

# Contactors Ex9C up to 500 A



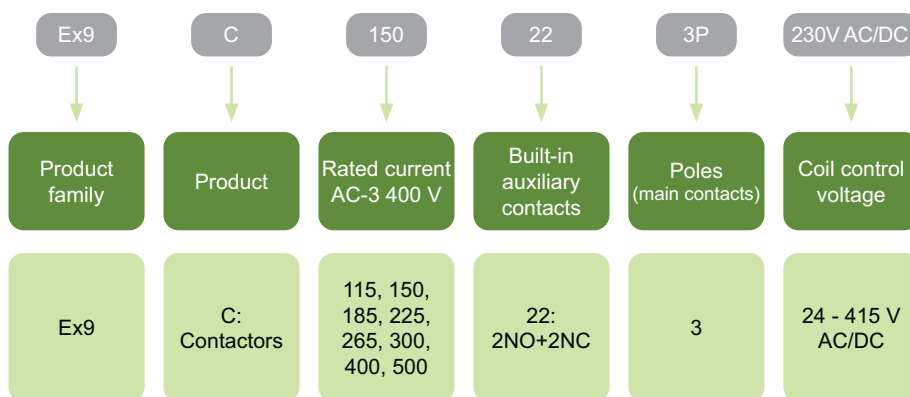
- Contactors according to IEC / EN 60947-4-1
- Rated current 115 - 500 A at 400 V AC-3
- 3-pole versions
- Coil control voltage 24 — 415 V AC/DC
- Rated conditional short circuit current  $I_q = 50 \text{ kA}$
- Suitable for industrial applications
- Mounting onto panel with screws

Ex9C contactors for rated current 115 - 500 A in category AC-3 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.

The contactors are equipped with controlled coil. It ensures that power consumption is significantly reduced when contactor is closed.

Overload relays Ex9R differ with the frame sizes in order to fit respective contactor of given rated current.

### Type Key



### Certification marks



# Contactors Ex9C up to 500 A

## Frame sizes



**Frame size 185**  
Rated currents  
115, 150, 185 A



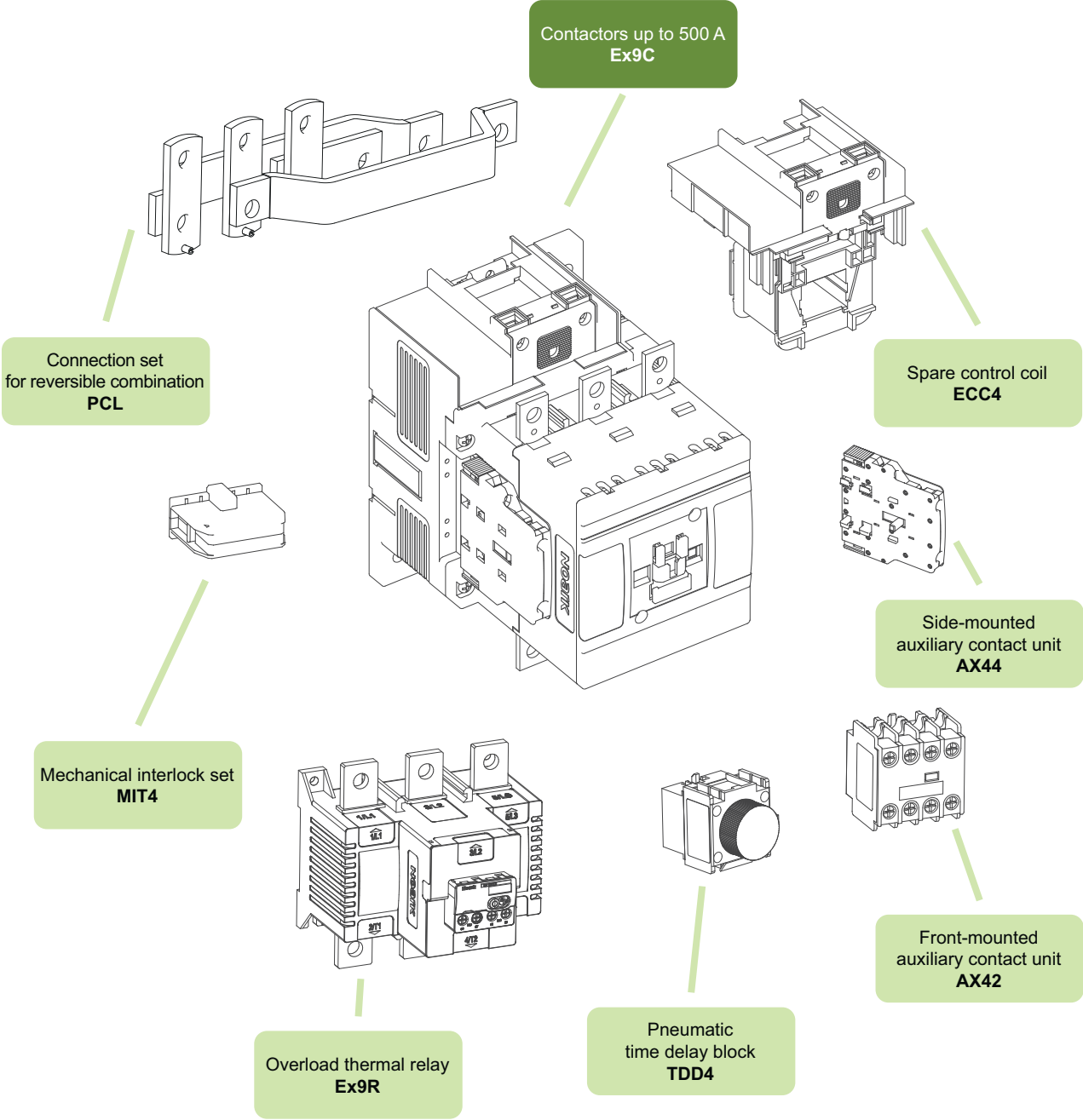
**Frame size 300**  
Rated currents  
225, 265, 300 A



**Frame size 500**  
Rated currents  
400, 500 A

# Contactor Ex9C up to 500 A

## Accessories



Front-mounted auxiliary contacts AX42	see page 104
Side-mounted auxiliary contacts AX44	see page 105
Overload thermal relays Ex9R	see page 87
Pneumatic time delay block TDD4	see page 106
Mechanical interlock MIT4	see page 105
Connection set for reversible combination PCL	see page 105
Spare control coil ECC4	see page 107

# Contactors Ex9C, frame size 185

## Rated current 115 A, 3-pole

- 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
- Can be combined with overload relays Ex9R185



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

## Rated current 150 A, 3-pole

- 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
- Can be combined with overload relays Ex9R185



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

# Contactors Ex9C, frame size 185

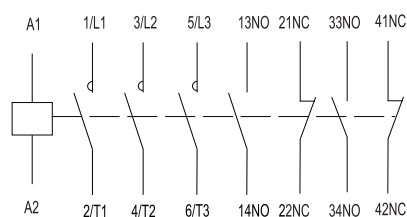
## Rated current 185 A, 3-pole

- 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
- Can be combined with overload relays Ex9R185



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

### Wiring diagram



# Contactors Ex9C, frame size 300

## Rated current 225 A, 3-pole

- 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
- Can be combined with overload relays Ex9R500



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

## Rated current 265 A, 3-pole

- 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
- Can be combined with overload relays Ex9R500



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

# Contactors Ex9C, frame size 300

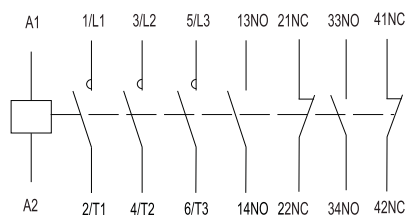
## Rated current 300 A, 3-pole

- 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
- Can be combined with overload relays Ex9R500



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

### Wiring diagram



# Contactors Ex9C, frame size 500

## Rated current 400 A, 3-pole

- 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
- Can be combined with overload relays Ex9R500



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

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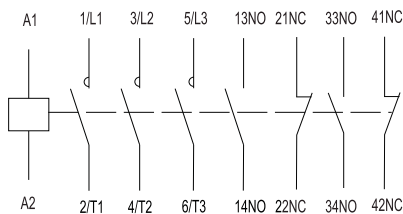
## Rated current 500 A, 3-pole

- 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
- Can be combined with overload relays Ex9R500



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

### Wiring diagram



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# 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
Mechanical interlocks	MIT44	107962
Reversible connection sets	PCL185	107965

### 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 %		
Closing delay	30 — 65 ms		
Opening delay	45 — 65 ms		

### 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		

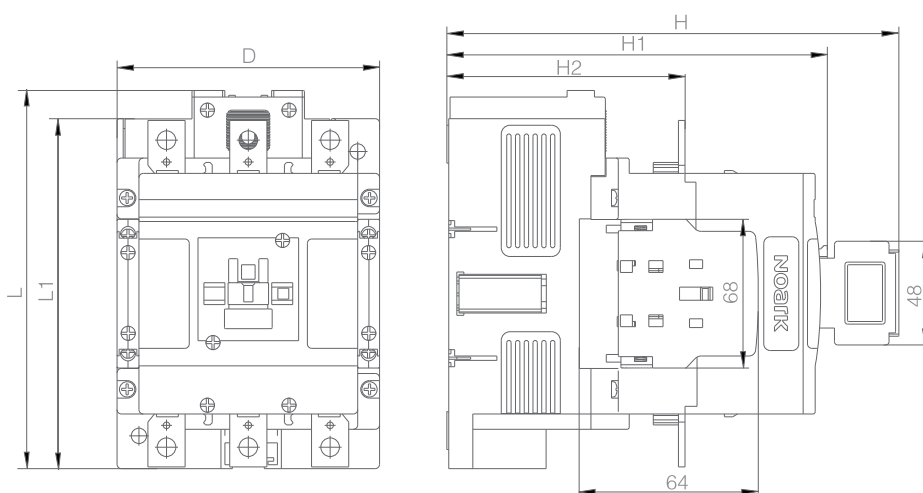
# Technical Data Ex9C, frame size 185

## 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 <sup>2</sup>		
Fastening torque of the screw	18 Nm		
Control coil terminal capacity	1 — 2.5 mm <sup>2</sup>		
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

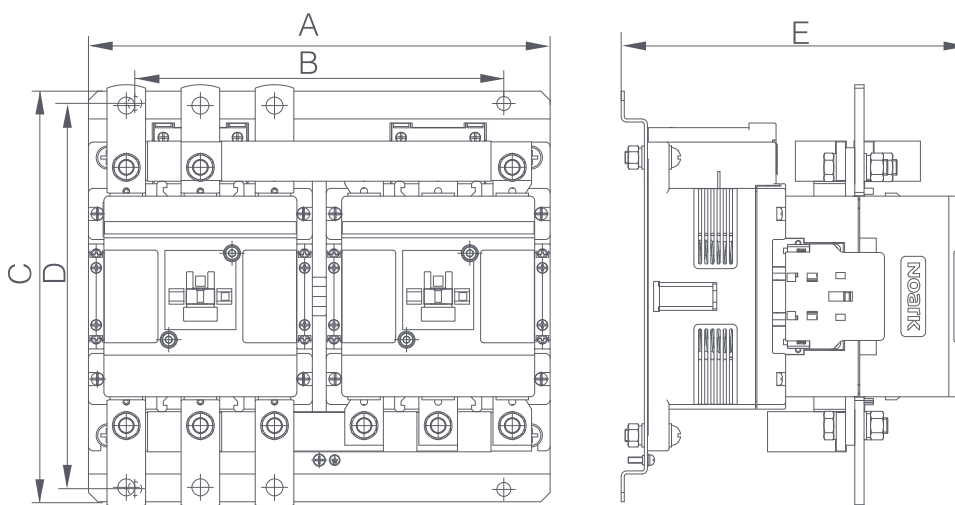


	Ex9C115	Ex9C150	Ex9C185
D		120 mm	
L		173 mm	
L1		160 mm	
H		205 mm	
H1		174 mm	
H2		108 mm	

# Technical Data Ex9C, frame size 185

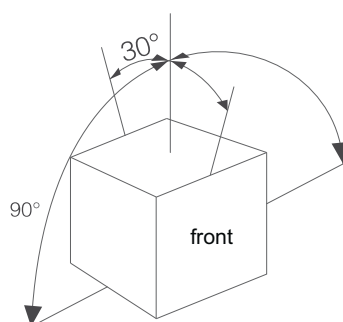
Contactors Ex9C115, Ex9C150, Ex9C185

## Dimensions of reversible combination

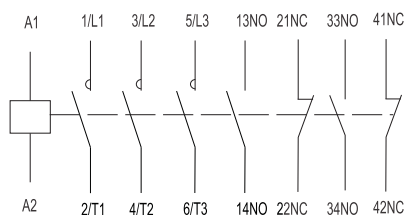


	Ex9C115	Ex9C150	Ex9C185
A		249 mm	
B		189 mm	
C		230 mm	
D		214 mm	
E		194 mm	

## 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
Mechanical interlocks	MIT45	107963
Reversible connection sets	PCL300	107966

### 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 %		
Closing delay	45 — 80 ms		
Opening delay	50 — 70 ms		

### 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		

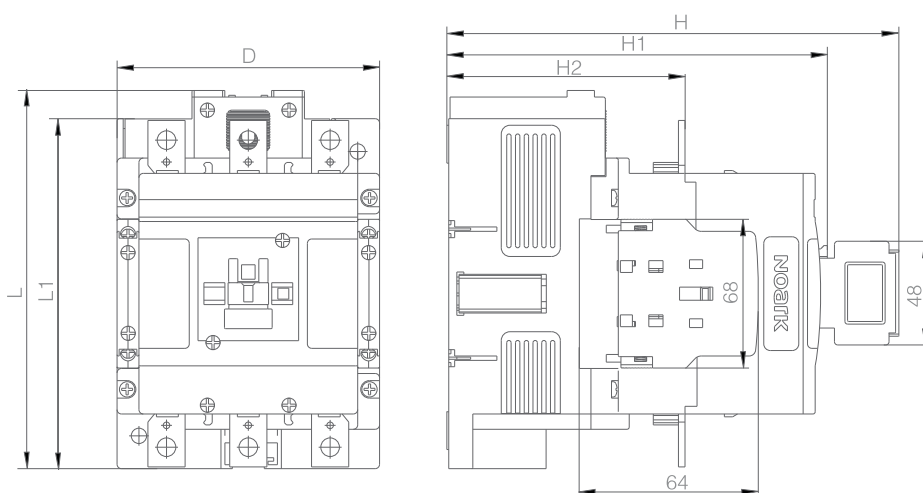
# Technical Data Ex9C, frame size 300

## 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 <sup>2</sup>		
Fastening torque of the screw	35 Nm		
Control coil terminal capacity	1 — 2.5 mm <sup>2</sup>		
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

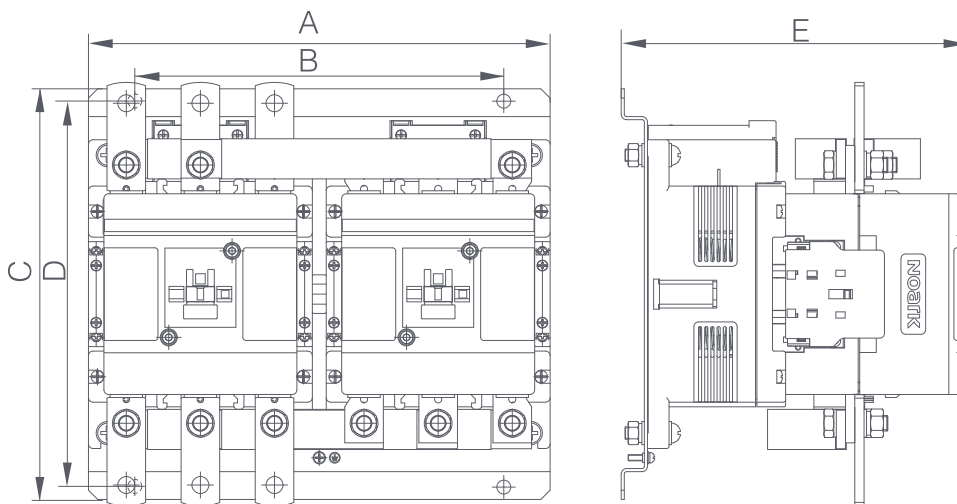


	Ex9C225	Ex9C265	Ex9C300
D		145 mm	
L		212 mm	
L1		200 mm	
H		239 mm	
H1		207 mm	
H2		134 mm	

# Technical Data Ex9C, frame size 300

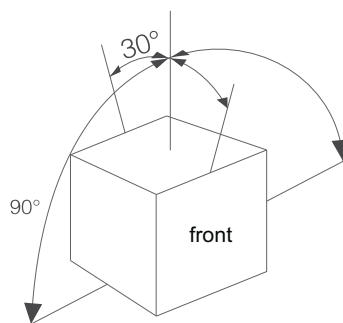
Contactors Ex9C225, Ex9C265, Ex9C300

## Dimensions of reversible combination

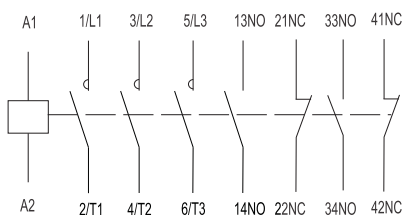


	Ex9C225	Ex9C265	Ex9C300
A		299 mm	
B		239 mm	
C		266 mm	
D		250 mm	
E		225 mm	

## 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
Mechanical interlocks	MIT46	107964
Reversible connection sets	PCL500	107967

### 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 %	
Closing delay	70 — 90 ms	
Opening delay	60 — 80 ms	

### 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

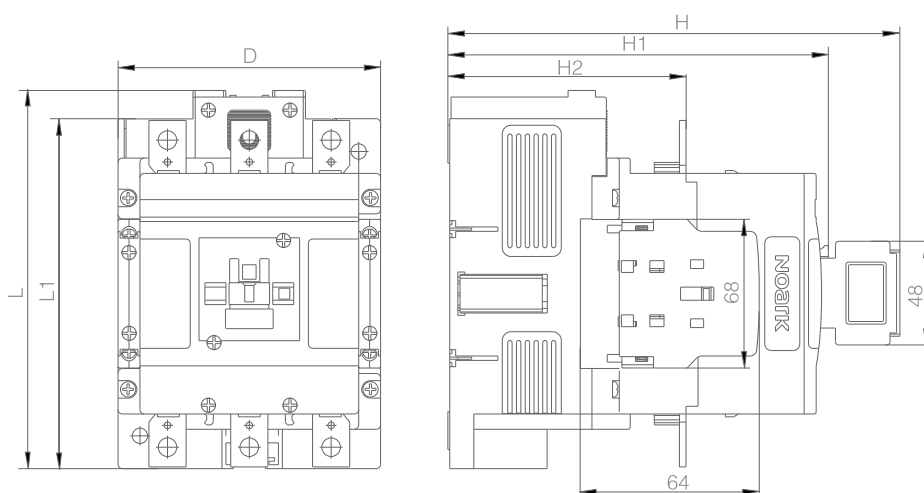
# Technical Data Ex9C, frame size 500

## 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 <sup>2</sup>	
Fastening torque of the screw	35 Nm	
Control coil terminal capacity	1 — 2.5 mm <sup>2</sup>	
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

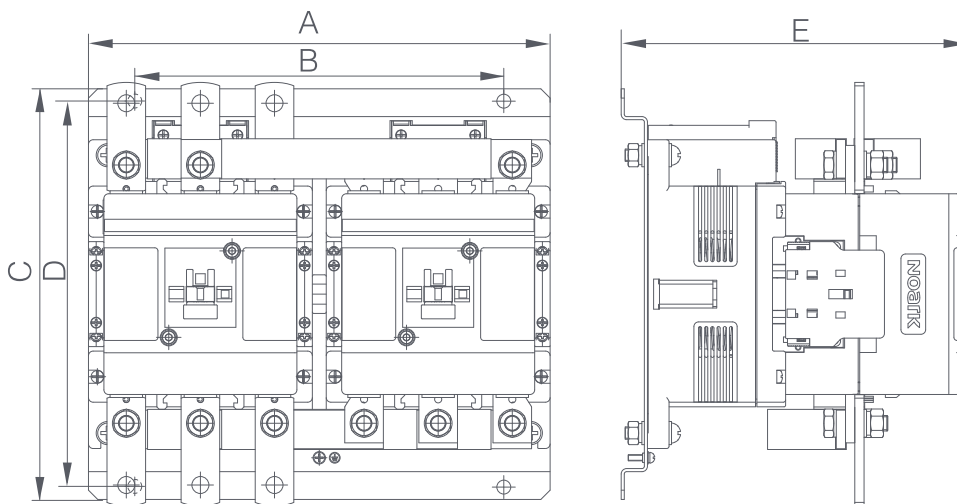


	Ex9C400	Ex9C500
D	160 mm	
L	218 mm	
L1	200 mm	
H	261 mm	
H1	229 mm	
H2	151 mm	

# Technical Data Ex9C, frame size 500

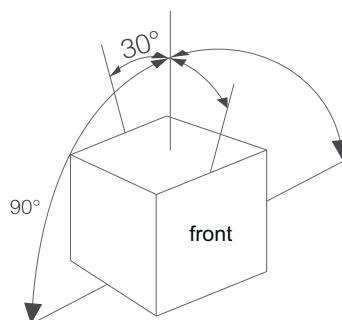
## Contactors Ex9C400, Ex9C500

### Dimensions of reversible combination



	Ex9C400	Ex9C500
A		329 mm
B		269 mm
C		268 mm
D		253 mm
E		246 mm

### Mounting positions



### Wiring diagram

