

Switching Systems

Modular Solutions for Customized Applications
Production, Development and Distribution of Drive Technology

Products . Contactors, Overload relays and Motor protection switches . Contactors . Contactor KB-04

Contactor KB-04

Undervoltage release up to 4.0 kW 400 V~/AC-3 Type KB-04 according to IEC 204-1, EN60204-1, Section 7.5.
Protection against automatic restarts after voltage dips and recovery.

Features

- Compact design
- Combinable with many options
- Budget-priced
- According to IEC947-4-1, EN60947, DIN VDE 0660 Part 102
- For switching motors up to 3.0 kW 230 V~ or 4.0 kW 400 V~/AC-3
- Mechanical ON/OFF
- Electrical ON/OFF



Contactor KB-04

► Models and Prices Contactor KB-04

Standard models

AC-coils Control voltage (Uc)	2 NO	3 NO	3 NO 1 NC	4 NO
110 V-120 V 50 Hz	-	-	8601.0231	8601.0240
110 V-120 V 60 Hz	-	-	8601.0431	8601.0440
208 V 60 Hz	8601.0620	8601.0630	8601.0631	8601.0640
230 V/240 V 50-60 Hz	8601.0720	8601.0730	8601.0731	8601.0740
400 V 50Hz	8601.1020	8601.1030	8601.1031	8601.1040
DC-coils Control voltage (Uc)	2 NO	3 NO	3 NO 1 NC	4 NO
100 V=	-	-	8601.0031	8601.0040
200 V=	-	-	8601.0531	8601.0540
360 V=	-	-	8601.0931	8601.0940

More coils, eg. 12 V AC-DC or 24 V AC-DC on request.

► Models and Prices with shock-protection

Description shock-protection

Small contactors are compact, all-purpose usable and cost-efficient devices. Therefore they are commonly used in mobile devices for craftsman, do-it-yourselfers and industrial machines. These machines are often moved between workspaces. These movements or placing materials on the devices can result into shakings. With the feeder plugged in that can cause an accidental tripping of the machine. The reason are the heavy armatures of these

contactors which may trigger when being shocked. To avoid this a patented attachment was developed which avoids this accidental tripping of the machine.

Notice:

Exchanging a standard contactor KB-04 with a contactor with shock-protection can only be realised by KLINGER BORN. Please contact us if required.

Image	Description	Art.-No.
	Contactor KB-04 with mounted shock-protection 400 V, 4 NO, with electrical ON	8601.5358
	Contactor KB-04 with mounted shock-protection and circuit breaker 230 V, 3 NO 1 NC	8601.5361
	Contactor KB-04 with mounted shock-protection 230 V, 4 NO	8601.5362
	Contactor KB-04 with mounted shock-protection 230 V, 3 NO	8601.5363
	Contactor KB-04 with mounted shock-protection 400 V, 4 NO	8601.5366
	Contactor KB-04 with mounted shock-protection and circuit breaker 400 V, 3 NO 1 NC	8601.5367

Further models on request

► Additional images



KB-04 with electrical grounding



KB-04 with DC-coil



KB-04 in print version

► Technical data

General technical data

Designation	KB-04
Rated operating voltage U _e	400 V
Rated insulation voltage U _i	400 V
Rated impulse withstand voltage U _{imp}	4000 V
Degree of pollution	3
Short-circuit current	3000 A
Short-circuit back-up fuse	20 A gL, 500 V (Classification Type 1)
Conventional thermal current (I _{th})	16 A
Housing material	PA6.6 GF V-0 / PBT V-0
CTI	500
Permissible ambient temperature	-25° C ... +50° C
Weight	Approx. 160 g (depending on model)

Characteristics

Certifications and approvals	VDE, Reg.No. 114281 and cCSAus, Certifiapproxte no. 1176852
Contact gap	> 3 mm
Contact release	Positively actuated contacts for mechanical off (contacts on guide rings)
Switching capacity	4 kW 400 V/AC-3
Connection	Flat plug 6.3x0.8
Mounting	Screw connection 2x M3.5 or Eject KA35 Snap-on mounting on DIN-bar 35mm (in preparation)
Actuation	Mechanical ON/OFF Electrical ON/OFF Mechanical ON / electrical OFF Electrical ON / mechanical OFF
Additional options	Accessories for electric ON-switching Accessories for electric ON-switching and/or electric OFF-switching Accessories for circuit breaker (protection for the electronic brake) Connecting elements, Earth connectors

Contact side - Load side

Assembly	4 NO, 3 NO, 2 NO, 3 NO 1 NC
Mechanical life span	5x10 ⁵ cycles
Electrical life span	1x10 ⁵ cycles at 16 A 400 V/AC-1 1x10 ⁵ cycles at 7.5 A 400 V/AC-3
Rated power at 230V	3.0 kW (AC-3) 13.5 A (three-phases consumer)
Rated power at 400 V	4.0 kW (AC-3) 9.0 A
Switching rate	600 cycles per hour
Distance between contacts when open	> 3 mm
Contact material	AgNi10
Response / Reset time	20 - 40 ms
B10 (B10d)	200.000 (266.666)


Exciter side - Magnetic circuit

Working range of the magnet coil	0.85 - 1.1 x Rated control supply voltage U_s
Rated operating capacity	6.0 W (AC) 4.0 W (DC)
Insulation class	B

► **Dimensional drawings**► **Component parts Contactor KB-04**

For special applications the following component parts are available

Image	Designation	Contacts	Art.-No.
	Circuit breaker for mechanical switch On	1 NC	8601.5100
	Circuit breaker with electrical ON	1 NC 1 NO	8601.5150
	NC element	1 NC	8601.5200
	Electrical ON element	1 NO	8601.5250
	Electric ON / Electric OUT	1 NO 1 NC	8601.5300
	Connection element black	-	8601.5080

Image	Designation	Contacts	Art.-No.
	Connection element green-yellow	-	8601.5081