

SUMMARY OF MODELS

Installation contactors and relays, Impulse relays
switch depending on applied voltage or impulse



Type	RSI	RPI	MIG	MIR
I_{th}, I_e	20, 25, 32, 40, 63 A	8, 16 A	20, 32, 63 A	16 A
Arrangement of contacts	10, 11, 20, 02, 40, 31, 04	001, 002, 003	10, 11, 20, 40, 31	001
Maximum load of each contact for:				
AC-1	63 A / 230 V	16 A / 250 V	63 A / 230 V	16 A / 250 V
AC-5a	22 A / 230 V	1.6 A / 230 V	22 A / 230 V	1.6 A / 230 V
AC-5b	5 000 W / 230 V	1000 W / 230 V	7 000 W / 230 V	460 W / 230 V
DC-1	63 A / 24 V	16 A / 24 V	63 A / 24 V	-

Timers

switch according to internal program in real time



Type	MAE-A	MAN-A	MAE-D	MAN-D	MAA-D
Design	Analog	Analog	Digital	Digital	Digital
Arrangement of contacts	001, 100	001, 100	001, 002	001, 002	001, 002
Permanent operation/off	Yes	Yes	Yes	Yes	Yes
Run reserve	-	100 hours	3 years	5 years	5 years
Menu language	-	-	EN	CS, EN, DE, PL, RU, IT, FR, ES, PT, NL, DA, FI, NO, SV, TR	
Number of programs	-	-	28	56	56
Program test	-	-	Yes	Yes	Yes
Holiday mode	-	-	-	Yes	Yes
Random switching mode	-	-	-	Yes	Yes
PIN code protection	-	-	-	Yes	Yes
Astro function	-	-	-	-	Yes

INSTALLATION CONTACTORS RSI

Installation contactors AC

- For switching of electrical circuits by application of control voltage on the coil.
- For control of appliances up to 63 A - electric boilers, convection heaters, water-heaters, storage heaters and also lighting circuits.
- Control voltage: AC 24 V, AC 230 V.
- Visual light indication at power up.

Installation contactors 20 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
10	AC 230 V	RSI-20-10-A230	OEZ:36609	1	0.130	1
20	AC 230 V	RSI-20-20-A230	OEZ:36610	1	0.130	1
	AC 24 V	RSI-20-20-A024	OEZ:36614	1	0.130	1
11	AC 230 V	RSI-20-11-A230	OEZ:36611	1	0.130	1
	AC 24 V	RSI-20-11-A024	OEZ:36615	1	0.130	1
02	AC 230 V	RSI-20-02-A230	OEZ:36612	1	0.130	1
	AC 24 V	RSI-20-02-A024	OEZ:36616	1	0.130	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 25 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC 230 V	RSI-25-40-A230	OEZ:36617	2	0.230	1
	AC 24 V	RSI-25-40-A024	OEZ:36621	2	0.230	1
31	AC 230 V	RSI-25-31-A230	OEZ:36618	2	0.230	1
	AC 24 V	RSI-25-31-A024	OEZ:36622	2	0.230	1
04	AC 230 V	RSI-25-04-A230	OEZ:36620	2	0.230	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 32 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
20	AC 230 V	RSI-32-20-A230	OEZ:43273	1	0.130	1
11	AC 230 V	RSI-32-11-A230	OEZ:43274	1	0.130	1
02	AC 230 V	RSI-32-02-A230	OEZ:43275	1	0.130	1
40	AC 230 V	RSI-32-40-A230	OEZ:43276	2	0.260	1
31	AC 230 V	RSI-32-31-A230	OEZ:43277	2	0.260	1
04	AC 230 V	RSI-32-04-A230	OEZ:43278	2	0.260	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 40 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC 230 V	RSI-40-40-A230	OEZ:36625	3	0.380	1
	AC 24 V	RSI-40-40-A024	OEZ:36629	3	0.380	1
31	AC 230 V	RSI-40-31-A230	OEZ:36626	3	0.380	1
	AC 24 V	RSI-40-31-A024	OEZ:36630	3	0.380	1
04	AC 230 V	RSI-40-04-A230	OEZ:36628	3	0.380	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 63 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC 230 V	RSI-63-40-A230	OEZ:36633	3	0.380	1
	AC 24 V	RSI-63-40-A024	OEZ:36637	3	0.380	1
31	AC 230 V	RSI-63-31-A230	OEZ:36634	3	0.380	1
	AC 24 V	RSI-63-31-A024	OEZ:36638	3	0.380	1
04	AC 230 V	RSI-63-04-A230	OEZ:36636	3	0.380	1

¹⁾ Each digit indicates successively the number of make and break contacts



INSTALLATION CONTACTORS RSI

Installation contactors AC with manual control

- For switching of electrical circuits by application of control voltage on the coil.
- For control of appliances up to 63 A - electric boilers, convection heaters, water-heaters, storage heaters and also lighting circuits.
- Control voltage: AC 24V, AC 230V.
- Visual light indication at power up.
- They are equipped with change-over switch with three positions:
 - position „AUTO“ - common function of the contactor
 - position „I“ - contactor in position ON, after application of supply voltage the contactors goes to AUTO position automatically
 - position „0“ - contactor coil circuit is interrupted.



Installation contactors 20 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
20	AC 230 V	RSI-20-20-A230-M	OEZ:36641	1	0.135	1
	AC 24 V	RSI-20-20-A024-M	OEZ:36643	1	0.135	1
11	AC 230 V	RSI-20-11-A230-M	OEZ:36642	1	0.135	1
	AC 24 V	RSI-20-11-A024-M	OEZ:36644	1	0.135	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 25 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC 230 V	RSI-25-40-A230-M	OEZ:36645	2	0.235	1
	AC 24 V	RSI-25-40-A024-M	OEZ:36647	2	0.235	1
31	AC 230 V	RSI-25-31-A230-M	OEZ:36646	2	0.235	1
	AC 24 V	RSI-25-31-A024-M	OEZ:36648	2	0.235	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 40 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC 230 V	RSI-40-40-A230-M	OEZ:36649	3	0.390	1
	AC 24 V	RSI-40-40-A024-M	OEZ:36651	3	0.390	1
31	AC 230 V	RSI-40-31-A230-M	OEZ:36650	3	0.390	1
	AC 24 V	RSI-40-31-A024-M	OEZ:36652	3	0.390	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 63 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC 230 V	RSI-63-40-A230-M	OEZ:36653	3	0.390	1

¹⁾ Each digit indicates successively the number of make and break contacts

INSTALLATION CONTACTORS RSI

Installation contactors AC/DC

- For switching of electrical circuits by application of control voltage on the coil.
- For control of appliances up to 63 A - electric boilers, convection heaters, water-heaters, storage heaters and also lighting circuits.
- Control voltage: AC/DC 24 V, AC/DC 230 V.
- Visual light indication at power up.
- In closed state they do not „hum“.

Instalační stykače 20 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
10	AC/DC 230 V	RSI-20-10-X230	OEZ:43104	1	0.130	1
20	AC/DC 230 V	RSI-20-20-X230	OEZ:43105	1	0.130	1
	AC/DC 24 V	RSI-20-20-X024	OEZ:43106	1	0.130	1
11	AC/DC 230 V	RSI-20-11-X230	OEZ:43107	1	0.130	1
	AC/DC 24 V	RSI-20-11-X024	OEZ:43108	1	0.130	1
02	AC/DC 230 V	RSI-20-02-X230	OEZ:43109	1	0.130	1
	AC/DC 24 V	RSI-20-02-X024	OEZ:43110	1	0.130	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 25 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC/DC 230 V	RSI-25-40-X230	OEZ:43115	2	0.240	1
	AC/DC 24 V	RSI-25-40-X024	OEZ:43116	2	0.240	1
31	AC/DC 230 V	RSI-25-31-X230	OEZ:43117	2	0.240	1
	AC/DC 24 V	RSI-25-31-X024	OEZ:43118	2	0.240	1
04	AC/DC 230 V	RSI-25-04-X230	OEZ:43119	2	0.240	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 32 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
20	AC/DC 230 V	RSI-32-20-X230	OEZ:43121	1	0.130	1
11	AC/DC 230 V	RSI-32-11-X230	OEZ:43122	1	0.130	1
02	AC/DC 230 V	RSI-32-02-X230	OEZ:43123	1	0.130	1
40	AC/DC 230 V	RSI-32-40-X230	OEZ:43124	2	0.260	1
31	AC/DC 230 V	RSI-32-31-X230	OEZ:43125	2	0.260	1
04	AC/DC 230 V	RSI-32-04-X230	OEZ:43126	2	0.260	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 40 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC/DC 230 V	RSI-40-40-X230	OEZ:43127	3	0.420	1
	AC/DC 24 V	RSI-40-40-X024	OEZ:43128	3	0.420	1
31	AC/DC 230 V	RSI-40-31-X230	OEZ:43129	3	0.420	1
	AC/DC 24 V	RSI-40-31-X024	OEZ:43130	3	0.420	1
04	AC/DC 230 V	RSI-40-04-X230	OEZ:43131	3	0.420	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 63 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC/DC 230 V	RSI-63-40-X230	OEZ:43132	3	0.420	1
	AC/DC 24 V	RSI-63-40-X024	OEZ:43133	3	0.420	1
31	AC/DC 230 V	RSI-63-31-X230	OEZ:43134	3	0.420	1
	AC/DC 24 V	RSI-63-31-X024	OEZ:43135	3	0.420	1

¹⁾ Each digit indicates successively the number of make and break contacts



INSTALLATION CONTACTORS RSI



Installation contactors AC/DC with manual control

- For switching of electrical circuits by application of control voltage on the coil.
- For control of appliances up to 63 A - electric boilers, convection heaters, water-heaters, storage heaters and also lighting circuits.
- Control voltage: AC/DC 24 V, AC/DC 230 V.
- Visual light indication at power up.
- In closed state they do not „hum“.
- They are equipped with change-over switch with three positions:
 - position „AUTO“ - common function of the contactor
 - position „I“ - contactor in position ON, after application of supply voltage the contactors goes to AUTO position automatically
 - position „0“ - contactor coil circuit is interrupted.

Installation contactors 20 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
20	AC/DC 230 V	RSI-20-20-X230-M	OEZ:43162	1	0.130	1
	AC/DC 24 V	RSI-20-20-X024-M	OEZ:43163	1	0.130	1
11	AC/DC 230 V	RSI-20-11-X230-M	OEZ:43164	1	0.130	1
	AC/DC 24 V	RSI-20-11-X024-M	OEZ:43165	1	0.130	1

¹⁾ Each digit indicates successively the number of make and break contacts

Installation contactors 25 A

Arrangement of contacts ¹⁾	Rated control voltage U _c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
40	AC/DC 230 V	RSI-25-40-X230-M	OEZ:43166	2	0.240	1
	AC/DC 24 V	RSI-25-40-X024-M	OEZ:43167	2	0.240	1
31	AC/DC 230 V	RSI-25-31-X230-M	OEZ:43168	2	0.240	1
	AC/DC 24 V	RSI-25-31-X024-M	OEZ:43169	2	0.240	1

¹⁾ Each digit indicates successively the number of make and break contacts

Accessories

Auxiliary switch PS-RSI-1100



- For signalling the main contact position of installation contactors.
- Contacts: 1 make.
- Installation by clicking on the right side of the installation contactors.
- It is possible to mount one auxiliary switch on one installation contactor.
- Width: 9 mm.

Type	Order code	Number of modules	Weight [kg]	Package [pcs]
PS-RSI-1100	OEZ:36657	0.5	0.03	1

INSTALLATION CONTACTORS RSI

Specifications

(for RSI-A installation contactors of one-module design with contact arrangement 10, 20, 11, 02)

Type		RSI-20-..-A...	RSI-32-..-A...
Standards		EN 60947-4-1 EN 60947-5-1 EN 61095	EN 60947-4-1 EN 60947-5-1 EN 61095
Approval marks			
Main circuit (contact)			
Arrangement of contacts ¹⁾		10, 20, 11, 02	20, 11, 02
Rated thermal current	I_{th}	20 A	32 A
Rated operating voltage	U_e	AC 230 V	AC 230 V
Rated operating current ²⁾	I_e	AC-1/AC-7a	20 A
		AC-3/AC-7b	NO: 9 A ³⁾ NC: 6 A ³⁾
Switched power ⁴⁾	P_e	AC-1/AC-7a 1-phase AC 230 V	4 kW
		AC-3/AC-7b 1-phase AC 230 V	NO: 1.3 kW ³⁾ NC: 0.75 kW ³⁾
Min. switched voltage/current		17 V / 50 mA	17 V / 50 mA
Max. switching frequency		AC-3, AC-7b, AC-1, AC-7a, lighting fittings	600 operating cycles/hr
		DC-1	300 operating cycles/hr
		no load	3 000 operating cycles/hr
Electrical endurance at I_e		AC-1/AC-7a	200 000 operating cycles
		AC-3/AC-7b	300 000 operating cycles
		DC-1	100 000 operating cycles
Mechanical endurance		3 000 000 operating cycles	3 000 000 operating cycles
Power loss at I_e (1 pole)		1.7 W	2.5 W
Maximum backup fuse gL/gG against short-circuit	coordination type 2	20 A	-
		coordination type 1	-
Min. distance between open contacts		3.6 mm	3.6 mm
Make time		15 ÷ 25 ms	15 ÷ 25 ms
Break time		10 ÷ 30 ms	10 ÷ 30 ms
Connection - conductor rigid	S	1 ÷ 10 mm ²	1 ÷ 10 mm ²
Connection - conductor flexible	S	1 ÷ 6 mm ²	1 ÷ 6 mm ²
Torque		1.2 Nm	1.2 Nm
Screw slot type		PZ1	PZ1
Control circuit (coil)			
Rated voltage	U_c	AC 24, 230 V	AC 230 V
Operating range	U_c	85 ÷ 110 %	85 ÷ 110 %
Rated frequency	f	50/60 Hz	50/60 Hz
Starting input power		12 VA / 10 W	12 VA / 10 W
Input power		2.8 VA / 1.2 W	2.8 VA / 1.2 W
Connection - conductor rigid		1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²
Connection - conductor flexible		1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²
Torque		0.6 Nm	0.6 Nm
Screw head type		PZ1	PZ1
Other data			
Other data	U_i	440 V	440 V
Rated impulse withstand voltage	U_{imp}	4 kV	4 kV
Mounting on "U" rail according to EN 60715 - type		TH35	TH35
Degree of protection		IP20	IP20
Ambient temperature		-5 ÷ +55 °C	-15 ÷ +55 °C
Seismic resistance		IEC 980:1993 ⁵⁾	IEC 980:1993 ⁵⁾

¹⁾ Each digit indicates successively the number of make and break contacts

²⁾ Switching of resistance or slightly inductive load in DC circuits, see page E14

³⁾ NO - make contact, NC - break contact













⁴⁾ Switched power is shown for categories AC-5a a AC-5b in tables on pages E13 and E14

⁵⁾ It passed the seismic tests for NPP Dukovany and Temelin

INSTALLATION CONTACTORS RSI

Specifications

(for RSI-A installation contactors of multi-module design with contact arrangement 40, 31, 04)

Type		RSI-25-...A...	RSI-32-...A...	RSI-40-...A...	RSI-63-...A...	
Standards		EN 60947-4-1 EN 60947-5-1 EN 61095	EN 60947-4-1 EN 60947-5-1 EN 61095	EN 60947-4-1 EN 60947-5-1 EN 61095	EN 60947-4-1 EN 60947-5-1 EN 61095	
Approval marks		  	  	  	  	
Main circuit (contact)						
Arrangement of contacts ¹⁾		40, 31, 04	40, 31, 04	40, 31, 04	40, 31, 04	
Rated thermal current	I_{th}	25 A	32 A	40 A	63 A	
Rated operating voltage	U_e	AC 400 V	AC 400 V	AC 400 V	AC 400 V	
Rated operating current ²⁾	I_e	AC-1/AC-7a AC-3/AC-7b	25 A 8.5 A	32 A 8.5 A	40 A 22 A	
Switched power ³⁾	P_e	AC-1/AC-7a 1-phase AC 230 V 3-phase AC 400 V AC-3/AC-7b 1-phase AC 230 V 3-phase AC 400 V	5.4 kW	7 kW	8.7 kW	13.3 kW
			16 kW	21 kW	26 kW	40 kW
			1.3 kW	1.3 kW	3.7 kW	5 kW
Min. switched voltage/current		17 V / 50 mA	17 V / 50 mA	17 V / 50 mA	17 V / 50 mA	
Max. switching frequency	AC-3, AC-7b, AC-1, AC-7a, lighting fittings DC-1 no load	600 operating cycles/hr	600 operating cycles/hr	600 operating cycles/hr	600 operating cycles/hr	
		300 operating cycles/hr	300 operating cycles/hr	300 operating cycles/hr	300 operating cycles/hr	
		3 000 operating cycles/hr	3 000 operating cycles/hr	3 000 operating cycles/hr	3 000 operating cycles/hr	
Electrical endurance at I_e	AC-1/AC-7a AC-3/AC-7b DC-1	200 000 operating cycles	150 000 operating cycles	100 000 operating cycles	100 000 operating cycles	
		500 000 operating cycles	500 000 operating cycles	150 000 operating cycles	150 000 operating cycles	
		100 000 operating cycles	100 000 operating cycles	100 000 operating cycles	100 000 operating cycles	
Mechanical endurance		3 000 000 operating cycles	3 000 000 operating cycles	3 000 000 operating cycles	3 000 000 operating cycles	
Power loss at I_e (1 pole)		2.2 W	2.5 W	4 W	8 W	
Maximum backup fuse gL/gG against short-circuit	coordination type 2 coordination type 1	25 A -	- 32 A	63 A -	80 A -	
Min. distance between open contacts		3.6 mm	3.6 mm	3.6 mm	3.6 mm	
Make time		10 ÷ 30 ms	10 ÷ 30 ms	10 ÷ 20 ms	10 ÷ 20 ms	
Break time		10 ÷ 30 ms	10 ÷ 30 ms	10 ÷ 15 ms	10 ÷ 15 ms	
Connection - conductor rigid	S	1 ÷ 10 mm ²	1 ÷ 10 mm ²	1.5 ÷ 25 mm ²	1.5 ÷ 25 mm ²	
Connection - conductor flexible	S	1 ÷ 6 mm ²	1 ÷ 6 mm ²	1.5 ÷ 16 mm ²	1.5 ÷ 16 mm ²	
Torque		1.2 Nm	1.2 Nm	3.5 Nm	3.5 Nm	
Screw head type		PZ1	PZ1	PZ2	PZ2	
Control circuit (coil)						
Rated voltage	U_c	AC 24, 230 V	AC 230 V	AC 24, 230 V	AC 24, 230 V	
Operating range	U_c	85 ÷ 110 %	85 ÷ 110 %	85 ÷ 110 %	85 ÷ 110 %	
Rated frequency	f	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	
Starting input power		33 VA / 25 W	33 VA / 25 W	15.4 VA / 6 W	15.4 VA / 6 W	
Input power		5.5 VA / 1.6 W	5.5 VA / 1.6 W	7.7 VA / 3 W	7.7 VA / 3 W	
Connection - conductor rigid		1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²	
Connection - conductor flexible		1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²	
Torque		0.6 Nm	0.6 Nm	0.6 Nm	0.6 Nm	
Screw head type		PZ1	PZ1	PZ1	PZ1	
Other data						
Rated insulation voltage	U_i	440 V	440 V	440 V	440 V	
Rated impulse withstand voltage	U_{imp}	4 kV	4 kV	4 kV	4 kV	
Mounting on "U" rail according to EN 60715 - type		TH35	TH35	TH35	TH35	
Degree of protection		IP20	IP20	IP20	IP20	
Ambient temperature		-5 ÷ +55 °C	-15 ÷ +55 °C	-5 ÷ +55 °C	-5 ÷ +55 °C	
Seismic resistance		IEC 980:1993 ⁴⁾	IEC 980:1993 ⁴⁾	IEC 980:1993 ⁴⁾	IEC 980:1993 ⁴⁾	

¹⁾ Each digit indicates successively the number of make and break contacts

²⁾ Switching of resistance or slightly inductive load in DC circuits, see page E14





³⁾ Switched power is shown for categories AC-5a a AC-5b in tables on pages E13 and E14

⁴⁾ It passed the seismic tests for NPP Dukovany and Temelin

INSTALLATION CONTACTORS RSI

Specifications

(for RSI-X installation contactors of one-module design with contact arrangement 10, 20, 11, 02)

Type		RSI-20-...X...	RSI-32-...X...
Standards		EN 60947-4-1 EN 60947-5-1 EN 61095	EN 60947-4-1 EN 60947-5-1 EN 61095
Approval marks		 	 
Main circuit (contact)			
Main circuit (contact) ¹⁾		10, 20, 11, 02	10, 20, 11, 02
Rated thermal current	I_{th}	20 A	32 A
Rated operating voltage	U_e	AC 230 V	AC 230 V
Rated operating current ²⁾	I_e	AC-1/AC-7a AC-3/AC-7b	AC-1/AC-7a AC-3/AC-7b
Switched power ⁴⁾	P_e	AC-1/AC-7a AC-3/AC-7b	AC-1/AC-7a AC-3/AC-7b
Min. switched voltage/current		17 V / 50 mA	17 V / 50 mA
Max. switching frequency		AC-3, AC-7b, AC-1, AC-7a, lighting fittings DC-1 no load	AC-3, AC-7b, AC-1, AC-7a, lighting fittings DC-1 no load
Electrical endurance at I_e		AC-1/AC-7a AC-3/AC-7b DC-1	AC-1/AC-7a AC-3/AC-7b DC-1
Mechanical endurance		3 000 000 operating cycles	10 000 000 operating cycles
Power loss at I_e (1 pole)		1.7 W	2.5 W
Maximum backup fuse gL/gG against short-circuit		coordination type 2 coordination type 1	- 32 A
Min. distance between open contacts		3.6 mm	3.6 mm
Make time		15 ÷ 45 ms	15 ÷ 45 ms
Break time		20 ÷ 50 ms	20 ÷ 50 ms
Connection - conductor rigid	S	1 ÷ 10 mm ²	1 ÷ 10 mm ²
Connection - conductor flexible	S	1 ÷ 6 mm ²	1 ÷ 6 mm ²
Torque		1.2 Nm	1.2 Nm
Screw head type		PZ1	PZ1
Control circuit (coil)			
Rated voltage	U_c	AC/DC 24, 230 V	AC/DC 230 V
Operating range	U_c	85 ÷ 110 %	85 ÷ 110 %
Rated frequency	f	40 ÷ 500 Hz	40 ÷ 500 Hz
Starting input power		2.1 VA / 2.1 W	2.1 VA / 2.1 W
Input power		2.1 VA / 2.1 W	2.1 VA / 2.1 W
Connection - conductor rigid		1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²
Connection - conductor flexible		1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²
Torque		0.6 Nm	0.6 Nm
Screw head type		PZ1	PZ1
Other data			
Rated insulation voltage	U_i	440 V	440 V
Rated impulse withstand voltage	U_{imp}	4 kV	4 kV
Mounting on "U" rail according to EN 60715 - type		TH35	TH35
Degree of protection		IP20	IP20
Ambient temperature		-5 ÷ +55 °C	-15 ÷ +55 °C
Seismic resistance		IEC 980:1993 ⁵⁾	IEC 980:1993 ⁵⁾

¹⁾ Each digit indicates successively the number of make and break contacts

²⁾ Switching of resistance or slightly inductive load in DC circuits, see page E14

³⁾ NO - make contact, NC - break contact









⁴⁾ Switched power is shown for categories AC-5a a AC-5b in tables on pages E13 and E14

⁵⁾ It passed the seismic tests for NPP Dukovany and Temelin

INSTALLATION CONTACTORS RSI

Specifications

(RSI-X installation contactors of multi-module design with contact arrangement 40, 31, 04)

Type		RSI-25-...X...	RSI-32-...X...	RSI-40-...X...	RSI-63-...X...
Standards		EN 60947-4-1 EN 60947-5-1 EN 61095	EN 60947-4-1 EN 60947-5-1 EN 61095	EN 60947-4-1 EN 60947-5-1 EN 61095	EN 60947-4-1 EN 60947-5-1 EN 61095
Approval marks		 	 	 	 
Main circuit (contact)					
Arrangement of contacts ¹⁾		40, 31, 04	40, 31, 04	40, 31, 04	40, 31, 04
Rated thermal current	I_{th}	25 A	32 A	40 A	63 A
Rated operating voltage	U_e	AC 400 V	AC 400 V	AC 400 V	AC 400 V
Rated operating current ²⁾	I_e	AC-1/AC-7a AC-3/AC-7b	25 A 8.5 A	32 A 8.5 A	40 A 22 A
Switched power ³⁾	P_e	AC-1/AC-7a AC-3/AC-7b	1-phase AC 230 V 3-phase AC 400 V 1.3 kW 4 kW	7 kW 21 kW 1.3 kW 4 kW	8.7 kW 26 kW 3.7 kW 11 kW
Min. switched voltage/current		17 V / 50 mA	17 V / 50 mA	17 V / 50 mA	17 V / 50 mA
Max. switching frequency		AC-3, AC-7b, AC-1, AC-7a, lighting fittings DC-1 no load	600 operating cycles/hr 300 operating cycles/hr 3 000 operating cycles/hr	600 operating cycles/hr 300 operating cycles/hr 3 000 operating cycles/hr	600 operating cycles/hr 300 operating cycles/hr 3 000 operating cycles/hr
Electrical endurance at I_e		AC-1/AC-7a AC-3/AC-7b DC-1	200 000 operating cycles 500 000 operating cycles 100 000 operating cycles	150 000 operating cycles 500 000 operating cycles 100 000 operating cycles	100 000 operating cycles 150 000 operating cycles 100 000 operating cycles
Mechanical endurance			3 000 000 operating cycles	10 000 000 operating cycles	3 000 000 operating cycles
Power loss at I_e (1 pole)			2.2 W	2.5 W	4 W
Maximum backup fuse gL/gG against short-circuit		coordination type 2 coordination type 1	25 A -	- 32 A	63 A 80 A
Min. distance between open contacts			3.6 mm	3.6 mm	3.6 mm
Make time			15 ÷ 45 ms	15 ÷ 45 ms	15 ÷ 20 ms
Break time			20 ÷ 70 ms	20 ÷ 70 ms	35 ÷ 45 ms
Connection - conductor rigid	S		1 ÷ 10 mm ²	1 ÷ 10 mm ²	1.5 ÷ 25 mm ²
Connection - conductor flexible	S		1 ÷ 6 mm ²	1 ÷ 6 mm ²	1.5 ÷ 16 mm ²
Torque			1.2 Nm	1.2 Nm	3.5 Nm
Screw head type			PZ1	PZ1	PZ2
Control circuit (coil)					
Rated voltage	U_c	AC/DC 24, 230 V	AC/DC 230 V	AC/DC 24, 230 V	AC/DC 24, 230 V
Operating range	U_c	85 ÷ 110 %	85 ÷ 110 %	85 ÷ 110 %	85 ÷ 110 %
Rated frequency	f	40 ÷ 500 Hz	40 ÷ 500 Hz	40 ÷ 500 Hz	40 ÷ 500 Hz
Starting input power ³⁾		2.6 VA / 2.6 W (3.8 VA / 3.8 W)	2.6 VA / 2.6 W	5 VA / 5 W	5 VA / 5 W
Input power ⁴⁾		2.6 VA / 2.6 W (3.8 VA / 3.8 W)	2.6 VA / 2.6 W	5 VA / 5 W	5 VA / 5 W
Connection - conductor rigid			1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²
Connection - conductor flexible			1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²	1 ÷ 2.5 mm ²
Torque			0.6 Nm	0.6 Nm	0.6 Nm
Screw head type			PZ1	PZ1	PZ1
Other data					
Rated insulation voltage	U_i	440 V	440 V	440 V	440 V
Rated impulse withstand voltage	U_{imp}	4 kV	4 kV	4 kV	4 kV
Mounting on "U" rail according to EN 60715 - type		TH35	TH35	TH35	TH35
Degree of protection		IP20	IP20	IP20	IP20
Ambient temperature		-5 ÷ +55 °C	-15 ÷ +55 °C	-5 ÷ +55 °C	-5 ÷ +55 °C
Seismic resistance		IEC 980:1993 ⁵⁾	IEC 980:1993 ⁵⁾	IEC 980:1993 ⁵⁾	IEC 980:1993 ⁵⁾

¹⁾ Each digit indicates successively the number of make and break contacts

²⁾ Switching of resistance or slightly inductive load in DC circuits, see page E14

³⁾ Switched power is shown for categories AC-5a a AC-5b in tables on pages E13 and E14




⁴⁾ Values in parentheses are valid for design with arrangement of contacts 04

⁵⁾ It passed the seismic tests for NPP Dukovany and Temelin

INSTALLATION CONTACTORS RSI

Specifications

(for PS-RSI-1100 auxiliary contact)

Type		PS-RSI-1100	
Standards		EN 60947-5-1	
Approval marks		  	
Contacts			
Arrangement of contacts ¹⁾		11	
Rated thermal current	I_{th}	6 A	
Rated operating voltage	U_e	AC 230 V, AC 400 V	
Rated operating current	I_e	AC-15	AC 230 V
			AC 400 V
		4 A	
Min. switched voltage/current		12 V / 5 mA	
Electrical endurance at I_e		50 000 operating cycles	
Mechanical endurance		3 000 000 operating cycles	
Power loss at I_e		0.3 W	
Maximum backup fuse gL/gG against short-circuit, coordination type 2		6 A	
Min. distance between open contacts		4 mm	
Connection - conductor rigid		1 ÷ 2.5 mm ²	
Connection - conductor flexible		1 ÷ 2.5 mm ²	
Torque		0.6 Nm	
Screw head type		PZ1	
Other data			
Rated insulation voltage	U_i	AC 500 V	
Rated impulse withstand voltage	U_{imp}	4 kV	
Degree of protection		IP20	
Seismic resistance		IEC 980:1993 ²⁾	

¹⁾ Each digit indicates successively the number of make and break contacts

²⁾ It passed the seismic tests for NPP Dukovany and Temelín

INSTALLATION CONTACTORS RSI

Switching of lights - maximum number of light fittings per one contact at AC 230 V, 50 Hz (utilization category AC-5a, AC-5b)

Maximum number of light bulbs

Installation contactor Type	Lighting fitting										
	15 W 0.07 A	25 W 0.11 A	40 W 0.17 A	60 W 0.26 A	75 W 0.33 A	100 W 0.44 A	150 W 0.65 A	200 W 0.87 A	300 W 1.3 A	500 W 2.17 A	1 000 W 4.35 A
RSI-20	133	80	50	33	27	20	13	10	7	4	2
RSI-25	147	88	55	37	29	22	15	11	7	4	2
RSI-32	167	100	63	42	33	25	17	13	8	5	3
RSI-40	267	160	100	67	53	40	27	20	13	8	4
RSI-63	333	200	125	83	67	50	33	25	17	10	5

Maximum total current of sources for LED

Installation contactor Type	Max. total current
RSI-20	2.4 A
RSI-25	3.8 A
RSI-32	4.0 A
RSI-40	11.0 A
RSI-63	18.0 A

Maximum number of fluorescent tubes

Installation contactor Type	Uncompensated			Compensated in parallel			DUO connection		
	18 W 0.37 A	36 W 0.43 A	58 W 0.67 A	18 W (4.5 μF) 0.19 A	36 W (4.5 μF) 0.29 A	58 W (7 μF) 0.46 A	2x 18 W 0.26 A	2x 36 W 0.48 A	2x 58 W 0.78 A
RSI-20	24	20	13	7	7	4	31	17	10
RSI-25	30	26	17	8	8	5	40	22	13
RSI-32	35	30	19	9	9	6	50	27	17
RSI-40	54	47	30	49	49	31	100	54	33
RSI-63	86	74	48	73	73	47	150	81	50

Maximum number of fluorescent tubes with electronic ballast

Installation contactor Type	With electronic ballast							
	18 W 0.09 A	36 W 0.16 A	58 W 0.25 A	80 W 0.40 A	2x 18 W 0.17 A	2x 36 W 0.31 A	2x 58 W 0.48 A	2x 80 W 0.76 A
RSI-20	39	22	14	9	21	11	7	5
RSI-25	53	30	19	12	28	15	10	6
RSI-32	57	32	20	13	30	16	11	7
RSI-40	139	78	50	31	74	40	26	16
RSI-63	200	113	72	45	106	58	38	24

Maximum number of high-pressure mercury discharge lamps

Installation contactor Type	Uncompensated							Compensated in parallel							
	50 W 0.6 A	80 W 0.8 A	125 W 1.2 A	250 W 2.2 A	400 W 3.3 A	700 W 5.4 A	1 000 W 7.5 A	50 W (7 μF) 0.3 A	80 W (8 μF) 0.4 A	125 W (10 μF) 0.6 A	250 W (18 μF) 1.2 A	400 W (25 μF) 1.8 A	700 W (40 μF) 3.4 A	1 000 W (60 μF) 4.8 A	
RSI-20	14	10	7	4	2	1	1	4	4	3	1	1	-	-	
RSI-25	18	13	9	5	3	2	1	5	5	4	2	1	-	-	
RSI-32	20	15	10	6	4	3	2	6	5	4	2	1	1	-	
RSI-40	38	29	20	10	7	4	3	31	27	22	12	9	5	4	
RSI-63	55	42	29	15	10	6	4	47	41	33	18	13	7	5	

INSTALLATION CONTACTORS RSI

Maximum number of metal halide discharge lamps

Installation contactor	Uncompensated							Compensated in parallel						
	35 W	70 W	150 W	250 W	400 W	1 000 W	2 000 W	35 W (6 µF)	70 W (12 µF)	150 W (20 µF)	250 W (32 µF)	400 W (45 µF)	1 000 W (85 µF)	2 000 W (125 µF)
Type	0.5 A	1 A	1.8 A	3 A	4.6 A	9.7 A	12.2 A	0.23 A	0.42 A	0.77 A	1.26 A	2 A	5 A	10.5 A
RSI-20	18	10	5	3	3	1	-	5	2	1	-	-	-	-
RSI-25	22	12	7	4	3	1	-	6	3	1	1	-	-	-
RSI-32	28	14	7	4	3	1	1	6	3	1	1	-	-	-
RSI-40	43	23	12	7	6	2	1	36	18	11	6	5	2	1
RSI-63	60	32	18	10	9	3	2	50	25	15	9	7	3	2

Maximum number of high-pressure sodium discharge lamps

Installation contactor	Uncompensated				Compensated in parallel				with electronic ballast			
	150 W	250 W	400 W	1 000 W	150 W (20 µF)	250 W (32 µF)	400 W (45 µF)	1 000 W (100 µF)	150 W	250 W	400 W	1 000 W
Type	1.8 A	3 A	4.4 A	10.3 A	0.77 A	1.26 A	2 A	5.1 A	0.72 A	1.3 A	2 A	5 A
RSI-20	5	3	2	-	1	-	-	-	3	2	1	-
RSI-25	6	4	2	1	1	1	-	-	4	2	1	-
RSI-32	6	4	2	1	2	1	-	-	5	3	2	-
RSI-40	17	10	6	3	11	6	4	2	8	4	3	1
RSI-63	22	13	8	3	16	10	6	3	10	5	4	1

Maximum number of low-pressure sodium discharge lamps

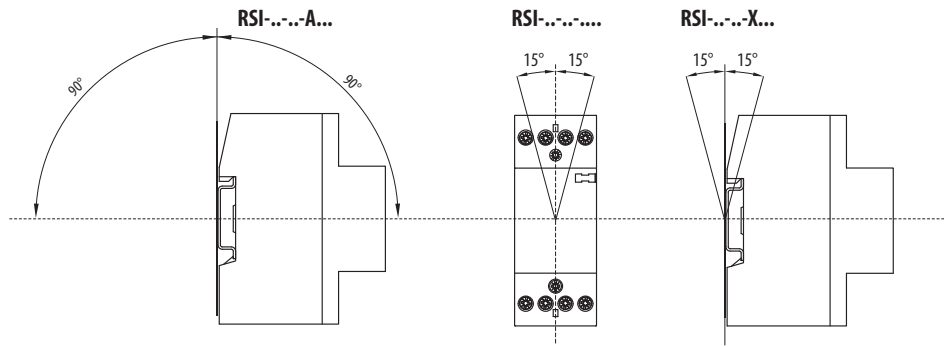
Installation contactor	Uncompensated						Compensated in parallel					
	18 W	35 W	55 W	90 W	135 W	180 W	18 W (5 µF)	35 W (20 µF)	55 W (20 µF)	90 W (26 µF)	135 W (40 µF)	180 W (40 µF)
Type	0.4 A	0.6 A	0.6 A	0.9 A	0.9 A	0.9 A	0.35 A	0.28 A	0.35 A	0.55 A	0.8 A	1 A
RSI-20	22	7	7	4	3	3	6	1	1	1	-	-
RSI-25	27	9	9	5	4	4	7	1	1	1	-	-
RSI-32	60	10	10	6	5	5	8	2	2	1	1	1
RSI-40	71	23	23	14	10	10	44	11	11	8	4	5
RSI-63	90	30	30	19	13	13	66	16	13	12	7	8

Switching of resistance or slightly inductive load in DC circuits (utilization category DC-1 (L/R ≤ 1 ms))

Installation contactor	Operating voltage U _e	Contact load			
		1 contact	2 contacts in series	3 contacts in series	4 contacts in series
RSI-20	DC 24 V	20 A	20 A	-	-
	DC 48 V	15 A	18 A	-	-
	DC 60 V	10 A	15 A	-	-
	DC 110 V	6 A	10 A	-	-
	DC 220 V	0.6 A	6 A	-	-
RSI-25	DC 24 V	25 A	25 A	25 A	25 A
	DC 48 V	20 A	25 A	25 A	25 A
	DC 60 V	15 A	20 A	25 A	25 A
	DC 110 V	6 A	10 A	20 A	20 A
	DC 220 V	0.6 A	6 A	15 A	15 A
RSI-32	DC 24 V	32 A	32 A	32 A	32 A
	DC 48 V	25 A	32 A	32 A	32 A
	DC 60 V	15 A	20 A	32 A	32 A
	DC 110 V	6 A	10 A	20 A	20 A
	DC 220 V	0.6 A	6 A	15 A	15 A
RSI-40	DC 24 V	40 A	40 A	40 A	40 A
	DC 48 V	24 A	38 A	40 A	40 A
	DC 60 V	18 A	32 A	40 A	40 A
	DC 110 V	4 A	10 A	30 A	40 A
	DC 220 V	1.2 A	8 A	20 A	40 A
RSI-63	DC 24 V	63 A	63 A	63 A	63 A
	DC 48 V	26 A	42 A	63 A	63 A
	DC 60 V	20 A	34 A	60 A	63 A
	DC 110 V	4 A	10 A	35 A	63 A
	DC 220 V	1.2 A	8 A	30 A	63 A

INSTALLATION CONTACTORS RSI

Working position



Dependency of RSI installation contactors on ambient temperature

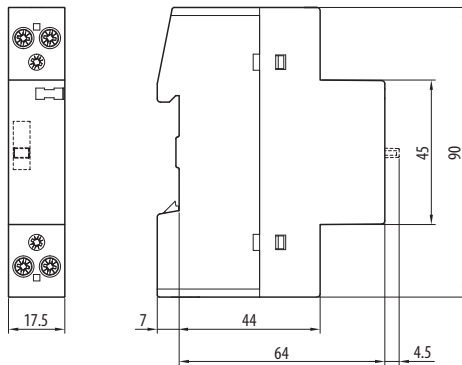
Type	Ambient temperature	Maximum number of the contactors side by side ²⁾
RSI-20...-A...	up to 40 °C	3
	up to 55 °C	2
RSI-25...-A...	up to 55 °C	without limitation
RSI-32...-A...	up to 40 °C	3
	up to 55 °C	2
RSI-40...-A...	up to 55 °C	without limitation
RSI-63...-A...	up to 55 °C	without limitation
RSI...-X... ¹⁾	up to 40 °C	3
	up to 55 °C	2

¹⁾ This is valid for all types of contactors with AC/DC control voltage

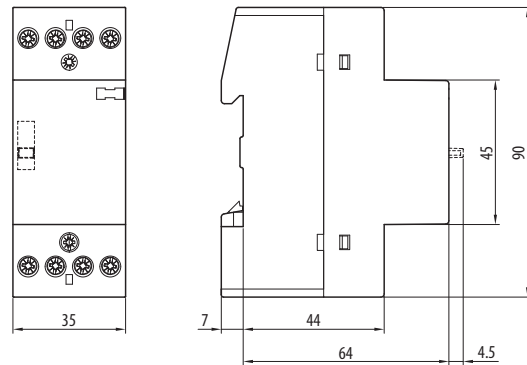
²⁾ After the stated number of contactors it is necessary to create a gap of 0.5 module

Dimensions

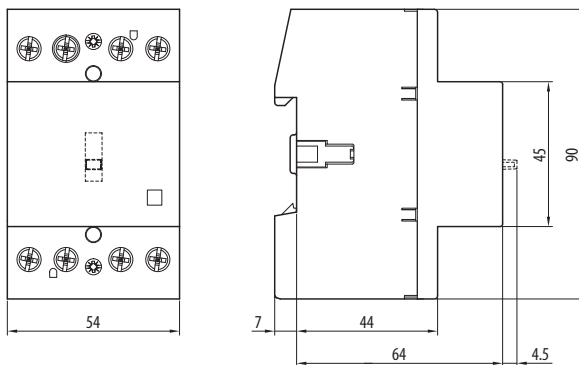
RSI-20
RSI-32 (10, 20, 11, 02)*



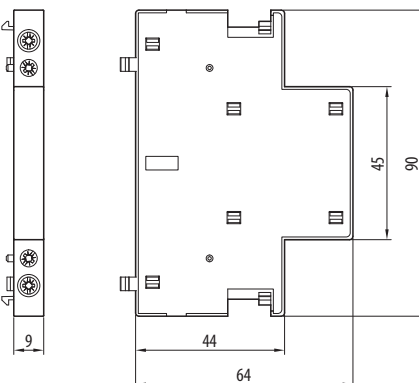
RSI-25
RSI-32 (40, 31, 04, 04)*



RSI-40, RSI-63



PS-RSI-1100

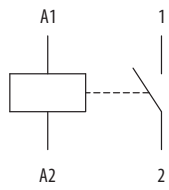


* Arrangement of contacts

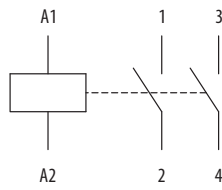
INSTALLATION CONTACTORS RSI

Diagram

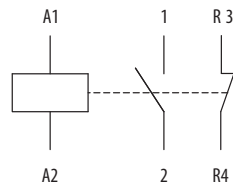
RSI --10----



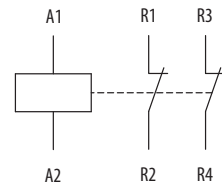
RSI --20----



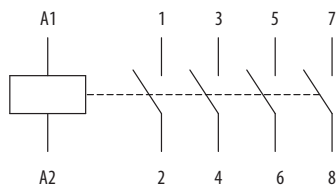
RSI --11----



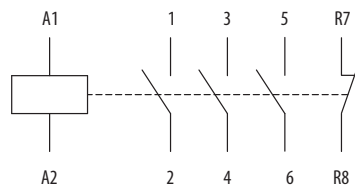
RSI --02----



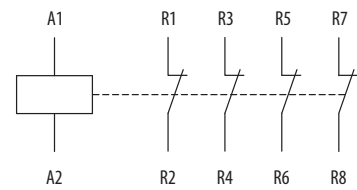
RSI --40----



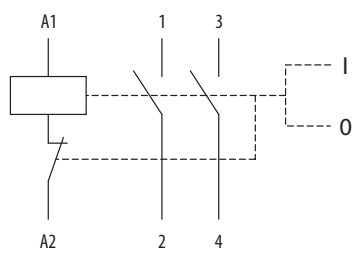
RSI --31----



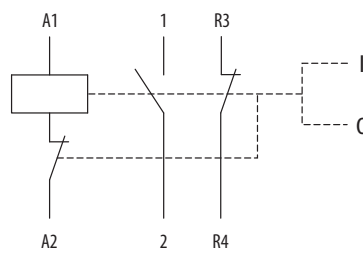
RSI --04----



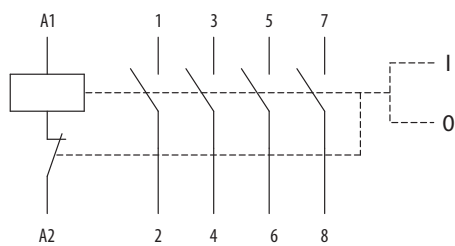
RSI-20-20----M



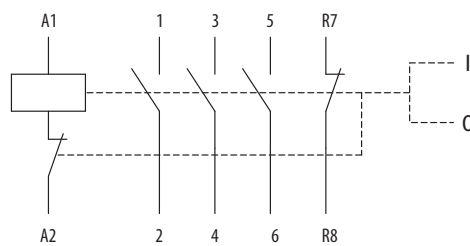
RSI-20-11----M



RSI--40----M



RSI--31----M



PS-RSI-1100

