



TECHNICAL MANUAL

Contactors
KMEp EKF



1 DESCRIPTION

Contactors KMEp EKF are switching devices designed for remote start, stop and reversing of three-phase squirrel-cage asynchronous electric motors in 50/60 Hz circuits with voltage up to 690 V AC (utilization category AC-3) and for remote control of electrical circuits.

With thermal overload relays, contactors protect electric motors against a prolonged overload or overcurrent caused by phase loss.

Contactors KMEp EKF comply with IEC 60947-4-1.

2 TECHNICAL DATA

The main technical data are listed in Tables 1 and 2.

Table 1

Contactor type			9A	12A	18A	25A	32A
Rated operating current, A	380-415 V	AC-3	9	12	18	25	32
		AC-4	3,5	5	7,7	8,5	12
	660/690 V	AC-3	6,6	8,9	12	18	21
		AC-4	1,5	2	3,8	4,4	7,5
Rated thermal current, A			25	25	32	40	50
Rated power, kW	220-240 V		2,2	3	4	5,5	7,5
	380-400 V		4	5,5	7,5	11	15
	415 V		4	5,5	9	11	15
	500 V		5,5	7,5	10	15	18,5
	660/690 V		5,5	7,5	10	15	18,5
Weight, kg			0,64	0,34	0,65	0,65	0,95
Dimensions, mm			76x115x47				
Poles			3P				
Rated operating voltage Ue, V AC			220 / 230 / 240 / 380 / 400 / 415 / 660 / 690				
Rated insulation voltage Ui, V			690				
Mechanical endurance, O-C mln cycles			10				8
Electrical endurance, O-C mln cycles	AC-3		1				0,8
	AC-4		0,2				
Rated operating voltage of control coil, V DC			24, 110, 220				
Control voltage range	operate		0,85 – 1,1 Us				
	release		0,1 - 0,75 Us				
Auxiliary contacts			1NO or 1NC				
Degree of protection			IP20				

Table 2

Contactor type			40A	50A	65A	80A	95A
Rated operating current, A	380-415 V	AC-3	40	50	65	80	95
		AC-4	18,5	24	28	37	44
	660/690 V	AC-3	34	39	42	49	55
		AC-4	9	12	14	17,3	21,3
Rated thermal current, A			60	80	80	125	125
Rated power, kW	220-240 V		11	15	18,5	22	25
	380-400 V		18,5	22	30	37	45
	415 V		22	30	37	45	45
	500 V		22	30	37	55	55
	660/690 V		30	33	37	45	55
Weight, kg			2,185			2,525	
Dimensions, mm			128x175x81	128x175x87		128x183x87	
Poles			3P				
Rated operating voltage U _e , V AC			220 / 230 / 240 / 380 / 400 / 415 / 660 / 690				
Rated insulation voltage U _i , V			690				
Mechanical endurance, O-C mln cycles			8				6
Electrical endurance, O-C mln cycles	AC-3	0,8					0,6
	AC-4	0,15				0,1	
Rated operating voltage of control coil, V DC			24, 110, 220				
Control voltage range	operate	0,85 – 1,1 U _s					
	release	0,1-0,75 U _s					
Auxiliary contacts			1NO+1NC				
Degree of protection			IP20				

Table 3 - Connections and accessories

Contactor type		9 A	12 A	18 A	25 A	32 A	40 A	50 A	65 A	80 A	95 A
Power circuit connection, mm	Flexible wire	1-2,5		1,5-4		2,5-6	6-16	10-25		16-35	
	Soild wire	1,5-4		2,5-6		4-10	10-25	16-35		25-50	
	Tightening torque, N*m	1,2				2,5				4,0	
Control circuit connection, mm	Flexible wire	1-4									
	Soild wire	1-4									
	Tightening torque, N*m	1,2									
Accessories	Auxiliary contact blocks	PKE 2NC; PKE 2NO; PKE 2NO+2NC; PKE 4NC; PKE 4NO; PKE NO+NC									
	Pneumatic time delay attachments	PVE 0,1-30 sec. ON delay; PVE 0,1-3 sec. ON delay; PVE 10-180 sec. ON delay; PVE 0,1-30 sec. OFF delay; PVE 0,1-3 sec. OFF delay; PVE 10-180 sec. OFF delay.									
	Interlocking devices	Mechanical interlocking up to 32 A					Mechanical interlocking up to 40 A				
	Thermal overload relays	RTE-1305 RTE-1306 RTE-1308 RTE-1310 RTE-1312 RTE-1314 RTE-1316 RTE-1321			RTE-2322 RTE-2353 RTE-2355		RTE-3353 RTE-3355 RTE-3357 RTE-3359 RTE-3361 RTE-3361 RTE-3363 RTE-3365				

3 OVERALL DIMENSIONS

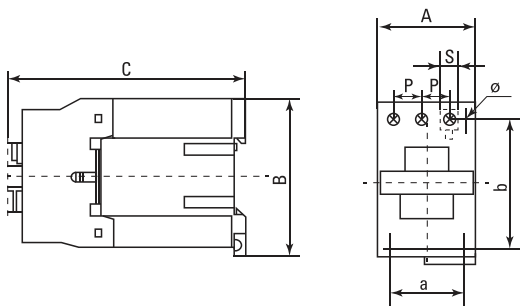


Fig. 1 - Overall dimensions of KMEp 9-32A

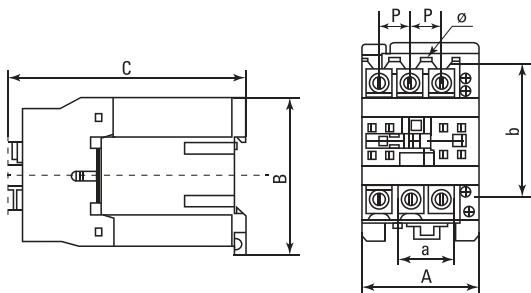


Fig. 2 - Overall dimensions of KMEp 40-95A

Table 4

Contactor type	B	A	C	b	a	Ø	P	S
9A & 12A	76	47	115	50-60	35	4,5	10,5	8,6
18A	76	47	120	50-60	35	4,5	10,5	8,6
25A	86	59	130	50-60	45	4,5	11,3	10,4
32A	86	59	135	50-60	45	4,5	13,2	11,7
40A, 50A, 65A	128	78	175	100/100	40	6,5	20	8,6
80A & 95A	128	87	183	100/100	40	6,5	20	8,6

4 INSTALLATION AND OPERATION

Contactors must be mounted and connected by qualified electrical personnel. Connection options with copper and aluminum wires are supported. Do not connect copper and aluminum wires to one terminal concurrently.

WARNING! Make sure the power is off before installation, connection and setting! For contactors operation, follow national safety rules for operation of electrical Installations.

Contactors may only be operated with a series-connected fuse or compatible miniature circuit breaker (MCB). Contactors KMEp EKF conform to IEC 61140 Class 0 for protection against electrical shock.

5 DELIVERY SCOPE

Contactors KMEp EKF are supplied in individual and group packages. For all available documentation, scan the QR-code on the insert or on the inside of the package.

6 SAFETY REQUIREMENTS

Contactors KMEp EKF must be maintained and repaired only by qualified personnel.

WARNING! Make sure the power is off before installation, connection and setting! Do not operate the devices with visible mechanical damage.

7 MAINTENANCE

For contactors maintenance, follow national safety rules for operation of electrical Installations.

Under normal operating conditions, visually inspect the contactors every 6 months.

8 TRANSPORTATION AND STORAGE

The contactors can be transported by any means of enclosed transport that ensures protection of packed products from mechanical impacts and weather exposure.

The contactors shall be stored in the original package indoors at the ambient temperature from -25°C to 50°C and relative humidity of max. 98% at +25°C.

9 DISPOSAL

Life-expired and failed contactors shall be disposed of in compliance with the effective national and local laws and regulations.

To dispose of the product, send it to an authorized company for recycling in compliance with the effective national and local laws and regulations.

10 MANUFACTURER'S WARRANTY

The manufacturer guarantees that the contactors comply with the requirements of IEC 60947-4-1, provided that consumers follow the operation, transportation and storage conditions.

Warranty period: 7 years from date of sale specified in the sales receipt.

Shelf life: 7 years from the date of manufacture specified on the product package or housing.

Service life: 10 years.

Manufacturer: OOO Elektroresheniya, Otradnaya st., 2b/9, 127273, Moscow, Russia. Tel.: +7 (495) 788-88-15.

MEA regional headquarters: EKF ELECTRICAL SOLUTION – FZCO, Dubai Silicon Oasis, DDP, Building A2, Dubai, United Arab Emirates.

Importer and EKF trademark service representative in the territory of the Republic of Kazakhstan: TOO «Energoresheniya Kazakhstan», Kazakhstan, Almaty, Bostandyk district, Turgut Ozal st., 4, apt 247.

11 CERTIFICATE OF ACCEPTANCE

Contactors KMEp EKF comply with the requirements of IEC 60947-4-1 and have been approved for operation.

Date of manufacture: for information, refer to the product package.

Quality control stamp

EHL



v3

ekfgroup.com

EKF