

CRG100, CRG125

contactors over 100 A

CRS.-30-...



- Three-pole or four-pole contactors for motor control applications in AC networks
- AC control input
- Load current 100...125 A
- Screw terminals
- 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

Load current: 100 A, 125 A

Type of contactor

Configuration of contacts ❶	Control voltage	Load current	
		100 A	125 A
3 NO + 2 NO + 2 NC	24 V AC	CRG100-30-22-A024	CRG125-30-22-A024
	110 V AC	CRG100-30-22-A110	CRG125-30-22-A110
	230 V AC	CRG100-30-22-A230	CRG125-30-22-A230
	400 V AC	CRG100-30-22-A400	CRG125-30-22-A400
4 NO + 2 NO + 2 NC	24 V AC	CRG100-40-22-A024	CRG125-40-22-A024
	110 V AC	CRG100-40-22-A110	CRG125-40-22-A110
	230 V AC	CRG100-40-22-A230	CRG125-40-22-A230
	400 V AC	CRG100-40-22-A400	CRG125-40-22-A400

Type of auxiliary contact

Configuration of contacts

1 NO + 1 NC

Type of thermal overload relay

Range of current

65...100 A **RST21-100**

85...125 A **RST21-125**

❶ Configuration of contacts: three-pole - 3 NO and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

Output circuit - main contacts data

		CRG100-...	CRG125-...
Configuration of contacts ❶		3 NO + 2 NO + 2 NC, 4 NO + 2 NO + 2 NC	3 NO + 2 NO + 2 NC, 4 NO + 2 NO + 2 NC
Rated thermal current	AC1	160 A	160 A
Rated load AC3 IEC 60947	220...240 V	105 A	125 A
	380...440 V	105 A	120 A
	500...550 V	85 A	90 A
	690 V	65 A	70 A
Motor load AC3 IEC 60947	220...240 V	30 kW	37 kW
	380...440 V	55 kW	60 kW
	500...550 V	55 kW	60 kW
	690 V	55 kW	60 kW
Motor load AC3 UL 508 (single-phase motor)	115 V	7,5 HP	10 HP
	230 V	15 HP	20 HP
Motor load AC3 UL 508 (three-phase motor)	200 V	30 HP	40 HP
	230 V	30 HP	40 HP
	460 V	60 HP	75 HP
	575 V	60 HP	75 HP
Max. short circuit current	220 V	1 050 A	1 250 A
	440 V	1 050 A	1 200 A
Max. breaking current	220 V	1 050 A	1 250 A
	440 V	1 050 A	1 200 A
Max. operating frequency	AC3	1 200 cycles/hour	1 200 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)		0,5 x 10 ⁷	0,5 x 10 ⁷

Output circuit - auxiliary contacts data

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

General data

		CRG...
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 and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

Input circuit - coil data

	CRG...-A...
Coil voltage	24, 110, 230, 400 V AC 50 Hz
Rated power consumption	4,4 VA
Pick-up power consumption	298 VA
Maintain power consumption	12,3 VA
Range of pick-up voltage	0,8...1,1 U _n
Range of drop-out voltage	0,3...0,4 U _n
Pick-up time	30...34 ms
Drop-out time	63...67 ms

Mechanical data - contactor

	CRG...-30-...	CRG...-40-...
Dimensions (L x W x H)	165,8 x 100 x 146,5 mm	203 x 175 x 181 mm
Weight (typical)	2 900 g	5 600 g
Protection category EN 60529	IP 00	IP 00
Connection mode	input: screws M4 tightening moment: 1,2...1,5 Nm output (main): screws M8 tightening moment: 2...6 Nm output (auxiliary): screws M4 tightening moment: 1,2...1,5 Nm	input: screws M4 tightening moment: 1,2...1,5 Nm output (main): screws M8 tightening moment: 2...6 Nm output (auxiliary): screws M4 tightening moment: 1,2...1,5 Nm
Mounting on panel	screws M4 tightening moment: 1,2...1,5 Nm	screws M4 tightening moment: 1,2...1,5 Nm

Mechanical data - auxiliary contact

Dimensions (L x W x H)	62,8 x 12 x 52,9 mm	
Weight (typical)	53 g	
Protection category EN 60529	IP 10	
Connection mode	output: screws M4	tightening moment: 0,8...1,2 Nm
Mounting on contactor	side	

Mechanical data - thermal overload relay

	RST21-...	
Dimensions (L x W x H)	67 x 103 x 105 mm	
Weight (typical)	480 g	
Protection category EN 60529	IP 00	
Connection mode	output (main): screws M8 output (auxiliary): screws M3,5	tightening moment: 2...6 Nm tightening moment: 0,8...1,2 Nm
Mounting on contactor	bottom	

CRG100, CRG125

contactors over 100 A

Mounting, accessories for contactors

Contactors **CRG100-...**, **CRG125-...** are designed for direct on panel mounting with four M4 screws. For **CRG100-...**, **CRG125-...** contactors we offer auxiliary contacts, thermal overload relays **RST21-...** and mechanical interlocks ②.

② 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).



auxiliary contact

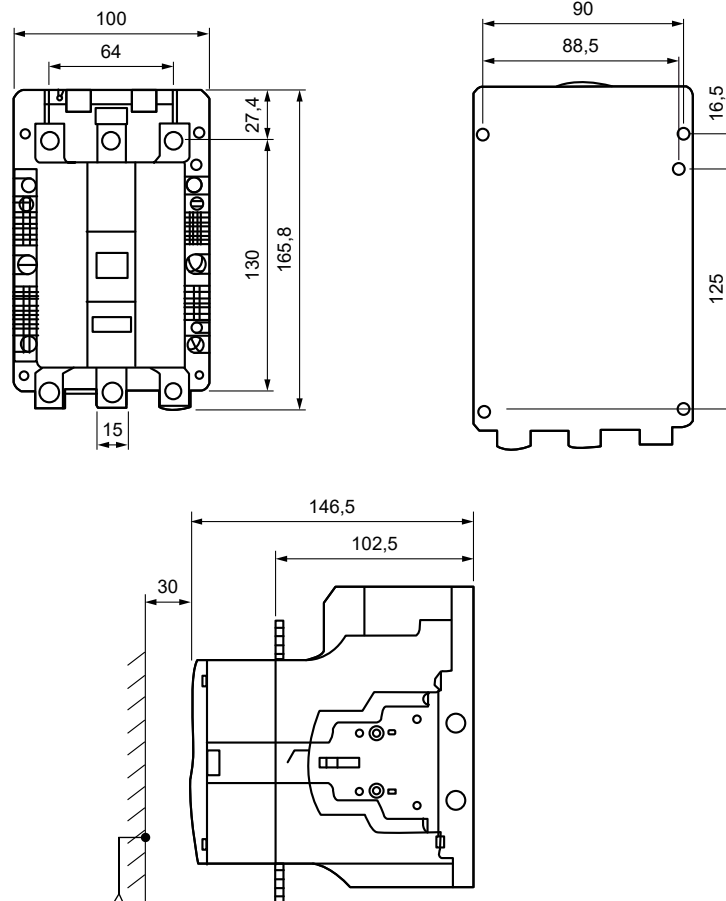


RST21-...



mechanical interlock

Dimensions

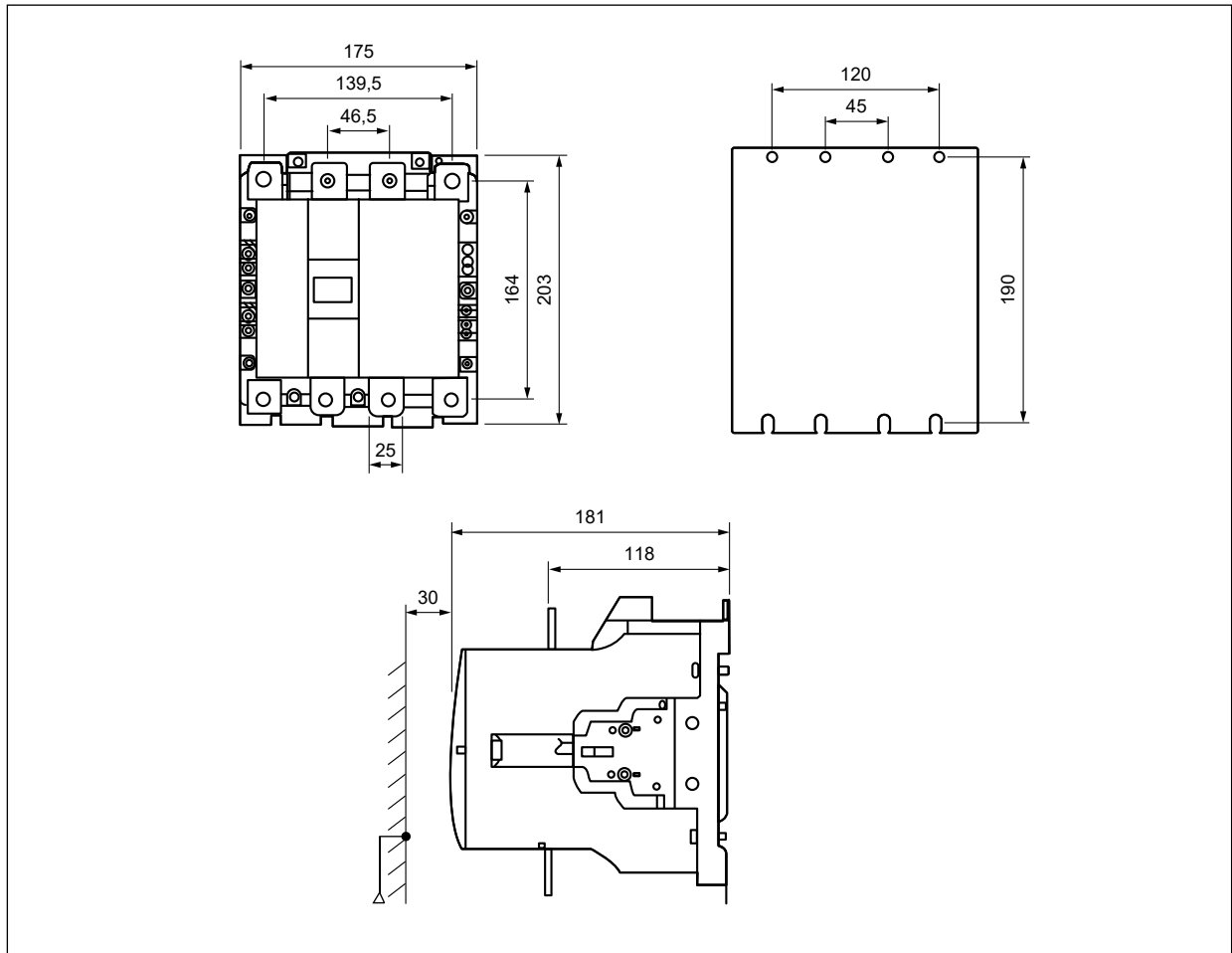


Three-pole contactor **CRG...30-...**

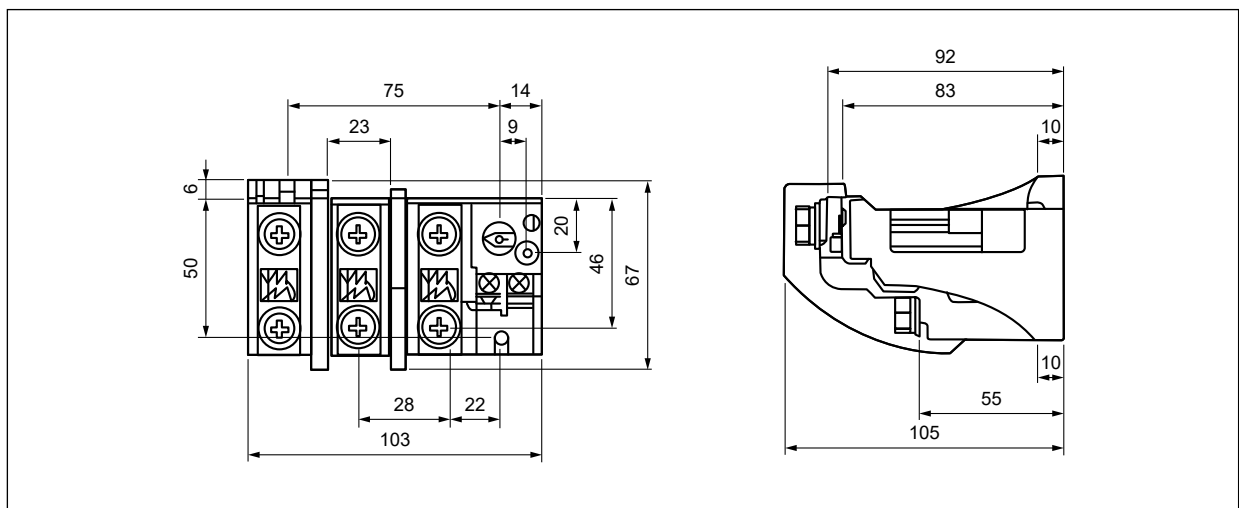
CRG100, CRG125

contactors over 100 A

Dimensions



Four-pole contactor **CRG..-40-...**

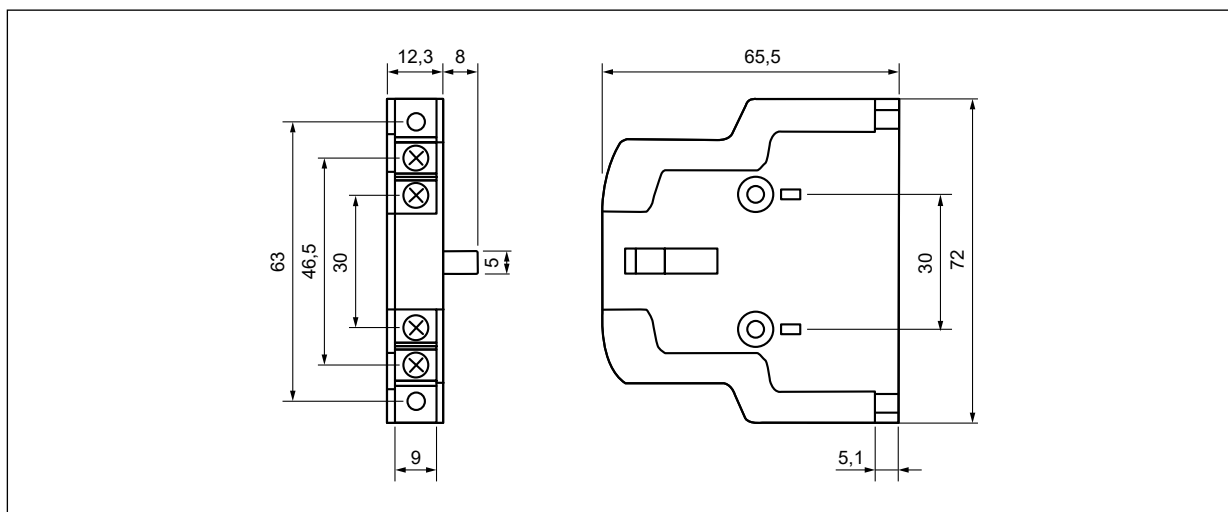


Thermal overload relay **RST21-...**

CRG100, CRG125

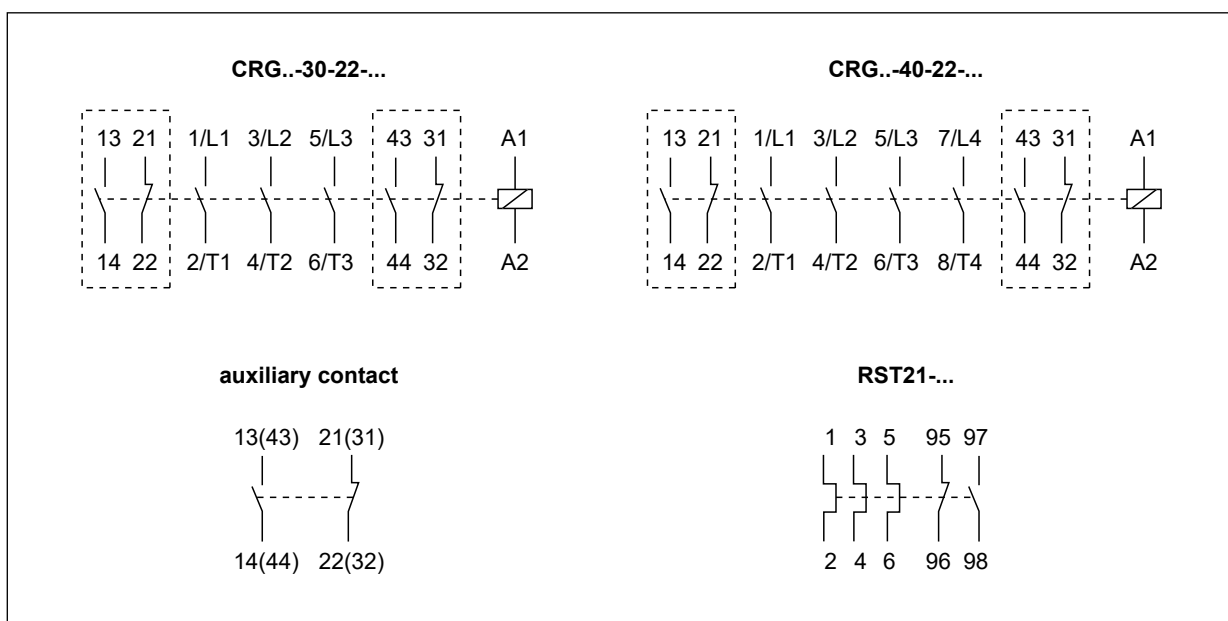
contactors over 100 A

Dimensions

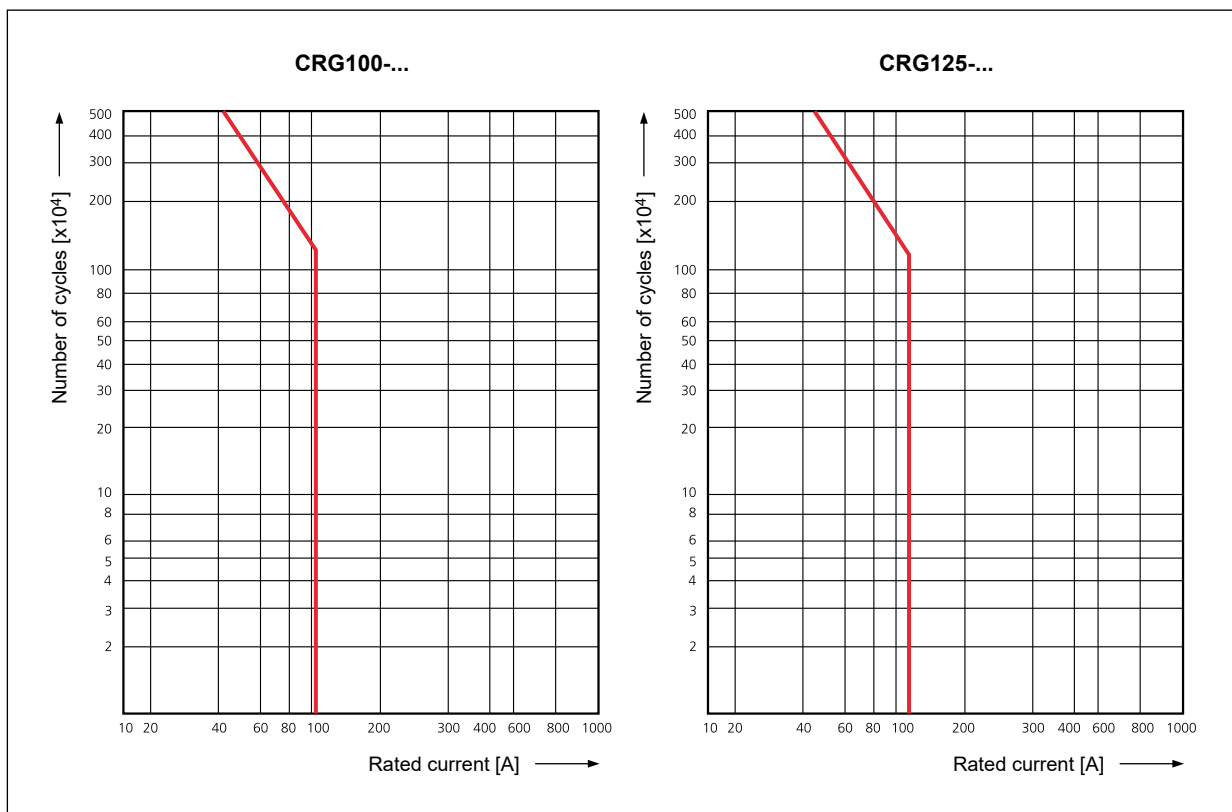


Auxiliary contact

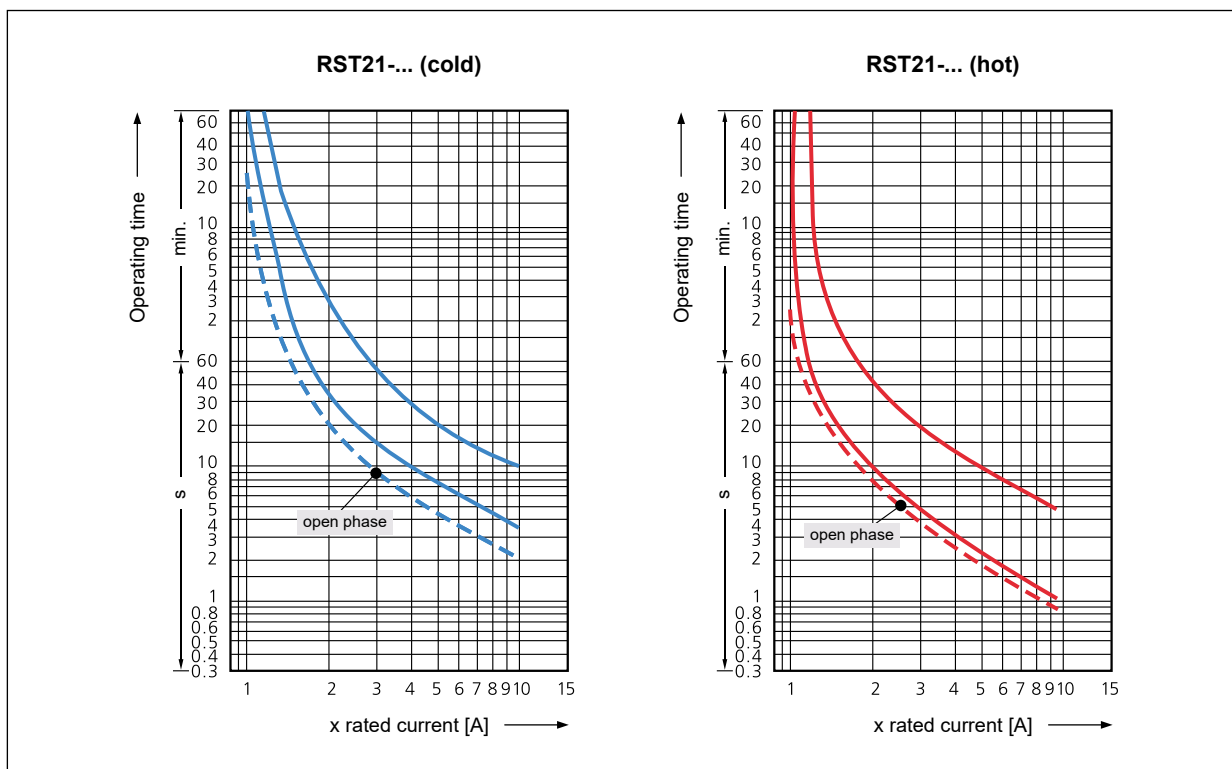
Connection diagrams



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



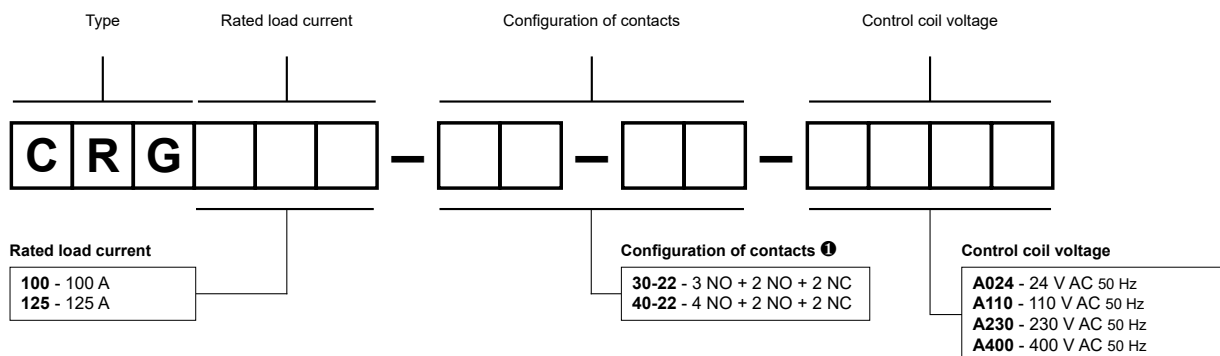
Thermal overload relays - characteristics curves



CRG100, CRG125

contactors over 100 A

Ordering codes of contactors



Examples of ordering codes ②:

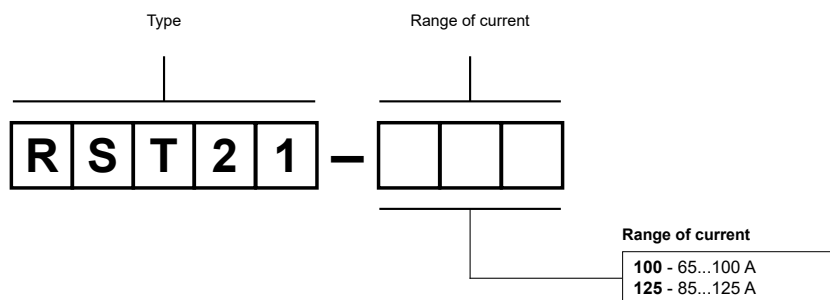
CRG100-30-22-A024

contactor **CRG100**..., rated load current 100 A, three-pole - contacts 3 NO + 2 NO + 2 NC, control coil voltage 24 V AC 50 Hz

CRG125-40-22-A400

contactor **CRG125**..., rated load current 125 A, four-pole - contacts 4 NO + 2 NO + 2 NC, control coil voltage 400 V AC 50 Hz

Ordering codes of thermal overload relays



Examples of ordering codes ③:

RST21-100

thermal overload relay **RST21**..., range of current 65...100 A

RST21-125

thermal overload relay **RST21**..., range of current 85...125 A

① Configuration of contacts: three-pole - 3 NO and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

② Ordering codes **CRG100**..., **CRG125**... are specified in table "Type of contactor" on page 1.

③ Ordering codes **RST21**... are specified in table "Type of thermal overload relay" on page 1.

CRG150

contactors over 100 A

CRS.-30-...



- Three-pole or four-pole contactors for motor control applications in AC networks
- AC control input
- Load current 150 A
- Screw terminals
- On panel mounting with four M5 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

Load current: 150 A

Type of contactor

Configuration of contacts ❶	Control voltage	Load current 150 A
3 NO + 2 NO + 2 NC	24 V AC	CRG150-30-22-A024
	110 V AC	CRG150-30-22-A110
	230 V AC	CRG150-30-22-A230
	400 V AC	CRG150-30-22-A400
4 NO + 2 NO + 2 NC	24 V AC	CRG150-40-22-A024
	110 V AC	CRG150-40-22-A110
	230 V AC	CRG150-40-22-A230
	400 V AC	CRG150-40-22-A400

Type of auxiliary contact

Configuration of contacts

1 NO + 1 NC

Type of thermal overload relay

Range of current

100...150 A **RST22-150**

❶ Configuration of contacts: three-pole - 3 NO and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

Output circuit - main contacts data

		CRG150-...
Configuration of contacts ❶		3 NO + 2 NO + 2 NC, 4 NO + 2 NO + 2 NC
Rated thermal current	AC1	210 A
Rated load AC3 IEC 60947	220...240 V	150 A
	380...440 V	150 A
	500...550 V	140 A
	690 V	100 A
Motor load AC3 IEC 60947	220...240 V	45 kW
	380...440 V	75 kW
	500...550 V	90 kW
	690 V	90 kW
Motor load AC3 UL 508 (single-phase motor)	115 V	15 HP
	230 V	25 HP
Motor load AC3 UL 508 (three-phase motor)	200 V	40 HP
	230 V	50 HP
	460 V	100 HP
	575 V	100 HP
Max. short circuit current	220 V	1 500 A
	440 V	1 500 A
Max. breaking current	220 V	1 500 A
	440 V	1 500 A
Max. operating frequency	AC3	1 200 cycles/hour
	AC4	300 cycles/hour
Electrical life	AC3	10 ⁶
	AC4	2 x 10 ⁵
Mechanical life (cycles)		0,5 x 10 ⁷

Output circuit - auxiliary contacts data

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

General data

		CRG...
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 and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

Input circuit - coil data

	CRG...-A...
Coil voltage	24, 110, 230, 400 V AC 50 Hz
Rated power consumption	4,4 VA
Pick-up power consumption	298 VA
Maintain power consumption	12,3 VA
Range of pick-up voltage	0,8...1,1 U _n
Range of drop-out voltage	0,3...0,4 U _n
Pick-up time	30...34 ms
Drop-out time	63...67 ms

Mechanical data - contactor

	CRG...-30-...	CRG...-40-...
Dimensions (L x W x H)	165,8 x 100 x 146,5 mm	203 x 175 x 181 mm
Weight (typical)	2 900 g	5 600 g
Protection category EN 60529	IP 10	IP 10
Connection mode	input: screws M4 tightening moment: 1,2...1,5 Nm output (main): screws M8 tightening moment: 2...6 Nm output (auxiliary): screws M4 tightening moment: 1,2...1,5 Nm	input: screws M4 tightening moment: 1,2...1,5 Nm output (main): screws M8 tightening moment: 2...6 Nm output (auxiliary): screws M4 tightening moment: 1,2...1,5 Nm
Mounting on panel	screws M5 tightening moment: 2...3 Nm	screws M5 tightening moment: 2...3 Nm

Mechanical data - auxiliary contact

Dimensions (L x W x H)	62,8 x 12 x 52,9 mm	
Weight (typical)	53 g	
Protection category EN 60529	IP 10	
Connection mode	output: screws M4	tightening moment: 0,8...1,2 Nm
Mounting on contactor	side	

Mechanical data - thermal overload relay

	RST22-150	
Dimensions (L x W x H)	89 x 112 x 105 mm	
Weight (typical)	600 g	
Protection category EN 60529	IP 00	
Connection mode	output (main): screws M8 output (auxiliary): screws M3,5	tightening moment: 2...6 Nm tightening moment: 0,8...1,2 Nm
Mounting on contactor	bottom	

Mounting, accessories for contactors

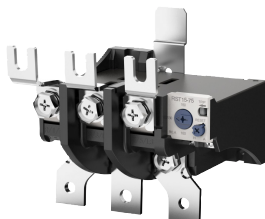
Contactors **CRG150-...** are designed for direct on panel mounting with four M5 screws.

For **CRG150-...** contactors we offer auxiliary contacts, thermal overload relays **RST22-150** and mechanical interlocks ②.

② 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).



auxiliary contact

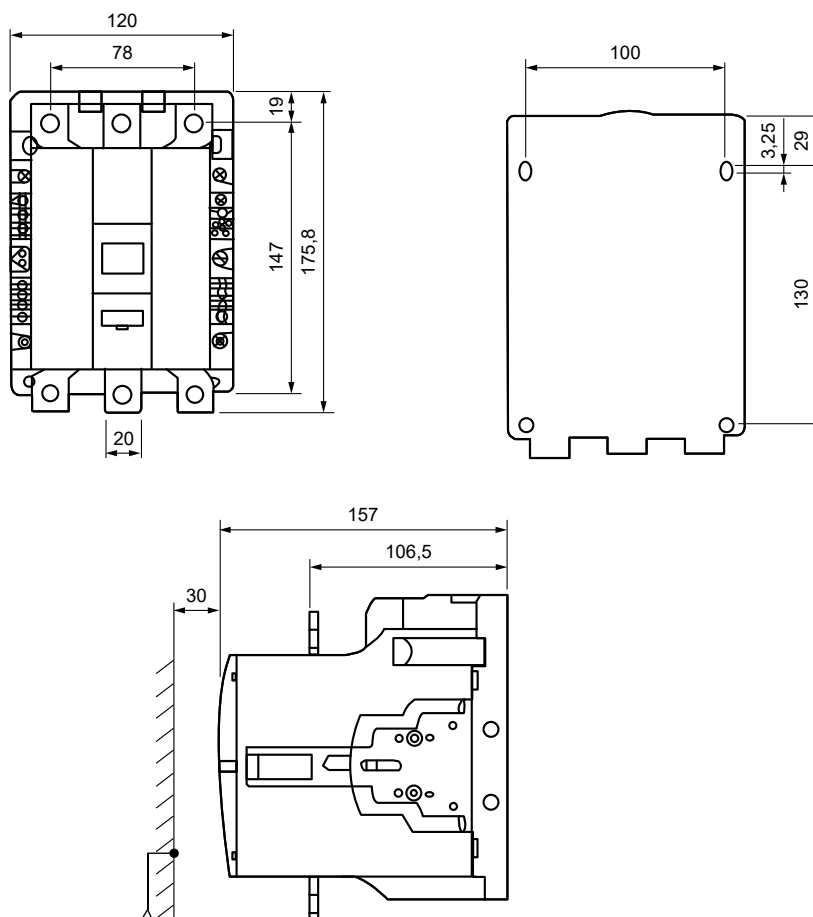


RST22-150



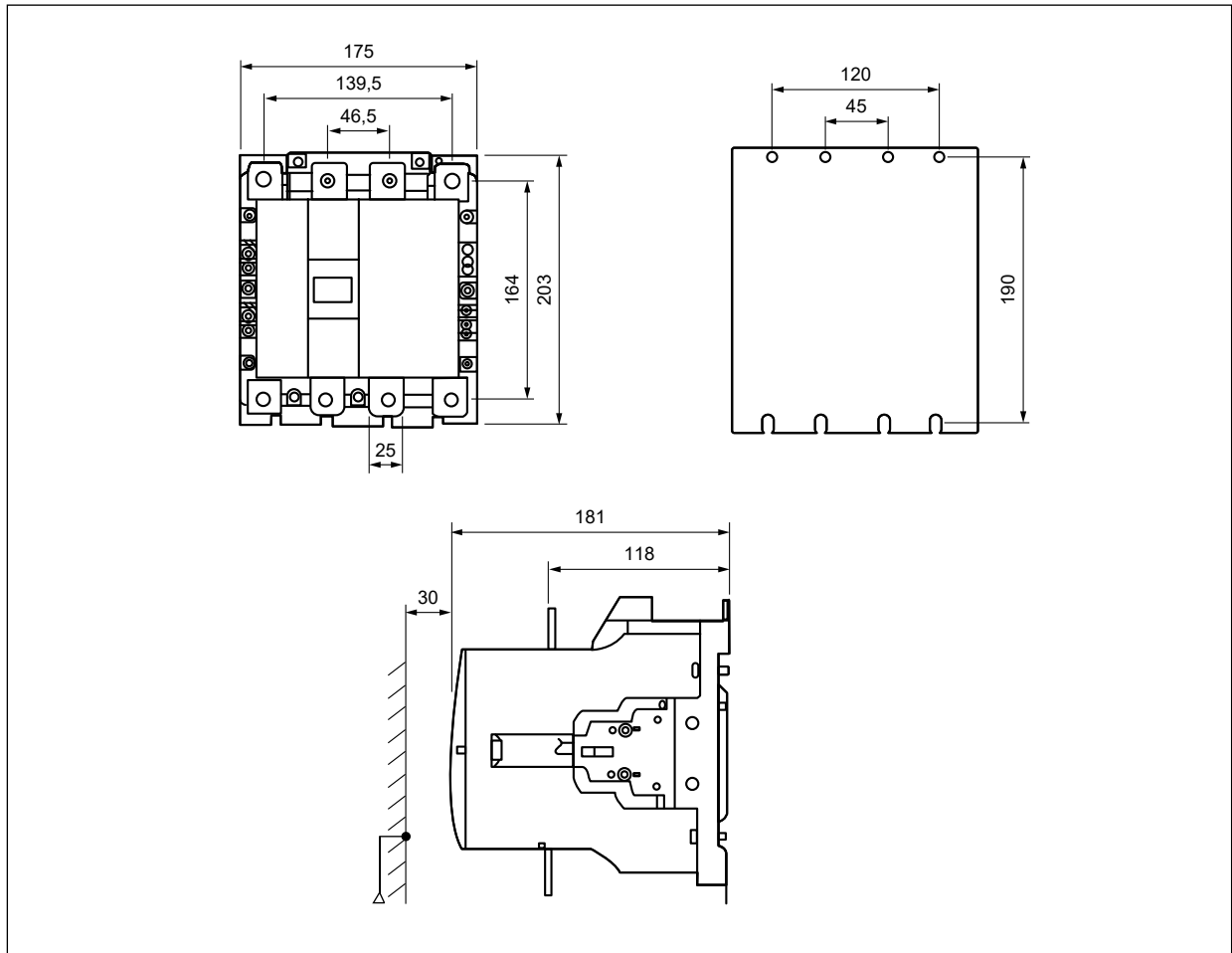
mechanical interlock

Dimensions

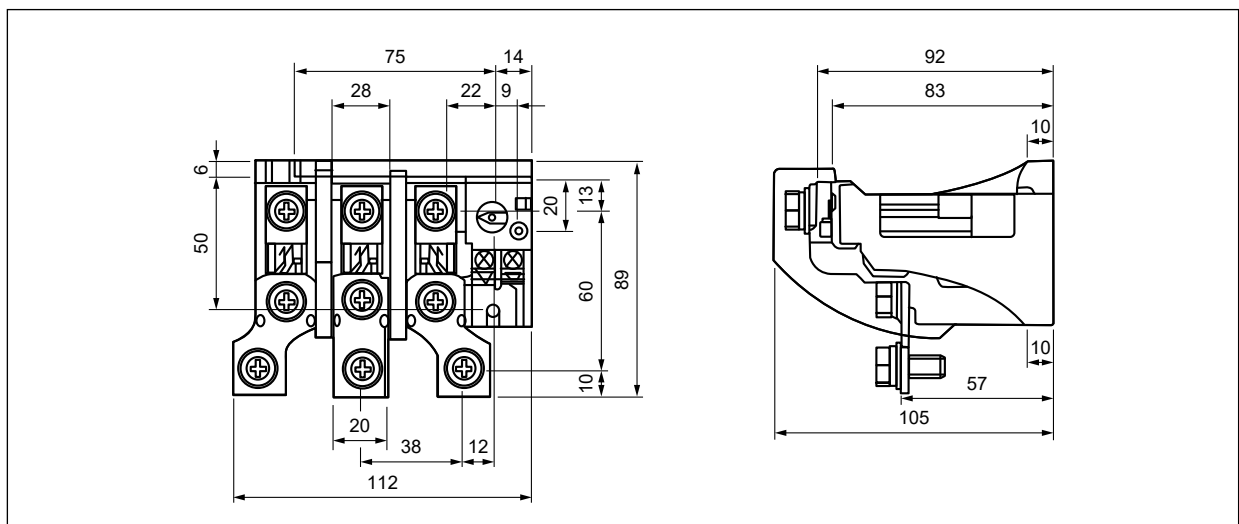


Three-pole contactor **CRG...-30-...**

Dimensions

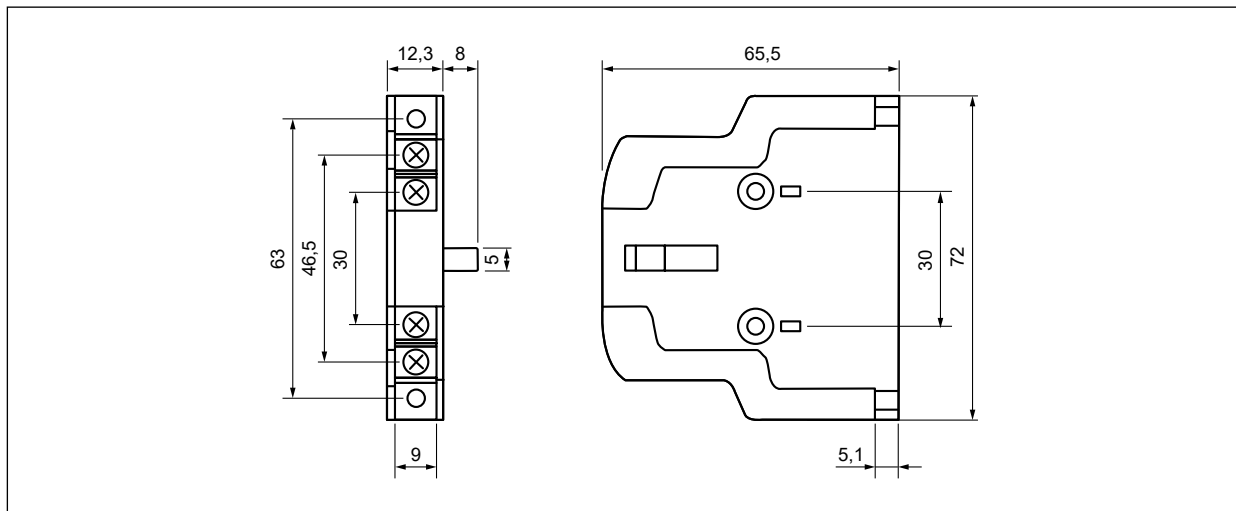


Four-pole contactor **CRG..-40...**



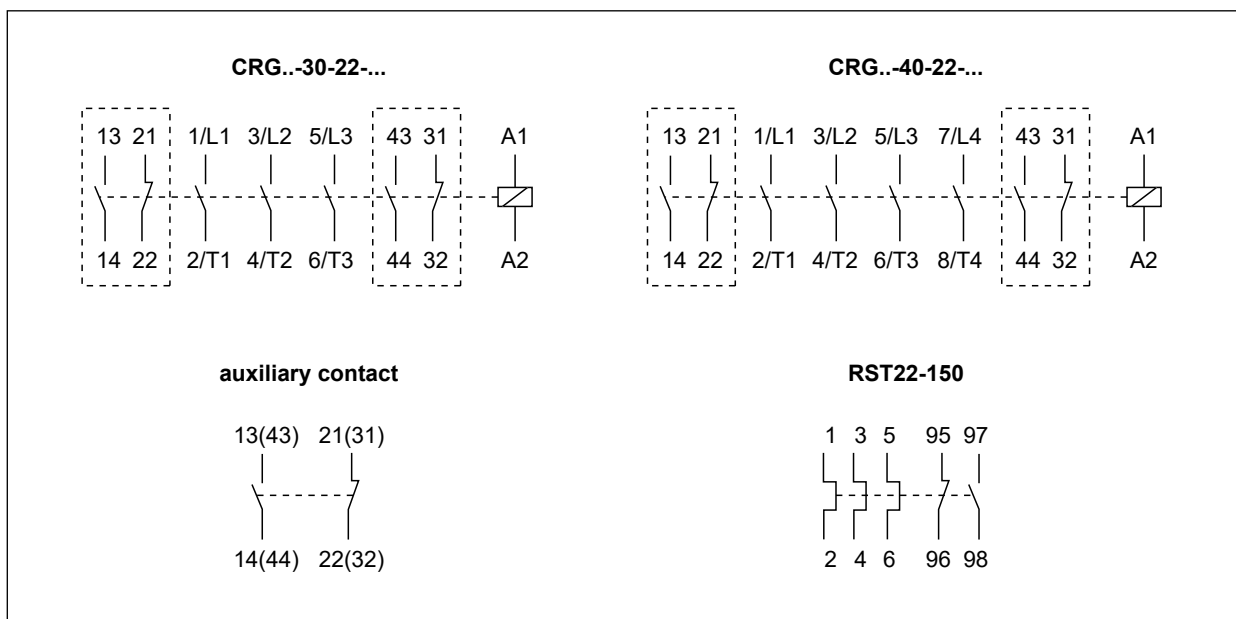
Thermal overload relay **RST22-150**

Dimensions

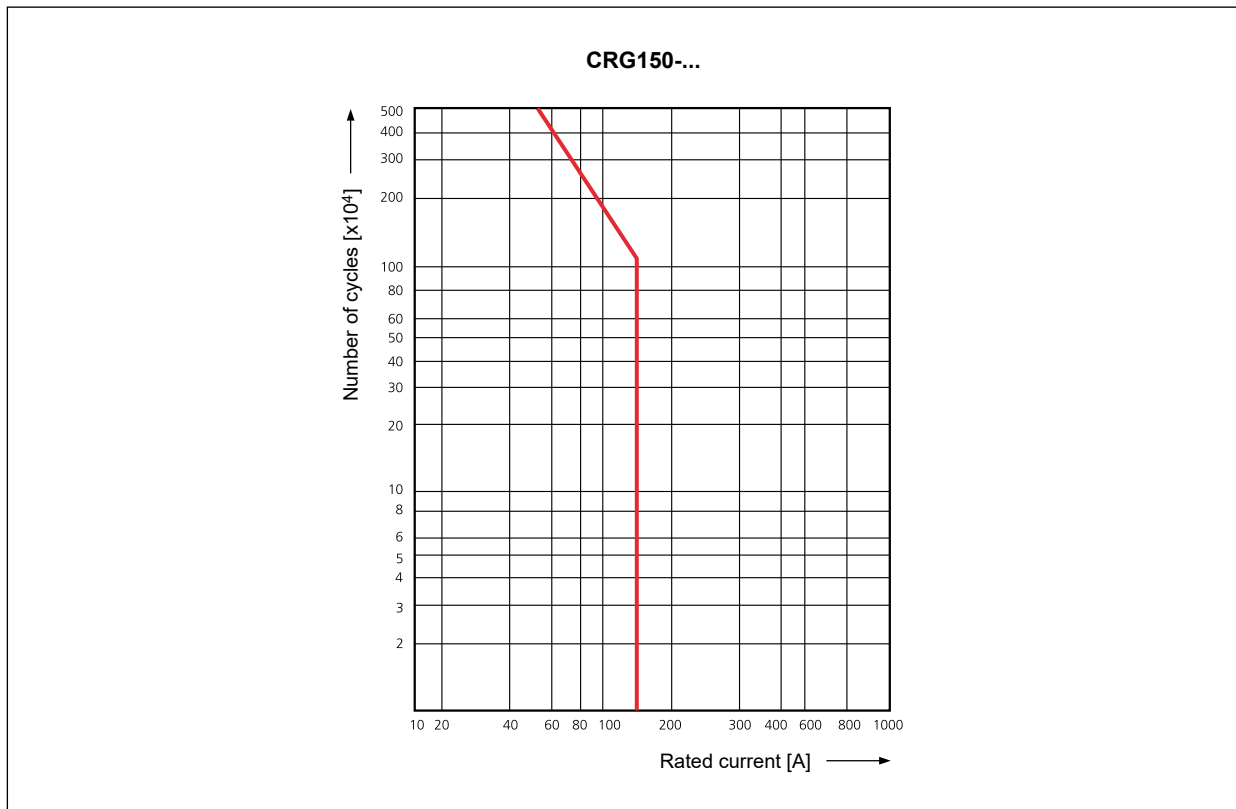


Auxiliary contact

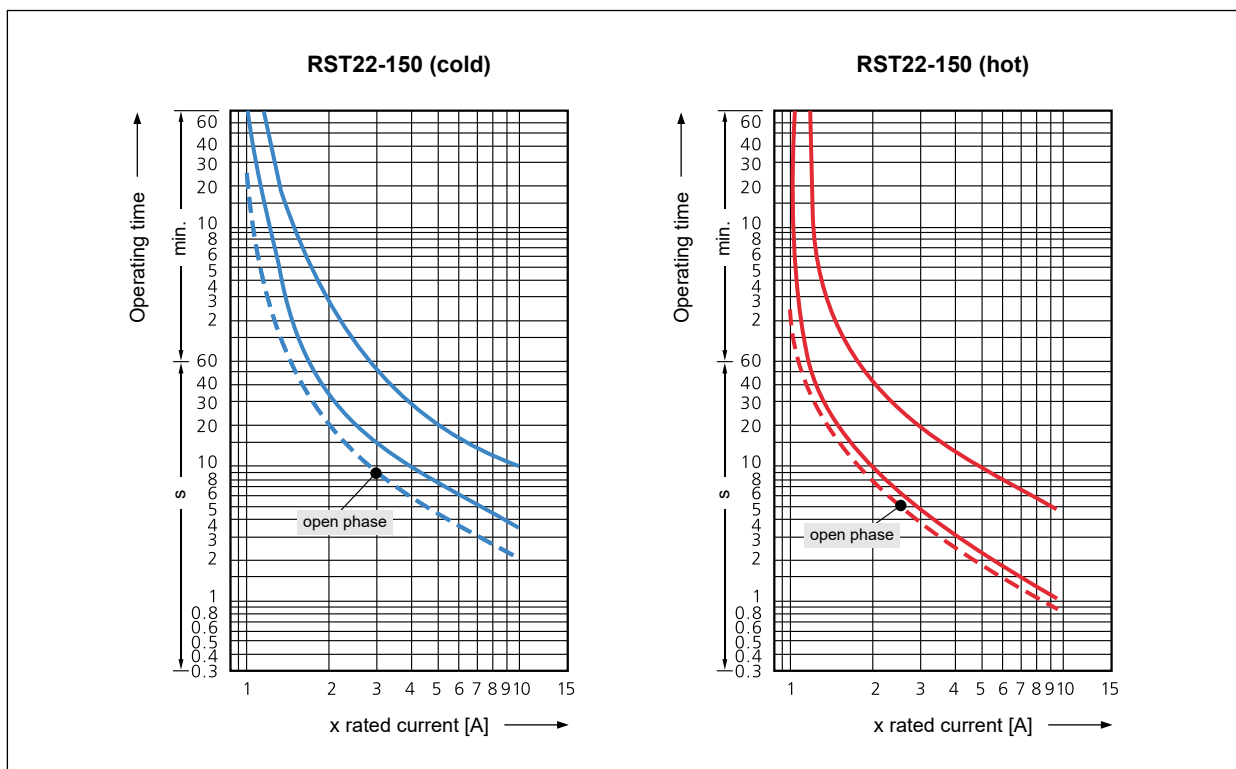
Connection diagrams



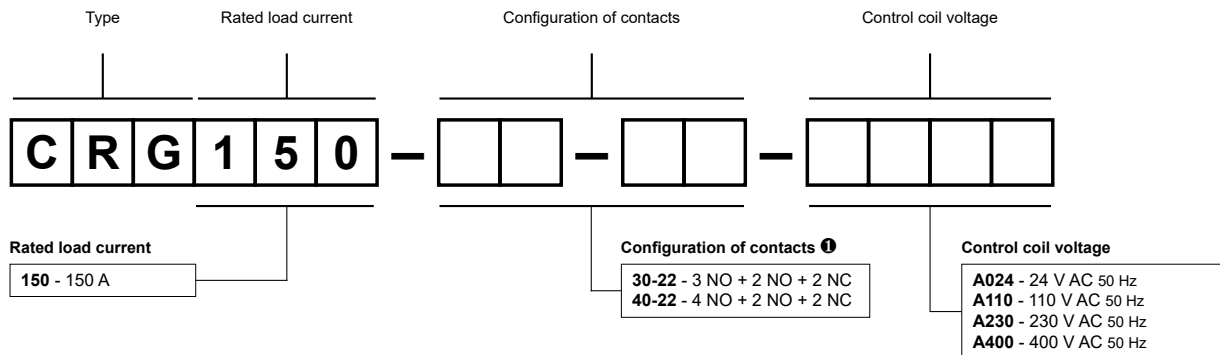
Contactors - electrical life at AC3 (U_e 380...440 V)



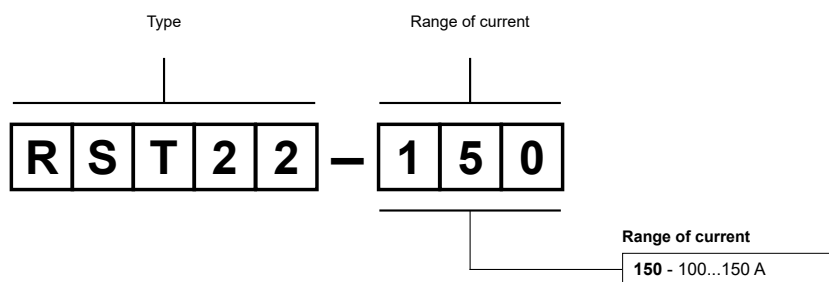
Thermal overload relays - characteristics curves



Ordering codes of contactors



Ordering codes of thermal overload relays



- ① Configuration of contacts: three-pole - 3 NO and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.
 ⑨ Ordering codes **CRG150-...** are specified in table "Type of contactor" on page 1.
 ④ Ordering codes **RST22-150** are specified in table "Type of thermal overload relay" on page 1.

CRG180, CRG220

contactors over 100 A

CRS.-30-...



- Three-pole or four-pole contactors for motor control applications in AC networks
- AC control input
- Load current 180...220 A
- Screw terminals
- On panel mounting with four M6 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

Load current: 180 A, 220 A

Type of contactor

Configuration of contacts ❶	Control voltage	Load current	
		180 A	220 A
3 NO + 2 NO + 2 NC	24 V AC	CRG180-30-22-A024	CRG220-30-22-A024
	110 V AC	CRG180-30-22-A110	CRG220-30-22-A110
	230 V AC	CRG180-30-22-A230	CRG220-30-22-A230
	400 V AC	CRG180-30-22-A400	CRG220-30-22-A400
4 NO + 2 NO + 2 NC	24 V AC	CRG180-40-22-A024	CRG220-40-22-A024
	110 V AC	CRG180-40-22-A110	CRG220-40-22-A110
	230 V AC	CRG180-40-22-A230	CRG220-40-22-A230
	400 V AC	CRG180-40-22-A400	CRG220-40-22-A400

Type of auxiliary contact

Configuration of contacts

1 NO + 1 NC

Type of thermal overload relay

Range of current

100...160 A **RST23-160**

120...180 A **RST23-180**

160...240 A **RST23-240**

❶ Configuration of contacts: three-pole - 3 NO and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

Output circuit - main contacts data

		CRG180-...	CRG220-...
Configuration of contacts ❶		3 NO + 2 NO + 2 NC, 4 NO + 2 NO + 2 NC	3 NO + 2 NO + 2 NC, 4 NO + 2 NO + 2 NC
Rated thermal current	AC1	230 A	260 A
Rated load AC3 IEC 60947	220...240 V	180 A	250 A
	380...440 V	180 A	250 A
	500...550 V	180 A	200 A
	690 V	120 A	150 A
Motor load AC3 IEC 60947	220...240 V	55 kW	75 kW
	380...440 V	90 kW	132 kW
	500...550 V	110 kW	132 kW
	690 V	110 kW	132 kW
Motor load AC3 UL 508 (single-phase motor)	115 V	15 HP	15 HP
	230 V	30 HP	40 HP
Motor load AC3 UL 508 (three-phase motor)	200 V	60 HP	60 HP
	230 V	60 HP	75 HP
	460 V	125 HP	150 HP
	575 V	125 HP	150 HP
Max. short circuit current	220 V	1 800 A	2 200 A
	440 V	1 800 A	2 200 A
Max. breaking current	220 V	1 800 A	2 200 A
	440 V	1 800 A	2 200 A
Max. operating frequency	AC3	1 200 cycles/hour	1 200 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)		0,5 x 10 ⁷	0,5 x 10 ⁷

Output circuit - auxiliary contacts data

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

General data

		CRG...
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 and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

Input circuit - coil data

	CRG...-A...
Coil voltage	24, 110, 230, 400 V AC 50 Hz
Rated power consumption	4,7 VA
Pick-up power consumption	380 VA
Maintain power consumption	11,6 VA
Range of pick-up voltage	0,8...1,1 U _n
Range of drop-out voltage	0,3...0,4 U _n
Pick-up time	45 ms
Drop-out time	45 ms

Mechanical data - contactor

	CRG...-30-...	CRG...-40-...
Dimensions (L x W x H)	203 x 138 x 181 mm	203 x 175 x 181 mm
Weight (typical)	5 400 g	5 600 g
Protection category EN 60529	IP 10	IP 10
Connection mode	input: screws M4 tightening moment: 1,2...1,5 Nm output (main): screws M10 tightening moment: 2...12 Nm output (auxiliary): screws M4 tightening moment: 1,2...1,5 Nm	input: screws M4 tightening moment: 1,2...1,5 Nm output (main): screws M10 tightening moment: 2...12 Nm output (auxiliary): screws M4 tightening moment: 1,2...1,5 Nm
Mounting on panel	screws M6 tightening moment: 2...22 Nm	screws M6 tightening moment: 2...22 Nm

Mechanical data - auxiliary contact

Dimensions (L x W x H)	62,8 x 12 x 52,9 mm	
Weight (typical)	53 g	
Protection category EN 60529	IP 10	
Connection mode	output: screws M4	tightening moment: 0,8...1,2 Nm
Mounting on contactor	side	

Mechanical data - thermal overload relay

	RST23-...	
Dimensions (L x W x H)	141 x 152 x 175 mm	
Weight (typical)	2 500 g	
Protection category EN 60529	IP 00	
Connection mode	output (main): screws M10 output (auxiliary): screws M3,5	tightening moment: 2...12 Nm tightening moment: 0,8...1,2 Nm
Mounting on contactor	bottom	

CRG180, CRG220

contactors over 100 A

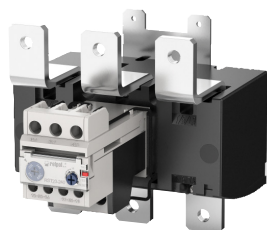
Mounting, accessories for contactors

Contactors **CRG180-...**, **CRG220-...** are designed for direct on panel mounting with four M6 screws. For **CRG180-...**, **CRG220-...** contactors we offer auxiliary contacts, thermal overload relays **RST23-...** and mechanical interlocks ②.

② 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).



auxiliary contact

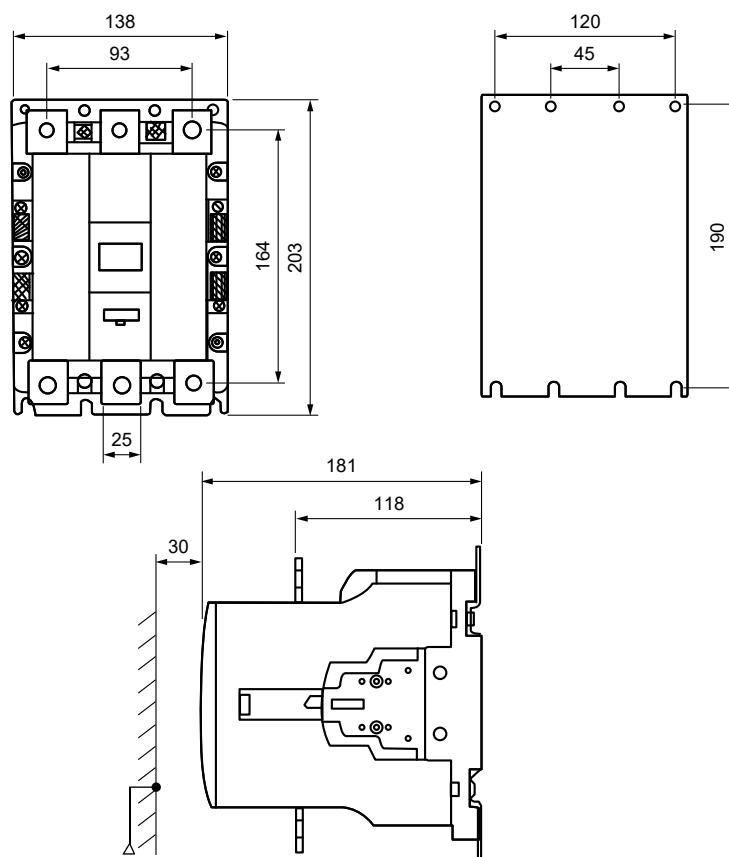


RST23-...



mechanical interlock

Dimensions

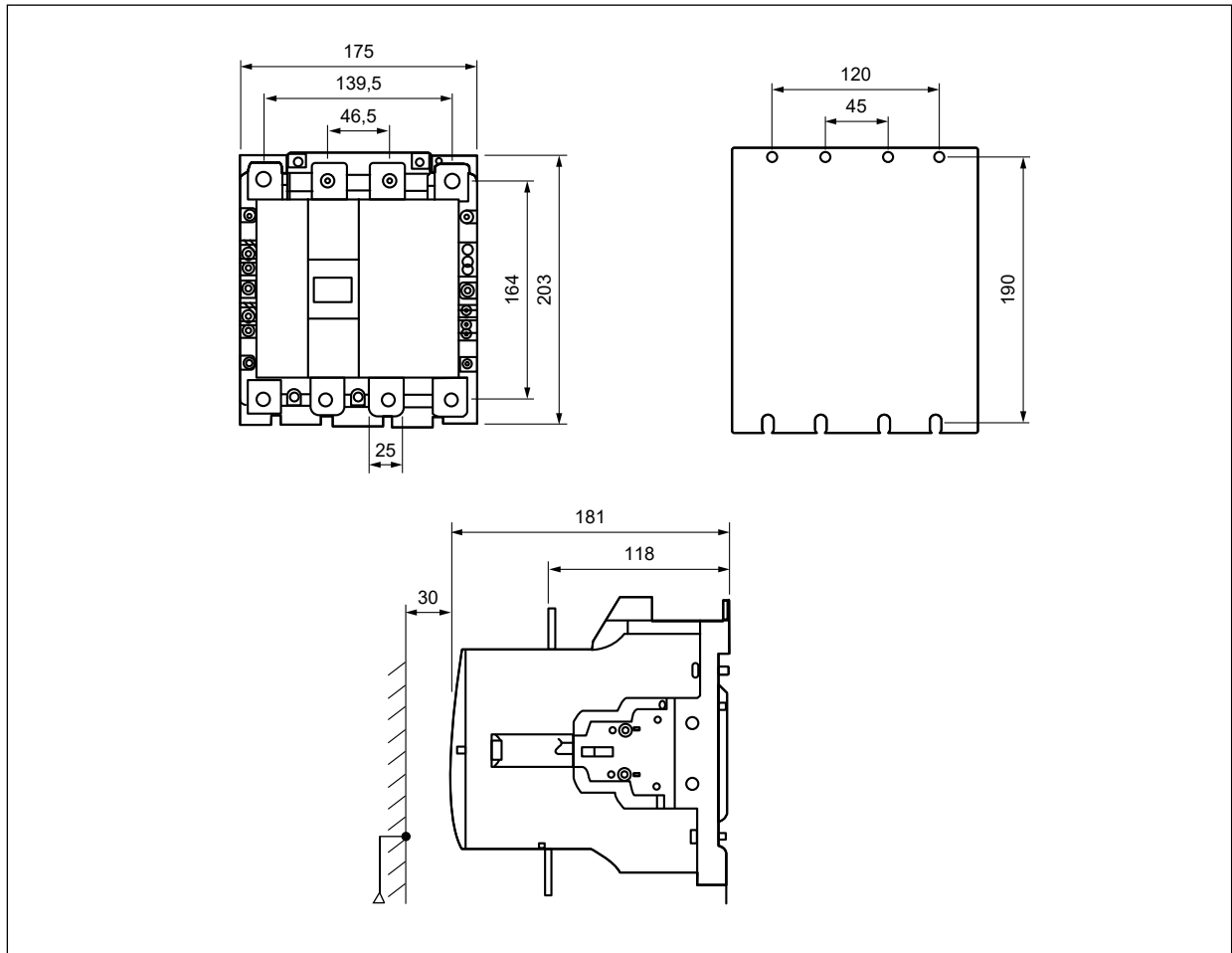


Three-pole contactor **CRG...30-...**

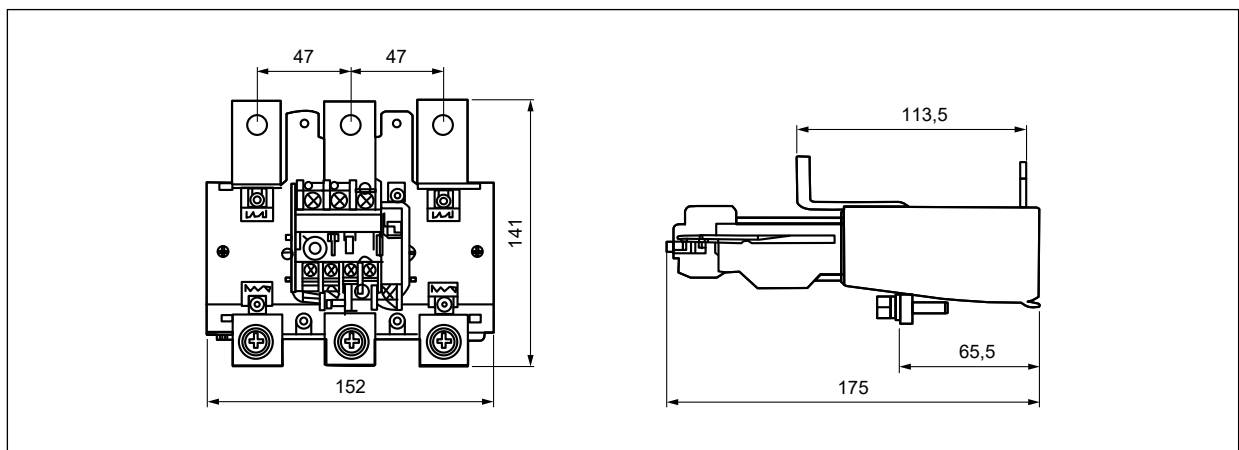
CRG180, CRG220

contactors over 100 A

Dimensions



Four-pole contactor **CRG..-40-...**

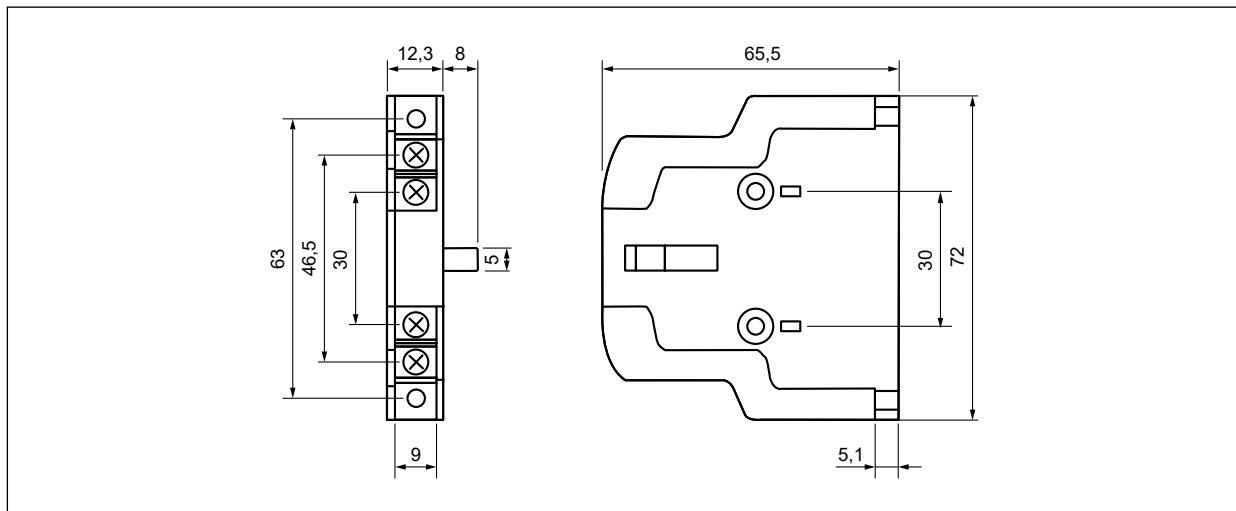


Thermal overload relay **RST23-...**

CRG180, CRG220

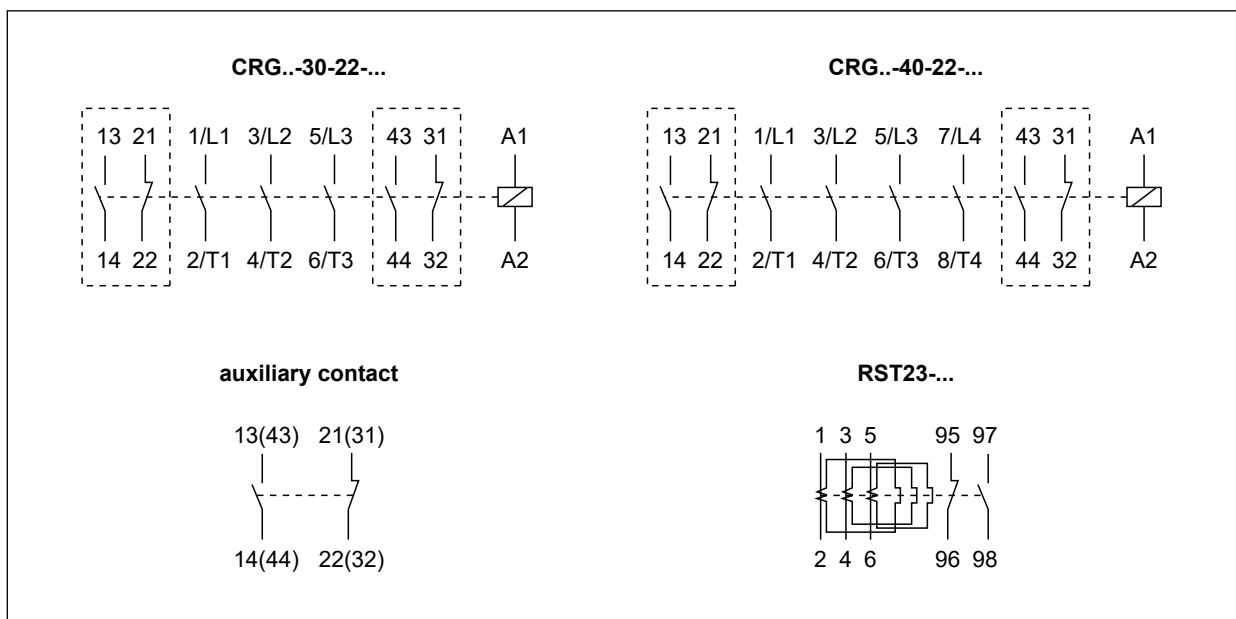
contactors over 100 A

Dimensions

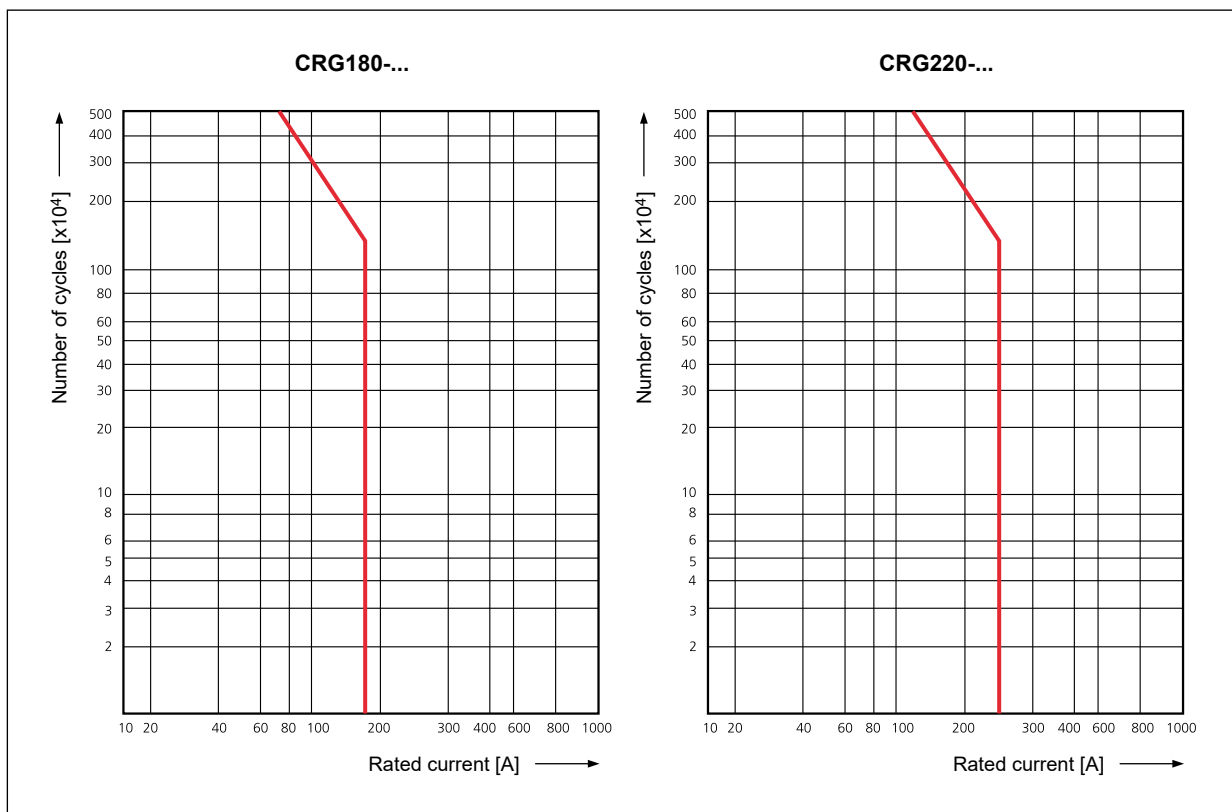


Auxiliary contact

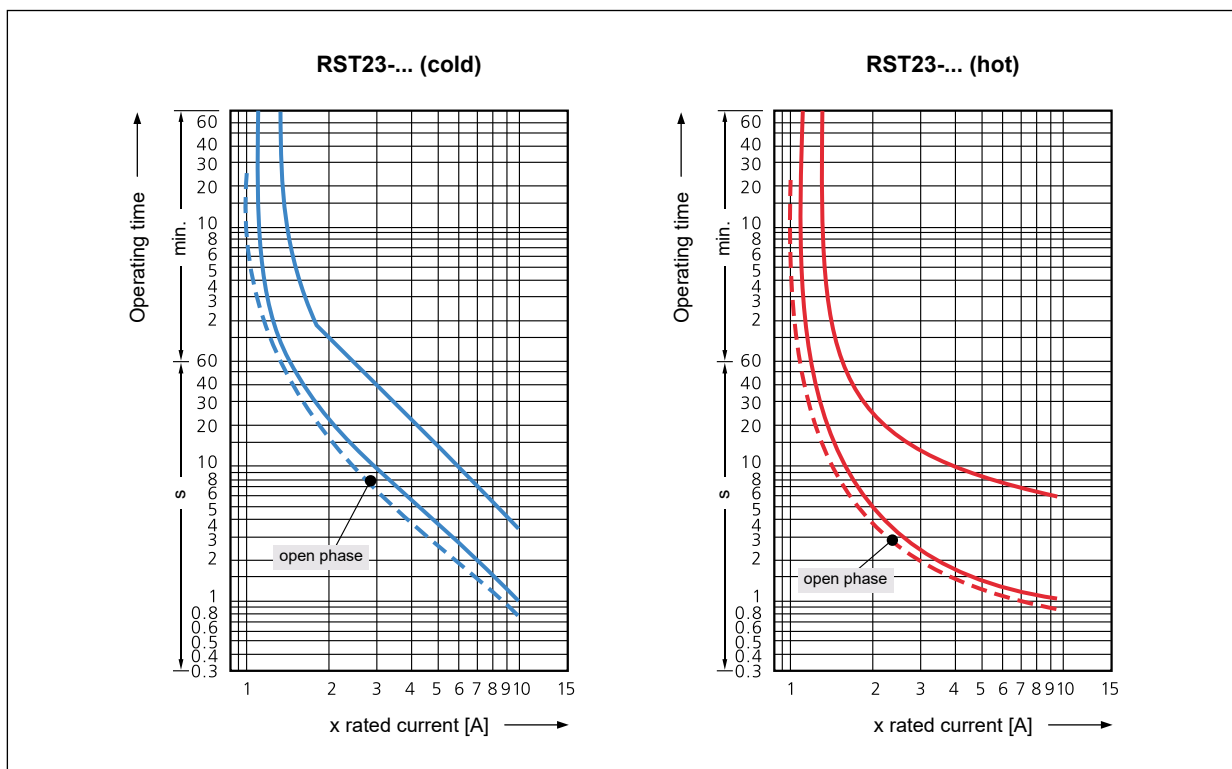
Connection diagrams



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



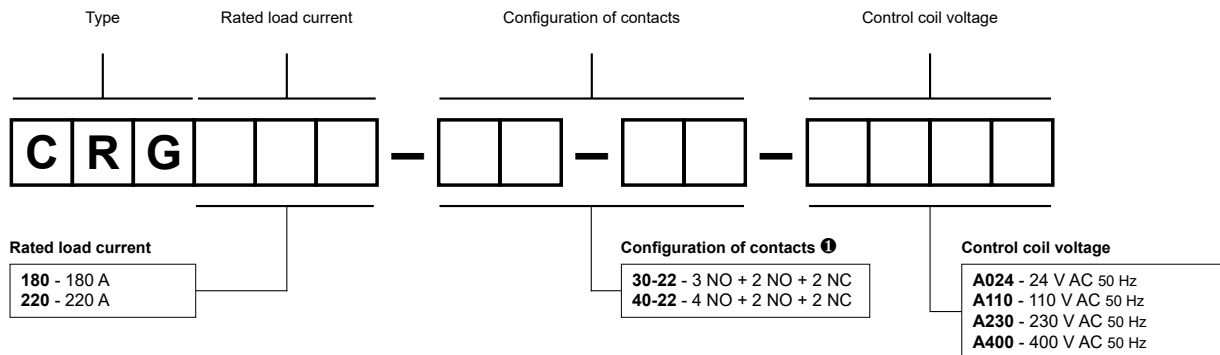
Thermal overload relays - characteristics curves



CRG180, CRG220

contactors over 100 A

Ordering codes of contactors

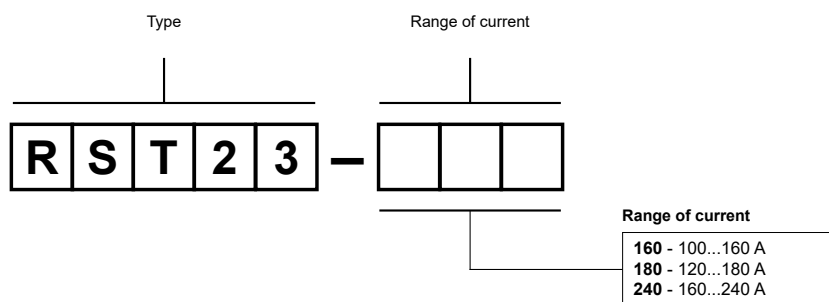


Examples of ordering codes ^❷:

CRG180-30-22-A230 contactor **CRG180-...**, rated load current 180 A, three-pole - contacts 3 NO + 2 NO + 2 NC, control coil voltage 230 V AC 50 Hz

CRG220-40-22-A024 contactor **CRG220-...**, rated load current 220 A, four-pole - contacts 4 NO + 2 NO + 2 NC, control coil voltage 24 V AC 50 Hz

Ordering codes of thermal overload relays



Examples of ordering codes ^❸:

RST23-180 thermal overload relay **RST23-...**, range of current 120...180 A

RST23-240 thermal overload relay **RST23-...**, range of current 160...240 A

- ❶ Configuration of contacts: three-pole - 3 NO and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.
- ❷ Ordering codes **CRG180-...**, **CRG220-...** are specified in table "Type of contactor" on page 1.
- ❸ Ordering codes **RST23-...** are specified in table "Type of thermal overload relay" on page 1.

CRG330, CRG400

contactors over 100 A

CRS.-30-...



- Three-pole or four-pole contactors for motor control applications in AC networks
- AC control input
- Load current 330...400 A
- Screw terminals
- On panel mounting with four M6 screws
- Accessories: auxiliary contacts, thermal overload relays
- 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

Load current: 330 A, 400 A

Type of contactor

Configuration of contacts ❶	Control voltage	Load current	
		330 A	400 A
3 NO + 2 NO + 2 NC	24 V AC	CRG330-30-22-A024	CRG400-30-22-A024
	110 V AC	CRG330-30-22-A110	CRG400-30-22-A110
	230 V AC	CRG330-30-22-A230	CRG400-30-22-A230
	400 V AC	CRG330-30-22-A400	CRG400-30-22-A400
4 NO + 2 NO + 2 NC	24 V AC	CRG330-40-22-A024	CRG400-40-22-A024
	110 V AC	CRG330-40-22-A110	CRG400-40-22-A110
	230 V AC	CRG330-40-22-A230	CRG400-40-22-A230
	400 V AC	CRG330-40-22-A400	CRG400-40-22-A400

Type of auxiliary contact

Configuration of contacts

1 NO + 1 NC

2 NO + 2 NC

Type of thermal overload relay

Range of current

220...300 A **RST24-300**

300...500 A **RST25-500**

380...630 A **RST25-630**

❶ Configuration of contacts: three-pole - 3 NO and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

Output circuit - main contacts data

		CRG330-...	CRG400-...
Configuration of contacts ❶		3 NO + 2 NO + 2 NC, 4 NO + 2 NO + 2 NC	3 NO + 2 NO + 2 NC, 4 NO + 2 NO + 2 NC
Rated thermal current	AC1	400 A	500 A
Rated load AC3 IEC 60947	220...240 V	330 A	400 A
	380...440 V	330 A	400 A
	500...550 V	310 A	400 A
	690 V	200 A	305 A
Motor load AC3 IEC 60947	220...240 V	100 kW	110 kW
	380...440 V	200 kW	250 kW
	500...550 V	200 kW	257 kW
	690 V	200 kW	280 kW
Motor load AC3 UL 508 (three-phase motor)	200 V	100 HP	125 HP
	230 V	100 HP	150 HP
	460 V	200 HP	300 HP
	575 V	200 HP	300 HP
Max. short circuit current	220 V	3 300 A	4 000 A
	440 V	3 300 A	4 000 A
Max. breaking current	220 V	3 300 A	4 000 A
	440 V	3 300 A	4 000 A
Max. operating frequency	AC3	600 cycles/hour	600 cycles/hour
	AC4	300 cycles/hour	300 cycles/hour
Electrical life	AC3	0,5 x 10 ⁶	0,5 x 10 ⁶
	AC4	2 x 10 ⁵	2 x 10 ⁵
Mechanical life (cycles)		0,3 x 10 ⁷	10 ⁶

Output circuit - auxiliary contacts data

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

General data

	CRG...
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 and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

Input circuit - coil data

	CRG...-A...
Coil voltage	24, 110, 230, 400 V AC 50 Hz
Rated power consumption	4,7 VA
Pick-up power consumption	380 VA
Maintain power consumption	11,6 VA
Range of pick-up voltage	0,8...1,1 U _n
Range of drop-out voltage	0,3...0,4 U _n
Pick-up time	45 ms
Drop-out time	45 ms

Mechanical data - contactor

	CRG...-30-...	CRG...-40-...
Dimensions (L x W x H)	206 x 213 x 219 mm	206 x 261 x 219 mm
Weight (typical)	CRG330-...: 5 500 g CRG400-...: 9 200 g	CRG330-...: 6 900 g CRG400-...: 11 600 g
Protection category EN 60529	IP 10	IP 10
Connection mode	input: screws M4 tightening moment: 1,2...1,5 Nm output (main): screws M10 tightening moment: 2...12 Nm output (auxiliary): screws M4 tightening moment: 1,2...1,5 Nm	input: screws M4 tightening moment: 1,2...1,5 Nm output (main): screws M10 tightening moment: 2...12 Nm output (auxiliary): screws M4 tightening moment: 1,2...1,5 Nm
Mounting on panel	screws M6 tightening moment: 2...22 Nm	screws M6 tightening moment: 2...22 Nm

Mechanical data - auxiliary contact

Configuration of contacts	1 NO + 1 NC	2 NO + 2 NC
Dimensions (L x W x H)	45 x 12 x 35 mm	45 x 22 x 35 mm
Weight (typical)	50 g	60 g
Protection category EN 60529	IP 10	IP 10
Connection mode	output: screws M4 tightening moment: 0,8...1,2 Nm	output: screws M4 tightening moment: 0,8...1,2 Nm
Mounting on contactor	side	side

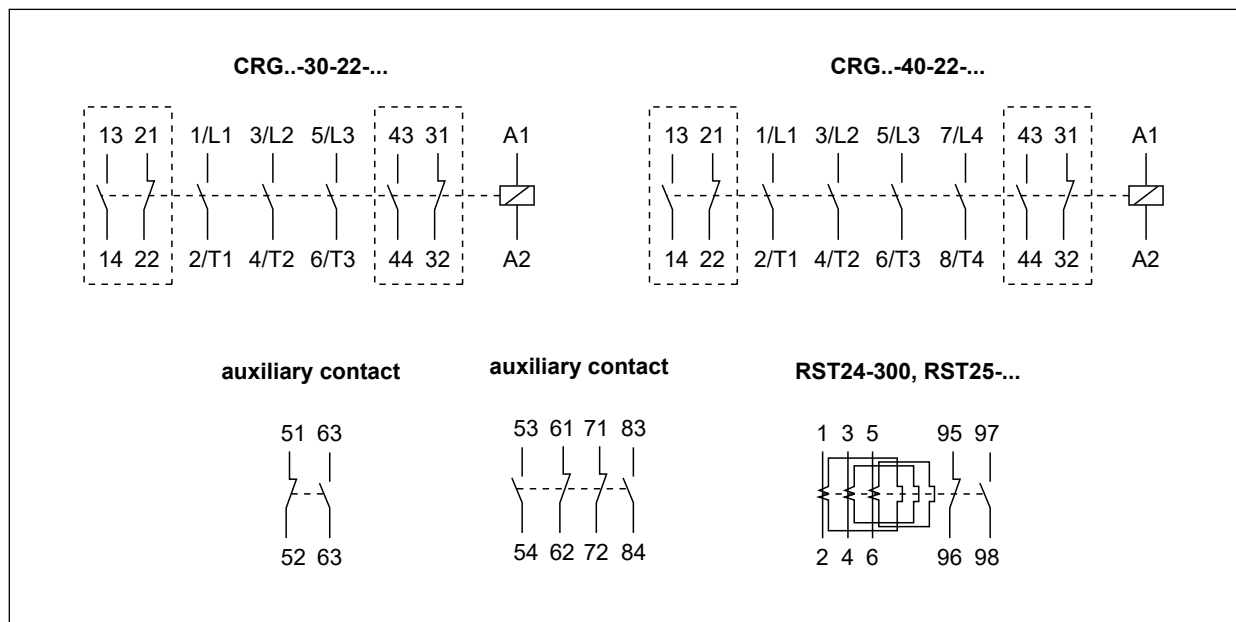
Mechanical data - thermal overload relay

	RST24-300, RST25-...	
Dimensions (L x W x H)	180 x 170 x 215 mm	
Weight (typical)	2 500 g	
Protection category EN 60529	IP 10	
Connection mode	output (main): screws M16 output (auxiliary): screws M3,5	tightening moment: 25...30 Nm tightening moment: 0,8...1,2 Nm
Mounting on contactor	bottom	

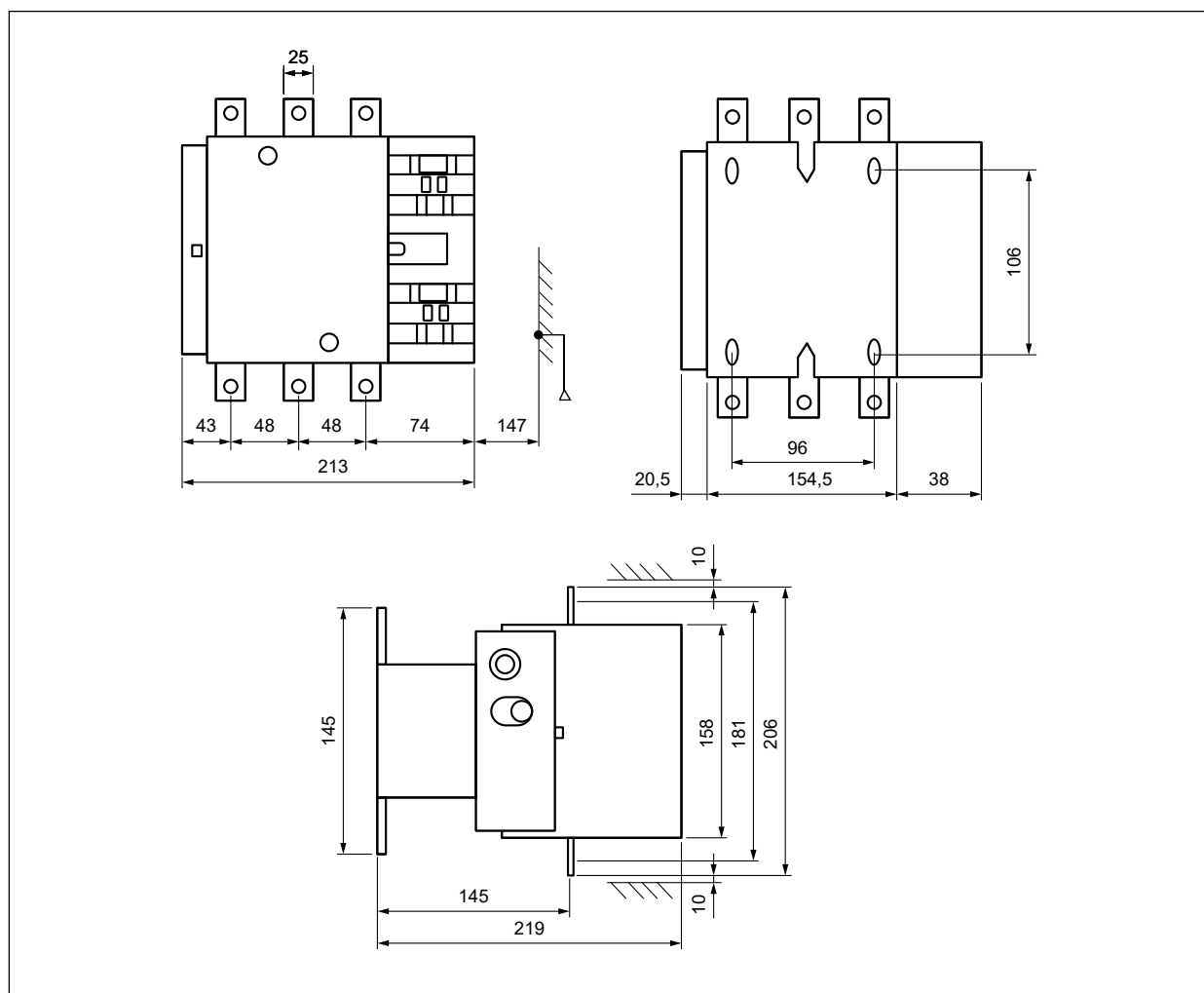
CRG330, CRG400

contactors over 100 A

Connection diagrams



Dimensions

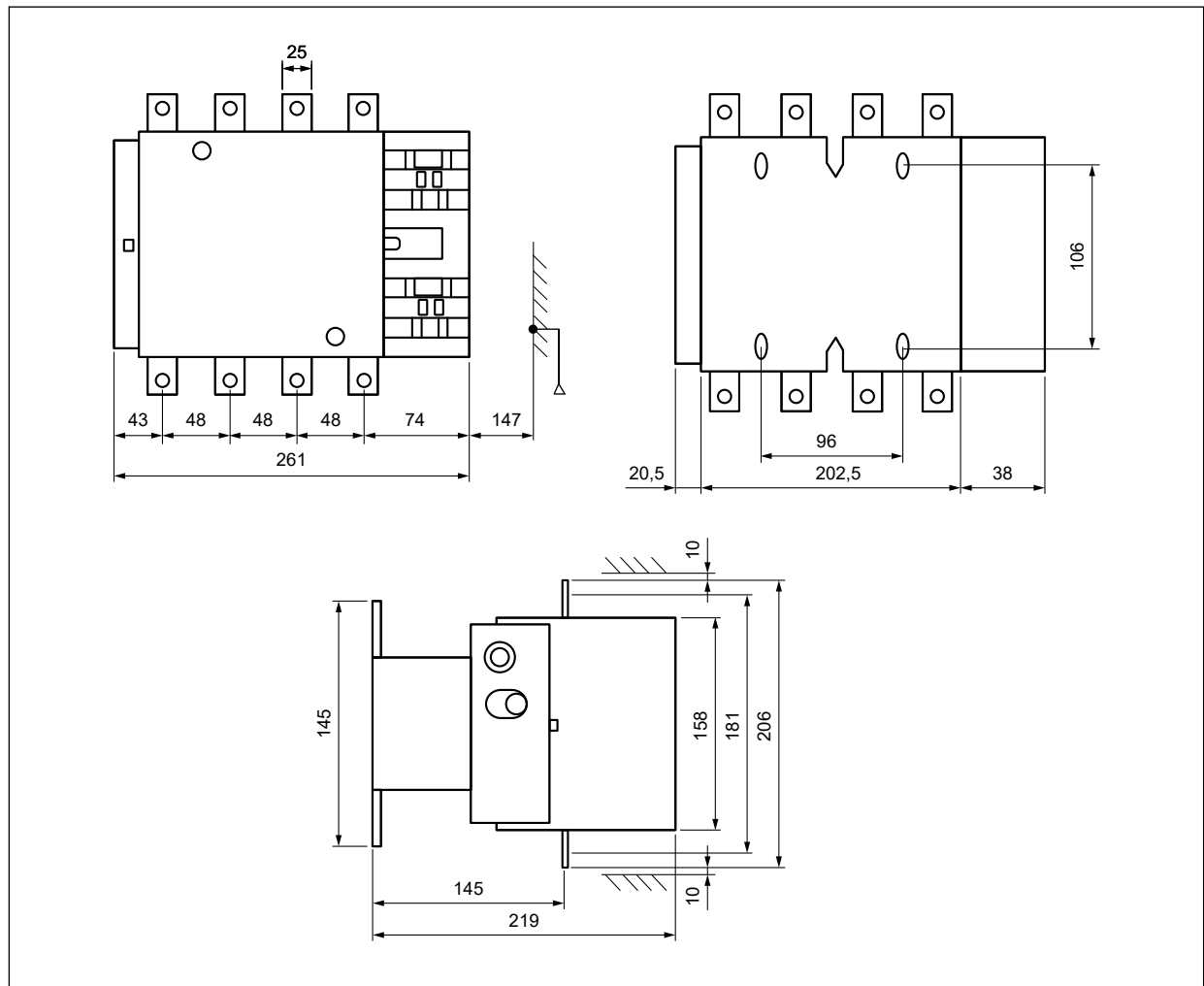


Three-pole contactor **CRG330-30-...**

CRG330, CRG400

contactors over 100 A

Dimensions

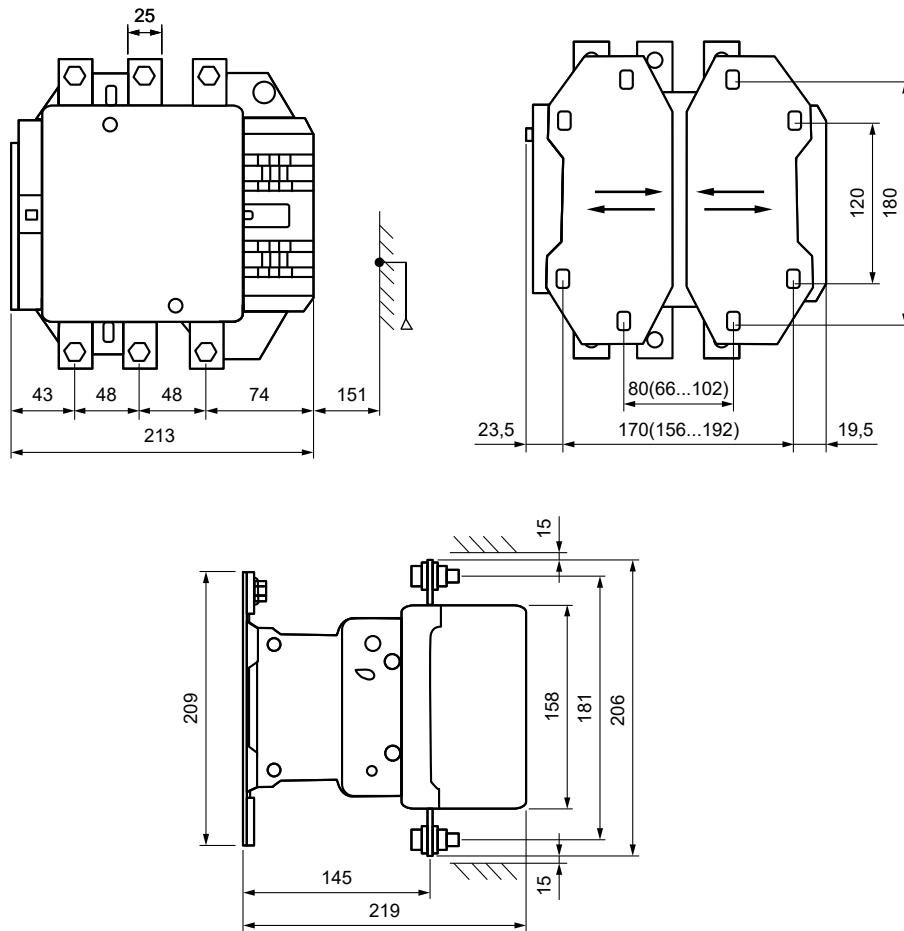


Four-pole contactor **CRG330-40-...**

CRG330, CRG400

contactors over 100 A

Dimensions

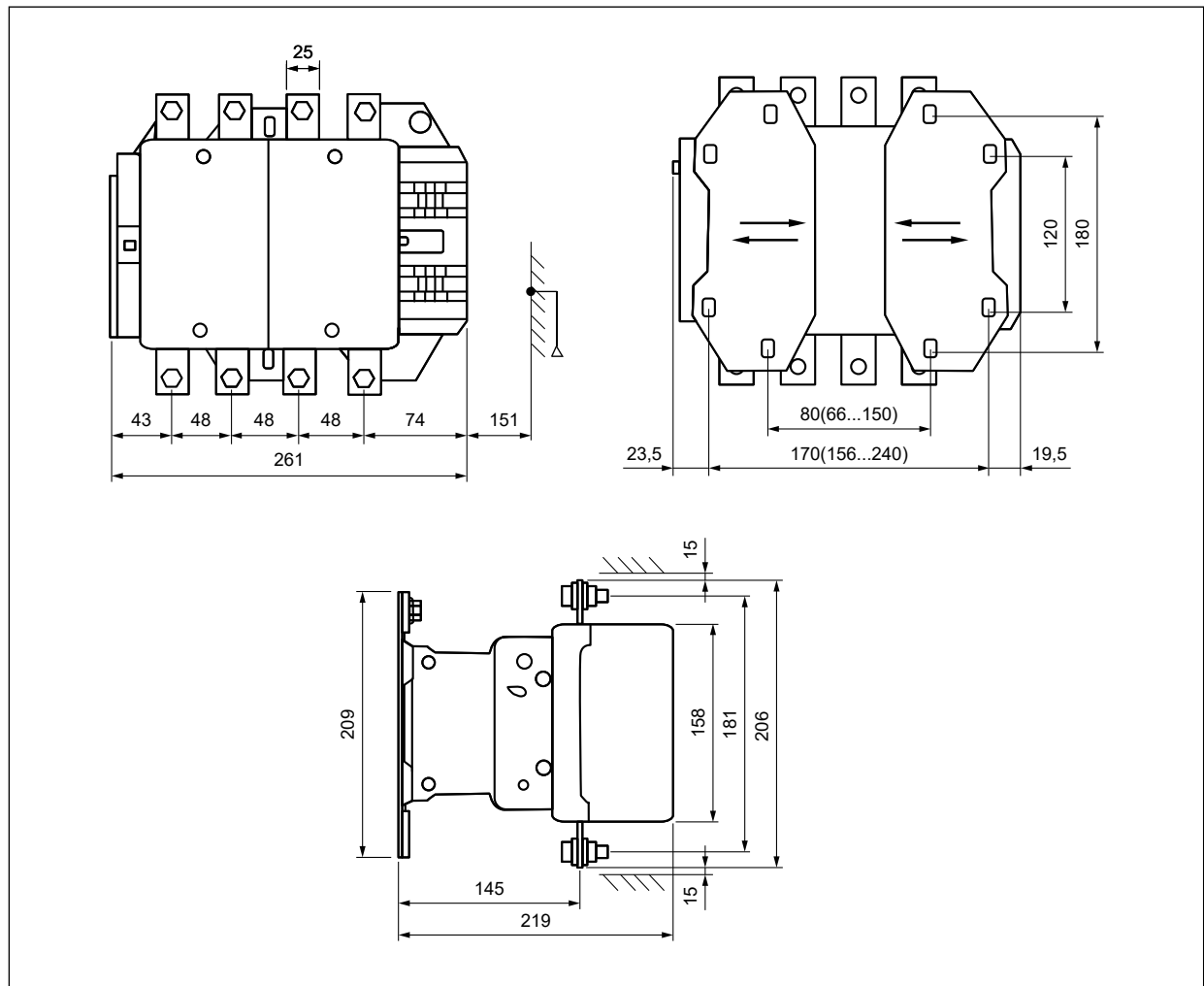


Three-pole contactor **CRG400-30-...**

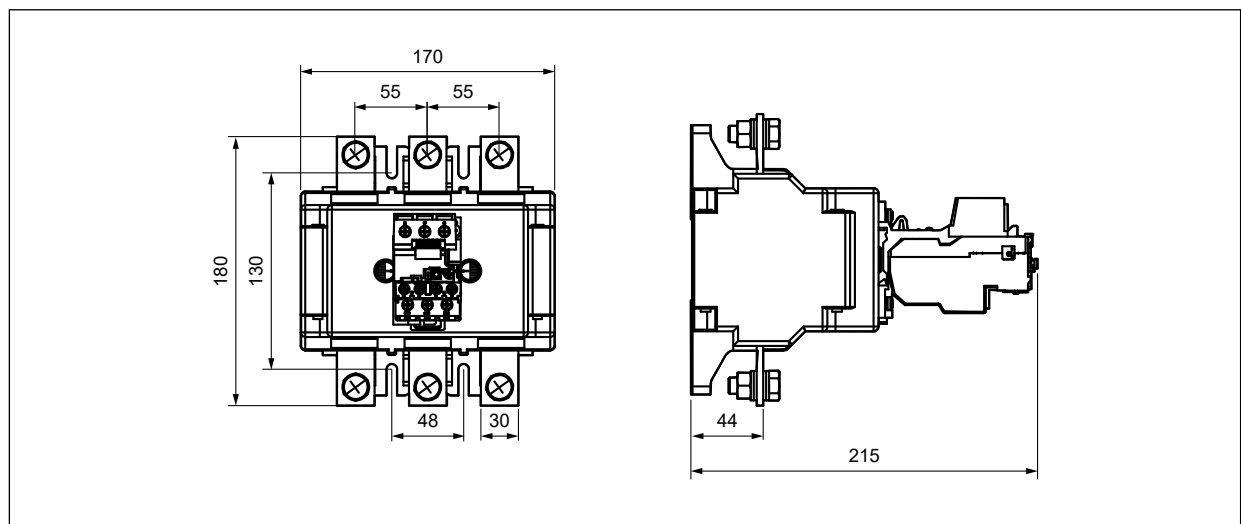
CRG330, CRG400

contactors over 100 A

Dimensions

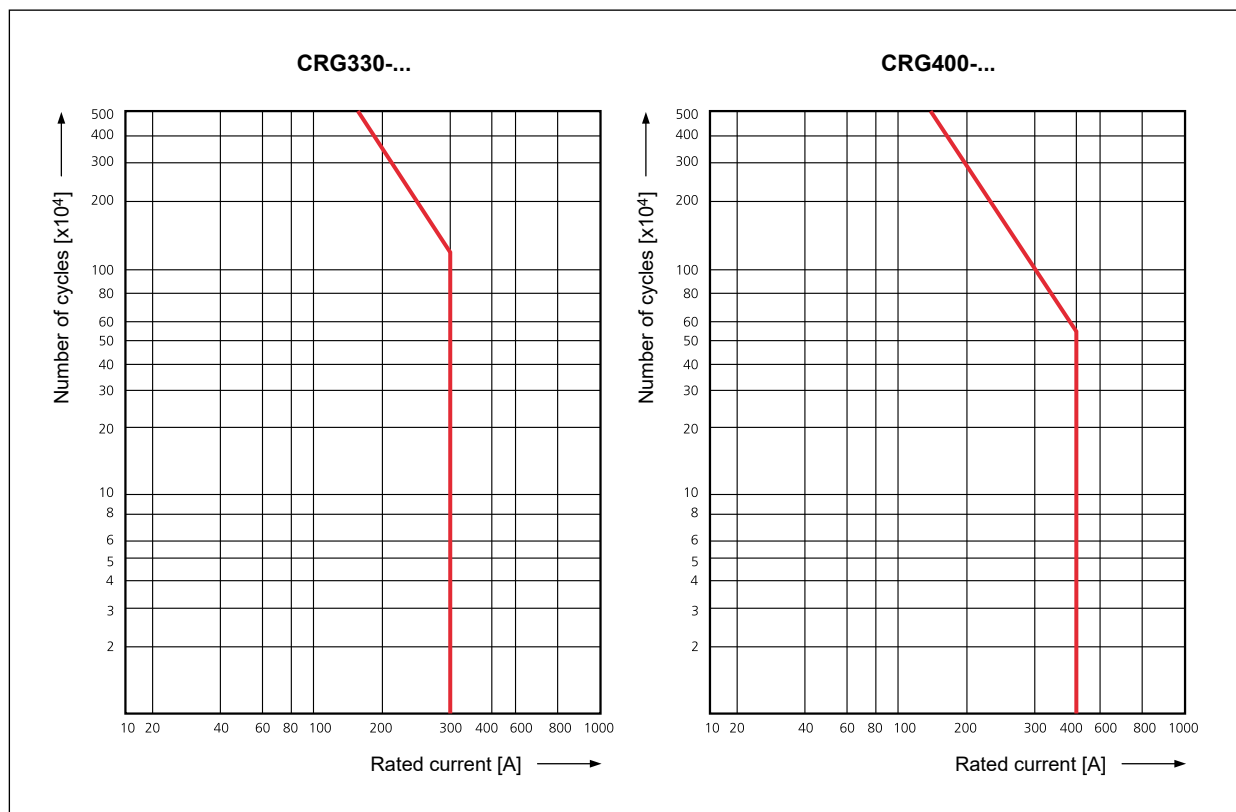


Four-pole contactor **CRG400-40...**

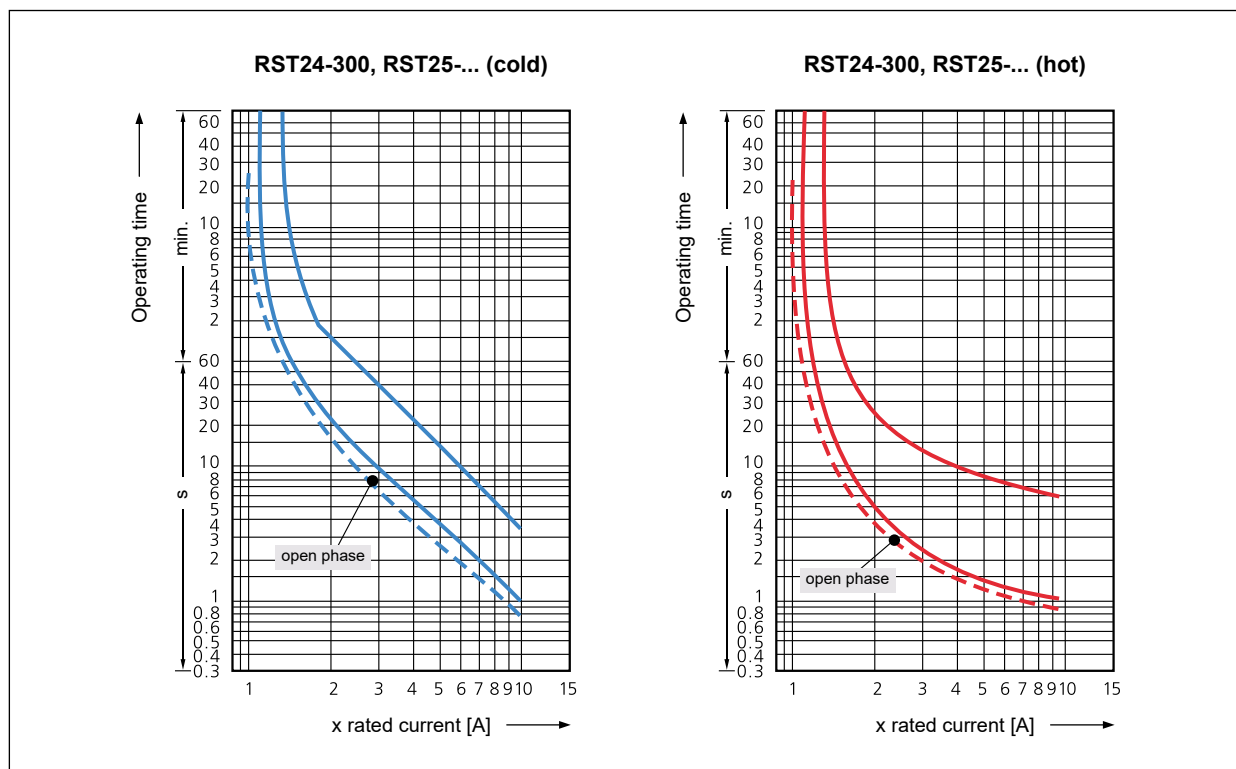


Thermal overload relay **RST24-300, RST25...**

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



Thermal overload relays - characteristics curves



CRG330, CRG400

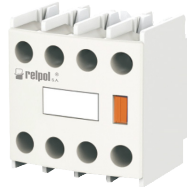
contactors over 100 A

Mounting, accessories for contactors

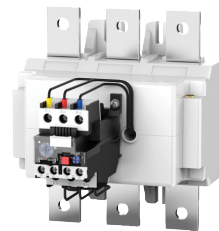
Contactors **CRG330-...**, **CRG400-...** are designed for direct on panel mounting with four M6 screws.
For **CRG330-...**, **CRG400-...** contactors we offer auxiliary contacts, thermal overload relays **RST24-300**, **RST25-...**.



auxiliary contact
1 NO + 1 NC

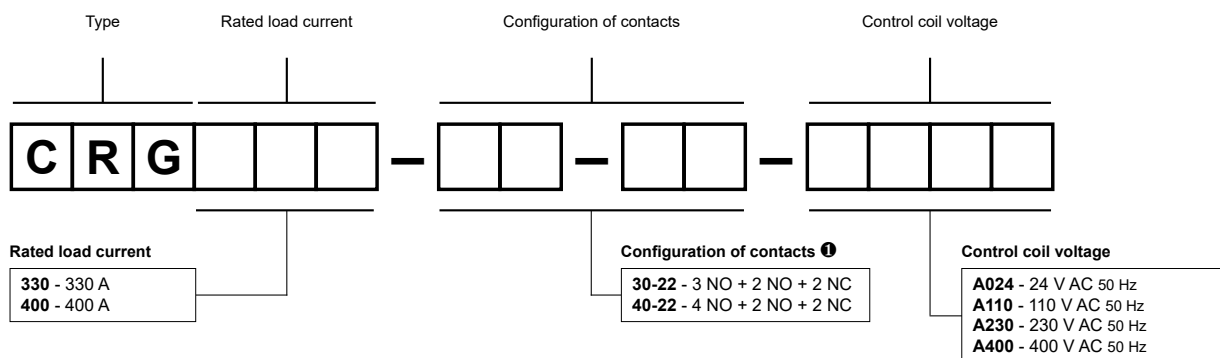


auxiliary contact
2 NO + 2 NC



RST24-300,
RST25-...

Ordering codes of contactors



Examples of ordering codes ②:

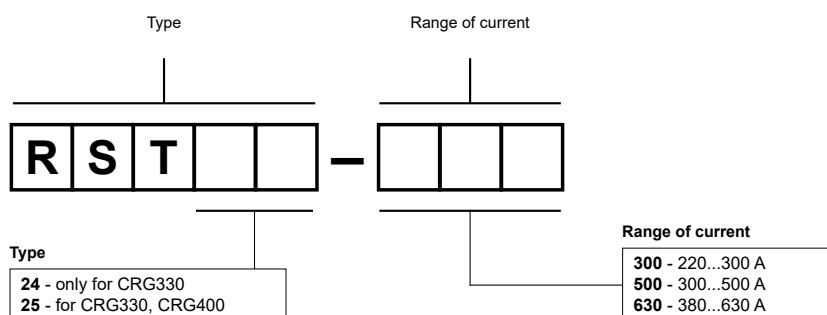
CRG330-30-22-A400

contactor **CRG330-...**, rated load current 330 A, three-pole - contacts 3 NO + 2 NO + 2 NC, control coil voltage 400 V AC 50 Hz

CRG400-40-22-A110

contactor **CRG400-...**, rated load current 400 A, four-pole - contacts 4 NO + 2 NO + 2 NC, control coil voltage 110 V AC 50 Hz

Ordering codes of thermal overload relays



Examples of ordering codes ③:

RST24-300

thermal overload relay **RST24-...**, range of current 220...300 A

RST25-630

thermal overload relay **RST25-...**, range of current 380...630 A

① Configuration of contacts: three-pole - 3 NO and four-pole - 4 NO with auxiliary contacts 2 NO + 2 NC.

② Ordering codes **CRG330-...**, **CRG400-...** are specified in table "Type of contactor" on page 1.

③ Ordering codes **RST24-300**, **RST25-...** are specified in table "Type of thermal overload relay" on page 1.