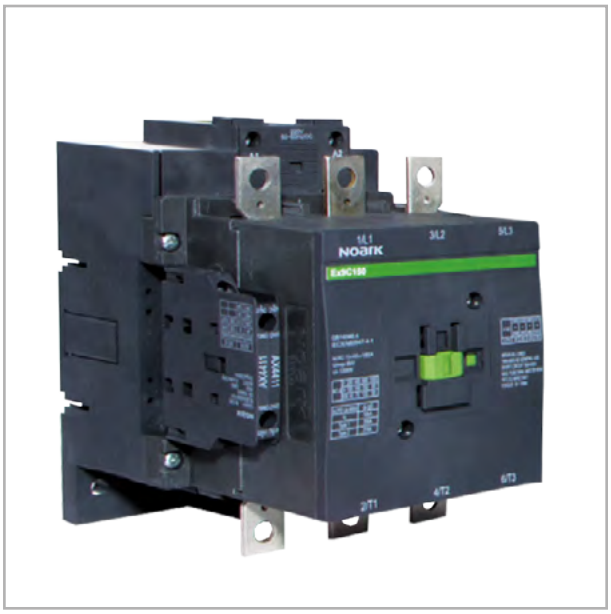
Contactors Ex9C up to 500 A



- **Contactors according to IEC / EN 60947-4-1**
- **Rated current up to 500 A at 400 V AC-3**
- **3-pole versions**
- **Coil control voltage 24 — 415 V AC/DC**
- **Rated conditional short circuit current I_q 50 kA**
- **Suitable for industrial applications**
- **Mounting onto panel with screws**

Ex9C contactors up to 500 A are intended for various industrial applications including the heavy industrial ones. Splitting into next three frame sizes brings optimization of electrical parameters and mechanical dimensions. All these frame sizes share accessory auxiliary contacts.

Overload relays differ with the frame sizes in order to fit respective contactor of given rated current.

Type Key

Ex9	C	150	22	3P	230V AC/DC
Product family	Product	Rated current AC-3 400 V	Built-in auxiliary contacts	Poles (main contacts)	Coil control voltage
Ex9	C: Contactors	115, 150, 185, 225, 265, 300, 400, 500	22: 2NO+2NC	3	24 — 415 V AC/DC

Certification marks

CE

Contactors Ex9C up to 500 A

Frame sizes

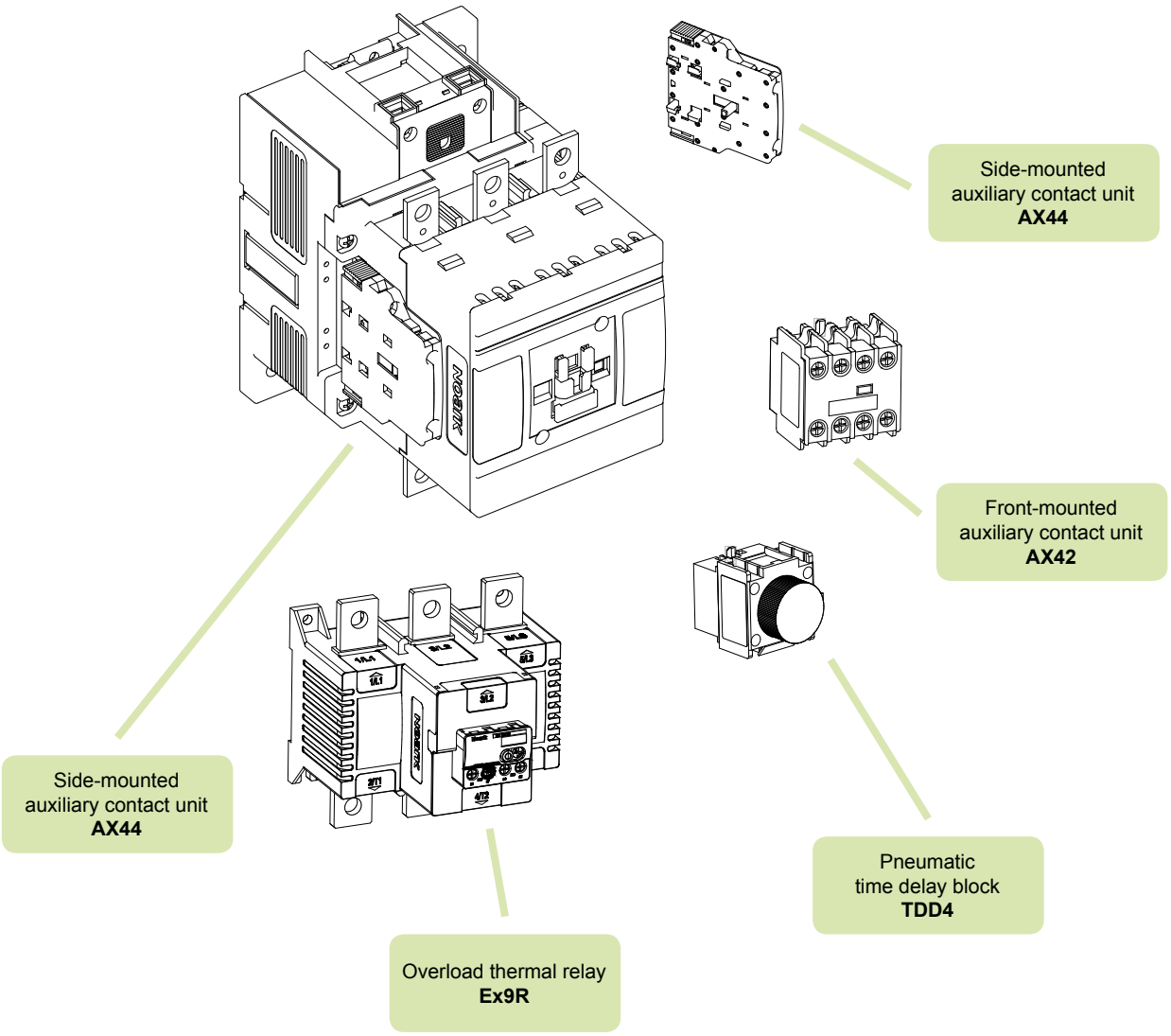
Frame size 185
Rated currents
115, 150, 185 A

Frame size 300
Rated currents
225, 265, 300 A

Frame size 500
Rated currents
400, 500 A

Contactors Ex9C up to 500 A

Accessories



Front-mounted auxiliary contacts AX42

Side-mounted auxiliary contacts AX44

Overload thermal relays Ex9R

Pneumatic time delay block TDD4

Contactors Ex9C, frame size 185

- Mounting onto panel with screws
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX44.. can be used
- AC and DC control voltage
- Minimized power consumption of coil
- DC coil technology - no humming noise
- Can be combined with overload relays Ex9R185

Rated current 115 A, 3-pole

Control voltage	I_e	Frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
24 V AC/DC	**115 A**	**185**	**3P**	**2NO+2NC**	**106217**	**Ex9C115 22 3P 24V AC/DC**	**1/2**
36 V AC/DC	115 A	185	3P	2NO+2NC	106216	Ex9C115 22 3P 36V AC/DC	1/2
42 V AC/DC	115 A	185	3P	2NO+2NC	106212	Ex9C115 22 3P 42V AC/DC	1/2
48 V AC/DC	115 A	185	3P	2NO+2NC	106211	Ex9C115 22 3P 48V AC/DC	1/2
110 V AC/DC	115 A	185	3P	2NO+2NC	106222	Ex9C115 22 3P 110V AC/DC	1/2
127 V AC/DC	115 A	185	3P	2NO+2NC	106221	Ex9C115 22 3P 127V AC/DC	1/2
220 V AC/DC	115 A	185	3P	2NO+2NC	106220	Ex9C115 22 3P 220V AC/DC	1/2
230 V AC/DC	**115 A**	**185**	**3P**	**2NO+2NC**	**106219**	**Ex9C115 22 3P 230V AC/DC**	**1/2**
240 V AC/DC	115 A	185	3P	2NO+2NC	106218	Ex9C115 22 3P 240V AC/DC	1/2
380 V AC/DC	115 A	185	3P	2NO+2NC	106215	Ex9C115 22 3P 380V AC/DC	1/2
400 V AC/DC	115 A	185	3P	2NO+2NC	106214	Ex9C115 22 3P 400V AC/DC	1/2
415 V AC/DC	115 A	185	3P	2NO+2NC	106213	Ex9C115 22 3P 415V AC/DC	1/2

Rated current 150 A, 3-pole

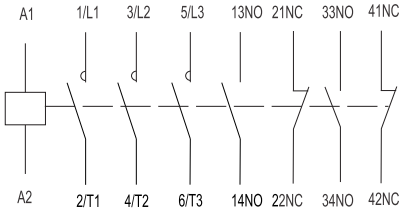
Control voltage	I_e	Frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
24 V AC/DC	**150 A**	**185**	**3P**	**2NO+2NC**	**106229**	**Ex9C150 22 3P 24V AC/DC**	**1/2**
36 V AC/DC	150 A	185	3P	2NO+2NC	106228	Ex9C150 22 3P 36V AC/DC	1/2
42 V AC/DC	150 A	185	3P	2NO+2NC	106224	Ex9C150 22 3P 42V AC/DC	1/2
48 V AC/DC	150 A	185	3P	2NO+2NC	106223	Ex9C150 22 3P 48V AC/DC	1/2
110 V AC/DC	150 A	185	3P	2NO+2NC	106234	Ex9C150 22 3P 110V AC/DC	1/2
127 V AC/DC	150 A	185	3P	2NO+2NC	106233	Ex9C150 22 3P 127V AC/DC	1/2
220 V AC/DC	150 A	185	3P	2NO+2NC	106232	Ex9C150 22 3P 220V AC/DC	1/2
230 V AC/DC	**150 A**	**185**	**3P**	**2NO+2NC**	**106231**	**Ex9C150 22 3P 230V AC/DC**	**1/2**
240 V AC/DC	150 A	185	3P	2NO+2NC	106230	Ex9C150 22 3P 240V AC/DC	1/2
380 V AC/DC	150 A	185	3P	2NO+2NC	106227	Ex9C150 22 3P 380V AC/DC	1/2
400 V AC/DC	150 A	185	3P	2NO+2NC	106226	Ex9C150 22 3P 400V AC/DC	1/2
415 V AC/DC	150 A	185	3P	2NO+2NC	106225	Ex9C150 22 3P 415V AC/DC	1/2

Contactors Ex9C, frame size 185

Rated current 185 A, 3-pole

Control voltage	I_e	Frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
24 V AC/DC	**185 A**	**185**	**3P**	**2NO+2NC**	**106241**	**Ex9C185 22 3P 24V AC/DC**	**1/2**
36 V AC/DC	185 A	185	3P	2NO+2NC	106240	Ex9C185 22 3P 36V AC/DC	1/2
42 V AC/DC	185 A	185	3P	2NO+2NC	106236	Ex9C185 22 3P 42V AC/DC	1/2
48 V AC/DC	185 A	185	3P	2NO+2NC	106235	Ex9C185 22 3P 48V AC/DC	1/2
110 V AC/DC	185 A	185	3P	2NO+2NC	106246	Ex9C185 22 3P 110V AC/DC	1/2
127 V AC/DC	185 A	185	3P	2NO+2NC	106245	Ex9C185 22 3P 127V AC/DC	1/2
220 V AC/DC	185 A	185	3P	2NO+2NC	106244	Ex9C185 22 3P 220V AC/DC	1/2
230 V AC/DC	**185 A**	**185**	**3P**	**2NO+2NC**	**106243**	**Ex9C185 22 3P 230V AC/DC**	**1/2**
240 V AC/DC	185 A	185	3P	2NO+2NC	106242	Ex9C185 22 3P 240V AC/DC	1/2
380 V AC/DC	185 A	185	3P	2NO+2NC	106239	Ex9C185 22 3P 380V AC/DC	1/2
400 V AC/DC	185 A	185	3P	2NO+2NC	106238	Ex9C185 22 3P 400V AC/DC	1/2
415 V AC/DC	185 A	185	3P	2NO+2NC	106237	Ex9C185 22 3P 415V AC/DC	1/2

Wiring diagram



Contactors Ex9C, frame size 300

- Mounting onto panel with screws
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX44.. can be used
- AC and DC control voltage
- Minimized power consumption of coil
- DC coil technology - no humming noise
- Can be combined with overload relays Ex9R500

Rated current 225 A, 3-pole

Control voltage	I_e	Frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
24 V AC/DC	**225 A**	**300**	**3P**	**2NO+2NC**	**106253**	**Ex9C225 22 3P 24V AC/DC**	**1/2**
36 V AC/DC	225 A	300	3P	2NO+2NC	106252	Ex9C225 22 3P 36V AC/DC	1/2
42 V AC/DC	225 A	300	3P	2NO+2NC	106248	Ex9C225 22 3P 42V AC/DC	1/2
48 V AC/DC	225 A	300	3P	2NO+2NC	106247	Ex9C225 22 3P 48V AC/DC	1/2
110 V AC/DC	225 A	300	3P	2NO+2NC	106258	Ex9C225 22 3P 110V AC/DC	1/2
127 V AC/DC	225 A	300	3P	2NO+2NC	106257	Ex9C225 22 3P 127V AC/DC	1/2
220 V AC/DC	225 A	300	3P	2NO+2NC	106256	Ex9C225 22 3P 220V AC/DC	1/2
230 V AC/DC	**225 A**	**300**	**3P**	**2NO+2NC**	**106255**	**Ex9C225 22 3P 230V AC/DC**	**1/2**
240 V AC/DC	225 A	300	3P	2NO+2NC	106254	Ex9C225 22 3P 240V AC/DC	1/2
380 V AC/DC	225 A	300	3P	2NO+2NC	106251	Ex9C225 22 3P 380V AC/DC	1/2
400 V AC/DC	225 A	300	3P	2NO+2NC	106250	Ex9C225 22 3P 400V AC/DC	1/2
415 V AC/DC	225 A	300	3P	2NO+2NC	106249	Ex9C225 22 3P 415V AC/DC	1/2

Rated current 265 A, 3-pole

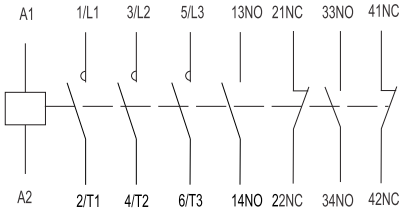
Control voltage	I_e	Frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
24 V AC/DC	**265 A**	**300**	**3P**	**2NO+2NC**	**106265**	**Ex9C265 22 3P 24V AC/DC**	**1/2**
36 V AC/DC	265 A	300	3P	2NO+2NC	106264	Ex9C265 22 3P 36V AC/DC	1/2
42 V AC/DC	265 A	300	3P	2NO+2NC	106260	Ex9C265 22 3P 42V AC/DC	1/2
48 V AC/DC	265 A	300	3P	2NO+2NC	106259	Ex9C265 22 3P 48V AC/DC	1/2
110 V AC/DC	265 A	300	3P	2NO+2NC	106270	Ex9C265 22 3P 110V AC/DC	1/2
127 V AC/DC	265 A	300	3P	2NO+2NC	106269	Ex9C265 22 3P 127V AC/DC	1/2
220 V AC/DC	265 A	300	3P	2NO+2NC	106268	Ex9C265 22 3P 220V AC/DC	1/2
230 V AC/DC	**265 A**	**300**	**3P**	**2NO+2NC**	**106267**	**Ex9C265 22 3P 230V AC/DC**	**1/2**
240 V AC/DC	265 A	300	3P	2NO+2NC	106266	Ex9C265 22 3P 240V AC/DC	1/2
380 V AC/DC	265 A	300	3P	2NO+2NC	106263	Ex9C265 22 3P 380V AC/DC	1/2
400 V AC/DC	265 A	300	3P	2NO+2NC	106262	Ex9C265 22 3P 400V AC/DC	1/2
415 V AC/DC	265 A	300	3P	2NO+2NC	106261	Ex9C265 22 3P 415V AC/DC	1/2

Contactors Ex9C, frame size 300

Rated current 300 A, 3-pole

Control voltage	I_e	Frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
24 V AC/DC	**300 A**	**300**	**3P**	**2NO+2NC**	**106277**	**Ex9C300 22 3P 24V AC/DC**	**1/2**
36 V AC/DC	300 A	300	3P	2NO+2NC	106276	Ex9C300 22 3P 36V AC/DC	1/2
42 V AC/DC	300 A	300	3P	2NO+2NC	106272	Ex9C300 22 3P 42V AC/DC	1/2
48 V AC/DC	300 A	300	3P	2NO+2NC	106271	Ex9C300 22 3P 48V AC/DC	1/2
110 V AC//DC	300 A	300	3P	2NO+2NC	106282	Ex9C300 22 3P 110V AC/DC	1/2
127 V AC/DC	300 A	300	3P	2NO+2NC	106281	Ex9C300 22 3P 127V AC/DC	1/2
220 V AC/DC	300 A	300	3P	2NO+2NC	106280	Ex9C300 22 3P 220V AC/DC	1/2
230 V AC/DC	**300 A**	**300**	**3P**	**2NO+2NC**	**106279**	**Ex9C300 22 3P 230V AC/DC**	**1/2**
240 V AC/DC	300 A	300	3P	2NO+2NC	106278	Ex9C300 22 3P 240V AC/DC	1/2
380 V AC/DC	300 A	300	3P	2NO+2NC	106275	Ex9C300 22 3P 380V AC/DC	1/2
400 V AC/DC	300 A	300	3P	2NO+2NC	106274	Ex9C300 22 3P 400V AC/DC	1/2
415 V AC/DC	300 A	300	3P	2NO+2NC	106273	Ex9C300 22 3P 415V AC/DC	1/2

Wiring diagram



Contactors Ex9C, frame size 500

- Mounting onto panel with screws
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX44.. can be used
- AC and DC control voltage
- Minimized power consumption of coil
- DC coil technology - no humming noise
- Can be combined with overload relays Ex9R500

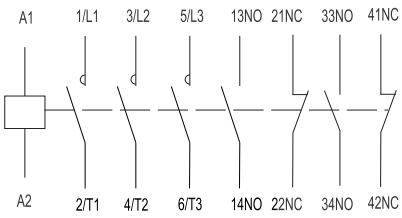
Rated current 400 A, 3-pole

Control voltage	I_e	Frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
24 V AC/DC	**400 A**	**500**	**3P**	**2NO+2NC**	**106289**	**Ex9C400 22 3P 24V AC/DC**	**1/1**
36 V AC/DC	400 A	500	3P	2NO+2NC	106288	Ex9C400 22 3P 36V AC/DC	1/1
42 V AC/DC	400 A	500	3P	2NO+2NC	106284	Ex9C400 22 3P 42V AC/DC	1/1
48 V AC/DC	400 A	500	3P	2NO+2NC	106283	Ex9C400 22 3P 48V AC/DC	1/1
110 V AC/DC	400 A	500	3P	2NO+2NC	106294	Ex9C400 22 3P 110V AC/DC	1/1
127 V AC/DC	400 A	500	3P	2NO+2NC	106293	Ex9C400 22 3P 127V AC/DC	1/1
220 V AC/DC	400 A	500	3P	2NO+2NC	106292	Ex9C400 22 3P 220V AC/DC	1/1
230 V AC/DC	**400 A**	**500**	**3P**	**2NO+2NC**	**106291**	**Ex9C400 22 3P 230V AC/DC**	**1/1**
240 V AC/DC	400 A	500	3P	2NO+2NC	106290	Ex9C400 22 3P 240V AC/DC	1/1
380 V AC/DC	400 A	500	3P	2NO+2NC	106287	Ex9C400 22 3P 380V AC/DC	1/1
400 V AC/DC	400 A	500	3P	2NO+2NC	106286	Ex9C400 22 3P 400V AC/DC	1/1
415 V AC/DC	400 A	500	3P	2NO+2NC	106285	Ex9C400 22 3P 415V AC/DC	1/1

Rated current 500 A, 3-pole

Control voltage	I_e	Frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
24 V AC/DC	**500 A**	**500**	**3P**	**2NO+2NC**	**106301**	**Ex9C500 22 3P 24V AC/DC**	**1/1**
36 V AC/DC	500 A	500	3P	2NO+2NC	106300	Ex9C500 22 3P 36V AC/DC	1/1
42 V AC/DC	500 A	500	3P	2NO+2NC	106296	Ex9C500 22 3P 42V AC/DC	1/1
48 V AC/DC	500 A	500	3P	2NO+2NC	106295	Ex9C500 22 3P 48V AC/DC	1/1
110 V AC/DC	500 A	500	3P	2NO+2NC	106306	Ex9C500 22 3P 110V AC/DC	1/1
127 V AC/DC	500 A	500	3P	2NO+2NC	106305	Ex9C500 22 3P 127V AC/DC	1/1
220 V AC/DC	500 A	500	3P	2NO+2NC	106304	Ex9C500 22 3P 220V AC/DC	1/1
230 V AC/DC	**500 A**	**500**	**3P**	**2NO+2NC**	**106303**	**Ex9C500 22 3P 230V AC/DC**	**1/1**
240 V AC/DC	500 A	500	3P	2NO+2NC	106302	Ex9C500 22 3P 240V AC/DC	1/1
380 V AC/DC	500 A	500	3P	2NO+2NC	106299	Ex9C500 22 3P 380V AC/DC	1/1
400 V AC/DC	500 A	500	3P	2NO+2NC	106298	Ex9C500 22 3P 400V AC/DC	1/1
415 V AC/DC	500 A	500	3P	2NO+2NC	106297	Ex9C500 22 3P 415V AC/DC	1/1

Wiring diagram



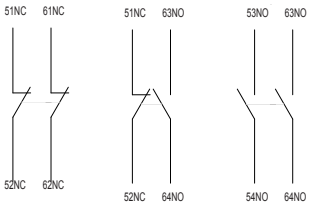
Contactors Ex9C, frame size 500

Side-mounted auxiliary contacts

- Auxiliary contacts for contactors of frame size C185, C300, C500
- Side-mounted version
- For subsequent mounting
- 1 unit can be used with a contactor at the left, another unit at the right side
- Do not limit a possibility to install front-mounted auxiliary contacts AX42 or overload relays Ex9R185, Ex9R500

Contacts	Suitable for	Article No.	Type	Packing
1 NO + 1 NC	C185, C300, C500	106322	AX4411	1/12/144
2 NO	C185, C300, C500	107958	AX4420	1/12/144
2 NC	C185, C300, C500	107957	AX4402	1/12/144

Wiring diagram



AX4402 AX4411 AX4420

Technical Data Ex9C, frame size 185

Contactors Ex9C115, Ex9C150, Ex9C185

General parameters

Contactors rated at AC-3		
Suitable for industrial applications		
3-pole versions		
Mounting with screws onto panel		
With built-in 2NO + 2NC auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX44	106322, 107958, 107957
Overload thermal relay	Ex9R185	106326 — 106328
Pneumatic time delay block	TDD4	104489 — 104494

Electrical parameters - main contacts and general

	Ex9C115	**Ex9C150**	**Ex9C185**
Tested according to	IEC/EN 60947-4-1		
Rated operating voltage U_e	230 / 400 / 690 / 1000 V AC		
Rated insulating voltage U_i	1000 V AC		
Rated impulse withstand voltage U_{imp}	8 kV		
Rated frequency for AC	50/60 Hz		
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes	yes
Conventional free air thermal current I_{th}	160 A	185 A	215 A
Rated operational current I_e			
AC-1	160 A	185 A	215 A
AC-3 / AC-4 at 400 V	115 A / 54 A	150 A / 68 A	185 A / 81 A
AC-3 / AC-4 at 690 V	115 A / 48 A	150 A / 57 A	170 A / 65 A
AC-3 / AC-4 at 1000 V	53 A / 34 A	65 A / 38 A	65 A / 42 A
Rated power of 3-phase motor			
AC-3 / AC-4 at 230 V	37 kW / 18.5 kW	45 kW / 22 kW	55 kW / 30 kW
AC-3 / AC-4 at 400 V	55 kW / 30 kW	75 kW / 37 kW	90 kW / 45 kW
AC-3 / AC-4 at 690 V	110 kW / 50 kW	132 kW / 55 kW	160 kW / 63 kW
Maximum short circuit protection fuse			
Coordination type 1 at 500 V AC	355 A gG/gL	355 A gG/gL	355 A gG/gL
Coordination type 2 at 500 V AC	315 A gG/gL	315 A gG/gL	315 A gG/gL
Safe isolation (EN 61140)			
Main contact — main contact	600 V AC	600 V AC	600 V AC
Main contact — coil	600 V AC	600 V AC	600 V AC
3-phase power AC-1			
Maximum back-up fuse gG/gL	400 A	400 A	400 A
Rated current $I_e = I_{th}$	160 A	185 A	215 A

Technical Data Ex9C, frame size 185

Contactors Ex9C115, Ex9C150, Ex9C185

Electrical parameters - main contacts and general

	Ex9C115	Ex9C150	Ex9C185
Making capacity			
AC-3 / AC-4 at 230 V	1150 A / 648 A	1500 A / 816 A	1850 A / 972 A
AC-3 / AC-4 at 400 V	1150 A / 648 A	1500 A / 816 A	1850 A / 972 A
AC-3 / AC-4 at 690 V	1150 A / 576 A	1500 A / 684 A	1700 A / 780 A
Breaking capacity			
AC-3 / AC-4 at 230 V	920 A / 540 A	1200 A / 680 A	1480 A / 810 A
AC-3 / AC-4 at 400 V	920 A / 540 A	1200 A / 680 A	1480 A / 810 A
AC-3 / AC-4 at 690 V	920 A / 480 A	1200 A / 570 A	1360 A / 650 A
Mechanical service life	8 000 000 operation cycles		
Electrical service life 380/400 V			
AC-3	1 000 000 operation cycles		
AC-4	200 000 operation cycles		
Switching frequency			
AC-3	1 000 oper. cycles per hour	750 oper. cycles per hour	750 oper. cycles per hour
AC-4	130 oper. cycles per hour	130 oper. cycles per hour	130 oper. cycles per hour
Overvoltage category	III		
Comparative Tracking Index	400 V		
Prospective short circuit current I_q	50 kA		

Electrical parameters - control coil

	Ex9C115	Ex9C150	Ex9C185
Control Voltage U_c	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC/DC		
Tolerance of Control Voltage U_c	0.85 — 1.1 U_c		
Frequency	50 Hz / DC		
Power consumption AC / DC			
Pick-up	400 VA / 400 W		
Hold	10 VA / 10 W		
Duty	100 %		

Electrical parameters - built-in auxiliary contacts

Built-in auxiliary contacts	2 NO + 2 NC
Rated operating voltage U_e	690 V AC
Rated insulating voltage U_i	690 V AC
Rated impulse withstand voltage U_{imp}	6 kV
Rated frequency	50 Hz
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes
Conventional free air thermal current I_{th}	10 A
Rated operational current I_e	
AC-15	6 A at 24 V, 3.13 A at 230 V, 1.8 A at 400 V, 1.04 A at 690 V
DC-13	0.55 A at 125 V, 0.27 A at 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

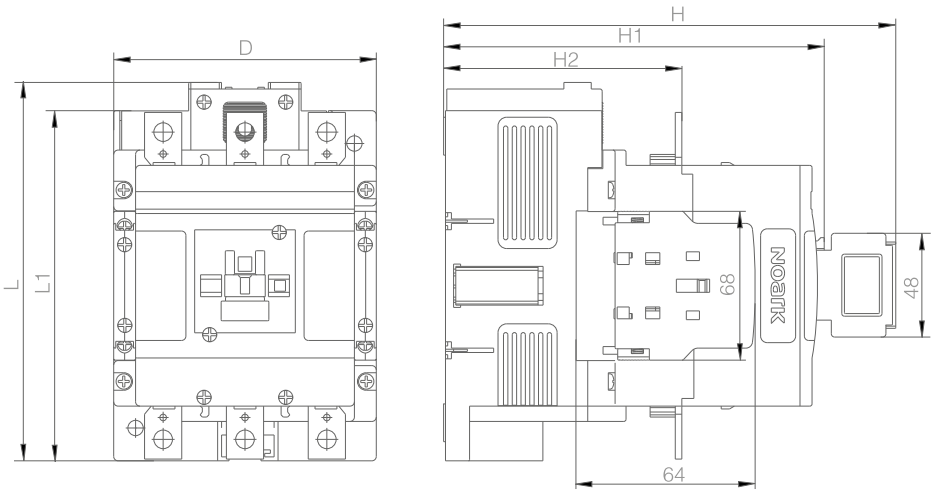
Technical Data Ex9C, frame size 185

Contactors Ex9C115, Ex9C150, Ex9C185

Mechanical parameters

	Ex9C115	Ex9C150	Ex9C185
Device width	120 mm		
Device height	173 mm		
Device depth	174 mm		
Mounting	with screws onto panel		
Degree of protection	IP20		
Terminals	connection plates for M8 screw		
Terminal capacity	copper bar 2x20x5 or 2x cable lug 25 — 120 mm^2		
Fastening torque of the screw	18 Nm		
Control coil terminal capacity	1 — 2.5 mm^2		
Control coil terminal fastening torque	1.7 Nm		
Ambient temperature	-20 — +60 °C		
Altitude	≤ 2000 m		
Relative humidity	≤ 90 %		
Resistance to humidity and heat	class 2		
Pollution degree	3		
Installation class	III		
Weight	3 kg		

Dimensions

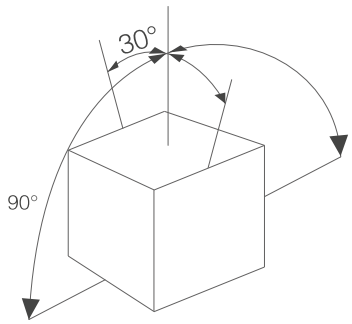


	Ex9C115	Ex9C150	Ex9C185
D	120 mm		
L	173 mm		
L1	160 mm		
H	205 mm		
H1	174 mm		
H2	108 mm		

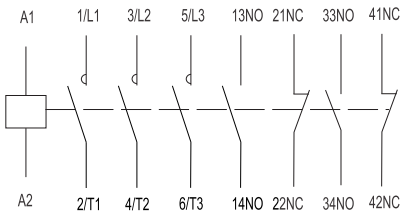
Technical Data Ex9C, frame size 185

Contactors Ex9C115, Ex9C150, Ex9C185

Mounting positions



Wiring diagram



Technical Data Ex9C, frame size 300

Contactors Ex9C225, Ex9C265, Ex9C300

General parameters

Contactors rated at AC-3		
Suitable for industrial applications		
3-pole versions		
Mounting with screws onto panel		
With built-in 2NO + 2NC auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX44	106322, 107958, 107957
Overload thermal relay	Ex9R500	106329 — 106332
Pneumatic time delay block	TDD4	104489 — 104494

Electrical parameters - main contacts and general

	Ex9C225	**Ex9C265**	**Ex9C300**
Tested according to	IEC/EN 60947-4-1		
Rated operating voltage U_e	230 / 400 / 690 / 1000 V AC		
Rated insulating voltage U_i	1000 V AC		
Rated impulse withstand voltage U_{imp}	8 kV		
Rated frequency for AC	50/60 Hz		
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes	yes
Conventional free air thermal current I_{th}	275 A	330 A	400 A
Rated operational current I_e			
AC-1	275 A	330 A	400 A
AC-3 / AC-4 at 400 V	225 A / 96 A	265 A / 117 A	300 A / 125 A
AC-3 / AC-4 at 690 V	225 A / 85 A	265 A / 105 A	280 A / 115 A
AC-3 / AC-4 at 1000 V	68 A / 42 A	95 A / 57 A	95 A / 57 A
Rated power of 3-phase motor			
AC-3 / AC-4 at 230 V	55 kW / 30 kW	75 kW / 37 kW	90 kW / 40 kW
AC-3 / AC-4 at 400 V	110 kW / 55 kW	132 kW / 63 kW	160 kW / 75 kW
AC-3 / AC-4 at 690 V	200 kW / 80 kW	250 kW / 100 kW	250 kW / 110 kW
Maximum short circuit protection fuse			
Coordination type 1 at 500 V AC	500 A gG/gL	500 A gG/gL	500 A gG/gL
Coordination type 2 at 500 V AC	400 A gG/gL	400 A gG/gL	400 A gG/gL
Safe isolation (EN 61140)			
Main contact — main contact	600 V AC	600 V AC	600 V AC
Main contact — coil	600 V AC	600 V AC	600 V AC
3-phase power AC-1			
Maximum back-up fuse gG/gL	500 A	800 A	800 A
Rated current $I_e = I_{th}$	275 A	330 A	400 A

Technical Data Ex9C, frame size 300

Contactors Ex9C225, Ex9C265, Ex9C300

Electrical parameters - main contacts and general

	Ex9C225	Ex9C265	Ex9C300
Making capacity			
AC-3 / AC-4 at 230 V	2250 A / 1152 A	2650 A / 1404 A	3000 A / 1500 A
AC-3 / AC-4 at 400 V	2250 A / 1152 A	2650 A / 1404 A	3000 A / 1500 A
AC-3 / AC-4 at 690 V	2250 A / 1020 A	2650 A / 1260 A	2800 A / 1380 A
Breaking capacity			
AC-3 / AC-4 at 230 V	1800 A / 960 A	2120 A / 1170 A	2400 A / 1250 A
AC-3 / AC-4 at 400 V	1800 A / 960 A	2120 A / 1170 A	2400 A / 1250 A
AC-3 / AC-4 at 690 V	1800 A / 850 A	2120 A / 1050 A	2240 A / 1150 A
Mechanical service life	8 000 000 operation cycles		
Electrical service life 380/400 V			
AC-3	1 000 000 operation cycles		
AC-4	200 000 operation cycles		
Switching frequency			
AC-3	500 oper. cycles per hour	500 oper. cycles per hour	500 oper. cycles per hour
AC-4	130 oper. cycles per hour	130 oper. cycles per hour	130 oper. cycles per hour
Overvoltage category	III		
Comparative Tracking Index	400 V		
Prospective short circuit current I_q	50 kA		

Electrical parameters - control coil

	Ex9C225	Ex9C265	Ex9C300
Control Voltage U_c	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC/DC		
Tolerance of Control Voltage U_c	0.85 — 1.1 U_c		
Frequency	50 Hz / DC		
Power consumption AC / DC			
Pick-up	590 VA / 590 W		
Hold	10 VA / 10 W		
Duty	100 %		

Electrical parameters - built-in auxiliary contacts

Built-in auxiliary contacts	2 NO + 2 NC
Rated operating voltage U_e	690 V AC
Rated insulating voltage U_i	690 V AC
Rated impulse withstand voltage U_{imp}	6 kV
Rated frequency	50 Hz
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes
Conventional free air thermal current I_{th}	10 A
Rated operational current I_e	
AC-15	6 A at 24 V, 3.13 A at 230 V, 1.8 A at 400 V, 1.04 A at 690 V
DC-13	0.55 A at 125 V, 0.27 A at 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

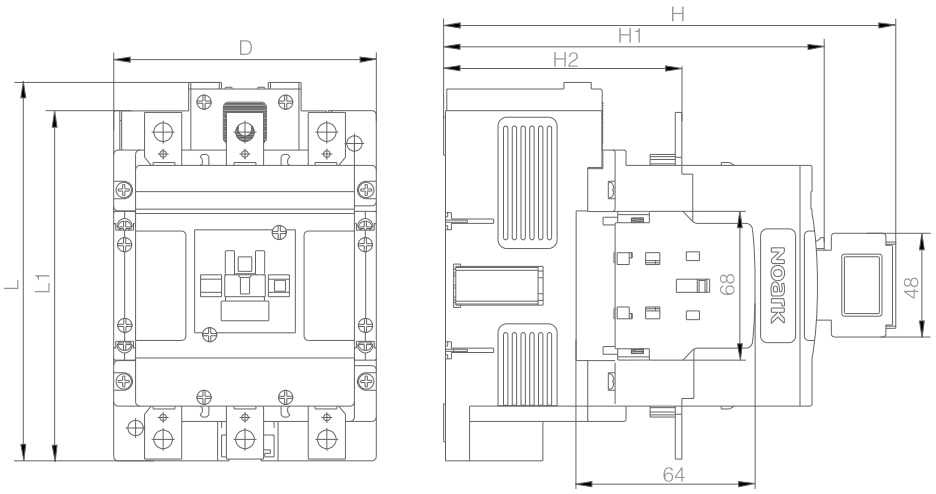
Technical Data Ex9C, frame size 300

Contactors Ex9C225, Ex9C265, Ex9C300

Mechanical parameters

	Ex9C225	Ex9C265	Ex9C300
Device width	145 mm		
Device height	212 mm		
Device depth	207 mm		
Mounting	with screws onto panel		
Degree of protection	IP20		
Terminals	connection plates for M10 screw		
Terminal capacity	copper bar 2x30x5 or 2x cable lug 50 — 240 mm^2		
Fastening torque of the screw	35 Nm		
Control coil terminal capacity	1 — 2.5 mm^2		
Control coil terminal fastening torque	1.7 Nm		
Ambient temperature	-20 — +60 °C		
Altitude	≤ 2000 m		
Relative humidity	≤ 90 %		
Resistance to humidity and heat	class 2		
Pollution degree	3		
Installation class	III		
Weight	6 kg		

Dimensions

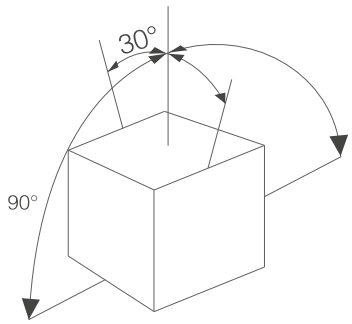


	Ex9C225	Ex9C265	Ex9C300
D	145 mm		
L	212 mm		
L1	200 mm		
H	239 mm		
H1	207 mm		
H2	134 mm		

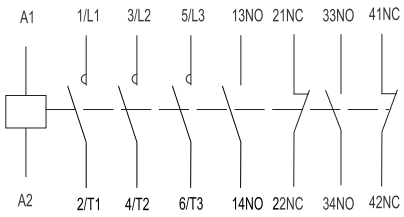
Technical Data Ex9C, frame size 300

Contactors Ex9C225, Ex9C265, Ex9C300

Mounting positions



Wiring diagram



Technical Data Ex9C, frame size 500

Contactors Ex9C400, Ex9C500

General parameters

Contactors rated at AC-3		
Suitable for industrial applications		
3-pole versions		
Mounting with screws onto panel		
With built-in 2NO + 2NC auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX44	106322, 107958, 107957
Overload thermal relay	Ex9R500	106329 — 106332
Pneumatic time delay block	TDD4	104489 — 104494

Electrical parameters - main contacts and general

	Ex9C400	**Ex9C500**
Tested according to	IEC/EN 60947-4-1	
Rated operating voltage U_e	230 / 400 / 690 / 1000 V AC	
Rated insulating voltage U_i	1000 V AC	
Rated impulse withstand voltage U_{imp}	8 kV	
Rated frequency for AC	50/60 Hz	
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes
Conventional free air thermal current I_{th}	430 A	610 A
Rated operational current I_e		
AC-1	430 A	610 A
AC-3 / AC-4 at 400 V	400 A / 150 A	500 A / 175 A
AC-3 / AC-4 at 690 V	400 A / 135 A	450 A / 150 A
AC-3 / AC-4 at 1000 V	180 A / 80 A	200 A / 80 A
Rated power of 3-phase motor		
AC-3 / AC-4 at 230 V	132 kW / 45 kW	160 kW / 55 kW
AC-3 / AC-4 at 400 V	220 kW / 90 kW	250 kW / 100 kW
AC-3 / AC-4 at 690 V	355 kW / 132 kW	400 kW / 150 kW
Maximum short circuit protection fuse		
Coordination type 1 at 500 V AC	630 A gG/gL	630 A gG/gL
Coordination type 2 at 500 V AC	630 A gG/gL	630 A gG/gL
Safe isolation (EN 61140)		
Main contact — main contact	600 V AC	600 V AC
Main contact — coil	600 V AC	600 V AC
3-phase power AC-1		
Maximum back-up fuse gG/gL	1000 A	1200 A
Rated current $I_e = I_{th}$	430 A	610 A

Technical Data Ex9C, frame size 500

Contactors Ex9C400, Ex9C500

Electrical parameters - main contacts and general

	Ex9C400	Ex9C500
Making capacity		
AC-3 / AC-4 at 230 V	4000 A / 1800 A	5000 A / 2100 A
AC-3 / AC-4 at 400 V	4000 A / 1800 A	5000 A / 2100 A
AC-3 / AC-4 at 690 V	4000 A / 1620 A	4500 A / 1800 A
Breaking capacity		
AC-3 / AC-4 at 230 V	3200 A / 1500 A	4000 A / 1750 A
AC-3 / AC-4 at 400 V	3200 A / 1500 A	4000 A / 1750 A
AC-3 / AC-4 at 690 V	3200 A / 1350 A	3600 A / 1500 A
Mechanical service life	5 000 000 operation cycles	
Electrical service life 380/400 V		
AC-3	1 000 000 operation cycles	
AC-4	200 000 operation cycles	
Switching frequency		
AC-3	500 oper. cycles per hour	420 oper. cycles per hour
AC-4	130 oper. cycles per hour	130 oper. cycles per hour
Overvoltage category	III	
Comparative Tracking Index	400 V	
Prospective short circuit current I_q	50 kA	

Electrical parameters - control coil

	Ex9C400	Ex9C500
Control Voltage U_c	36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC/DC	
Tolerance of Control Voltage U_c	0.85 — 1.1 U_c	
Frequency	50 Hz / DC	
Power consumption AC / DC		
Pick-up	600 VA / 600 W	
Hold	10 VA / 10 W	
Duty	100 %	

Electrical parameters - built-in auxiliary contacts

Built-in auxiliary contacts	2 NO + 2 NC
Rated operating voltage U_e	690 V AC
Rated insulating voltage U_i	690 V AC
Rated impulse withstand voltage U_{imp}	6 kV
Rated frequency	50 Hz
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes
Conventional free air thermal current I_{th}	10 A
Rated operational current I_e	
AC-15	6 A at 24 V, 3.13 A at 230 V, 1.8 A at 400 V, 1.04 A at 690 V
DC-13	0.55 A at 125 V, 0.27 A at 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

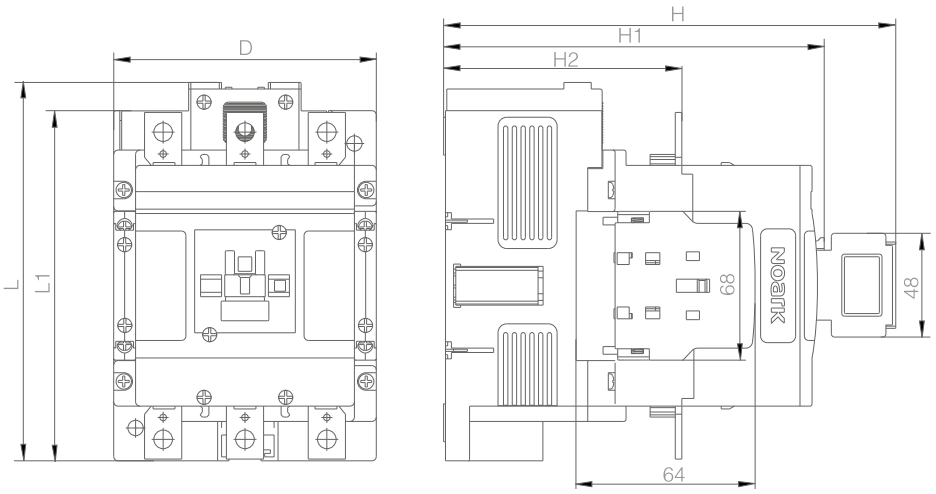
Technical Data Ex9C, frame size 500

Contactors Ex9C400, Ex9C500

Mechanical parameters

	Ex9C400	Ex9C500
Device width	160 mm	
Device height	218 mm	
Device depth	229 mm	
Mounting	with screws onto panel	
Degree of protection	IP20	
Terminals	connection plates for M10 screw	
Terminal capacity	copper bar 2x30x5 or 2x cable lug 50 — 240 mm^2	
Fastening torque of the screw	35 Nm	
Control coil terminal capacity	1 — 2.5 mm^2	
Control coil terminal fastening torque	1.7 Nm	
Ambient temperature	-20 — +60 °C	
Altitude	≤ 2000 m	
Relative humidity	≤ 90 %	
Resistance to humidity and heat	class 2	
Pollution degree	3	
Installation class	III	
Weight	9,5 kg	

Dimensions

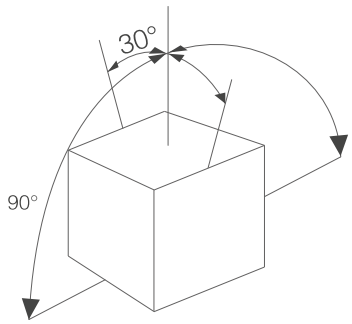


	Ex9C400	Ex9C500
D	160 mm	
L	218 mm	
L1	200 mm	
H	261 mm	
H1	229 mm	
H2	151 mm	

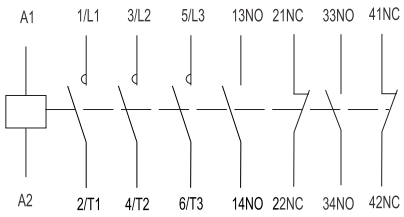
Technical Data Ex9C, frame size 500

Contactors Ex9C400, Ex9C500

Mounting positions



Wiring diagram



Technical Data accessories

Accessories for Contactors of frame size Ex9C185, Ex9C300, Ex9C500

Side-mounted auxiliary contact units AX44

General parameters

Auxiliary contacts for contactors of frame size Ex9C185, Ex9C300, Ex9C500, for subsequent mounting
Side-mounted version
1 unit can be used with a contactor at the left, another unit at the right side
Do not limit a possibility to install front-mounted auxiliary contact unit AX42 or overload relay Ex9R

Electrical parameters

	AX4411	**AX4402**	**AX4420**
Contacts	1 NO + 1 NC	2 NC	2 NO
Tested according to	IEC/EN 60947-5-1		
Rated op. voltage U_e	24 / 230 / 400 / 690 V AC 125 / 250 V DC		
Min. op. voltage per contact U_{min}	17 V AC, 3 V DC		
Rated frequency	50 Hz		
Rated thermal current I_{th}	10 A		
Rated op. current I_e, ut. cat. AC-15	6 A at 24 V, 3.13 A at 230 V, 1.8 A at 400 V, 1.04 A at 690 V		
Rated op. current I_e, ut. cat. DC-13	0.55 A at 125 V, 0.27 A at 250 V		
Min. operational current I_{min}	5 mA AC, 5 mA DC		
Rated impulse withstand voltage U_{imp}	6 kV (1.2/50 ms)		
Rated insulation voltage U_i	690 V		
Max. back-up fuse	10 A gG/gL		
Conditional short circuit current I_k with max. back-up fuse	1 kA		

Mechanical parameters

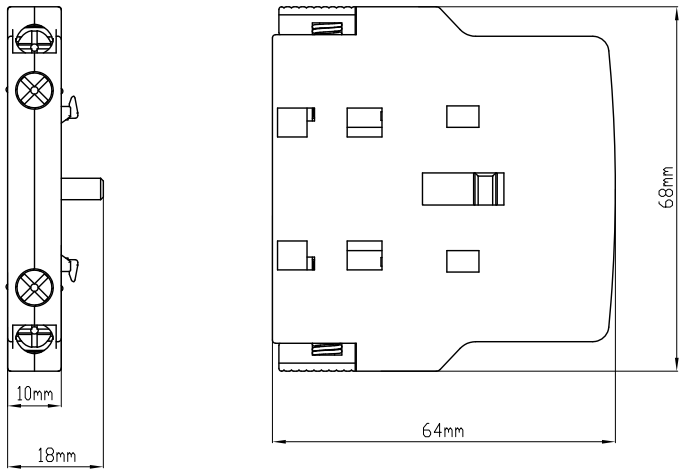
	AX44
Device width	10 mm
Device height	64 mm
Device depth	68 mm
Mounting	side
Degree of protection	IP20
Terminals	lift
Terminal capacity	1 — 4 mm^2
Fastening torque of terminals	1.7 Nm

Technical Data Ex9C accessories

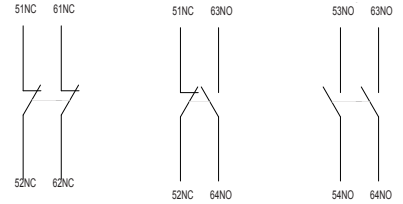
Accessories for Contactors of frame size Ex9C185, Ex9C300, Ex9C500

Side-mounted auxiliary contact units AX44

Dimensions



Wiring diagrams



AX4402 AX4411 AX4420