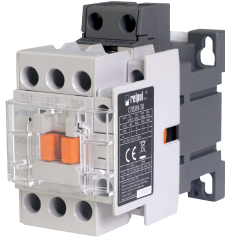


CRS09, CRS12, CRS18, CRS22

contactors up to 100 A

CRS.-30-...



- Three-pole or four-pole contactors for motor control applications in AC networks
- AC or DC control input
- Load current 9...22 A
- Screw terminals
- 35 mm rail mount acc. to EN 60715 or on panel mounting with four M4 screws
- Accessories: auxiliary contacts, thermal overload relays, mechanical interlocks
- Recognitions, certifications, directives: RoHS, REACH,



Applications

Control various motors (machine tools, fans, pumps, conveyor drives) for start, stop, and forward/reverse operations; work with thermal overload relays and circuit breakers to provide motor overload and short-circuit protection for safe equipment operation; manage power supply for high-power equipment in buildings, such as central air conditioning, large exhaust fans, and fire pumps; operate traction and door motors in elevator control systems, ensuring smooth starts and stops; act as power switches in distribution systems to switch transformers and capacitor banks, stabilizing grid voltage and power factor; integrate with PLCs, variable frequency drives, and other automation devices for automatic switching in production lines and smart control systems.

Basic technical data

Configuration of contacts ①: three-pole, four-pole

Control input: AC, DC

Load current: 9 A, 12 A, 18 A, 22 A

Type of contactor

Configuration of contacts ①	Control voltage	Load current	
		9 A	12 A
3 NO + 1 NO + 1 NC	24 V AC	CRS09-30-11-A024	CRS12-30-11-A024
	48 V AC	CRS09-30-11-A048	CRS12-30-11-A048
	110 V AC	CRS09-30-11-A110	CRS12-30-11-A110
	230 V AC	CRS09-30-11-A230	CRS12-30-11-A230
	24 V DC	CRS09-30-11-D024	CRS12-30-11-D024
	48 V DC	CRS09-30-11-D048	CRS12-30-11-D048
	110 V DC	CRS09-30-11-D110	CRS12-30-11-D110
	220 V DC	CRS09-30-11-D220	CRS12-30-11-D220
4 NO	24 V AC	CRS09-40-00-A024	CRS12-40-00-A024
	48 V AC	CRS09-40-00-A048	CRS12-40-00-A048
	110 V AC	CRS09-40-00-A110	CRS12-40-00-A110
	230 V AC	CRS09-40-00-A230	CRS12-40-00-A230

① Configuration of contacts: three-pole - 3 NO with auxiliary contacts 1 NO + 1 NC; four-pole - 4 NO without auxiliary contacts.

Type of contactor

Configuration of contacts ❶	Control voltage	Load current	
		18 A	22 A
3 NO + 1 NO + 1 NC	24 V AC	CRS18-30-11-A024	CRS22-30-11-A110
	48 V AC	CRS18-30-11-A048	CRS22-30-11-A024
	110 V AC	CRS18-30-11-A110	CRS22-30-11-A048
	230 V AC	CRS18-30-11-A230	CRS22-30-11-A230
	24 V DC	CRS18-30-11-D024	CRS22-30-11-D024
	48 V DC	CRS18-30-11-D048	CRS22-30-11-D048
	110 V DC	CRS18-30-11-D110	CRS22-30-11-D110
	220 V DC	CRS18-30-11-D220	CRS22-30-11-D220
4 NO	24 V AC	CRS18-40-00-A024	CRS22-40-00-A024
	48 V AC	CRS18-40-00-A048	CRS22-40-00-A048
	110 V AC	CRS18-40-00-A110	CRS22-40-00-A110
	230 V AC	CRS18-40-00-A230	CRS22-40-00-A230

Type of auxiliary contact

Configuration of contacts		Configuration of contacts	
1 NO + 1 NC	CRS20-11S	2 NO + 2 NC	CRS20-22
1 NO + 1 NC	CRS20-11	3 NO + 1 NC	CRS20-31
2 NO	CRS20-20	1 NO + 3 NC	CRS20-13
2 NC	CRS20-02	4 NO	CRS20-40
		4 NC	CRS20-04

Type of thermal overload relay

Range of current		Range of current	
0,1...0,16 A	RST12-0V16	4...6 A	RST12-6
0,16...0,25 A	RST12-0V25	5...8 A	RST12-8
0,25...0,4 A	RST12-0V4	6...9 A	RST12-9
0,4...0,63 A	RST12-0V63	7...10 A	RST12-10
0,63...1 A	RST12-1	9...13 A	RST12-13
1...1,6 A	RST12-1V6	12...18 A	RST12-18
1,6...2,5 A	RST12-2V5	16...22 A	RST12-22
2,5...4 A	RST12-4		

❶ Configuration of contacts: three-pole - 3 NO with auxiliary contacts 1 NO + 1 NC; four-pole - 4 NO without auxiliary contacts.

CRS09, CRS12, CRS18, CRS22

contactors up to 100 A

Input circuit - coil data

	CRS...-A...	CRS...-D...
Coil voltage	24, 48, 110, 230 V AC 50 Hz	24, 48, 110, 220 V DC
Rated power consumption	9 VA	9 W
Pick-up power consumption	95 VA	9 W
Maintain power consumption	10,2 VA	8,8 W
Range of pick-up voltage	0,8...1,1 U _n	0,8...1,1 U _n
Range of drop-out voltage	0,3...0,4 U _n	0,1...0,3 U _n
Pick-up time	10...17 ms	45...55 ms
Drop-out time	6...9 ms	8...15 ms

Output circuit - main contacts data

		CRS09-...	CRS12-...
Configuration of contacts ❶		3 NO + 1 NO + 1 NC, 4 NO	3 NO + 1 NO + 1 NC, 4 NO
Rated thermal current	AC1	CRS...-30-...: 25 A CRS...-40-...: 20 A	CRS...-30-...: 25 A CRS...-40-...: 20 A
Rated load AC3 IEC 60947	220...240 V	11 A	13 A
	380...440 V	9 A	12 A
	500...550 V	7 A	12 A
	690 V	5 A	9 A
Motor load AC3 IEC 60947	220...240 V	2,5 kW	3,5 kW
	380...440 V	4 kW	5,5 kW
	500...550 V	4 kW	7,5 kW
	690 V	4 kW	7,5 kW
Motor load AC3 UL 508 (single-phase motor)	115 V	0,5 HP	0,5 HP
	230 V	1 HP	2 HP
Motor load AC3 UL 508 (three-phase motor)	200 V	2 HP	3 HP
	230 V	2 HP	3 HP
	460 V	5 HP	7,5 HP
	575 V	7,5 HP	10 HP
Max. short circuit current	220 V	132 A	156 A
	440 V	108 A	144 A
Max. breaking current	220 V	110 A	130 A
	440 V	90 A	120 A
Max. operating frequency	AC3	1 800 cycles/hour	1 800 cycles/hour
	AC4	300 cycles/hour	300 cycles/hour
Electrical life	AC3	2,5 x 10 ⁶	2,5 x 10 ⁶
	AC4	2 x 10 ⁵	2 x 10 ⁵
Mechanical life (cycles)		2,5 x 10 ⁷	2,5 x 10 ⁷

❶ Configuration of contacts: three-pole - 3 NO with auxiliary contacts 1 NO + 1 NC; four-pole - 4 NO without auxiliary contacts.

Output circuit - main contacts data

		CRS18-...	CRS22-...
Configuration of contacts ❶		3 NO + 1 NO + 1 NC, 4 NO	3 NO + 1 NO + 1 NC, 4 NO
Rated thermal current	AC1	CRS...30-...: 40 A CRS...40-...: 25 A	CRS...30-...: 40 A CRS...40-...: 32 A
Rated load AC3 IEC 60947	220...240 V	18 A	22 A
	380...440 V	18 A	22 A
	500...550 V	13 A	22 A
	690 V	9 A	18 A
Motor load AC3 IEC 60947	220...240 V	4,5 kW	5,5 kW
	380...440 V	7,5 kW	11 kW
	500...550 V	7,5 kW	15 kW
	690 V	7,5 kW	15 kW
Motor load AC3 UL 508 (single-phase motor)	115 V	1 HP	2 HP
	230 V	3 HP	3 HP
Motor load AC3 UL 508 (three-phase motor)	200 V	5 HP	7,5 HP
	230 V	5 HP	7,5 HP
	460 V	10 HP	10 HP
	575 V	15 HP	15 HP
Max. short circuit current	220 V	216 A	264 A
	440 V	216 A	264 A
Max. breaking current	220 V	180 A	220 A
	440 V	180 A	220 A
Max. operating frequency	AC3	1 800 cycles/hour	1 800 cycles/hour
	AC4	300 cycles/hour	300 cycles/hour
Electrical life	AC3	10 ⁶	10 ⁶
	AC4	2 x 10 ⁵	2 x 10 ⁵
Mechanical life (cycles)		1,5 x 10 ⁷	1,5 x 10 ⁷

Output circuit - auxiliary contacts data

		CRS20-...
Configuration of contacts		1 NO + 1 NC, 2 NO, 2 NC, 2 NO + 2 NC, 3 NO + 1 NC, 1 NO + 3 NC, 4 NO, 4 NC
Rated current	AC12	3 A / 125 V, 1,5 A / 250 V
	AC15	6 A / 120 V, 3 A / 240 V
	DC12	0,55 A / 440 V, 0,27 A / 600 V
	DC13	1,5 A / 480 V, 1,2 A / 600 V
Rated thermal current	AC1	16 A

General data

	CRS...
Operating altitude	0...2 000 m
Ambient temperature (non-condensation and/or icing)	storage: -30...+65 °C operating: -25...+40 °C

❶ Configuration of contacts: three-pole - 3 NO with auxiliary contacts 1 NO + 1 NC; four-pole - 4 NO without auxiliary contacts.

Mechanical data - contactor

		CRS...-30-...	CRS...-40-...
Dimensions (L x W x H)		CRP...-A...: 80 x 44 x 86,8 mm CRP...-D...: 80 x 44 x 113,2 mm	CRP...-A...: 80 x 47,2 x 86,8 mm CRP...-D...: 80 x 47,2 x 113,2 mm
Weight (typical)		CRP...-A...: 358 g CRP...-D...: 380 g	CRP...-A...: 590 g CRP...-D...: 610 g
Protection category EN 60529		IP 10	IP 10
Connection mode		input: screws M3,5 tightening moment: 0,8...1,2 Nm output (main): screws M4 tightening moment: 1,2...1,5 Nm output (auxiliary): screws M3,5 tightening moment: 0,8...1,2 Nm	input: screws M3,5 tightening moment: 0,8...1,2 Nm output (main): screws M4 tightening moment: 1,2...1,5 Nm output (auxiliary): screws M3,5 tightening moment: 0,8...1,2 Nm
Mounting	on 35 mm rail mount	direct	direct
	on panel	screws M4 tightening moment: 1,2...1,5 Nm	screws M4 tightening moment: 1,2...1,5 Nm

Mechanical data - auxiliary contact

	CRS20-11S	CRS20-11, CRS20-20, CRS20-02	CRS20-22, CRS20-31, CRS20-13, CRS20-40, CRS20-04
Dimensions (L x W x H)	62,8 x 12 x 52,9 mm	48,5 x 24 x 37 mm	48,5 x 43,5 x 37 mm
Weight (typical)	32 g	20 g	36 g
Protection category EN 60529	IP 10	IP 10	IP 10
Connection mode	output: screws M3,5 tight. moment: 0,8...1,2 Nm	output: screws M3,5 tight. moment: 0,8...1,2 Nm	output: screws M3,5 tight. moment: 0,8...1,2 Nm
Mounting on contactor	side	top	top

Mechanical data - thermal overload relay

	RST12-...
Dimensions (L x W x H)	63,1 x 44 x 88,5 mm
Weight (typical)	110 g
Protection category EN 60529	IP 10
Connection mode	output (main): screws M4 output (auxiliary): screws M3,5 tightening moment: 1,2...1,5 Nm tightening moment: 0,8...1,2 Nm
Mounting on contactor	bottom

CRS09, CRS12, CRS18, CRS22 contactors up to 100 A

Mounting, accessories for contactors

Contactors **CRS09-...**, **CRS12-...**, **CRS18-...**, **CRS22-...** are designed for direct mounting on 35 mm rail mount acc. to EN 60715 or on panel mounting with four M4 screws.

For **CRS09-...**, **CRS12-...**, **CRS18-...**, **CRS22-...** contactors we offer auxiliary contacts **CRS20-...**, thermal overload relays **RST12-...** and mechanical interlocks **CRS-MI51** Ⓢ.

Ⓢ The mechanical interlock is mounted directly between two contactors, creating a compact and safe reversing combination or a changeover switch (preventing simultaneous activation of both contactors).



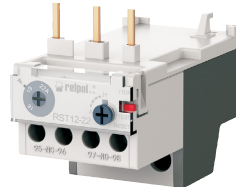
CRS20-11S



CRS20-11
CRS20-20
CRS20-02



CRS20-22, CRS20-31
CRS20-13, CRS20-40
CRS20-04

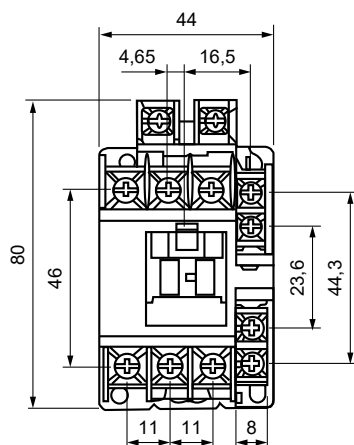


RST12-...

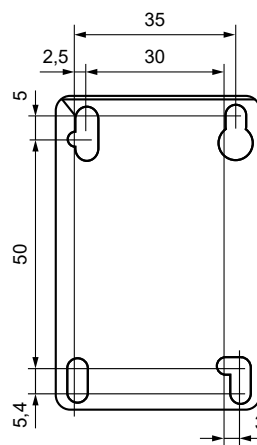


CRS-MI51

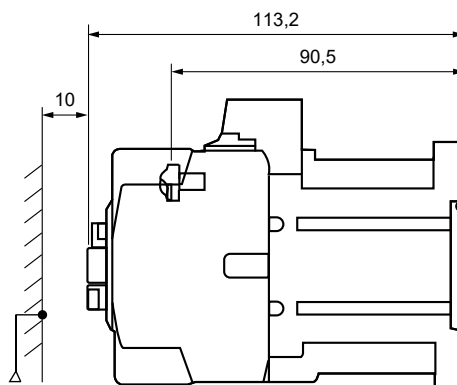
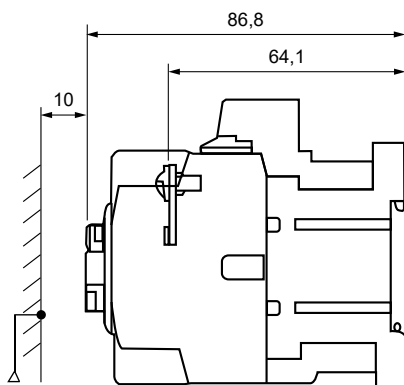
Dimensions



CRS...-A...



CRS...-D...

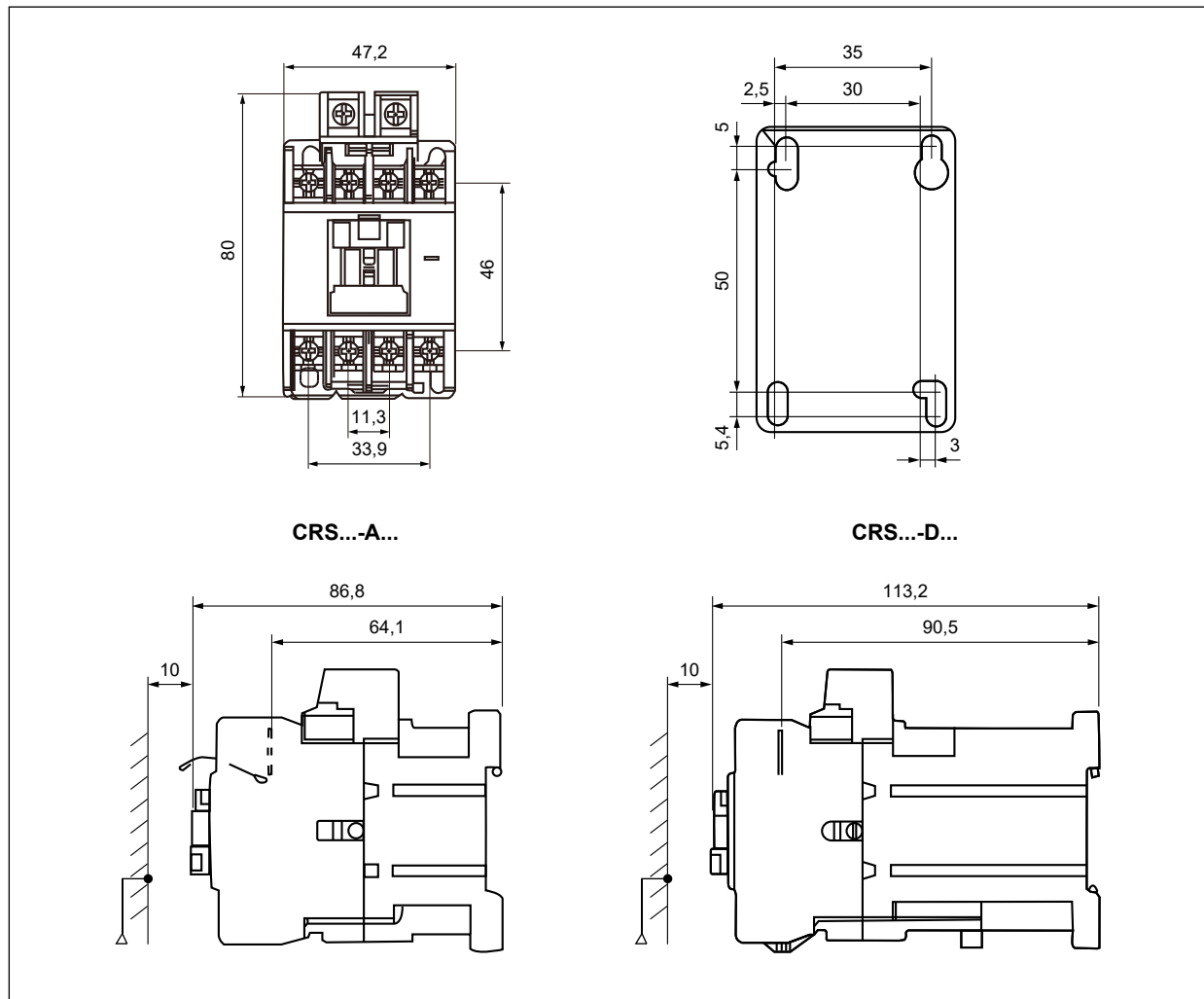


Three-pole contactor **CRS...-30-...**

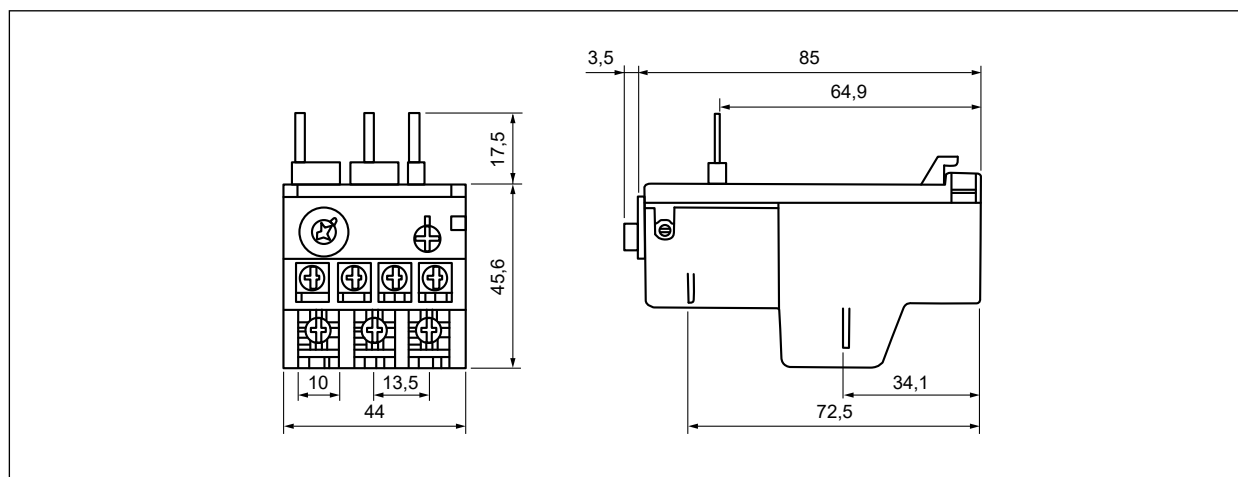
CRS09, CRS12, CRS18, CRS22

contactors up to 100 A

Dimensions



Four-pole contactor **CRS...-40...**



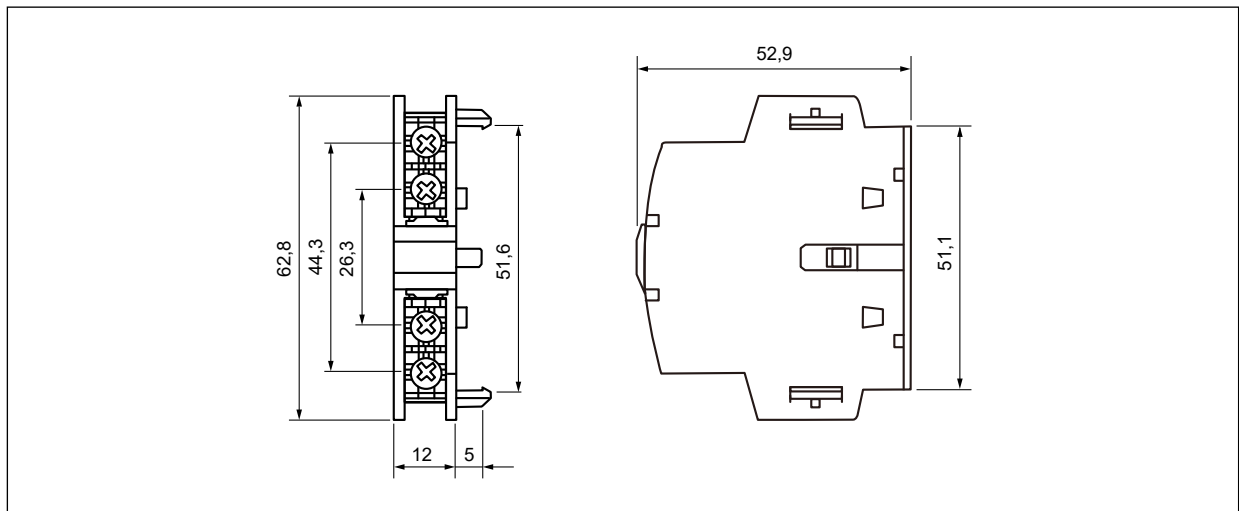
Thermal overload relay **RST12-...**

13.09.2026

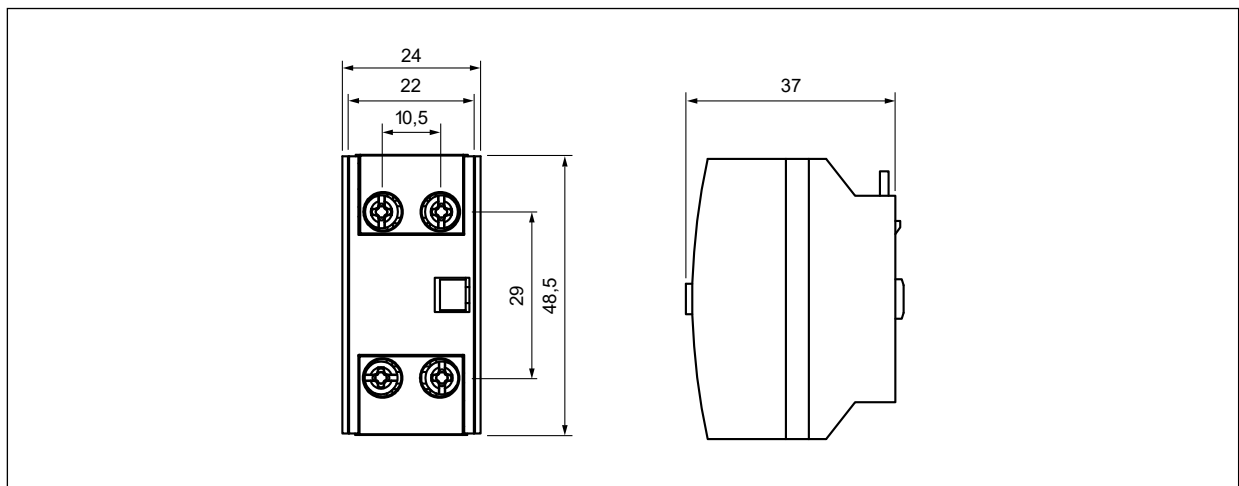
CRS09, CRS12, CRS18, CRS22

contactors up to 100 A

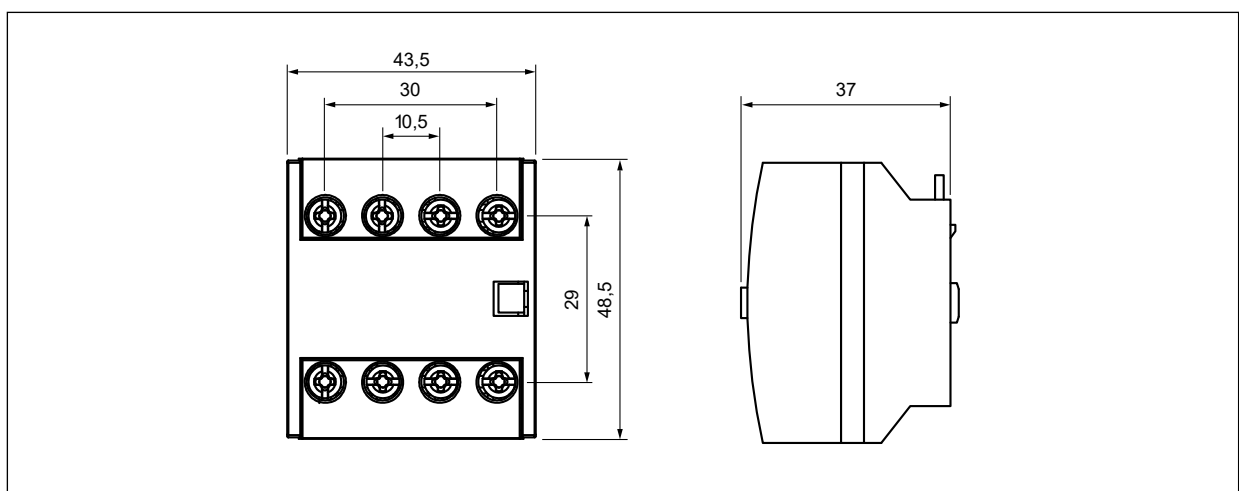
Dimensions



Auxiliary contact **CRS20-11S**



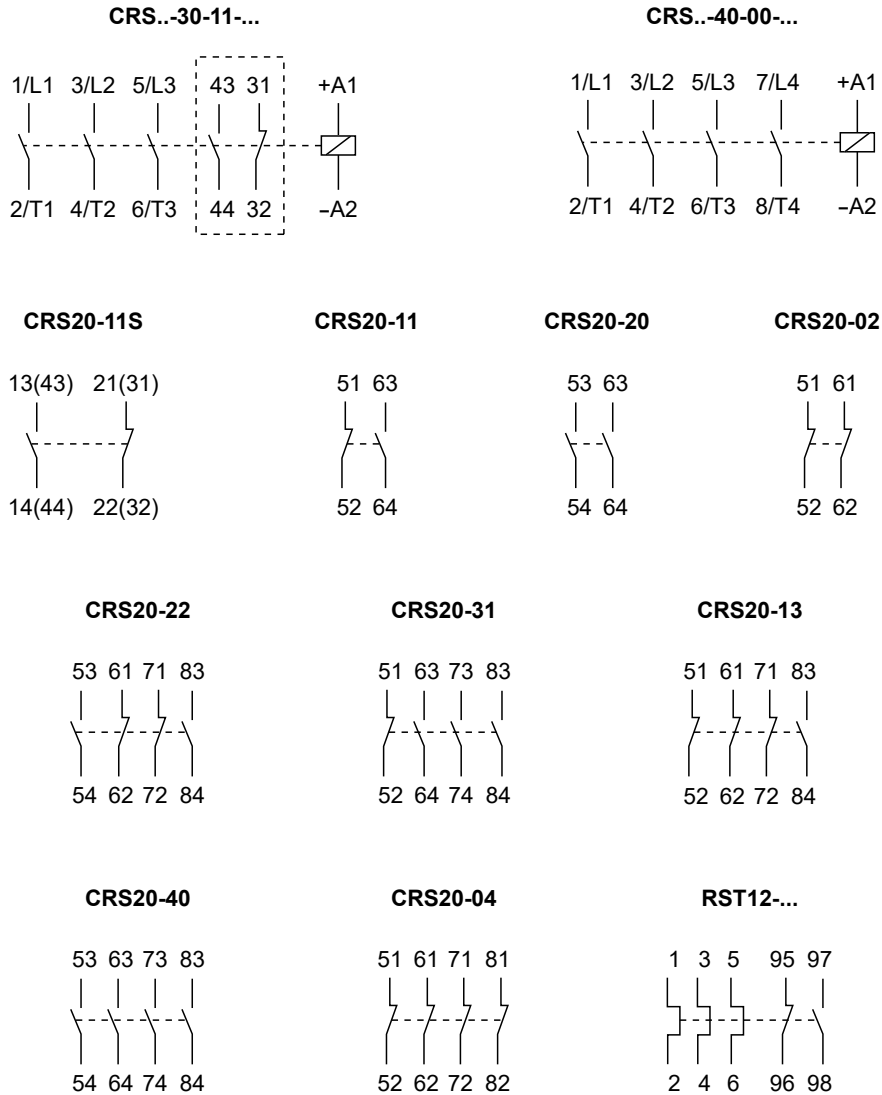
Auxiliary contact **CRS20-11, CRS20-20, CRS20-02**



Auxiliary contact **CRS20-22, CRS20-31, CRS20-13, CRS20-40, CRS20-04**

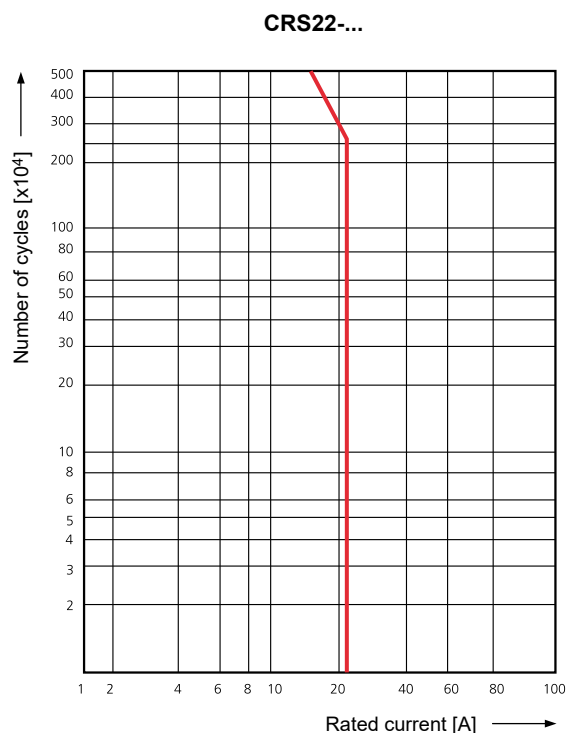
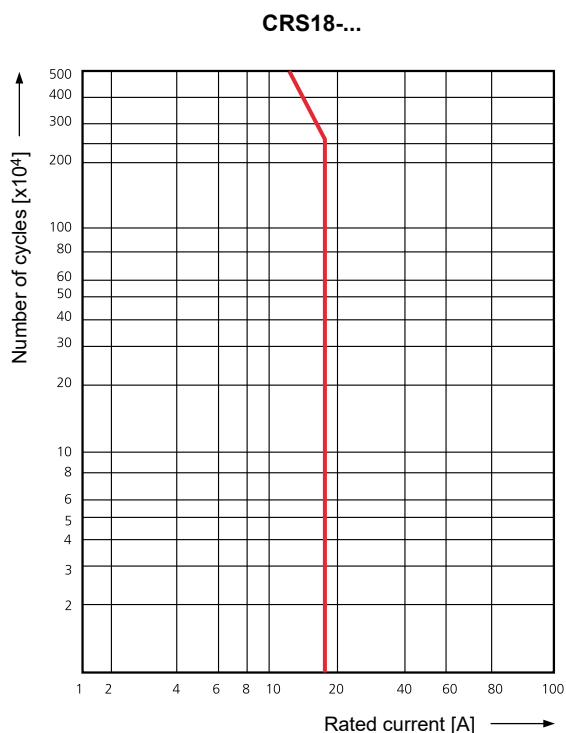
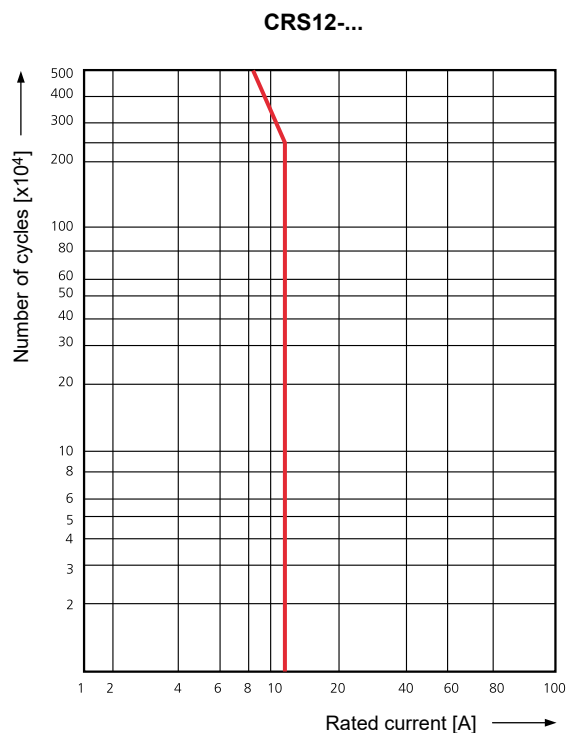
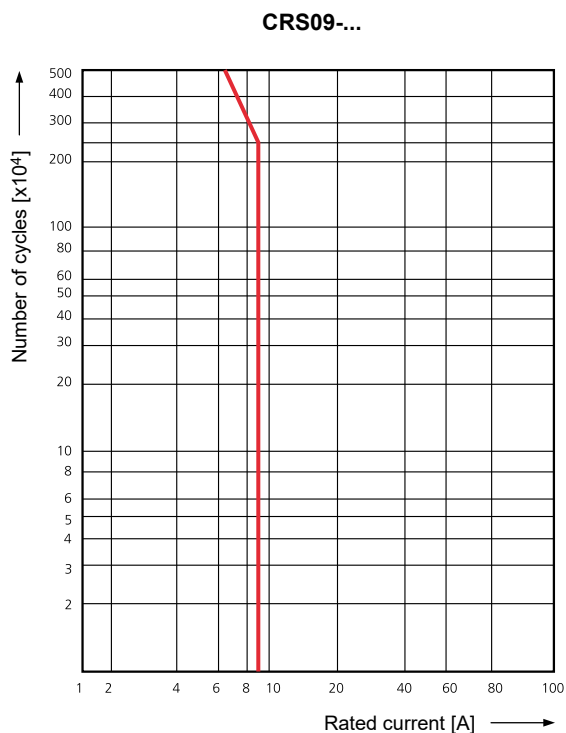
13.09.2026

Connection diagrams ⑨

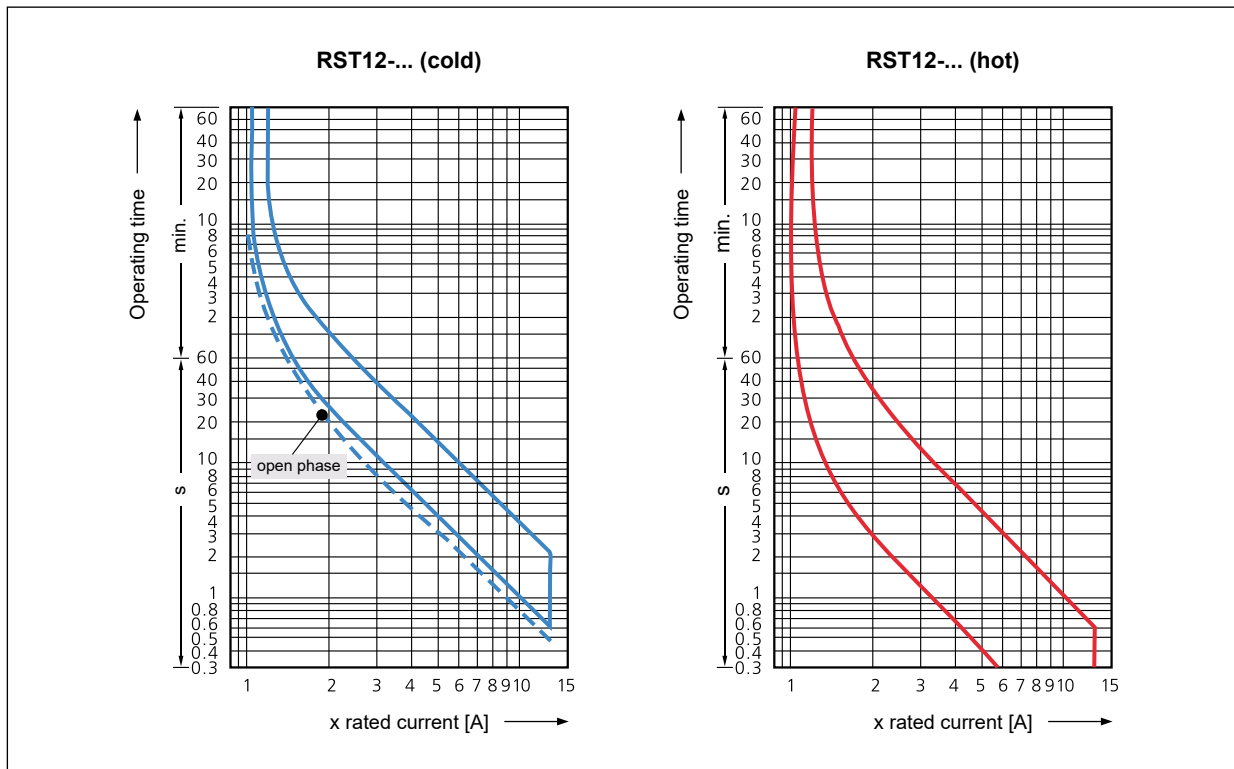


⑨ The indicated polarization of the supply (+A1/-A2) refers only to the DC coils.

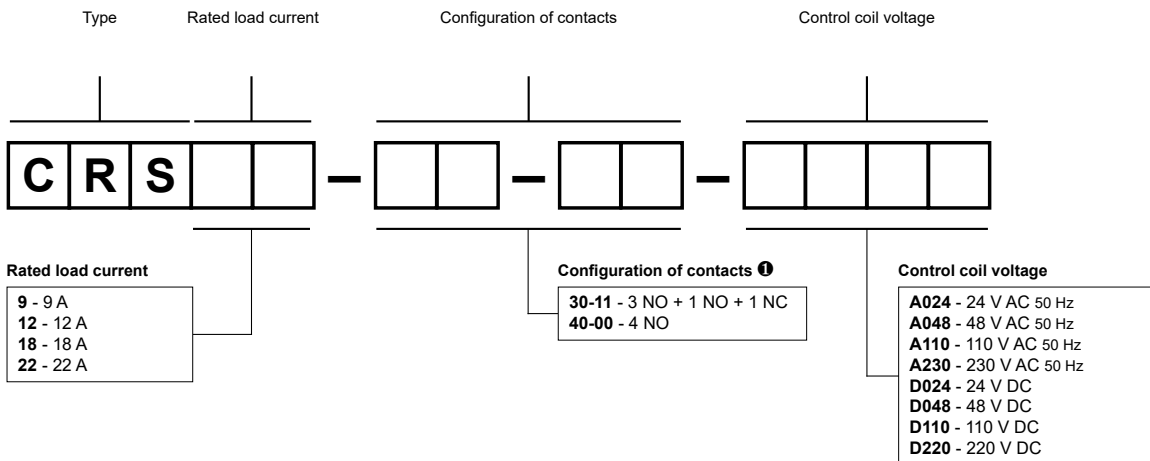
Contactors - electrical life at AC3 (U_e 380...440 V)



Thermal overload relays - characteristics curves



Ordering codes of contactors



Examples of ordering codes ④:

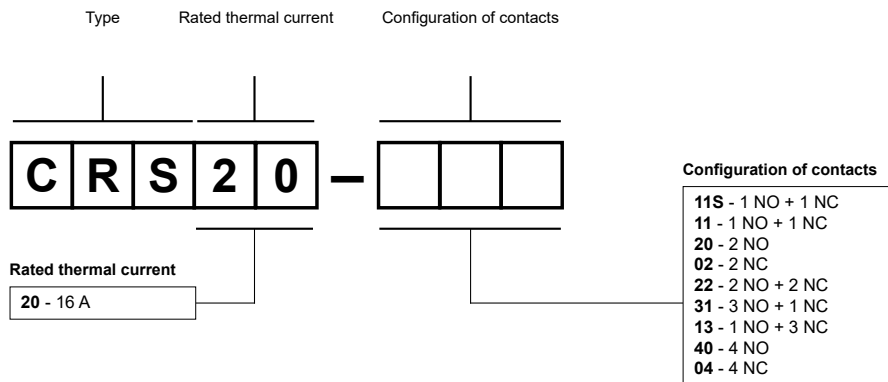
CRS09-30-11-D024 contactor **CRS09**..., rated load current 9 A, three-pole - contacts 3 NO + 1 NO + 1 NC, control coil voltage 24 V DC

CRS22-40-00-A230 contactor **CRS22**..., rated load current 22 A, four-pole - contacts 4 NO, control coil voltage 230 V AC 50 Hz

① Configuration of contacts: three-pole - 3 NO with auxiliary contacts 1 NO + 1 NC; four-pole - 4 NO without auxiliary contacts.

④ Ordering codes **CRS09**..., **CRS12**..., **CRS18**..., **CRS22**... are specified in tables "Type of contactor" on pages 1, 2.

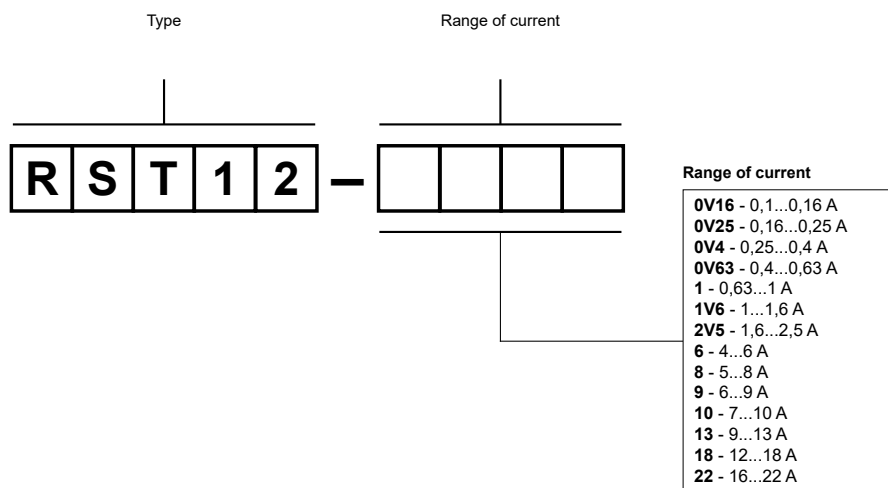
Ordering codes of auxiliary contacts



Examples of ordering codes ⑤:

CRS20-11S auxiliary contact **CRS20-...**, rated thermal current 16 A, two-pole - contacts 1 NO + 1 NC
CRS20-20 auxiliary contact **CRS20-...**, rated thermal current 16 A, two-pole - contacts 2 NO
CRS20-04 auxiliary contact **CRS20-...**, rated thermal current 16 A, four-pole - contacts 4 NC

Ordering codes of thermal overload relays



Examples of ordering codes ⑥:

RST12-0V16 thermal overload relay **RST12-...**, range of current 0,1...0,16 A
RST12-2V5 thermal overload relay **RST12-...**, range of current 1,6...2,5 A
RST12-22 thermal overload relay **RST12-...**, range of current 16...22 A

⑤ Ordering codes **CRP20-...** are specified in table "Type of auxiliary contact" on page 2.

⑥ Ordering codes **RST12-...** are specified in table "Type of thermal overload relay" on page 2.

CRS32, CRS40

contactors up to 100 A

CRS...30-...



- Three-pole or four-pole contactors for motor control applications in AC networks
- AC or DC control input
- Load current 32...40 A
- Screw terminals
- 35 mm rail mount acc. to EN 60715 or on panel mounting with four M4 screws
- Accessories: auxiliary contacts, thermal overload relays, mechanical interlocks
- Recognitions, certifications, directives: RoHS, REACH,



Applications

Control various motors (machine tools, fans, pumps, conveyor drives) for start, stop, and forward/reverse operations; work with thermal overload relays and circuit breakers to provide motor overload and short-circuit protection for safe equipment operation; manage power supply for high-power equipment in buildings, such as central air conditioning, large exhaust fans, and fire pumps; operate traction and door motors in elevator control systems, ensuring smooth starts and stops; act as power switches in distribution systems to switch transformers and capacitor banks, stabilizing grid voltage and power factor; integrate with PLCs, variable frequency drives, and other automation devices for automatic switching in production lines and smart control systems.

Basic technical data

Configuration of contacts ①: three-pole, four-pole

Control input: AC, DC

Load current: 32 A, 40 A

Type of contactor

Configuration of contacts ①	Control voltage	Load current	
		32 A	40 A
3 NO + 2 NO + 2 NC	24 V AC	CRS32-30-22-A024	CRS40-30-22-A024
	48 V AC	CRS32-30-22-A048	CRS40-30-22-A048
	110 V AC	CRS32-30-22-A110	CRS40-30-22-A110
	230 V AC	CRS32-30-22-A230	CRS40-30-22-A230
	24 V DC	CRS32-30-22-D024	CRS40-30-22-D024
	48 V DC	CRS32-30-22-D048	CRS40-30-22-D048
	110 V DC	CRS32-30-22-D110	CRS40-30-22-D110
	220 V DC	CRS32-30-22-D220	CRS40-30-22-D220
4 NO	24 V AC	CRS32-40-00-A024	CRS40-40-00-A024
	48 V AC	CRS32-40-00-A048	CRS40-40-00-A048
	110 V AC	CRS32-40-00-A110	CRS40-40-00-A110
	230 V AC	CRS32-40-00-A230	CRS40-40-00-A230

Type of auxiliary contact

Configuration of contacts		Configuration of contacts	
1 NO + 1 NC	CRS20-11S	2 NO + 2 NC	CRS20-22
1 NO + 1 NC	CRS20-11	3 NO + 1 NC	CRS20-31
2 NO	CRS20-20	1 NO + 3 NC	CRS20-13
2 NC	CRS20-02	4 NO	CRS20-40
		4 NC	CRS20-04

Type of thermal overload relay

Range of current	
18...26 A	RST14-26
24...36 A	RST14-36
28...40 A	RST14-40

① Configuration of contacts: three-pole - 3 NO with auxiliary contacts 2 NO + 2 NC; four-pole - 4 NO without auxiliary contacts.

Output circuit - main contacts data

		CRS32-...	CRS40-...
Configuration of contacts ❶		3 NO + 2 NO + 2 NC, 4 NO	3 NO + 2 NO + 2 NC, 4 NO
Rated thermal current	AC1	50 A	60 A
Rated load AC3 IEC 60947	220...240 V	32 A	40 A
	380...440 V	32 A	40 A
	500...550 V	28 A	32 A
	690 V	20 A	23 A
Motor load AC3 IEC 60947	220...240 V	7,5 kW	11 kW
	380...440 V	15 kW	18,5 kW
	500...550 V	18,5 kW	22 kW
	690 V	18,5 kW	22 kW
Motor load AC3 UL 508 (single-phase motor)	115 V	2 HP	3 HP
	230 V	5 HP	5 HP
Motor load AC3 UL 508 (three-phase motor)	200 V	7,5 HP	10 HP
	230 V	10 HP	10 HP
	460 V	20 HP	25 HP
	575 V	20 HP	25 HP
Max. short circuit current	220 V	385 A	480 A
	440 V	385 A	480 A
Max. breaking current	220 V	320 A	400 A
	440 V	320 A	400 A
Max. operating frequency	AC3	1 800 cycles/hour	1 800 cycles/hour
	AC4	300 cycles/hour	300 cycles/hour
Electrical life	AC3	10 ⁶	10 ⁶
	AC4	2 x 10 ⁵	2 x 10 ⁵
Mechanical life (cycles)		10 ⁷	10 ⁷

Output circuit - auxiliary contacts data

		CRS20-...
Configuration of contacts		1 NO + 1 NC, 2 NO, 2 NC, 2 NO + 2 NC, 3 NO + 1 NC, 1 NO + 3 NC, 4 NO, 4 NC
Rated current	AC12	3 A / 125 V, 1,5 A / 250 V
	AC15	6 A / 120 V, 3 A / 240 V
	DC12	0,55 A / 440 V, 0,27 A / 600 V
	DC13	1,5 A / 480 V, 1,2 A / 600 V
Rated thermal current	AC1	16 A

General data

	CRS...
Operating altitude	0...2 000 m
Ambient temperature (non-condensation and/or icing)	storage: -30...+65 °C operating: -25...+40 °C

❶ Configuration of contacts: three-pole - 3 NO with auxiliary contacts 2 NO + 2 NC; four-pole - 4 NO without auxiliary contacts.

Input circuit - coil data

	CRS...-A...	CRS...-D...
Coil voltage	24, 48, 110, 230 V AC 50 Hz	24, 48, 110, 220 V DC
Rated power consumption	2 VA	8,8 W
Pick-up power consumption	100 VA	8,8 W
Maintain power consumption	10,2 VA	8,8 W
Range of pick-up voltage	0,8...1,1 U _n	0,8...1,1 U _n
Range of drop-out voltage	0,3...0,4 U _n	0,1...0,3 U _n
Pick-up time	6...9 ms	8...15 ms
Drop-out time	10...17 ms	45...55 ms

Mechanical data - contactor

		CRS...-30-...	CRS...-40-...
Dimensions (L x W x H)		CRP...-A...: 82 x 68 x 94,5 mm CRP...-D...: 82 x 68 x 120,9 mm	CRP...-A...: 83,5 x 59 x 94,5 mm CRP...-D...: 83,5 x 59 x 121 mm
Weight (typical)		CRP...-A...: 450 g CRP...-D...: 670 g	CRP...-A...: 590 g CRP...-D...: 700 g
Protection category	EN 60529	IP 10	IP 10
Connection mode		input: screws M3,5 tightening moment: 0,8...1,2 Nm output (main): screws M5 tightening moment: 2...3 Nm output (auxiliary): screws M3,5 tightening moment: 0,8...1,2 Nm	input: screws M3,5 tightening moment: 0,8...1,2 Nm output (main): screws M5 tightening moment: 2...3 Nm output (auxiliary): screws M3,5 tightening moment: 0,8...1,2 Nm
Mounting	on 35 mm rail mount	direct	direct
	on panel	screws M4 tightening moment: 1,2...1,5 Nm	screws M4 tightening moment: 1,2...1,5 Nm

Mechanical data - auxiliary contact

	CRS20-11S	CRS20-11, CRS20-20, CRS20-02	CRS20-22, CRS20-31, CRS20-13, CRS20-40, CRS20-04
Dimensions (L x W x H)	62,8 x 12 x 52,9 mm	48,5 x 24 x 37 mm	48,5 x 43,5 x 37 mm
Weight (typical)	32 g	20 g	36 g
Protection category	EN 60529	IP 10	IP 10
Connection mode	output: screws M3,5 tight. moment: 0,8...1,2 Nm	output: screws M3,5 tight. moment: 0,8...1,2 Nm	output: screws M3,5 tight. moment: 0,8...1,2 Nm
Mounting on contactor	side	top	top

Mechanical data - thermal overload relay

	RST14-...
Dimensions (L x W x H)	70,8 x 53 x 95,5 mm
Weight (typical)	170 g
Protection category	EN 60529
Connection mode	output (main): screws M5 output (auxiliary): screws M3,5 tightening moment: 2...3 Nm tightening moment: 0,8...1,2 Nm
Mounting on contactor	bottom

CRS32, CRS40

contactors up to 100 A

Mounting, accessories for contactors

Contactors **CRS32-...**, **CRS40-...** are designed for direct mounting on 35 mm rail mount acc. to EN 60715 or on panel mounting with four M4 screws.

For **CRS32-...**, **CRS40-...** contactors we offer auxiliary contacts **CRS20-...**, thermal overload relays **RST14-...** and mechanical interlocks **CRS-MI51** Ⓢ.

Ⓢ The mechanical interlock is mounted directly between two contactors, creating a compact and safe reversing combination or a changeover switch (preventing simultaneous activation of both contactors).



CRS20-11S



CRS20-11
CRS20-20
CRS20-02



CRS20-22, CRS20-31
CRS20-13, CRS20-40
CRS20-04

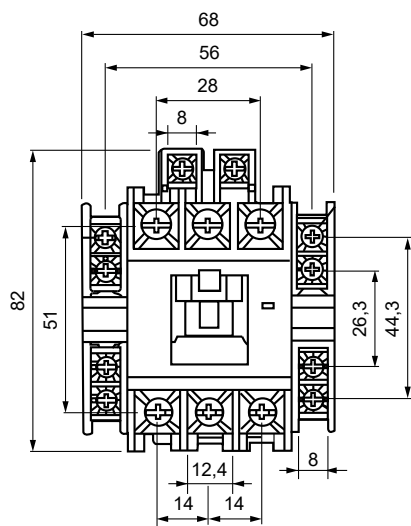


RST14-...

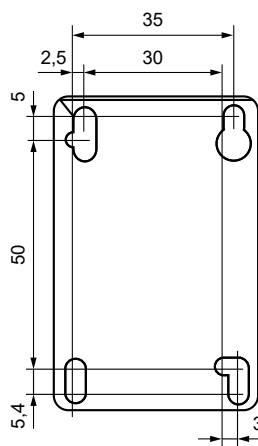


CRS-MI51

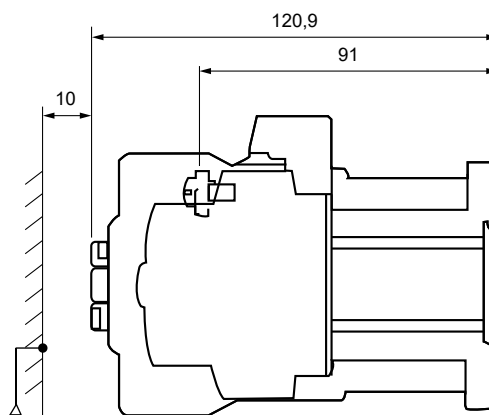
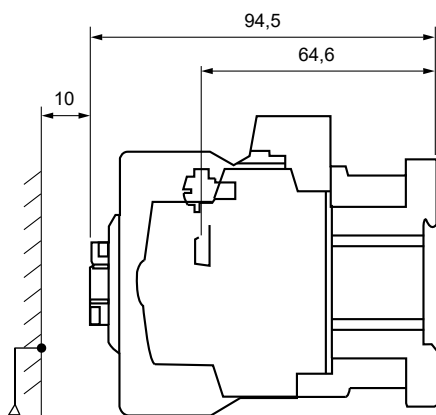
Dimensions



CRS...-A...



CRS...-D...

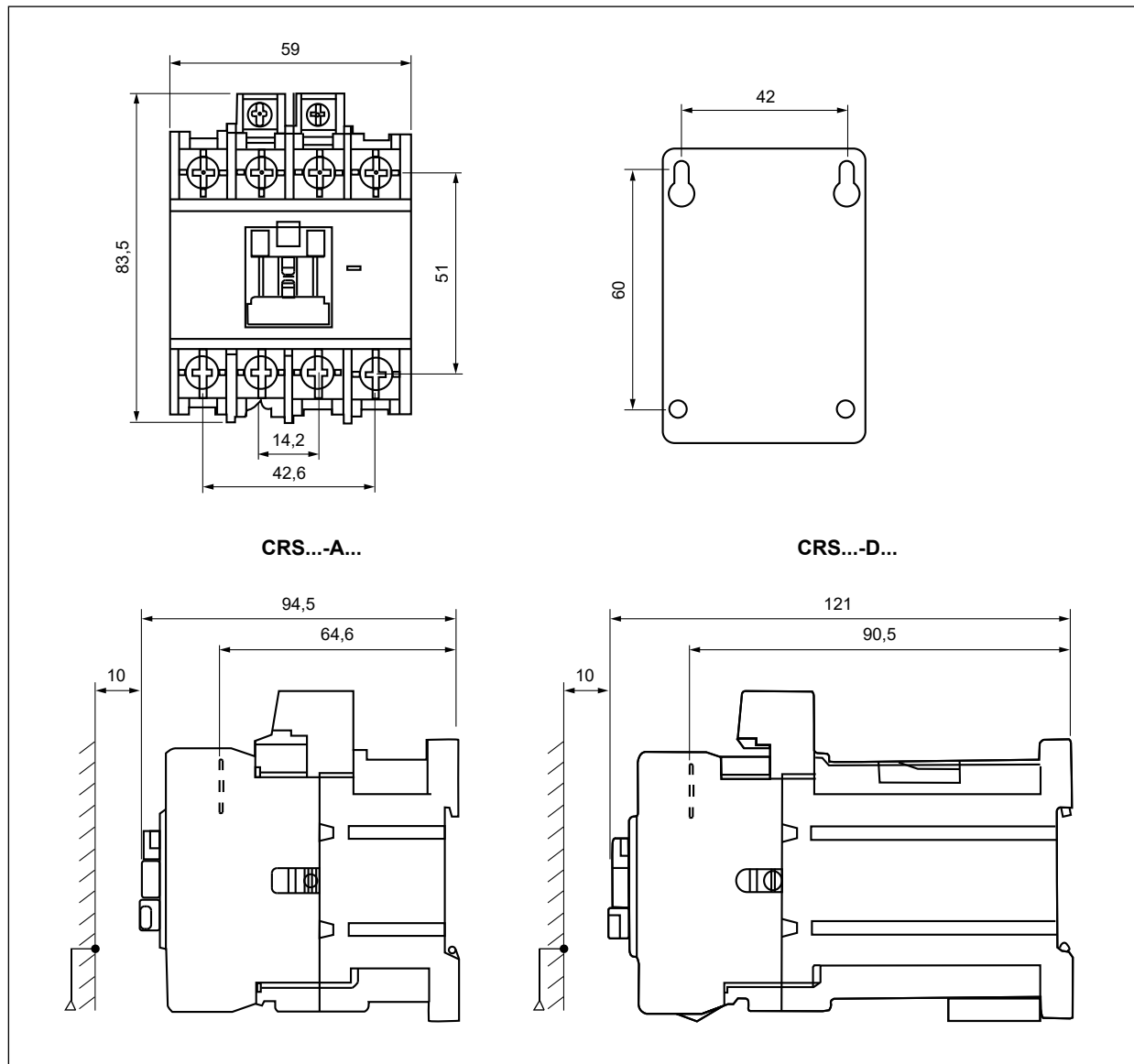


Three-pole contactor **CRS...-30-...**

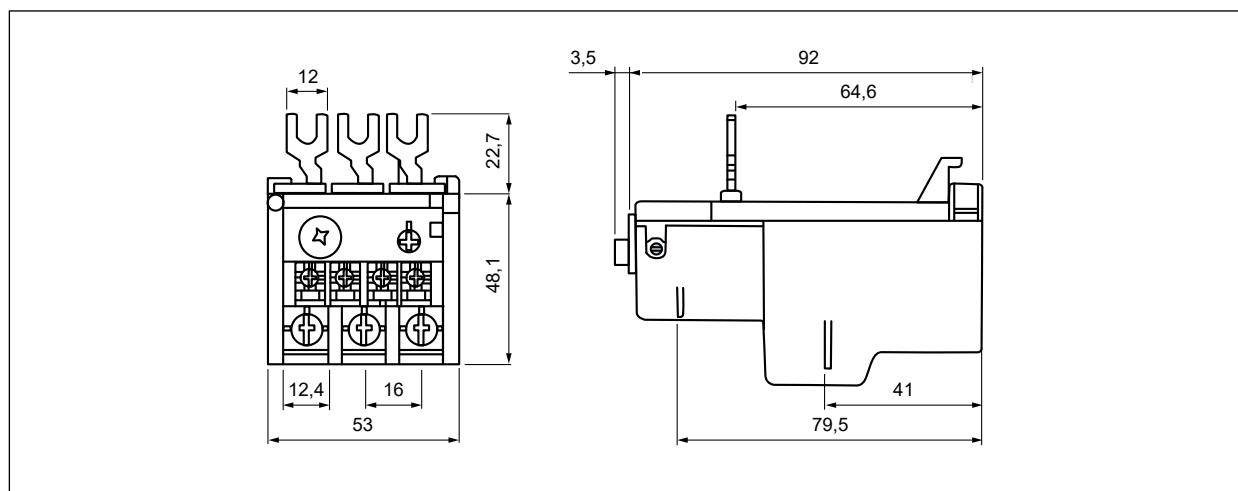
CRS32, CRS40

contactors up to 100 A

Dimensions



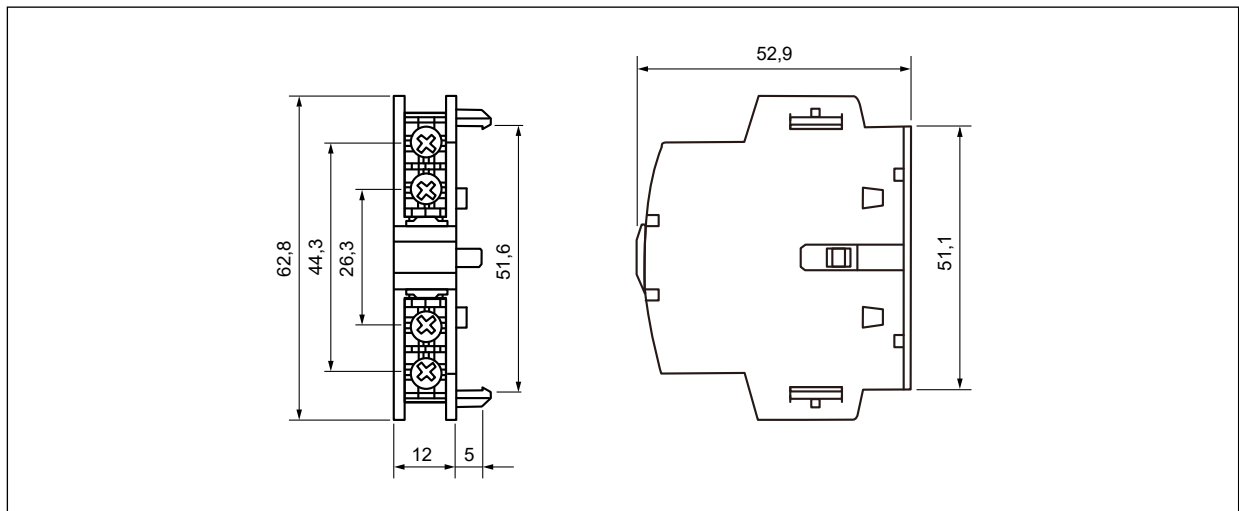
Four-pole contactor **CRS..-40-...**



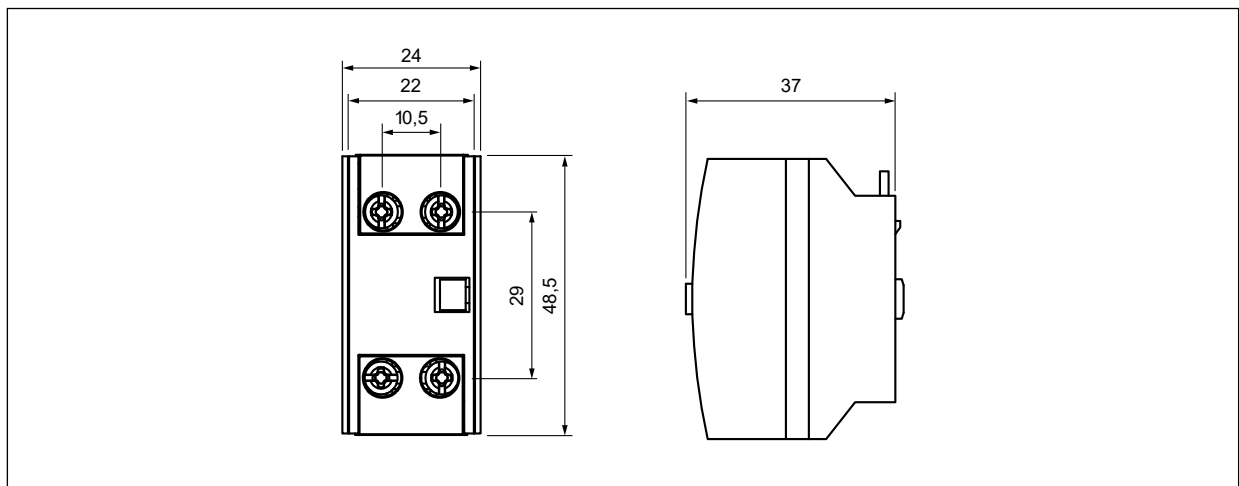
Thermal overload relay **RST14-...**

13.09.2026

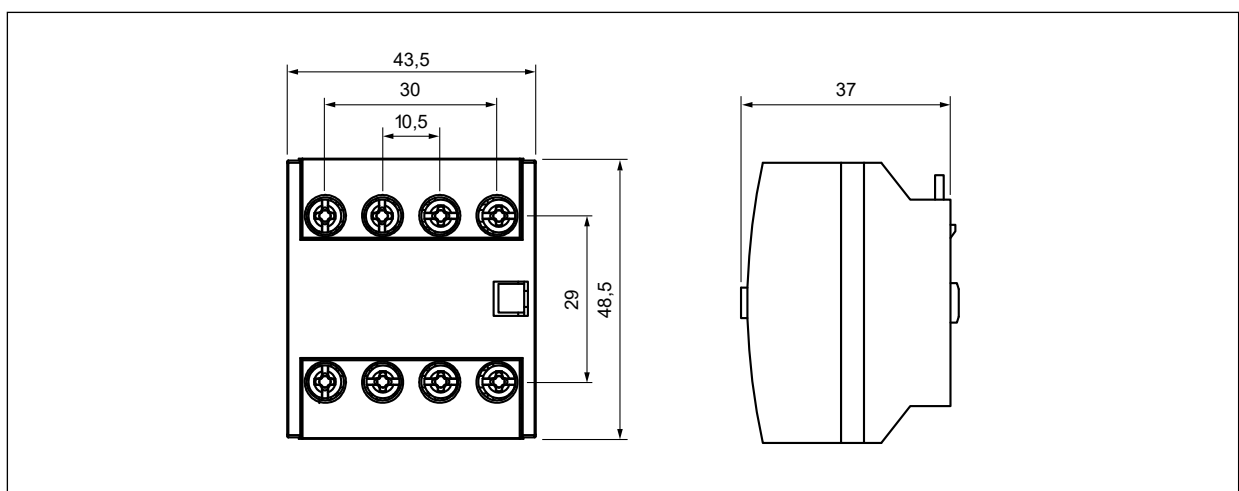
Dimensions



Auxiliary contact **CRS20-11S**

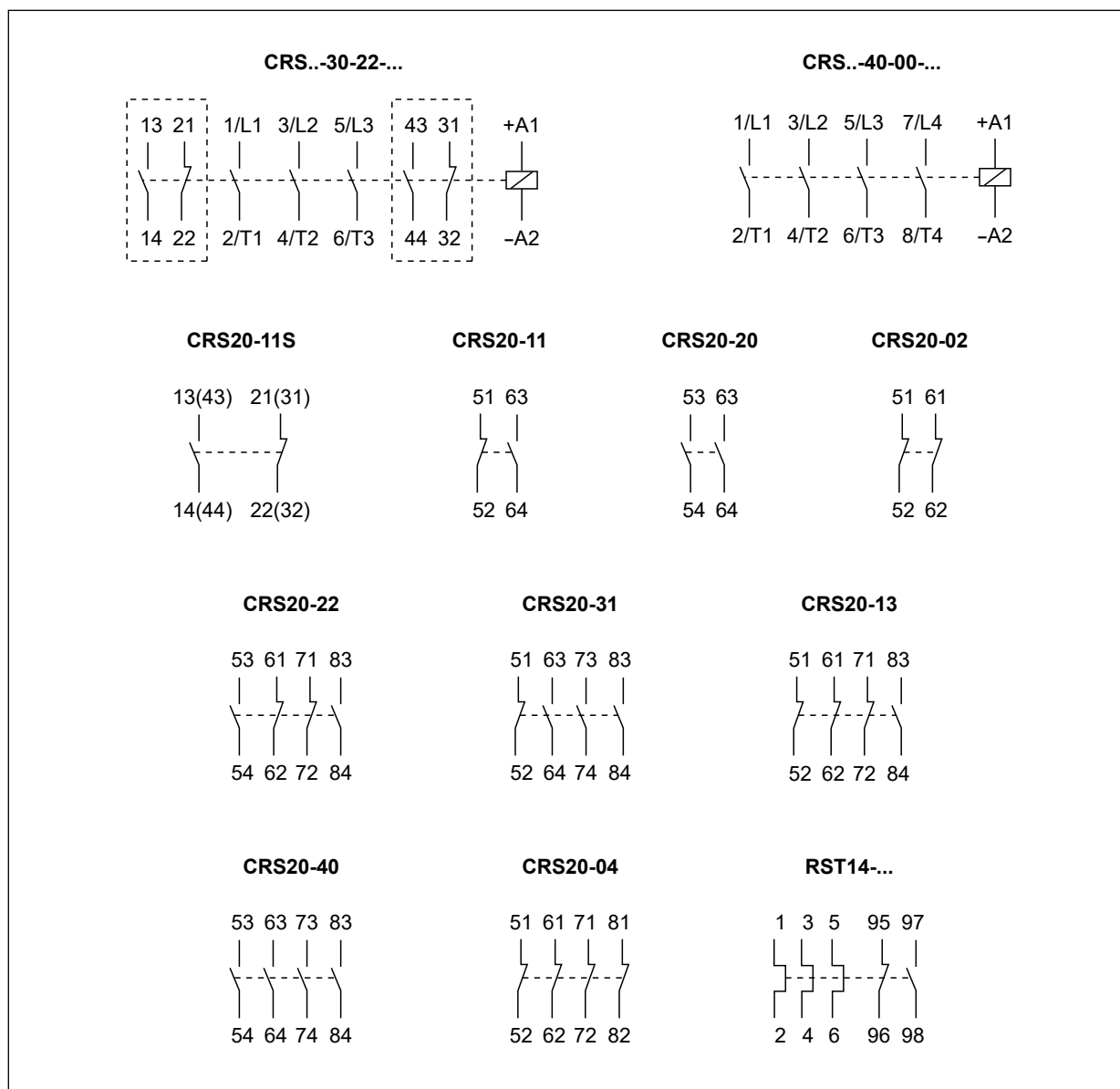


Auxiliary contact **CRS20-11, CRS20-20, CRS20-02**



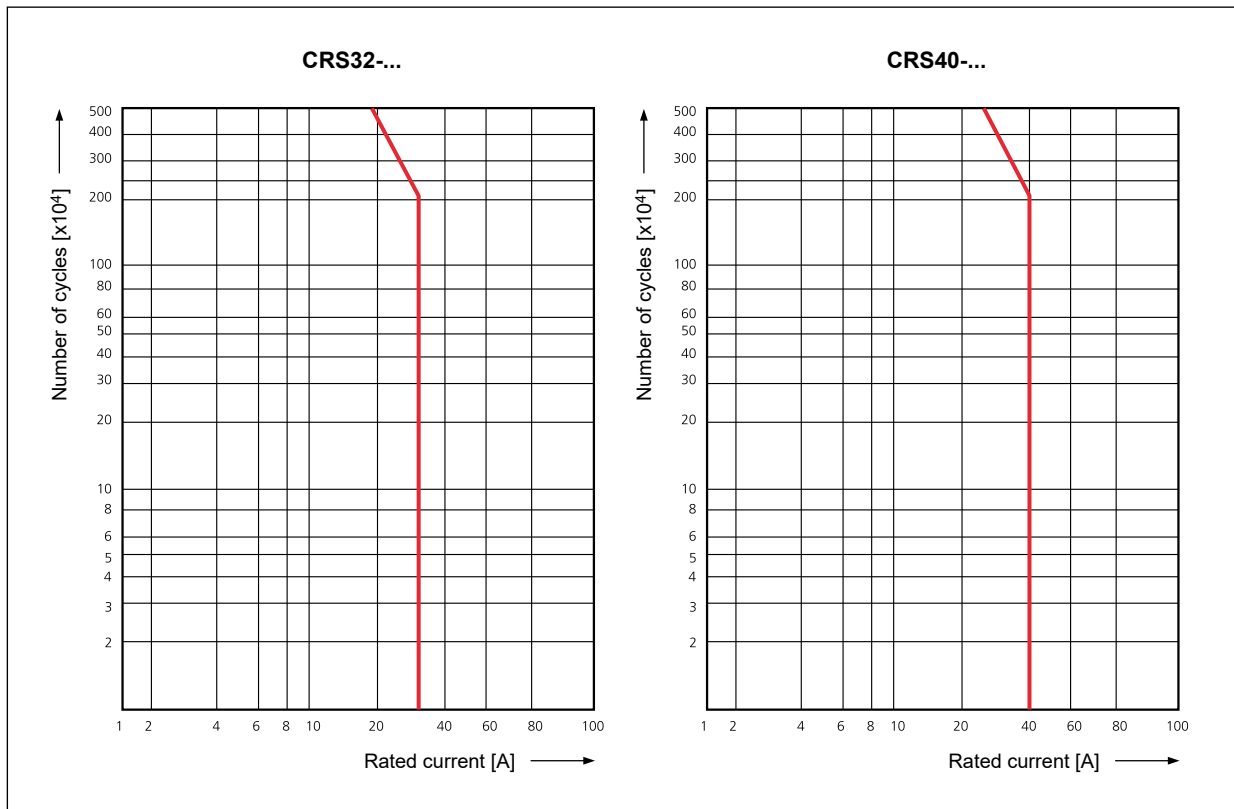
Auxiliary contact **CRS20-22, CRS20-31, CRS20-13, CRS20-40, CRS20-04**

Connection diagrams ⑨

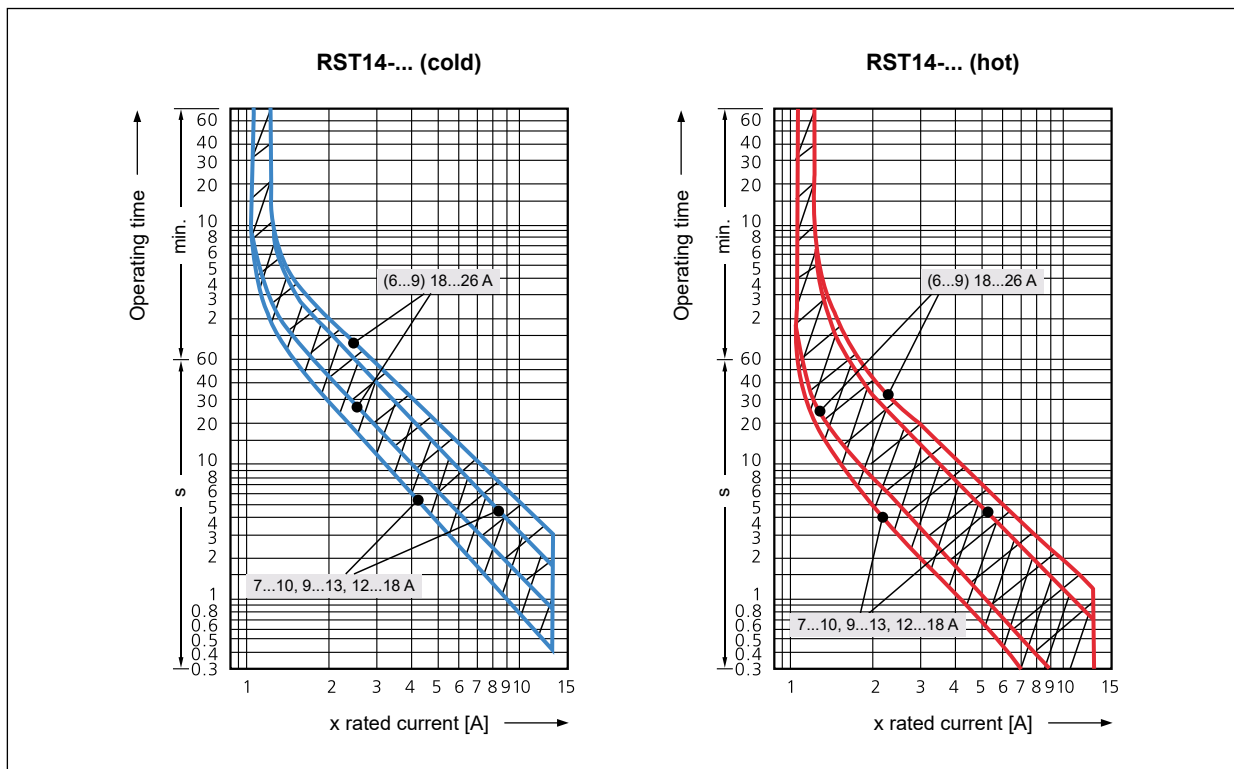


⑨ The indicated polarization of the supply (+A1/-A2) refers only to the DC coils.

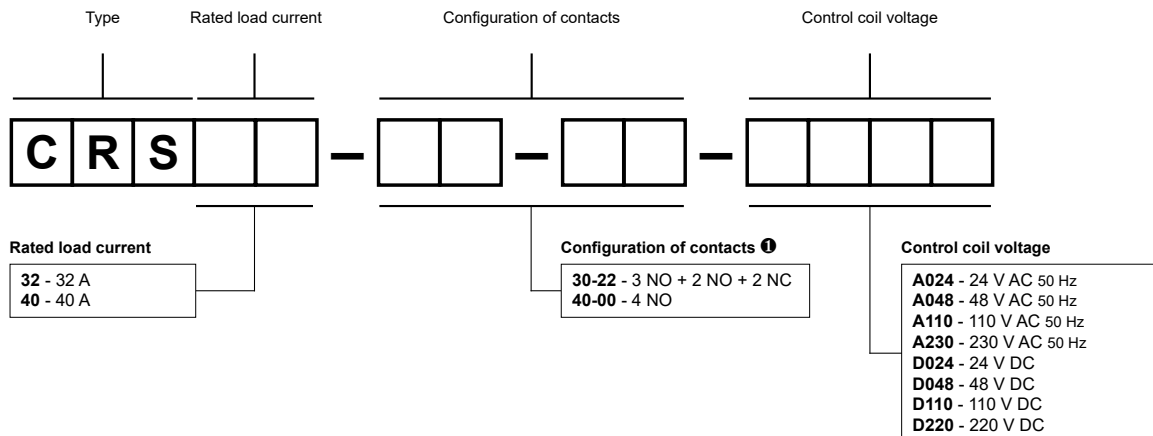
Contactors - electrical life at AC3 (U_e 380...440 V)



Thermal overload relays - characteristics curves



Ordering codes of contactors

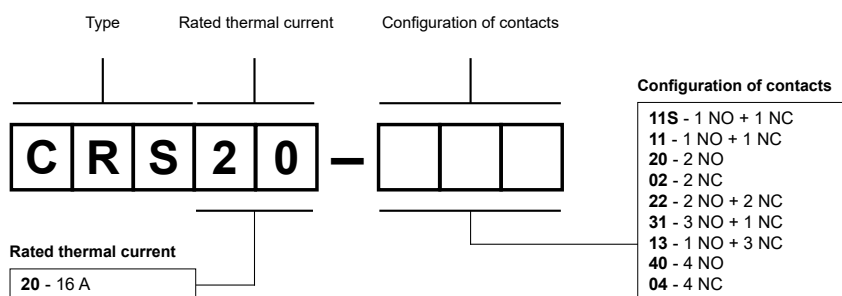


Examples of ordering codes ④:

CRS32-30-22-D220 contactor **CRS32**..., rated load current 32 A, three-pole - contacts 3 NO + 2 NO + 2 NC, control coil voltage 220 V DC

CRS40-40-00-A230 contactor **CRS40**..., rated load current 40 A, four-pole - contacts 4 NO, control coil voltage 230 V AC 50 Hz

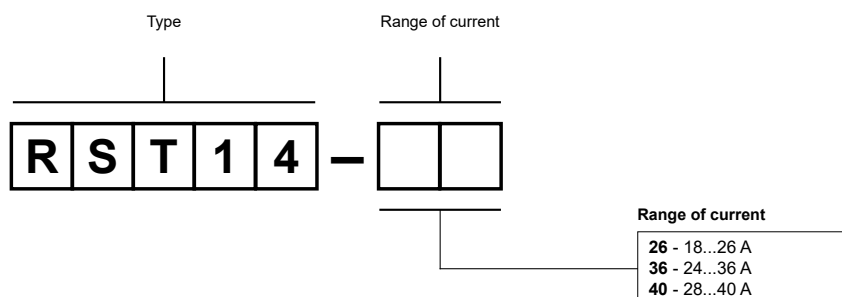
Ordering codes of auxiliary contacts



Examples of ordering codes ⑥:

CRS20-11 auxiliary contact **CRS20**..., rated thermal current 16 A, two-pole - contacts 1 NO + 1 NC
CRS20-31 auxiliary contact **CRS20**..., rated thermal current 16 A, four-pole - contacts 3 NO + 1 NC

Ordering codes of thermal overload relays



Examples of ordering codes ⑧:

RST14-26 thermal overload relay **RST14**..., range of current 18...26 A
RST14-40 thermal overload relay **RST14**..., range of current 28...40 A

① Configuration of contacts: three-pole - 3 NO with auxiliary contacts 2 NO + 2 NC; four-pole - 4 NO without auxiliary contacts.

④ Ordering codes **CRS32**..., **CRS40**... are specified in table "Type of contactor" on page 1.

⑤ Ordering codes **CRP20**... are specified in table "Type of auxiliary contact" on page 1.

⑥ Ordering codes **RST14**... are specified in table "Type of thermal overload relay" on page 1.

CRS50, CRS65, CRS75, CRS85

contactors up to 100 A

CRS...-30-...



- Three-pole or four-pole contactors for motor control applications in AC networks
- AC or DC control input
- Load current 50...85 A
- Screw terminals
- 35 mm rail mount acc. to EN 60715 or on panel mounting with four M4 screws
- Accessories: auxiliary contacts, thermal overload relays, mechanical interlocks
- Recognitions, certifications, directives: RoHS, REACH,



Applications

Control various motors (machine tools, fans, pumps, conveyor drives) for start, stop, and forward/reverse operations; work with thermal overload relays and circuit breakers to provide motor overload and short-circuit protection for safe equipment operation; manage power supply for high-power equipment in buildings, such as central air conditioning, large exhaust fans, and fire pumps; operate traction and door motors in elevator control systems, ensuring smooth starts and stops; act as power switches in distribution systems to switch transformers and capacitor banks, stabilizing grid voltage and power factor; integrate with PLCs, variable frequency drives, and other automation devices for automatic switching in production lines and smart control systems.

Basic technical data

Configuration of contacts ❶: three-pole, four-pole

Control input: AC, DC

Load current: 50 A, 65 A, 75 A, 85 A

Type of contactor

Configuration of contacts ❶	Control voltage	Load current	
		50 A	60 A
3 NO + 2 NO + 2 NC	24 V AC	CRS50-30-22-A024	CRS65-30-22-A024
	48 V AC	CRS50-30-22-A048	CRS65-30-22-A048
	110 V AC	CRS50-30-22-A110	CRS65-30-22-A110
	230 V AC	CRS50-30-22-A230	CRS65-30-22-A230
	24 V DC	CRS50-30-22-D024	CRS65-30-22-D024
	48 V DC	CRS50-30-22-D048	CRS65-30-22-D048
	110 V DC	CRS50-30-22-D110	CRS65-30-22-D110
	220 V DC	CRS50-30-22-D220	CRS65-30-22-D220
4 NO	24 V AC	CRS50-40-00-A024	CRS65-40-00-A024
	48 V AC	CRS50-40-00-A048	CRS65-40-00-A048
	110 V AC	CRS50-40-00-A110	CRS65-40-00-A110
	230 V AC	CRS50-40-00-A230	CRS65-40-00-A230

❶ Configuration of contacts: three-pole - 3 NO with auxiliary contacts 2 NO + 2 NC; four-pole - 4 NO without auxiliary contacts.

CRS50, CRS65, CRS75, CRS85

contactors up to 100 A

Type of contactor

Configuration of contacts ❶	Control voltage	Load current	
		75 A	85 A
3 NO + 2 NO + 2 NC	24 V AC	CRS75-30-22-A024	CRS85-30-22-A024
	48 V AC	CRS75-30-22-A048	CRS85-30-22-A048
	110 V AC	CRS75-30-22-A110	CRS85-30-22-A110
	230 V AC	CRS75-30-22-A230	CRS85-30-22-A230
	24 V DC	CRS75-30-22-D024	CRS85-30-22-D024
	48 V DC	CRS75-30-22-D048	CRS85-30-22-D048
	110 V DC	CRS75-30-22-D110	CRS85-30-22-D110
	220 V DC	CRS75-30-22-D220	CRS85-30-22-D220
4 NO	24 V AC	CRS75-40-00-A024	CRS85-40-00-A024
	48 V AC	CRS75-40-00-A048	CRS85-40-00-A048
	110 V AC	CRS75-40-00-A110	CRS85-40-00-A110
	230 V AC	CRS75-40-00-A230	CRS85-40-00-A230

Type of auxiliary contact

Configuration of contacts		Configuration of contacts	
1 NO + 1 NC	CRS20-11S	2 NO + 2 NC	CRS20-22
1 NO + 1 NC	CRS20-11	3 NO + 1 NC	CRS20-31
2 NO	CRS20-20	1 NO + 3 NC	CRS20-13
2 NC	CRS20-02	4 NO	CRS20-40
		4 NC	CRS20-04

Type of thermal overload relay

Range of current	
34...50 A	RST15-50
45...65 A	RST15-65
54...75 A	RST15-75
63...85 A	RST15-85

❶ Configuration of contacts: three-pole - 3 NO with auxiliary contacts 2 NO + 2 NC; four-pole - 4 NO without auxiliary contacts.

CRS50, CRS65, CRS75, CRS85

contactors up to 100 A

Input circuit - coil data

	CRS...-A...	CRS...-D...
Coil voltage	24, 48, 110, 230 V AC 50 Hz	24, 48, 110, 220 V DC
Rated power consumption	17 VA	8,8 W
Pick-up power consumption	212 VA	900 W
Maintain power consumption	17 VA	8,8 W
Range of pick-up voltage	0,8...1,1 U _n	0,8...1,1 U _n
Range of drop-out voltage	0,3...0,4 U _n	0,1...0,3 U _n
Pick-up time	16...25 ms	20...30 ms
Drop-out time	8...15 ms	13...20 ms

Output circuit - main contacts data

		CRS50-...	CRS65-...
Configuration of contacts ❶		3 NO + 2 NO + 2 NC, 4 NO	3 NO + 2 NO + 2 NC, 4 NO
Rated thermal current	AC1	80 A	100 A
Rated load AC3 IEC 60947	220...240 V	55 A	65 A
	380...440 V	50 A	65 A
	500...550 V	43 A	60 A
	690 V	28 A	35 A
Motor load AC3 IEC 60947	220...240 V	15 kW	18,5 kW
	380...440 V	22 kW	30 kW
	500...550 V	30 kW	33 kW
	690 V	30 kW	33 kW
Motor load AC3 UL 508 (single-phase motor)	115 V	3 HP	5 HP
	230 V	7,5 HP	10 HP
Motor load AC3 UL 508 (three-phase motor)	200 V	10 HP	15 HP
	230 V	15 HP	20 HP
	460 V	30 HP	40 HP
	575 V	30 HP	40 HP
Max. short circuit current	220 V	660 A	780 A
	440 V	600 A	780 A
Max. breaking current	220 V	550 A	650 A
	440 V	500 A	650 A
Max. operating frequency	AC3	1 200 cycles/hour	1 200 cycles/hour
	AC4	300 cycles/hour	300 cycles/hour
Electrical life	AC3	2 x 10 ⁶	2 x 10 ⁶
	AC4	2 x 10 ⁵	2 x 10 ⁵
Mechanical life (cycles)		10 ⁷	10 ⁷

❶ Configuration of contacts: three-pole - 3 NO with auxiliary contacts 2 NO + 2 NC; four-pole - 4 NO without auxiliary contacts.

CRS50, CRS65, CRS75, CRS85

contactors up to 100 A

Output circuit - main contacts data

		CRS75-...	CRS85-...
Configuration of contacts ❶		3 NO + 2 NO + 2 NC, 4 NO	3 NO + 2 NO + 2 NC, 4 NO
Rated thermal current	AC1	110 A	135 A
Rated load AC3 IEC 60947	220...240 V	75 A	85 A
	380...440 V	75 A	85 A
	500...550 V	64 A	75 A
	690 V	42 A	45 A
Motor load AC3 IEC 60947	220...240 V	22 kW	25 kW
	380...440 V	37 kW	45 kW
	500...550 V	37 kW	45 kW
	690 V	37 kW	45 kW
Motor load AC3 UL 508 (single-phase motor)	115 V	5 HP	7,5 HP
	230 V	15 HP	15 HP
Motor load AC3 UL 508 (three-phase motor)	200 V	20 HP	25 HP
	230 V	25 HP	30 HP
	460 V	50 HP	50 HP
	575 V	50 HP	50 HP
Max. short circuit current	220 V	900 A	750 A
	440 V	900 A	750 A
Max. breaking current	220 V	960 A	800 A
	440 V	960 A	800 A
Max. operating frequency	AC3	1 200 cycles/hour	1 200 cycles/hour
	AC4	300 cycles/hour	300 cycles/hour
Electrical life	AC3	2 x 10 ⁶	2 x 10 ⁶
	AC4	2 x 10 ⁵	2 x 10 ⁵
Mechanical life (cycles)		10 ⁷	10 ⁷

Output circuit - auxiliary contacts data

		CRS20-...
Configuration of contacts		1 NO + 1 NC, 2 NO, 2 NC, 2 NO + 2 NC, 3 NO + 1 NC, 1 NO + 3 NC, 4 NO, 4 NC
Rated current	AC12	3 A / 125 V, 1,5 A / 250 V
	AC15	6 A / 120 V, 3 A / 240 V
	DC12	0,55 A / 440 V, 0,27 A / 600 V
	DC13	1,5 A / 480 V, 1,2 A / 600 V
Rated thermal current	AC1	16 A

General data

	CRS...
Operating altitude	0...2 000 m
Ambient temperature (non-condensation and/or icing)	storage: -30...+65 °C operating: -25...+40 °C

❶ Configuration of contacts: three-pole - 3 NO with auxiliary contacts 2 NO + 2 NC; four-pole - 4 NO without auxiliary contacts.

13.09.2026

CRS50, CRS65, CRS75, CRS85

contactors up to 100 A

Mechanical data - contactor

		CRS..-30-...	CRS..-40-...
Dimensions (L x W x H)		123,5 x 94 x 117,4 mm	123,5 x 91 x 117,8 mm
Weight (typical)		CRP...-A...: 1 000 g CRP...-D...: 1 060 g	CRP...-A...: 1 200 g CRP...-D...: 1 290 g
Protection category EN 60529		IP 10	IP 10
Connection mode		input: screws M3,5 tightening moment: 0,8...1,2 Nm output (main CRS50...): screws M6 tightening moment: 3...4 Nm output (main CRS65/75/85...): screws M8 tightening moment: 6...8 Nm output (auxiliary): screws M3,5 tightening moment: 0,8...1,2 Nm	input: screws M3,5 tightening moment: 0,8...1,2 Nm output (main CRS50...): screws M6 tightening moment: 3...4 Nm output (main CRS65/75/85...): screws M8 tightening moment: 6...8 Nm output (auxiliary): screws M3,5 tightening moment: 0,8...1,2 Nm
Mounting	on 35 mm rail mount	direct	direct
	on panel	screws M4 tightening moment: 1,2...1,5 Nm	screws M4 tightening moment: 1,2...1,5 Nm

Mechanical data - auxiliary contact

	CRS20-11S	CRS20-11, CRS20-20, CRS20-02	CRS20-22, CRS20-31, CRS20-13, CRS20-40, CRS20-04
Dimensions (L x W x H)	62,8 x 12 x 52,9 mm	48,5 x 24 x 37 mm	48,5 x 43,5 x 37 mm
Weight (typical)	32 g	20 g	36 g
Protection category EN 60529	IP 10	IP 10	IP 10
Connection mode	output: screws M3,5 tight. moment: 0,8...1,2 Nm	output: screws M3,5 tight. moment: 0,8...1,2 Nm	output: screws M3,5 tight. moment: 0,8...1,2 Nm
Mounting on contactor	side	top	top

Mechanical data - thermal overload relay

	RST15-...
Dimensions (L x W x H)	81,4 x 70 x 101,5 mm
Weight (typical)	300 g
Protection category EN 60529	IP 10
Connection mode	output (main RST15-50): screws M6 output (main RST15-65/75/85): screws M8 output (auxiliary): screws M3,5 tightening moment: 2...22 Nm tightening moment: 2...38 Nm tightening moment: 0,8...1,2 Nm
Mounting on contactor	bottom

CRS50, CRS65, CRS75, CRS85

contactors up to 100 A

Mounting, accessories for contactors

Contactors **CRS50-...**, **CRS65-...**, **CRS75-...**, **CRS85-...** are designed for direct mounting on 35 mm rail mount acc. to EN 60715 or on panel mounting with four M4 screws.

For **CRS50-...**, **CRS65-...**, **CRS75-...**, **CRS85-...** contactors we offer auxiliary contacts **CRS20-...**, thermal overload relays **RST15-...** and mechanical interlocks **CRS-MI51** Ⓢ.

Ⓢ The mechanical interlock is mounted directly between two contactors, creating a compact and safe reversing combination or a changeover switch (preventing simultaneous activation of both contactors).



CRS20-11S



CRS20-11
CRS20-20
CRS20-02



CRS20-22, CRS20-31
CRS20-13, CRS20-40
CRS20-04

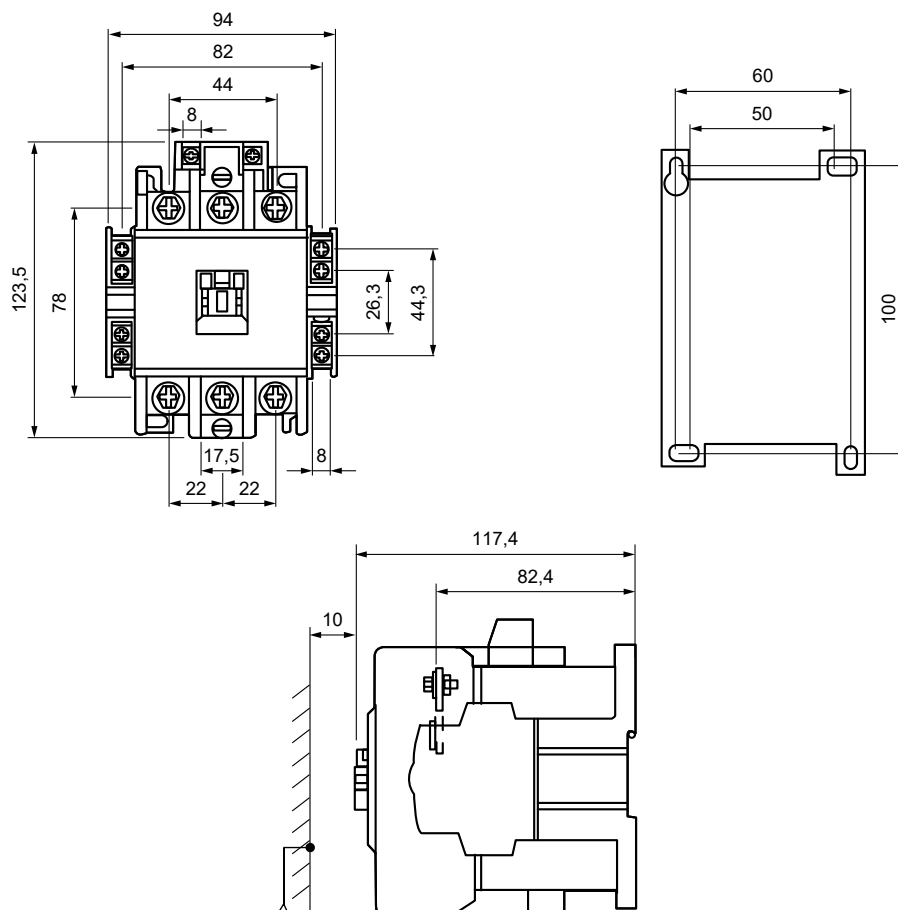


RST15-...



CRS-MI51

Dimensions

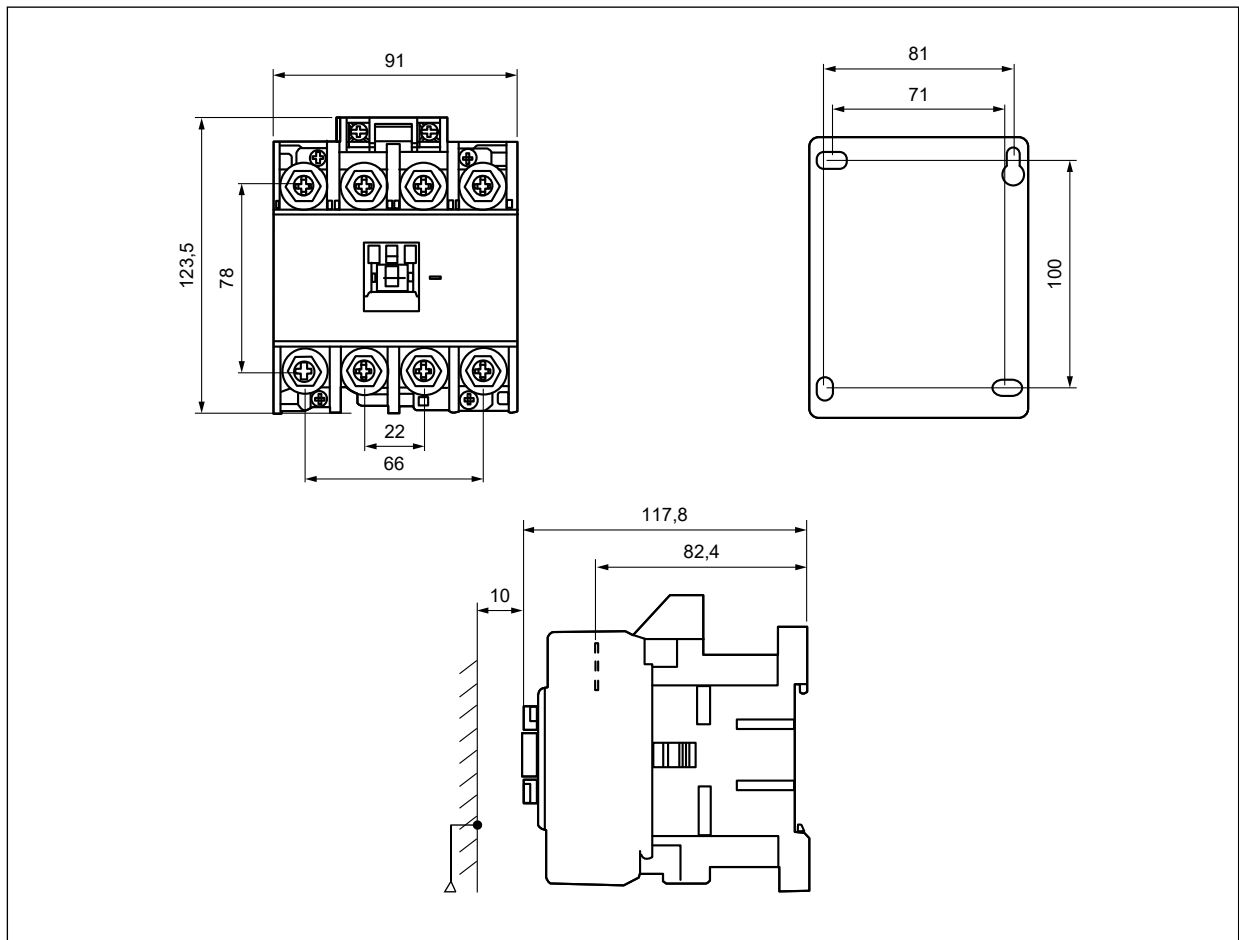


Three-pole contactor **CRS...-30-...**

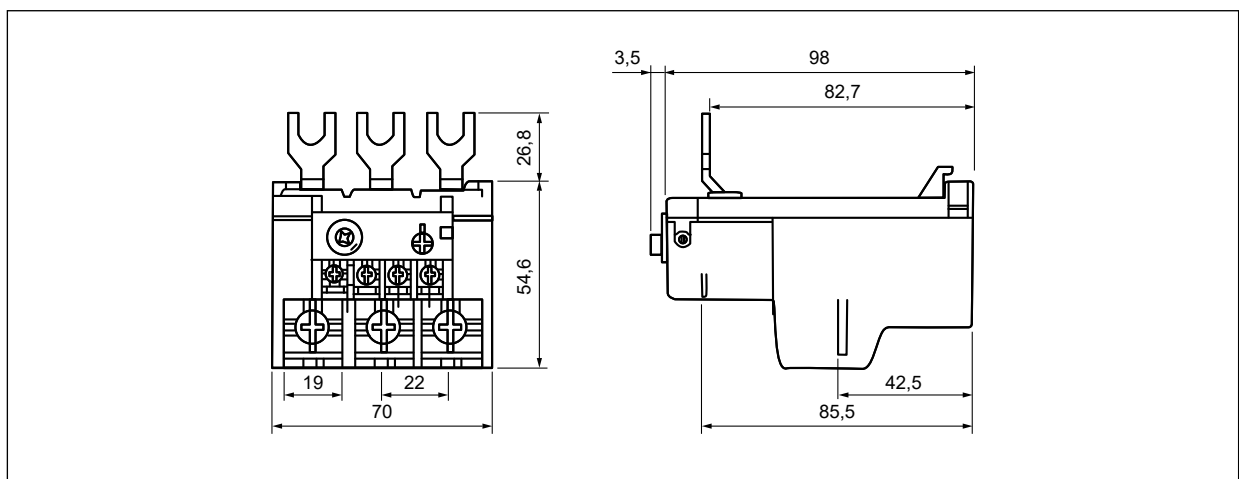
CRS50, CRS65, CRS75, CRS85

contactors up to 100 A

Dimensions



Four-pole contactor **CRS..-40-...**

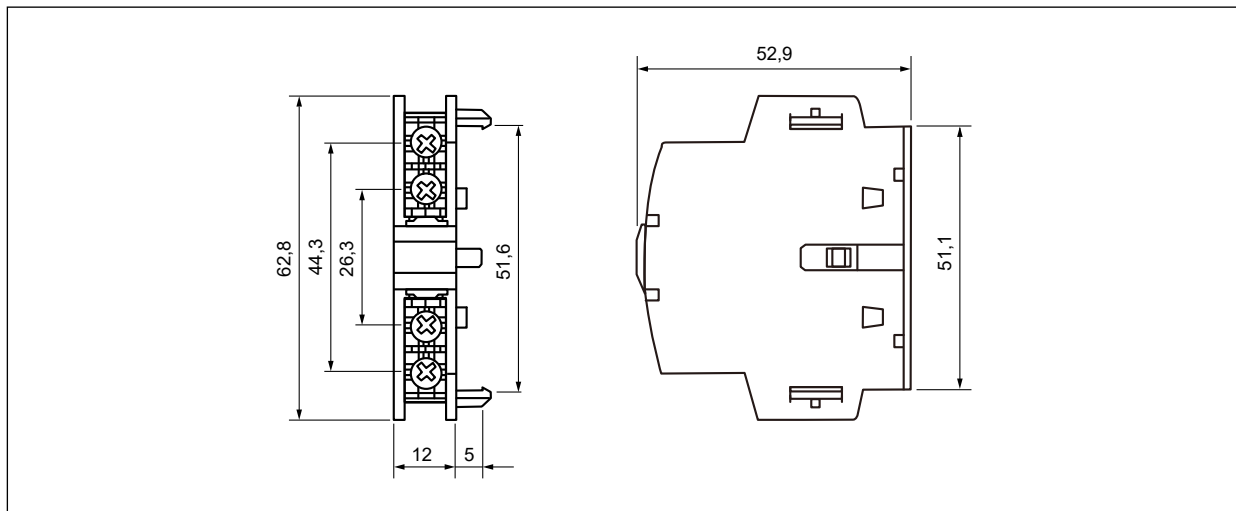


Thermal overload relay **RST15-...**

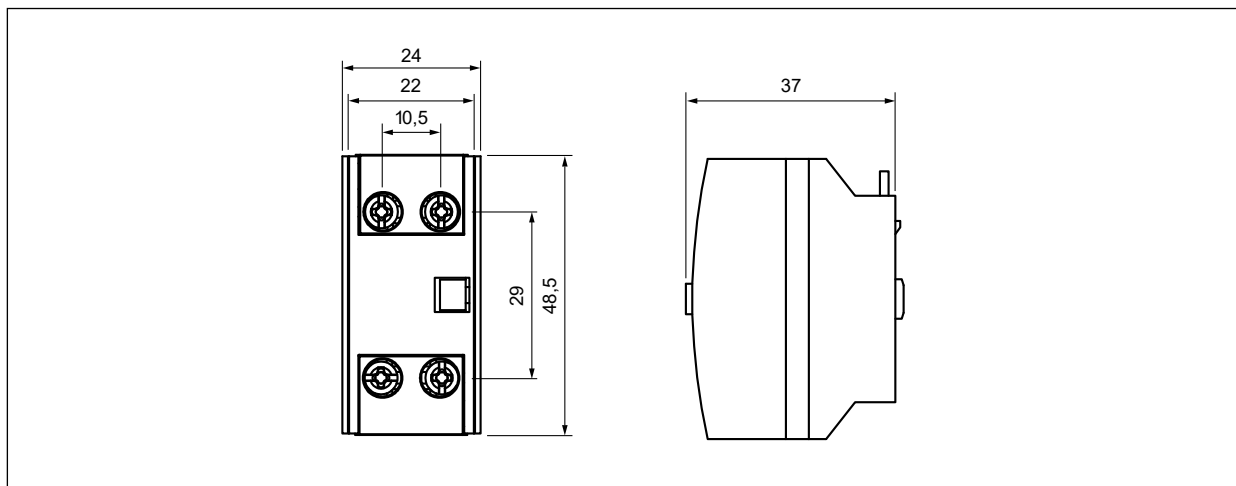
CRS50, CRS65, CRS75, CRS85

contactors up to 100 A

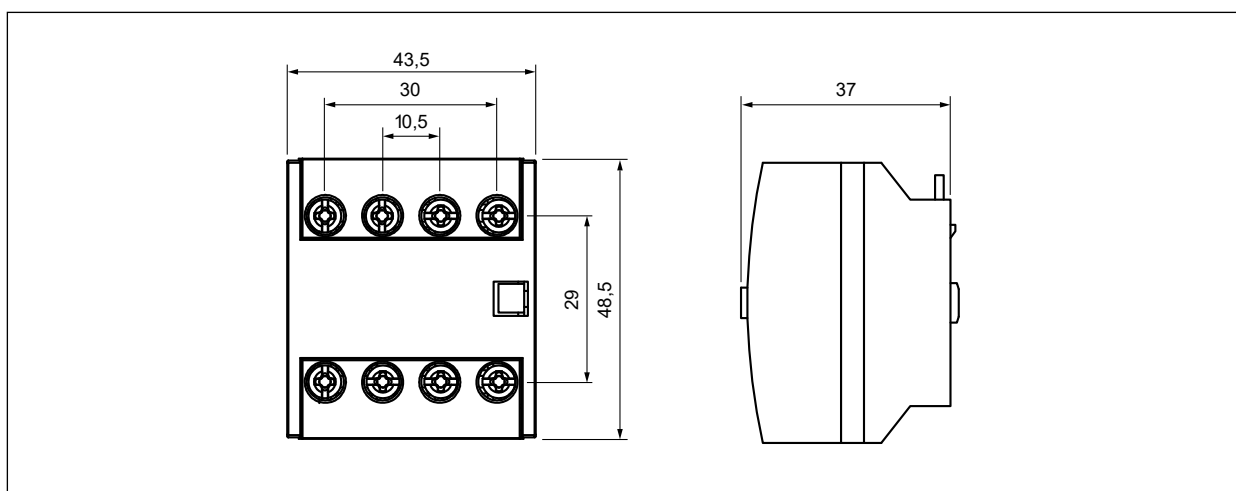
Dimensions



Auxiliary contact **CRS20-11S**



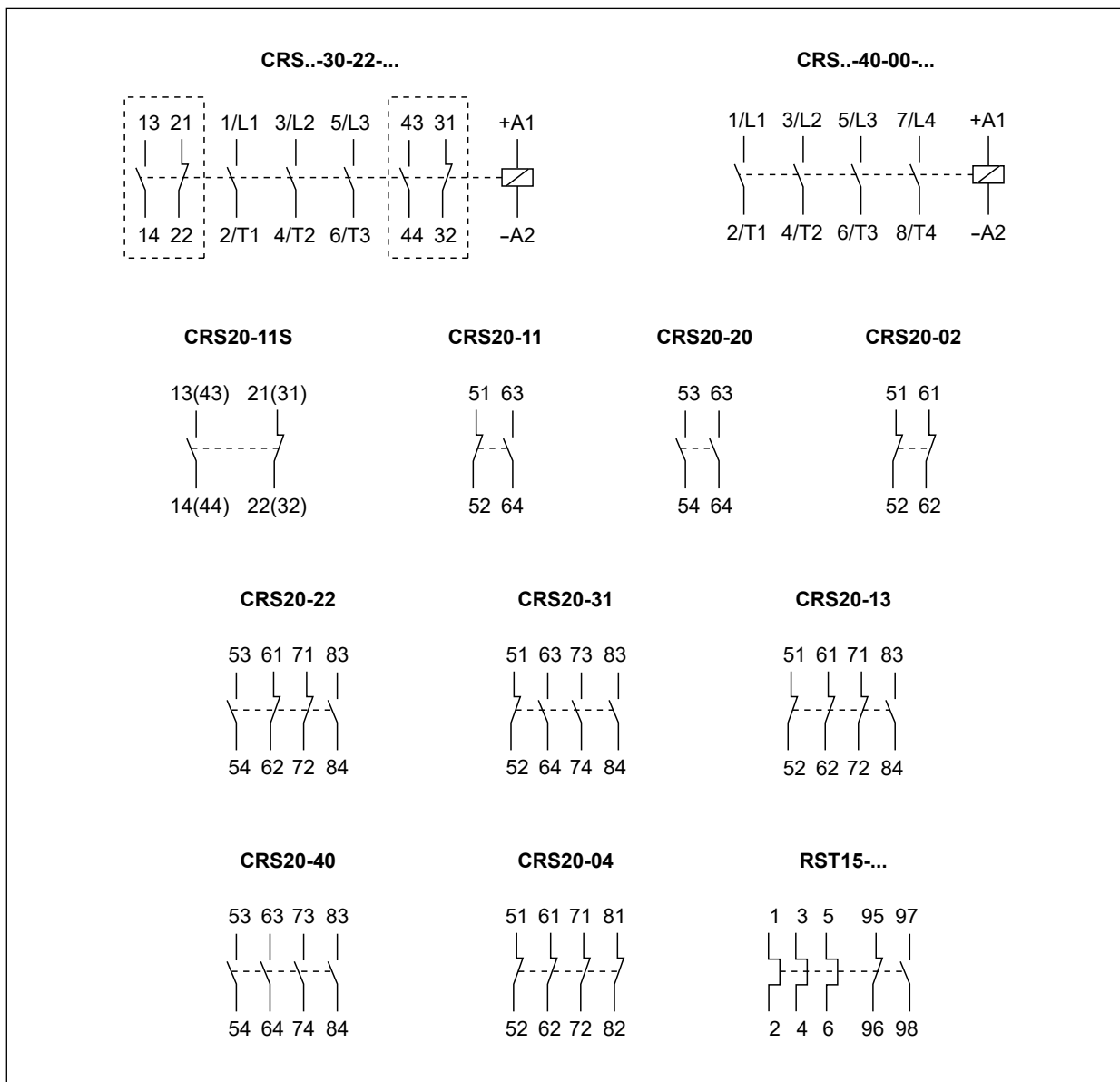
Auxiliary contact **CRS20-11, CRS20-20, CRS20-02**



Auxiliary contact **CRS20-22, CRS20-31, CRS20-13, CRS20-40, CRS20-04**

13.09.2026

Connection diagrams ⑨

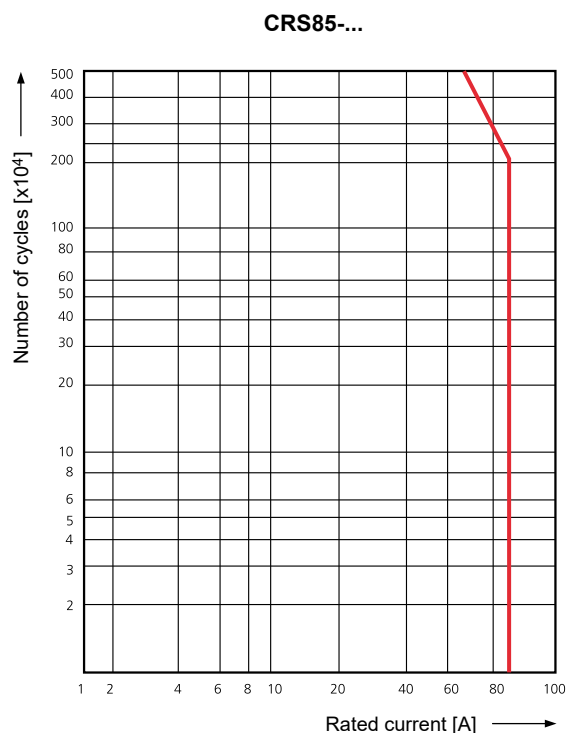
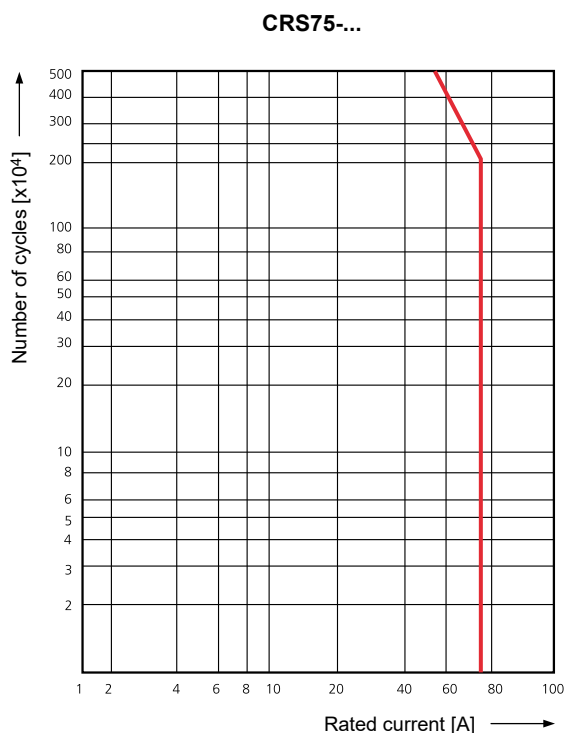
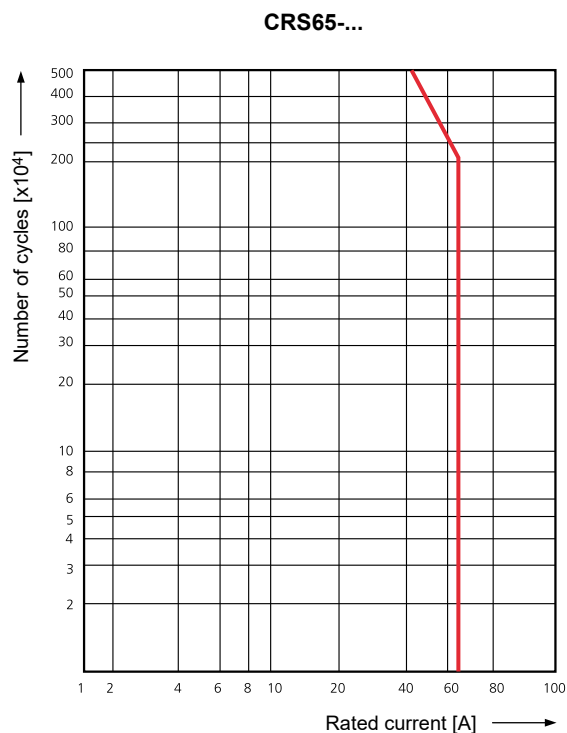
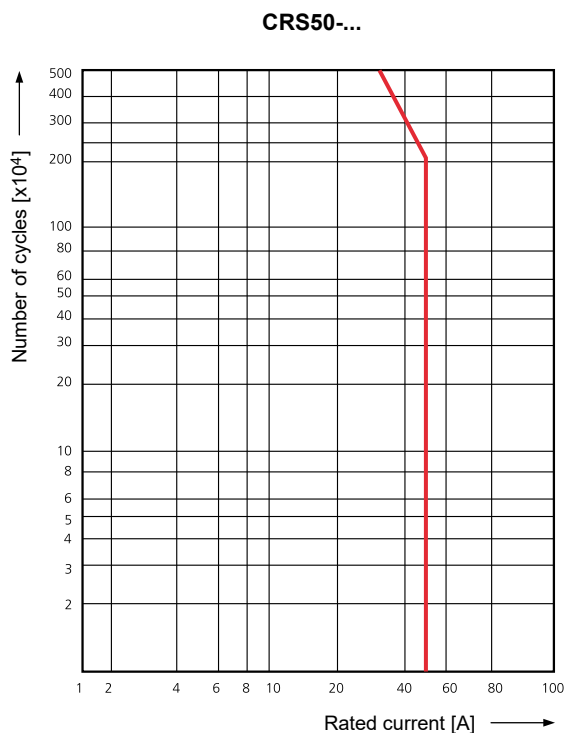


⑨ The indicated polarization of the supply (+A1/-A2) refers only to the DC coils.

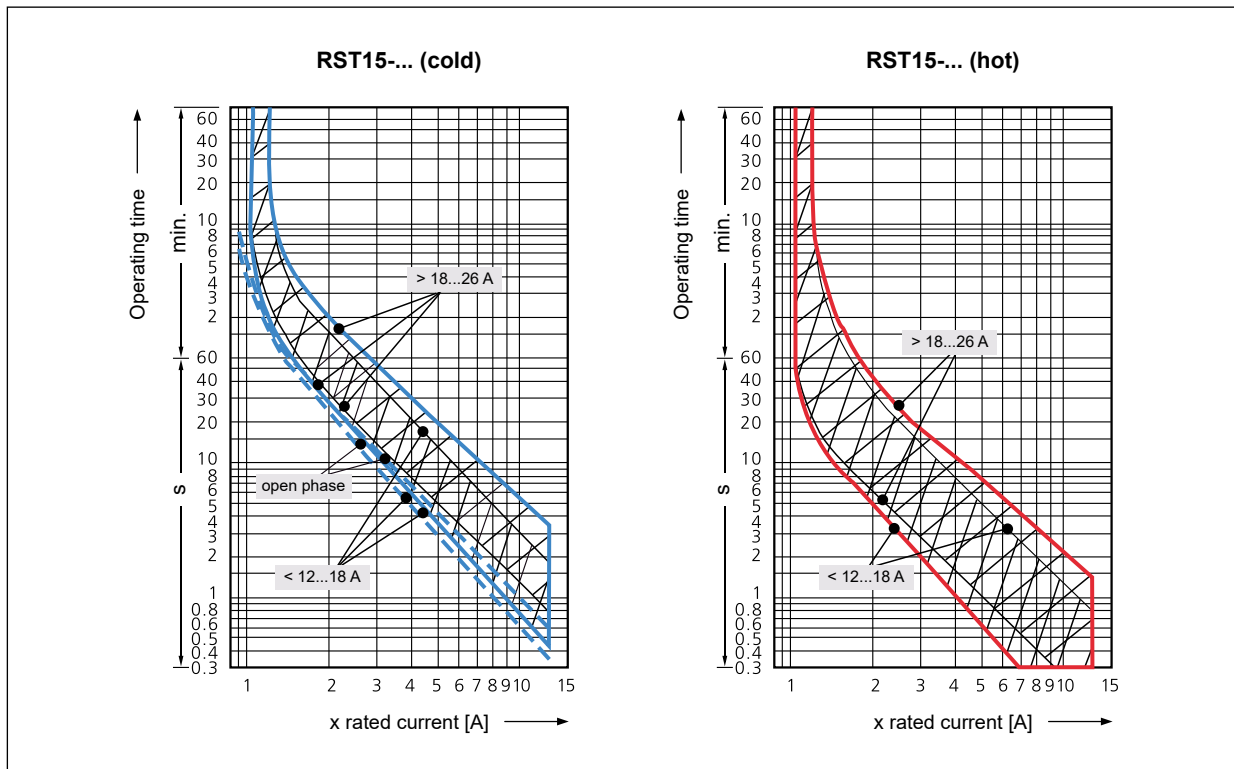
CRS50, CRS65, CRS75, CRS85

contactors up to 100 A

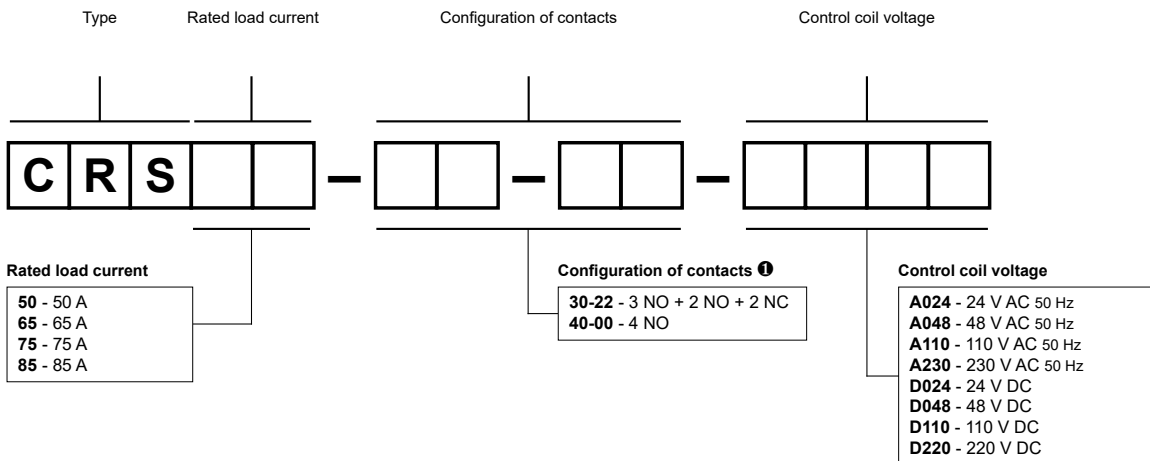
Contactors - electrical life at AC3 (U_e 380...440 V)



Thermal overload relays - characteristics curves



Ordering codes of contactors



Examples of ordering codes ④:

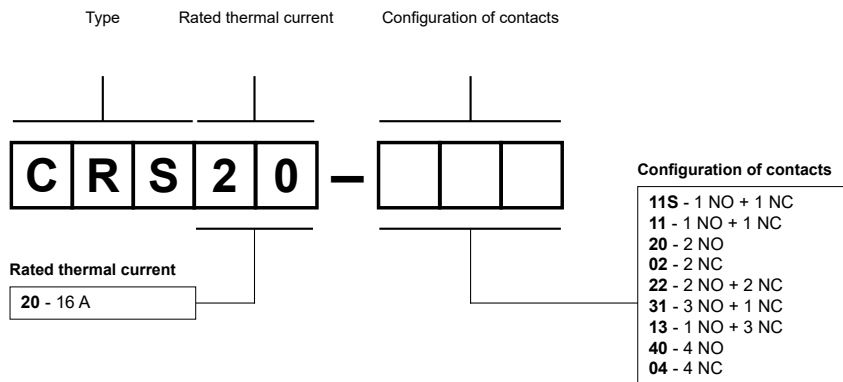
CRS50-30-22-D048 contactor **CRS50**..., rated load current 50 A, three-pole - contacts 3 NO + 2 NO + 2 NC, control coil voltage 48 V DC

CRS85-40-00-A110 contactor **CRS85**..., rated load current 85 A, four-pole - contacts 4 NO, control coil voltage 110 V AC 50 Hz

① Configuration of contacts: three-pole - 3 NO with auxiliary contacts 2 NO + 2 NC; four-pole - 4 NO without auxiliary contacts.

④ Ordering codes **CRS50**..., **CRS65**..., **CRS75**..., **CRS85**... are specified in tables "Type of contactor" on pages 1, 2.

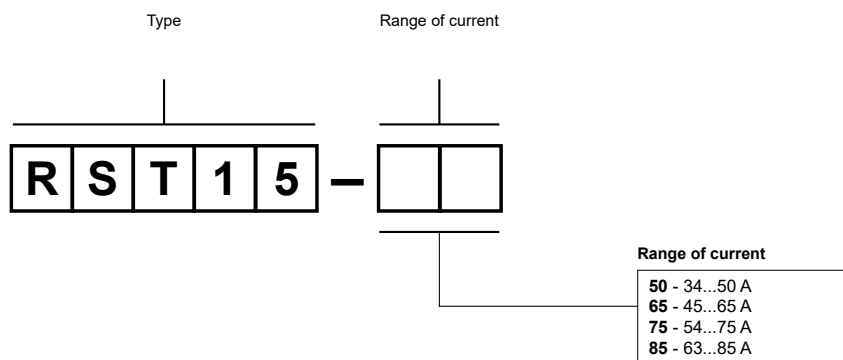
Ordering codes of auxiliary contacts



Examples of ordering codes ⑤:

CRS20-11 auxiliary contact **CRS20-...**, rated thermal current 16 A, two-pole - contacts 1 NO + 1 NC
CRS20-02 auxiliary contact **CRS20-...**, rated thermal current 16 A, two-pole - contacts 1 NO + 3 NC
CRS20-13 auxiliary contact **CRS20-...**, rated thermal current 16 A, four-pole - contacts 4 NC

Ordering codes of thermal overload relays



Examples of ordering codes ⑥:

RST15-50 thermal overload relay **RST15-...**, range of current 34...50 A
RST15-65 thermal overload relay **RST15-...**, range of current 45...65 A
RST15-85 thermal overload relay **RST15-...**, range of current 63...85 A

⑤ Ordering codes **CRP20-...** are specified in table "Type of auxiliary contact" on page 2.

⑥ Ordering codes **RST15-...** are specified in table "Type of thermal overload relay" on page 2.