

RIK21



three-pole

RIK20



double-pole

RIK25



four-pole

RIK40



four-pole

RIK63



four-pole

RIKN



auxiliary contacts ⑥

- ① RIK20, RIK25, RIK40, RIK63: contactors with a varistor for overvoltage protection and a rectifier enable DC and AC voltage control
- ② RIKN available in versions: RIKN-20 (2 NO) and RIKN-11 (1 NO + 1 NC)
- ③ RIKN can not be mounted on contactors RIK20
- ④ RIKN increase by 9 mm the width of contactors RIK25, RIK40, RIK63
- ⑤ Recommended ventilation distance between group of contactors mounted side-by-side is 0,5 module width (9 mm)
- ⑥ The data for 1-phase power are valid for contactors RIK..22 (2 NO + 2 NC)

Features

- Control coil voltages of contactors:
 - **RIK21:**
AC: 24 V, 230 V AC: 50/60 Hz,
 - **RIK20 ①, RIK25 ①, RIK40 ①, RIK63 ①:**
AC/DC: 24 V, 230 V AC: 50/60 Hz,
- Setting up contacts of contactors:
 - **RIK20, RIK25, RIK40, RIK63:**
can be used as main or auxiliary contacts,
 - **RIK25, RIK40, RIK63:**
additional auxiliary contacts **RIKN ②**,
mounted on the side of the contactor.
- Silent operation.
- Protection against direct contact IP 20.
- Compliance with standards:
 - IEC/EN 61095, IEC/EN 60947-4-1,
 - IEC/EN 60947-5-1, VDE 0660, VDE 0637.
- Recognitions, certifications, directives:
 - RoHS,



General data		RIK21	RIK20	RIK25	RIK40	RIK63	RIKN
Mechanical life (cycles)		3 x 10 ⁶	3 x 10 ⁶	3 x 10 ⁶	3 x 10 ⁶	3 x 10 ⁶	3 x 10 ⁶
Module width		2	1 ③	2	3	3	0,5
Dimensions (L x W x H)		59,5 x 35 x 57 mm	85 x 17,5 x 65 mm	85 x 35 x 65 mm ④	84 x 53,5 x 65,5 mm ④	84 x 53,5 x 65,5 mm ④	84 x 9 x 60 mm
Weight		170 g	130 g	240 g	350 g	350 g	35 g
Ambient temperature	storage	-30...+80 °C	-30...+80 °C	-30...+80 °C	-30...+80 °C	-30...+80 °C	-30...+80 °C
	operating	-5...+55 °C	-5...+55 °C	-5...+55 °C	-5...+55 °C	-5...+55 °C	-5...+55 °C
Cover protection category (PN-EN 60529)		IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Number of contactors mounted side-by-side ⑤	≤ +40 °C	no limitation	max. 3	max. 3	no limitation	no limitation	①
	+40...+55 °C	no limitation	max. 2	max. 2	no limitation	no limitation	①
Max. operating frequency	DC1	300 cycles/hour	300 cycles/hour	300 cycles/hour	300 cycles/hour	300 cycles/hour	–
	AC1 / AC3 / AC5b / AC6b	600 cycles/hour	600 cycles/hour	600 cycles/hour	600 cycles/hour	600 cycles/hour	–
	AC15	1 200 cycles/hour	600 cycles/hour	600 cycles/hour	1 200 cycles/hour	1 200 cycles/hour	1 200 cycles/hour
	no load	3 000 cycles/hour	3 000 cycles/hour	3 000 cycles/hour	3 000 cycles/hour	3 000 cycles/hour	3 000 cycles/hour
Contact reliability		17 V (≥ 50 mA)	17 V (≥ 50 mA)	17 V (≥ 50 mA)	17 V (≥ 50 mA)	17 V (≥ 50 mA)	12 V (≥ 5 mA)
Min. distance of open contacts		3,6 mm	3,6 mm	3,6 mm	3,6 mm	3,6 mm	4 mm
Power dissipation per pole		2 W	1,7 W	2,2 W	4 W	8 W	0,3 W
Overvoltage protection		–	430 V	430 V	430 V	430 V	–
Overload current withstand capability		40 A	72 A	68 A	176 A	240 A	–
Max. back-up fuse for short-circuit protection gL (coordination type 2) I _v		20 A	20 A	25 A	63 A	80 A	6 A
Output circuit – main contacts data							
Insulation rated voltage U _i		415 V	230 V	440 V	440 V	440 V	500 V
Rated surge voltage U _{imp}		4 000 V	4 000 V	4 000 V	4 000 V	4 000 V	4 000 V
Rated thermal current I _{th}		20 A	20 A	25 A	40 A	63 A	6 A
Rated operational voltage U _e		400 V	230 V	400 V	400 V	400 V	230 V, 400 V
Rated frequency f		50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
AC1 / AC7a non-inductive or slightly inductive loads, resistance furnaces, heaters / slightly inductive loads in household appliances (mixers, blenders)							
Rated operational current I _e		20 A	20 A	25 A	40 A	63 A	–
Operational power P _e	230 V	4 kW	4 kW	5,4 kW	8,7 kW	13,3 kW	–
	230 V	7,5 kW	–	9 kW	16 kW	24 kW	–
	400 V	13 kW	–	16 kW	26 kW	40 kW	–
Electrical life (cycles)		2 x 10 ⁵	2 x 10 ⁵	2 x 10 ⁵	10 ⁵	10 ⁵	–
AC3 / AC7b squirrel-cage motors: starting, switches off motors during running time / motor-loads in household appliances (fans, central vacuum)							
Rated operational current I _e		5 A	9 A / 6 A (NO/NC)	8,5 A	22 A	30 A	–
Operational power P _e	230 V	0,37 kW	1,3 kW / 0,75 kW (NO/NC)	1,3 kW ⑥	3,7 kW ⑥	5 kW ⑥	–
	230 V	1,1 kW	–	2,2 kW	5,5 kW	8,5 kW	–
	400 V	2,2 kW	–	4 kW	11 kW	15 kW	–
Electrical life (cycles)		3 x 10 ⁵	3 x 10 ⁵	5 x 10 ⁵	1,5 x 10 ⁵	1,5 x 10 ⁵	–



Mounting

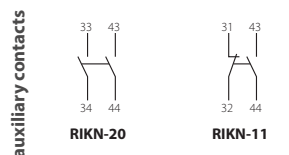
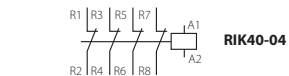
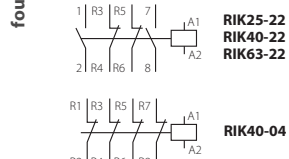
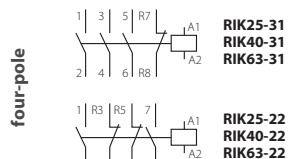
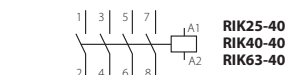
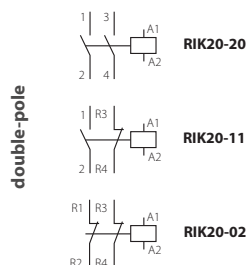
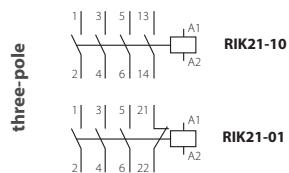
Installation contactors **RIK** are designed for:

- direct mounting on 35 mm rail mount acc. to PN-EN 60715,
- operational position – see page 11 "Mounting positions",
- application site – mounted in switchboards.



		RIK21	RIK20	RIK25	RIK40	RIK63	RIKN
Output circuit – main contacts data							
AC6b							
Switching of capacitors C	230 V	36 µF	30 µF	36 µF	220 µF	330 µF	–
Electrical life (cycles)		10 ⁵	10 ⁵	10 ⁵	10 ⁵	10 ⁵	–
DC1 (L/R ≤ 1 ms)							
non-inductive or slightly inductive loads, resistance furnaces, heaters							
Rated operational current I_e							
• 1 pole	U _e = 24 V DC	20 A	20 A	25 A	40 A	63 A	–
	U _e = 48 V DC	12 A	15 A	20 A	24 A	26 A	–
• 2 poles connected in series	U _e = 60 V DC	6 A	10 A	15 A	18 A	20 A	–
	U _e = 110 V DC	2 A	6 A	6 A	4 A	4 A	–
	U _e = 220 V DC	0,5 A	0,6 A	0,6 A	1,2 A	1,2 A	–
	U _e = 24 V DC	20 A	20 A	25 A	40 A	63 A	–
• 3 poles connected in series	U _e = 48 V DC	15 A	18 A	25 A	38 A	42 A	–
	U _e = 60 V DC	10 A	15 A	20 A	32 A	34 A	–
	U _e = 110 V DC	4 A	10 A	10 A	10 A	10 A	–
	U _e = 220 V DC	1,5 A	6 A	6 A	8 A	8 A	–
• 4 poles connected in series	U _e = 24 V DC	20 A	–	25 A	40 A	63 A	–
	U _e = 48 V DC	20 A	–	25 A	40 A	63 A	–
	U _e = 60 V DC	20 A	–	25 A	40 A	60 A	–
	U _e = 110 V DC	6 A	–	20 A	30 A	35 A	–
• 4 poles connected in series	U _e = 220 V DC	2,5 A	–	15 A	20 A	30 A	–
	U _e = 24 V DC	20 A	–	25 A	40 A	63 A	–
	U _e = 48 V DC	20 A	–	25 A	40 A	63 A	–
	U _e = 60 V DC	20 A	–	25 A	40 A	63 A	–
• 4 poles connected in series	U _e = 110 V DC	6 A	–	20 A	40 A	63 A	–
	U _e = 220 V DC	3,5 A	–	15 A	40 A	63 A	–
	Electrical life (cycles)	10 ⁵	10 ⁵	10 ⁵	10 ⁵	10 ⁵	–
	DC3 (L/R ≤ 2 ms)						
shunt-motors: starting, plugging, inching, dynamic breaking of motors							
Rated operational current I_e							
• 1 pole	U _e = 24 V DC	10 A	10 A	15 A	22 A	25 A	–
	U _e = 48 V DC	5 A	5 A	8 A	10 A	11 A	–
	U _e = 60 V DC	2 A	2 A	4 A	5 A	5 A	–
	U _e = 110 V DC	1 A	1 A	1,3 A	1,5 A	1,5 A	–
• 2 poles connected in series	U _e = 220 V DC	0,1 A	0,1 A	0,2 A	0,3 A	0,3 A	–
	U _e = 24 V DC	20 A	20 A	25 A	40 A	45 A	–
	U _e = 48 V DC	10 A	10 A	16 A	20 A	22 A	–
	U _e = 60 V DC	8 A	8 A	12 A	16 A	18 A	–
• 3 poles connected in series	U _e = 110 V DC	4 A	4 A	5,5 A	5 A	5 A	–
	U _e = 220 V DC	0,4 A	0,4 A	0,6 A	1 A	1 A	–
	U _e = 24 V DC	20 A	–	25 A	40 A	63 A	–
	U _e = 48 V DC	20 A	–	25 A	40 A	45 A	–
• 4 poles connected in series	U _e = 60 V DC	15 A	–	25 A	32 A	35 A	–
	U _e = 110 V DC	6 A	–	15 A	15 A	18 A	–
	U _e = 220 V DC	2,5 A	–	3 A	4 A	5 A	–
	U _e = 24 V DC	20 A	–	25 A	40 A	63 A	–
• 4 poles connected in series	U _e = 48 V DC	20 A	–	25 A	40 A	63 A	–
	U _e = 60 V DC	15 A	–	25 A	40 A	63 A	–
	U _e = 110 V DC	6 A	–	20 A	40 A	63 A	–
	U _e = 220 V DC	3,5 A	–	8 A	10 A	10 A	–
Electrical life (cycles)	10 ⁵	10 ⁵	10 ⁵	10 ⁵	10 ⁵	10 ⁵	–

Connections diagrams ●



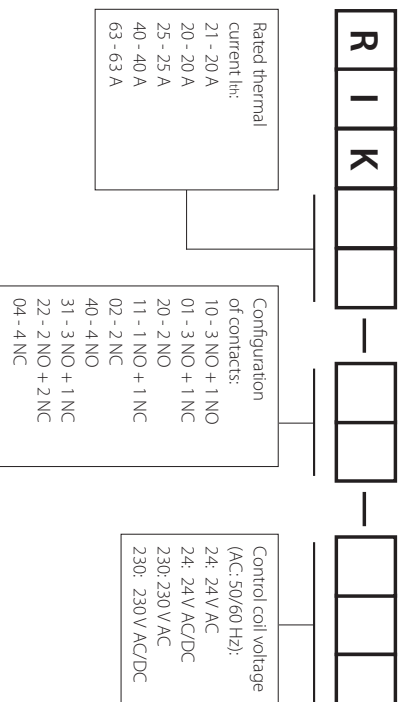
● RIK20, RIK25, RIK40, RIK63: contactors with a varistor for overvoltage protection and a rectifier enable DC and AC voltage control
 ● RIK20, RIK25: contactors can be controlled by AC voltage with frequency 40 ... 400 Hz

	RIK21	RIK20	RIK25	RIK40	RIK63	RIKN	
Output circuit – main contacts data							
DC5 (L/R ≤ 7,5 ms)							
series-motors: starting, plugging, inching, dynamic breaking of motors							
Rated operational current I_e							
• 1 pole	U _e = 24 V DC U _e = 48 V DC U _e = 60 V DC U _e = 110 V DC U _e = 220 V DC	10 A 4 A 1 A 0,3 A 0,06 A	10 A 4 A 1 A 0,3 A 0,06 A	15 A 5 A 3 A 0,5 A 0,1 A	20 A 8 A 4 A 1 A 0,2 A	25 A 10 A 5 A 1 A 0,2 A	–
• 2 poles connected in series	U _e = 24 V DC U _e = 48 V DC U _e = 60 V DC U _e = 110 V DC U _e = 220 V DC	20 A 8 A 6 A 2 A 0,2 A	20 A 8 A 6 A 2 A 0,2 A	25 A 15 A 10 A 4 A 0,4 A	40 A 18 A 14 A 5 A 0,8 A	45 A 20 A 15 A 5 A 0,8 A	–
• 3 poles connected in series	U _e = 24 V DC U _e = 48 V DC U _e = 60 V DC U _e = 110 V DC U _e = 220 V DC	20 A 20 A 15 A 5 A 1,5 A	– – – – –	25 A 25 A 20 A 12 A 2 A	40 A 40 A 28 A 12 A 3 A	63 A 44 A 30 A 15 A 4 A	–
• 4 poles connected in series	U _e = 24 V DC U _e = 48 V DC U _e = 60 V DC U _e = 110 V DC U _e = 220 V DC	20 A 20 A 15 A 5 A 3 A	– – – – –	25 A 25 A 25 A 15 A 5 A	40 A 40 A 40 A 35 A 8 A	63 A 60 A 45 A 10 A	–
Electrical life (cycles)		10 ⁵	10 ⁵	10 ⁵	10 ⁵	10 ⁵	
Connections (mounting)							
Max. cross section of the cables (rigid / flexible) S	1...2,5 mm ² / 1...2,5 mm ²	1...10 mm ² / 1...6 mm ²	1...10 mm ² / 1...6 mm ²	1,5...25 mm ² / 1,5...16 mm ²	1,5...25 mm ² / 1,5...16 mm ²	1...2,5 mm ² / 1...2,5 mm ²	
Screws (type / head)	M3,5 / PZ2	M3,5 / PZ1	M3,5 / PZ1	M5 / PZ2	M5 / PZ2	M3 / PZ1	
Max. tightening moment for the terminal	1,2 Nm	1,2 Nm	1,2 Nm	3,5 Nm	3,5 Nm	0,6 Nm	
Output circuit – auxiliary contacts data							
Insulation rated voltage U_i	415 V	230 V	440 V	440 V	440 V	500 V	
Rated surge voltage U_{imp}	4 000 V	4 000 V	4 000 V	4 000 V	4 000 V	4 000 V	
Rated thermal current I_{th}	20 A	20 A	25 A	40 A	40 A	6 A	
Rated operational voltage U_e	400 V	230 V	400 V	400 V	400 V	230 V, 400 V	
AC15							
control of AC electromagnetic loads							
Rated operational current (1-phase) I_e	230 V 400 V	6 A 4 A	6 A –	6 A 4 A	6 A 4 A	6 A 4 A	
Electrical life (cycles)		3 x 10 ⁵	3 x 10 ⁵	5 x 10 ⁵	1,5 x 10 ⁵	1,5 x 10 ⁵ 0,5 x 10 ⁵	
Input circuit – coil data							
Control voltage U_c	AC: 24 V, 230 V	AC/DC ①: 24 V, 230 V	AC/DC ①: 24 V, 230 V	AC/DC ①: 24 V, 230 V	AC/DC ①: 24 V, 230 V	–	
Range of control voltage U_c	0,85 ... 1,1 U _c	0,85 ... 1,1 U _c	0,85 ... 1,1 U _c	0,85 ... 1,1 U _c	0,85 ... 1,1 U _c	–	
Rated frequency f	AC: 50/60 Hz	AC: 50/60 Hz ●	AC: 50/60 Hz ●	AC: 50/60 Hz	AC: 50/60 Hz	–	
Surge immunity test (IEC/EN 61000-4-5)	2 000 V (1,2 / 50 μs)	2 000 V (1,2 / 50 μs)	2 000 V (1,2 / 50 μs)	2 000 V (1,2 / 50 μs)	2 000 V (1,2 / 50 μs)	–	
Coil consumption	switch-on operation	30 VA / 25 W 5 VA / 1,5 W	2,1 VA / 2,1 W 2,1 VA / 2,1 W	2,6 VA / 2,6 W 2,6 VA / 2,6 W	15,4 VA / 6 W 7,7 VA / 3 W	15,4 VA / 6 W 7,7 VA / 3 W	
Delays	make	7 ... 20 ms	15 ... 45 ms	15 ... 45 ms	10 ... 20 ms	15 ... 20 ms	
	break	10 ... 20 ms	20 ... 50 ms	20 ... 70 ms	10 ... 15 ms	35 ... 45 ms	
Max. cross section of the cables (rigid / flexible) S	1...2,5 mm ² / 1...2,5 mm ²	1...2,5 mm ² / 1...2,5 mm ²	1...2,5 mm ² / 1...2,5 mm ²	1...2,5 mm ² / 1...2,5 mm ²	1...2,5 mm ² / 1...2,5 mm ²	–	
Screws (type / head)	M3,5 / PZ2	M3,5 / PZ1	M3,5 / PZ1	M3 / PZ1	M3 / PZ1	–	
Max. tightening moment for the terminal	0,6 Nm	0,6 Nm	0,6 Nm	0,6 Nm	0,6 Nm	–	

RIK21/20/25/40/63 installation contactors

Selection table

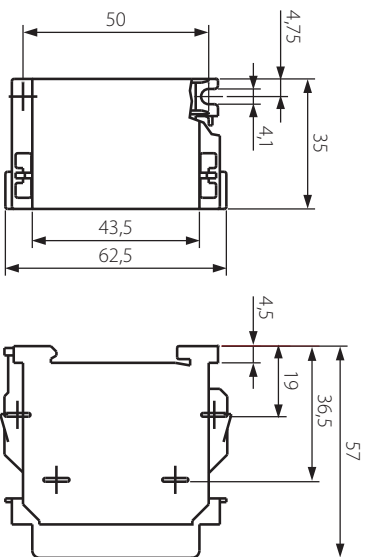
Type of installation contactor	Ordering code of installation contactor	Configuration of contacts	Control coil voltage	Additional auxiliary contacts
RIK21	RIK21-10-24	3 NO + auxiliary contact 1 NO	24 V AC	-
	RIK21-01-24	3 NO + auxiliary contact 1 NC	24 V AC	
	RIK21-10-230	3 NO + auxiliary contact 1 NO	230 V AC	
	RIK21-01-230	3 NO + auxiliary contact 1 NC	230 V AC	
RIK20	RIK20-20-24	2 NO	24 V AC/DC	-
	RIK20-11-24	1 NO + 1 NC	24 V AC/DC	
	RIK20-02-24	2 NC	24 V AC/DC	
	RIK20-20-230	2 NO	230 V AC/DC	
	RIK20-11-230	1 NO + 1 NC	230 V AC/DC	
	RIK20-02-230	2 NC	230 V AC/DC	
RIK25	RIK25-40-24	4 NO	24 V AC/DC	RIKN-20 (2 NO) RIKN-11 (1 NO + 1 NC)
	RIK25-31-24	3 NO + 1 NC	24 V AC/DC	
	RIK25-22-24	2 NO + 2 NC	24 V AC/DC	
	RIK25-40-230	4 NO	230 V AC/DC	
	RIK25-31-230	3 NO + 1 NC	230 V AC/DC	
	RIK25-22-230	2 NO + 2 NC	230 V AC/DC	
RIK40	RIK40-40-24	4 NO	24 V AC/DC	RIKN-20 (2 NO) RIKN-11 (1 NO + 1 NC)
	RIK40-31-24	3 NO + 1 NC	24 V AC/DC	
	RIK40-22-24	2 NO + 2 NC	24 V AC/DC	
	RIK40-04-24	4 NC	24 V AC/DC	
	RIK40-40-230	4 NO	230 V AC/DC	
	RIK40-31-230	3 NO + 1 NC	230 V AC/DC	
RIK63	RIK63-40-230	4 NC	230 V AC/DC	RIKN-20 (2 NO) RIKN-11 (1 NO + 1 NC)
	RIK63-40-24	4 NO	24 V AC/DC	
	RIK63-31-24	3 NO + 1 NC	24 V AC/DC	
	RIK63-22-24	2 NO + 2 NC	24 V AC/DC	
	RIK63-04-24	4 NC	24 V AC/DC	
	RIK63-40-230	4 NO	230 V AC/DC	
RIK63	RIK63-31-230	3 NO + 1 NC	230 V AC/DC	RIKN-11 (1 NO + 1 NC)
	RIK63-22-230	2 NO + 2 NC	230 V AC/DC	
RIK63-04-230	4 NC	230 V AC/DC		



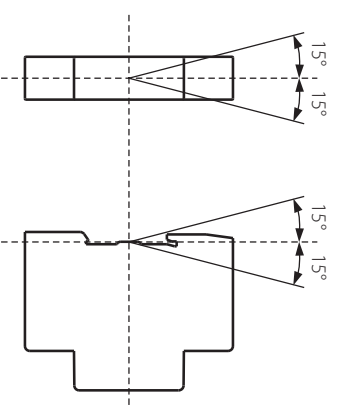
RIK21/20/25/40/63

installation contactors

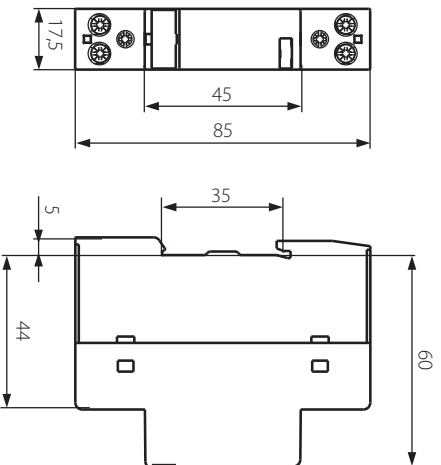
contactors RIK21



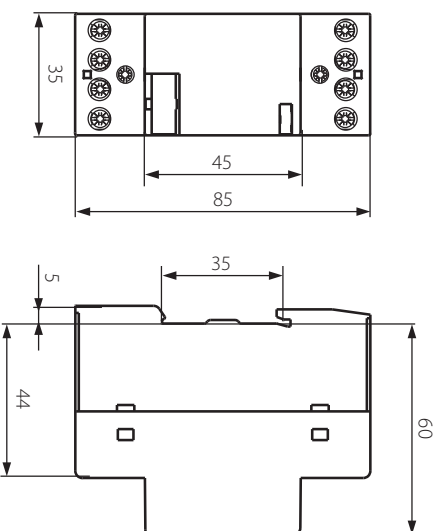
mounting positions RIK20, RIK25, RIK40, RIK63 ⑧



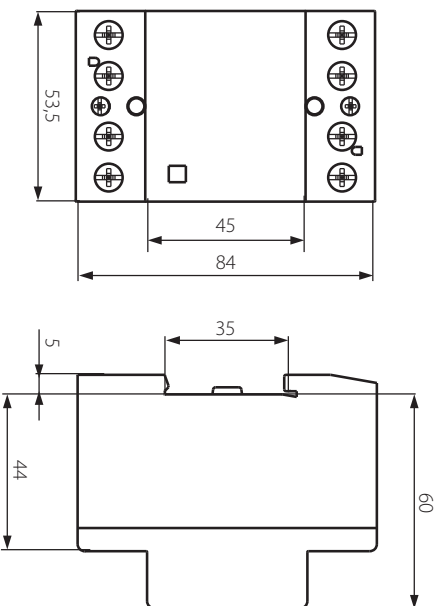
contactors RIK20



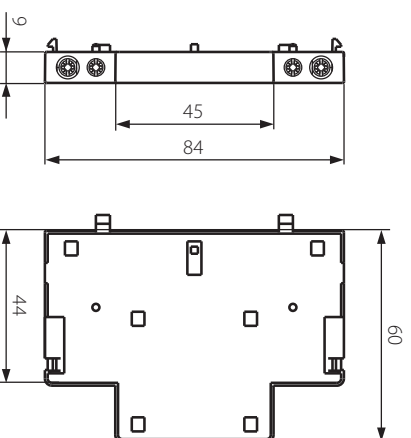
contactors RIK25



contactors RIK40, RIK63



auxiliary contacts RIKN ④






- ④ RIKN increase by 9 mm the width of contactors RIK25, RIK40, RIK63
- ⑧ RIK21: mounting position of contactor is optional

RIK21/20/25/40/63

control of lighting circuits

Maximum number of lamps on each pole contactor at 230 V 50 Hz

	Power [W]	Current [A]	Capacitance [µF]	RIK21	RIK20	RIK25	RIK40	RIK63	
 	Incandescent lamps and tungsten halogen lamps								
	15	0,07	—	130	130	130	260	330	
	25	0,11	—	80	80	80	160	200	
	40	0,18	—	50	50	50	100	125	
	60	0,26	—	33	33	33	65	85	
	75	0,33	—	26	26	26	53	66	
	100	0,44	—	20	20	20	40	50	
	150	0,65	—	13	13	13	26	33	
	200	0,87	—	10	10	10	20	25	
	300	1,3	—	6	6	6	13	16	
500	2,17	—	3	3	3	8	10		
1000	4,35	—	1	1	1	4	5		
Energy saving lamps									
3	0,03	—	50	50	60	150	200		
5	0,04	—	45	45	55	135	180		
7	0,055	—	40	40	50	120	160		
8	0,065	—	35	35	45	110	150		
9	0,075	—	30	30	40	100	140		
10	0,08	—	30	30	40	100	140		
11	0,09	—	30	30	40	100	140		
12	0,1	—	25	25	35	95	120		
14	0,11	—	25	25	35	90	120		
15	0,12	—	20	20	30	85	115		
16	0,13	—	20	20	30	80	105		
18	0,145	—	18	18	26	70	95		
20	0,16	—	17	17	22	65	85		
21	0,17	—	15	15	20	60	80		
23	0,185	—	15	15	20	60	70		
24	0,195	—	15	15	20	55	70		
30	0,16	—	15	15	20	55	70		
Metal halide lamps									
35	0,35	—	18	18	22	43	60		
70	1	—	10	10	12	23	32		
150	1,8	—	5	5	7	12	18		
250	3	—	3	3	4	7	10		
400	3,5	—	3	3	3	6	9		
1000	9,5	—	1	1	1	2	3		
2000	16,5	—	—	—	—	1	1		
35	0,23	6	5	5	6	36	50		
70	0,45	12	2	2	3	18	25		
150	0,75	20	1	1	1	11	15		
250	1,26	33	—	—	—	6	9		
400	2	35	—	—	—	6	8		
1000	5	95	—	—	—	2	3		
2000	10,5	148	—	—	—	1	2		
20	0,1	—	9	9	9	18	20		
35	0,2	—	6	6	6	11	13		
70	0,36	—	5	5	5	10	12		
150	0,7	—	4	4	4	8	10		

① (PCI) + 50...125 In lamp for 0,6 ms








parallel correction

with electronic control gear ①

RIK21/20/25/40/63

control of lighting circuits

Maximum number of lamps on each pole contactor at 230 V 50 Hz

	Power [W]	Current [A]	Capacitance [µF]	RIK21	RIK20	RIK25	RIK40	RIK63		
High-pressure mercury-vapour lamps										
	uncorrected	50	0,61	-	14	14	18	38	55	
		80	0,8	-	10	10	13	29	42	
		125	1,15	-	7	7	9	20	29	
		250	2,15	-	4	4	5	10	15	
		400	3,25	-	2	2	3	7	10	
	parallel correction	700	5,4	-	1	1	2	4	6	
		1000	7,5	-	1	1	1	3	4	
		50	0,28	7	4	4	5	5	31	47
		80	0,41	8	4	4	5	5	27	41
		125	0,65	10	3	3	4	4	22	33
parallel correction	250	1,22	18	1	1	2	2	12	18	
	400	1,95	25	1	1	1	1	9	13	
	700	3,45	45	-	-	-	-	5	7	
	1000	4,8	60	-	-	-	-	4	5	
	High-pressure sodium-vapour lamps									
	uncorrected	150	1,8	-	5	5	6	17	22	
		250	3	-	3	3	4	10	13	
		400	4,7	-	2	2	2	6	8	
		1000	10,3	-	-	-	1	3	3	
		150	0,77	20	1	1	1	11	16	
	correction	250	1,26	33	-	-	1	6	10	
		400	2	48	-	-	-	4	6	
		1000	5,1	106	-	-	-	2	3	
		20	0,1	-	9	9	9	18	20	
		35	0,2	-	6	6	6	11	13	
with electronic control gear ^①	70	0,36	-	5	5	5	10	12		
	150	0,7	-	4	4	4	8	10		
Low-pressure sodium-vapour lamps										
	uncorrected	18	0,35	-	22	22	27	71	90	
		35	0,6	-	7	7	9	23	30	
		55	0,6	-	7	7	9	23	30	
		90	0,9	-	4	4	5	14	19	
		135	0,9	-	3	3	4	10	13	
	parallel correction	180	0,9	-	3	3	4	10	13	
		18	0,35	5	6	6	7	44	66	
		35	0,28	20	1	1	1	11	16	
		55	0,35	20	1	1	1	11	16	
		90	0,55	26	1	1	1	8	12	
Transformer for low-voltage tungsten halogen lamps	135	0,8	45	-	-	-	4	7		
	180	1	40	-	-	-	5	8		
	20	-	-	40	40	52	110	174		
	50	-	-	20	20	24	50	80		
	75	-	-	13	13	16	35	54		
	100	-	-	10	10	12	27	43		
	150	-	-	7	7	9	19	29		
	200	-	-	5	5	6	14	23		
	300	-	-	3	3	4	9	14		


^① (PCI) + 50...125 In lamp for 0,6 ms

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RIK21/20/25/40/63

control of lighting circuits

Maximum number of lamps on each pole contactor at 230 V 50 Hz

 Fluorescent lamps	Power [W]	Current [A]	Capacitance [µF]	RIK21	RIK20	RIK25	RIK40	RIK63
				uncorrected or series correction	11 18 24 36 58 65 85	0,16 0,37 0,35 0,43 0,67 0,67 0,8	1,3 2,7 2,5 3,4 5,3 5,3 5,3	55 22 22 17 14 14 12
lead-lag circuit	2 x 11	0,07	-	2 x 50	2 x 50	2 x 60	2 x 140	2 x 200
	2 x 18	0,11	-	2 x 30	2 x 30	2 x 40	2 x 100	2 x 150
	2 x 24	0,14	-	2 x 24	2 x 24	2 x 31	2 x 78	2 x 118
	2 x 36	0,22	-	2 x 17	2 x 17	2 x 24	2 x 65	2 x 95
	2 x 58	0,35	-	2 x 10	2 x 10	2 x 14	2 x 40	2 x 60
	2 x 65	0,35	-	2 x 9	2 x 9	2 x 13	2 x 30	2 x 45
	2 x 85	0,47	-	2 x 6	2 x 6	2 x 10	2 x 20	2 x 30
	11	0,16	3,5	9	9	10	62	94
	18	0,37	4,5	7	7	8	48	73
	24	0,35	4,5	7	7	8	48	73
parallel correction	36	0,34	4,5	7	7	8	48	73
	58	0,67	7	4	4	5	31	47
	65	0,67	7	4	4	5	31	47
	85	0,8	8	3	3	4	27	41
	18	0,09	-	25	25	35	100	140
	36	0,16	-	15	15	20	52	75
	58	0,25	-	14	14	19	50	72
	2 x 18	0,17	-	2 x 12	2 x 12	2 x 17	2 x 50	2 x 70
	2 x 36	0,32	-	2 x 7	2 x 7	2 x 10	2 x 26	2 x 38
	2 x 58	0,49	-	2 x 7	2 x 7	2 x 9	2 x 25	2 x 36
with electronic control gear (FCG)	22	0,11	-	22	22	30	80	110
	40	0,21	FC	12	12	15	40	60
	55	0,28	-	8	8	12	30	45
	14	0,08	-	30	30	40	105	150
	21	0,11	HE	22	22	30	80	115
	28	0,14	-	18	18	22	60	90
	35	0,18	-	14	14	18	48	70
	24	0,12	-	20	20	26	70	100
	39	0,2	-	12	12	16	42	62
	49	0,24	HO	10	10	14	35	52
54	0,27	-	9	9	13	32	47	
80	0,39	-	6	6	8	22	32	
TS with electronic control gear (FCG)	2 x 22	0,23	-	2 x 11	2 x 11	2 x 15	2 x 40	2 x 55
	2 x 40	0,42	2 x FC	2 x 6	2 x 6	2 x 7	2 x 20	2 x 30
	2 x 55	0,55	-	2 x 4	2 x 4	2 x 6	2 x 15	2 x 22
	2 x 14	0,15	-	2 x 15	2 x 15	2 x 20	2 x 52	2 x 75
	2 x 21	0,22	2 x HE	2 x 11	2 x 11	2 x 15	2 x 40	2 x 57
	2 x 28	0,28	-	2 x 9	2 x 9	2 x 11	2 x 20	2 x 45
	2 x 35	0,36	-	2 x 7	2 x 7	2 x 9	2 x 24	2 x 35
	2 x 24	0,24	-	2 x 10	2 x 10	2 x 13	2 x 35	2 x 50
	2 x 39	0,39	-	2 x 6	2 x 6	2 x 8	2 x 21	2 x 31
	2 x 49	0,48	2 x HO	2 x 5	2 x 5	2 x 7	2 x 17	2 x 26
2 x 54	0,54	-	2 x 4	2 x 4	2 x 6	2 x 16	2 x 23	
2 x 80	0,74	-	2 x 3	2 x 3	2 x 4	2 x 11	2 x 16	



RIK21/20/25/40/63

control of lighting circuits

Maximum number of lamps on each pole contactor at 230 V 50 Hz



Compact fluorescent lamps	Power [W]	Current [A]	Capacitance [µF]	RIK21	RIK20	RIK25	RIK40	RIK63
series correction	10	0,19	1,4	50	50	60	105	165
	13	0,18	1,4	50	50	60	105	165
	18	0,23	1,7	40	40	50	85	135
	26	0,33	2,5	30	30	35	60	95
	18	0,38	2,7	25	25	30	50	80
	24	0,35	2,7	25	25	30	50	80
	36	0,44	3,4	20	20	25	45	70
	5	0,18	2,2	13	13	16	100	150
	7	0,18	2,1	14	14	17	104	157
	9	0,17	2	15	15	18	110	165
	10	0,19	2,2	13	13	16	100	150
	11	0,16	1,7	17	17	21	125	194
parallel correction	13	0,18	1,8	16	16	20	120	183
	18	0,23	2,3	13	13	15	95	143
	26	0,33	3,3	9	9	11	66	100
	18	0,38	4,2	7	7	8	52	78
	24	0,35	3,6	8	8	10	61	91
	36	0,44	4,4	6	6	8	50	75
	5	0,05	—	45	45	63	180	250
	7	0,05	—	45	45	63	180	250
	9	0,07	—	32	32	45	128	180
	10	0,07	—	32	32	45	128	180
	11	0,07	—	32	32	45	128	180
	13	0,07	—	32	32	45	128	180
with electronic control gear (ECG)	18	0,22	—	10	10	14	40	57
	24	0,22	—	10	10	14	40	57
	26	0,22	—	10	10	14	40	57
	32	0,22	—	10	10	14	40	57
	36	0,22	—	10	10	14	40	57
	40	0,22	—	10	10	14	40	57
	42	0,22	—	10	10	14	40	57
	55	0,28	—	8	8	11	32	45
	57	0,28	—	8	8	11	32	45
	70	0,35	—	6	6	9	25	36
	80	0,41	—	5	5	8	22	30
	120	0,58	—	4	4	5	15	22
series correction	2 x 9	0,11	—	2 x 16	2 x 16	2 x 22	2 x 90	2 x 125
	2 x 10	0,11	—	2 x 16	2 x 16	2 x 22	2 x 90	2 x 125
	2 x 11	0,11	—	2 x 16	2 x 16	2 x 22	2 x 90	2 x 125
	2 x 13	0,11	—	2 x 16	2 x 16	2 x 22	2 x 90	2 x 125
	2 x 18	0,3	—	2 x 5	2 x 5	2 x 7	2 x 20	2 x 28
	2 x 24	0,31	—	2 x 5	2 x 5	2 x 7	2 x 20	2 x 28
	2 x 26	0,31	—	2 x 5	2 x 5	2 x 7	2 x 20	2 x 28
	2 x 32	0,31	—	2 x 5	2 x 5	2 x 7	2 x 20	2 x 28
	2 x 36	0,31	—	2 x 5	2 x 5	2 x 7	2 x 20	2 x 28
	2 x 40	0,4	—	2 x 4	2 x 4	2 x 6	2 x 18	2 x 26
	2 x 42	0,4	—	2 x 4	2 x 4	2 x 6	2 x 18	2 x 26
	2 x 55	0,55	—	2 x 3	2 x 3	2 x 5	2 x 16	2 x 22
2 x 57	0,55	—	2 x 3	2 x 3	2 x 5	2 x 16	2 x 22	



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