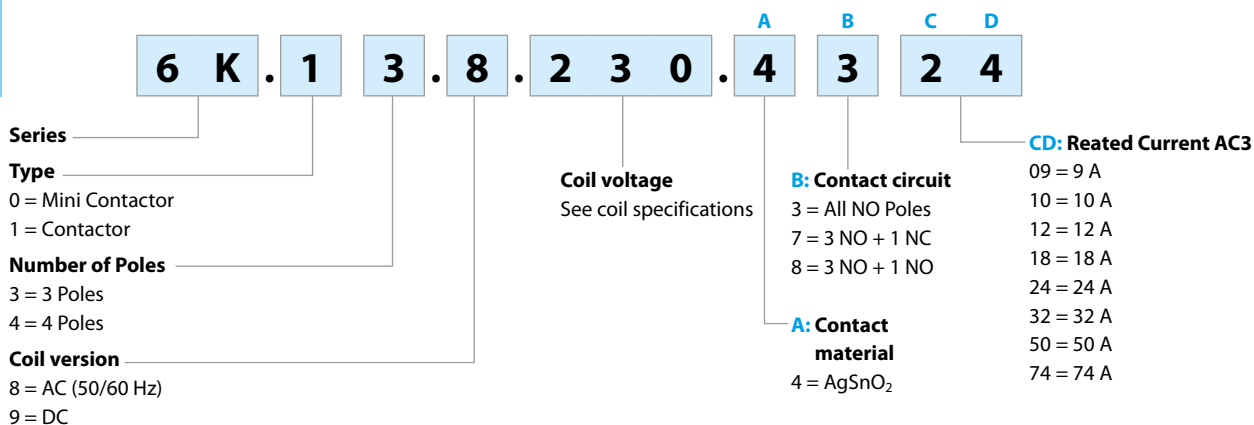


4 NO
(43xx)

Ordering information

Example: 6K series, industrial contactor, 3 contacts, 230 V AC, all NO contacts, 24 A AC3-400 V

A

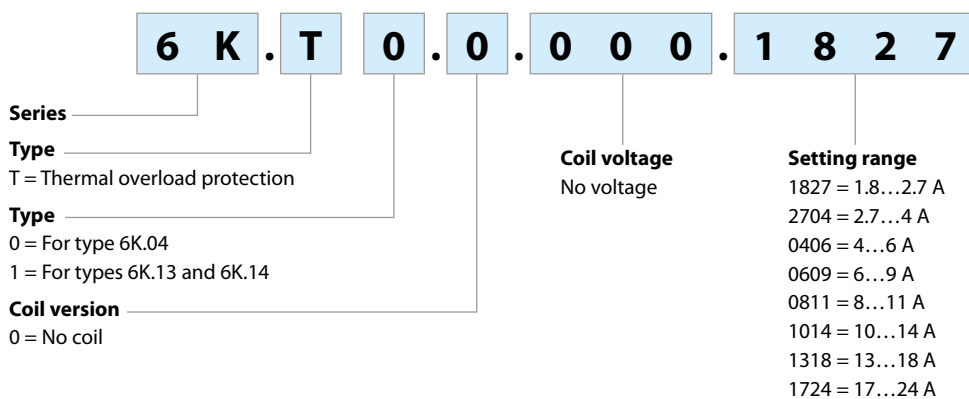


Selecting features and options: only combinations in the same row are possible.

Type	Coil version	A	B	CD
6K.04	AC - DC	4	3 - 7 - 8	09 - 12
6K.14	AC - DC	4	3 - 7 - 8	10 - 18
6K.13	AC	4	3	24 - 32 - 50 - 74
6K.13	DC	4	3	24 - 32

Ordering information

Example: 6K series, thermal overload protection for type 6K.04, setting range 1.8...2.7 A



Codes

6K.T0.0.000.0406
 6K.T0.0.000.0609
 6K.T0.0.000.0811
 6K.T0.0.000.1827
 6K.T0.0.000.2704

6K.T1.0.000.1827
 6K.T1.0.000.2704
 6K.T1.0.000.0406
 6K.T1.0.000.0609
 6K.T1.0.000.0811
 6K.T1.0.000.1014
 6K.T1.0.000.1318
 6K.T1.0.000.1724

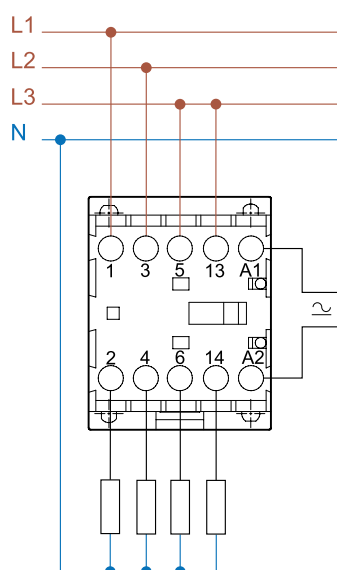
Technical data

Short circuit protection according to IEC 947-4-1 CLASS 10 A		6K.04	6K.14	6K.13-4324/4332	6K.13-4350/4374	
Rated conditional short circuit current	kA	3	10	10	10	
Back-up fuse	A	40 (gL/gG type)	63	100	160	
For contactors with thermal overload relay the device with the smaller admissible control fuse (contactor or thermal overload relay) determines the fuse size. Short circuit protection short-circuit current 1kA, contact welding not accepted max. fuse size gL (gG)	A	20	—	—	—	
Rated short circuit current	kA	—	10	10	10	
Coordination-type "1" according to IEC 947-4-1 Contact welding without hazard of persons max. fuse size gL (gG)	A	—	63	100	160	
Coordination-type "2" according to IEC 947-4-1 Light contact welding accepted without hazard of persons max. fuse size gL (gG)	A	—	25 (6K.14-4810) 35 (6K.14-4818) 25 (6K.14-4710) 35 (6K.14-4718) 25 (6K.14-4310) 35 (6K.14-4318)	50	100 (6K.13-4350) 125 (6K.13-4374)	
For contactors with thermal overload relay the device with the smaller admissible backup fuse (contactor or thermal overload relay) determines the fuse size Contact welding not accepted max. fuse size gL (gG)	A	—	16	25 (6K.13-4324) 35 (6K.13-4332)	50 (6K.13-4350) 63 (6K.13-4374)	
Terminals		Solid and flexible cable				
		6K.04	6K.14	6K.13-4324/4332	6K.13-4350/4374	
Max. wire size	mm²	1 x 2.5	1 x 6	1 x 25	1 x 50	
	AWG	1 x 14	1 x 10	1 x 10	1 x 10	
Min. wire size	mm²	1 x 0.5	1 x 0.75	1 x 1.5	1 x 4	
	AWG	1 x 18	1 x 18	1 x 16	1 x 12	
 Screw torque	Nm	0.8	0.8	2.5	3.5	
Wire strip length	mm	8	11	13	20	
Other data		6K.04	6K.14	6K.13-4324/4332	6K.13-4350	6K.13-4374
Shock resistance NO/NC	g	5/5	10/6	8/—	8/—	8/—
Power lost per pole AC3-400 V	W	0.20	0.35	1.3	2.2	5.5

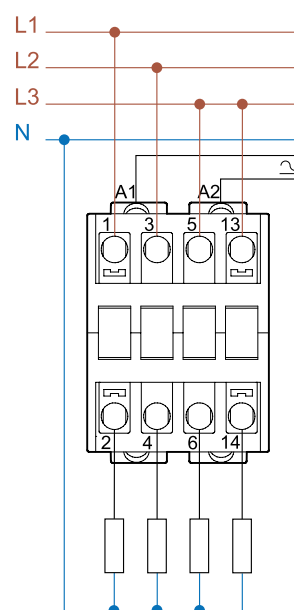
Terminals for thermal overload protection		6K.T0		6K.T1	
Max. wire size		solid cable	flexible cable	solid cable	flexible cable
	mm ²	1 x 6	1 x 4	1 x 6	1 x 4
	AWG	1 x 10	1 x 12	1 x 10	1 x 12
Min. wire size		solid cable	flexible cable	solid cable	flexible cable
	mm ²	1 x 0.75	1 x 1	1 x 0.75	1 x 1
	AWG	1 x 19	1 x 18	1 x 19	1 x 18
 Screw torque	Nm	1.2		0.8	
Wire strip length for terminals 95-96/97-98/14/22	mm	—		9	
Wire strip length for terminals T1, T2, T3	mm	—		13	
Wire strip length for terminals 95-96/97-98/T1/T2/T3	mm	10		—	

Wiring diagrams

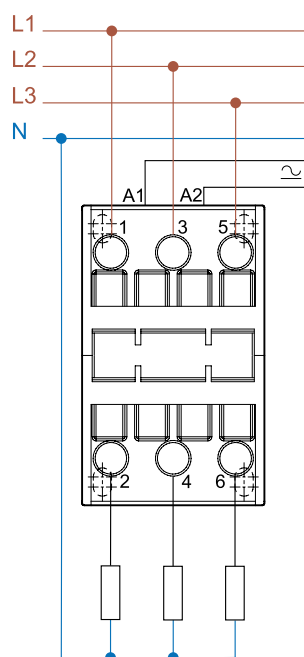
A



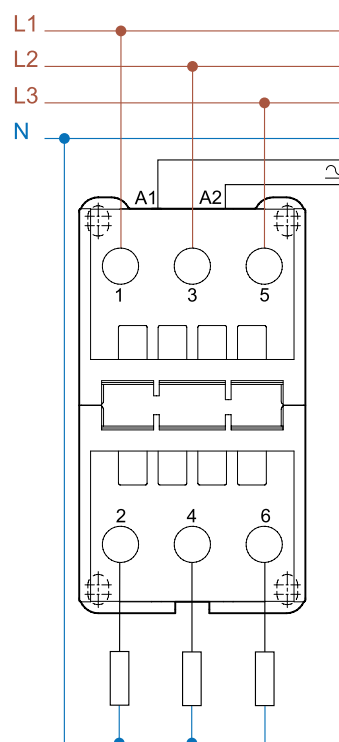
Type 6K.04-4x09/4x12



Type 6K.14-4x10/4x18



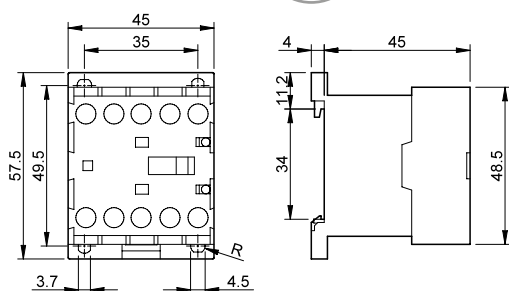
Type 6K.13-4324/4332



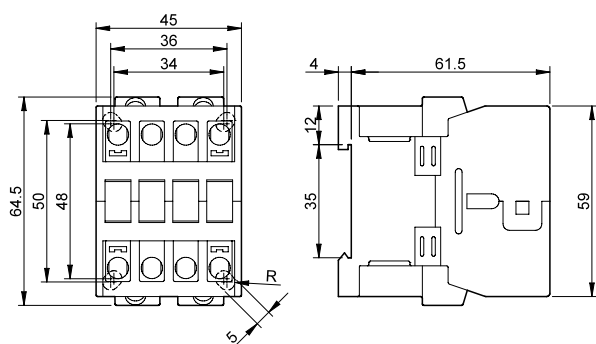
Type 6K.13-4350/4374

Outline drawings

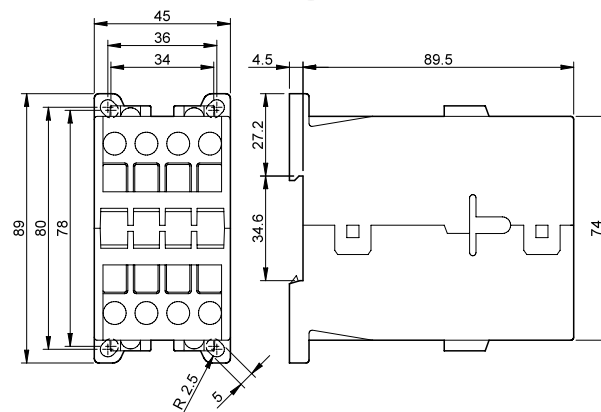
Type 6K.04
Box clamp



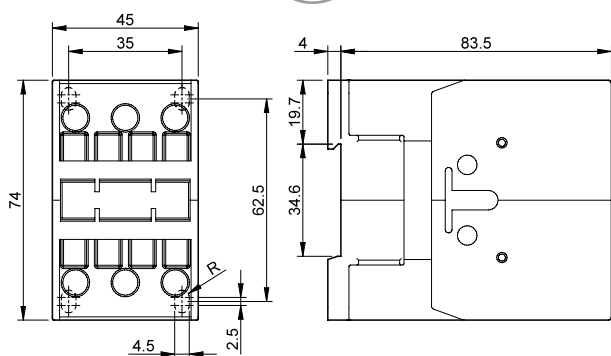
Type 6K.14.8.xxx.4x10/4x18
Box clamp



Type 6K.14.9.xxx.4x10/4x18
Box clamp



Type 6K.13.8.xxx.4324/4332
Box clamp



Type 6K.13.9.xxx.4324/4332
Box clamp

