

# Contactors Ex9C



- Contactors according to IEC / EN 60947-4-1
- Four frame sizes with rated current up to 100 A at 400 V AC-3
- 3-pole versions
- Coil control voltage 24 — 415 V AC
- Rated conditional short circuit current  $I_c$  50 kA
- Suitable mainly for industrial applications, can be used also for domestic ones
- Mounting onto device rail (DIN) 35 mm or 75 mm (frame sizes 38, 65, 100) or onto panel

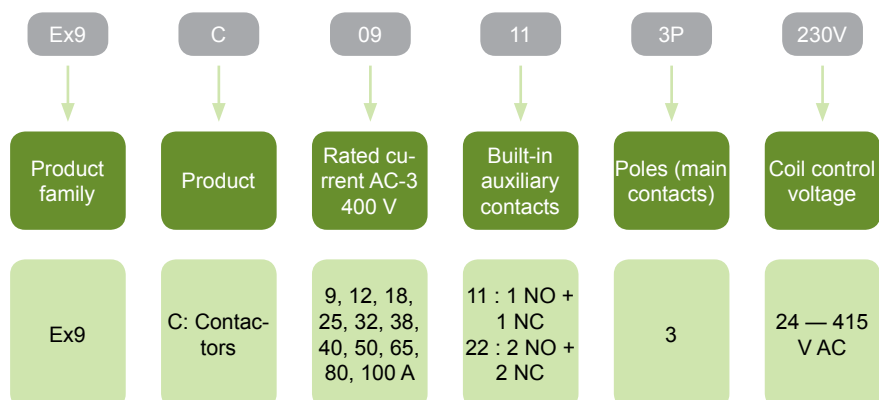
Rated operational voltage of main contacts 690 V AC

Rated frequency 50 Hz

Ex9C contactors are intended for various applications including heavy industrial ones. Splitting into four 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.

Frame size 18 contains contactors with rated currents AC-3 9, 12 and 18 A at 400 V. Size 38 consists of rated currents 25, 32, 38 A. Version 65 is splitted into currents 40, 50 and 65. Finally frame size 100 is covered with rated currents 80 and 100 A.

## Type Key



## Certification marks



# Contactors Ex9C

## Frame sizes



**Frame size 18**  
Rated currents 9, 12,  
18 A



**Frame size 38**  
Rated currents 25, 32,  
38 A



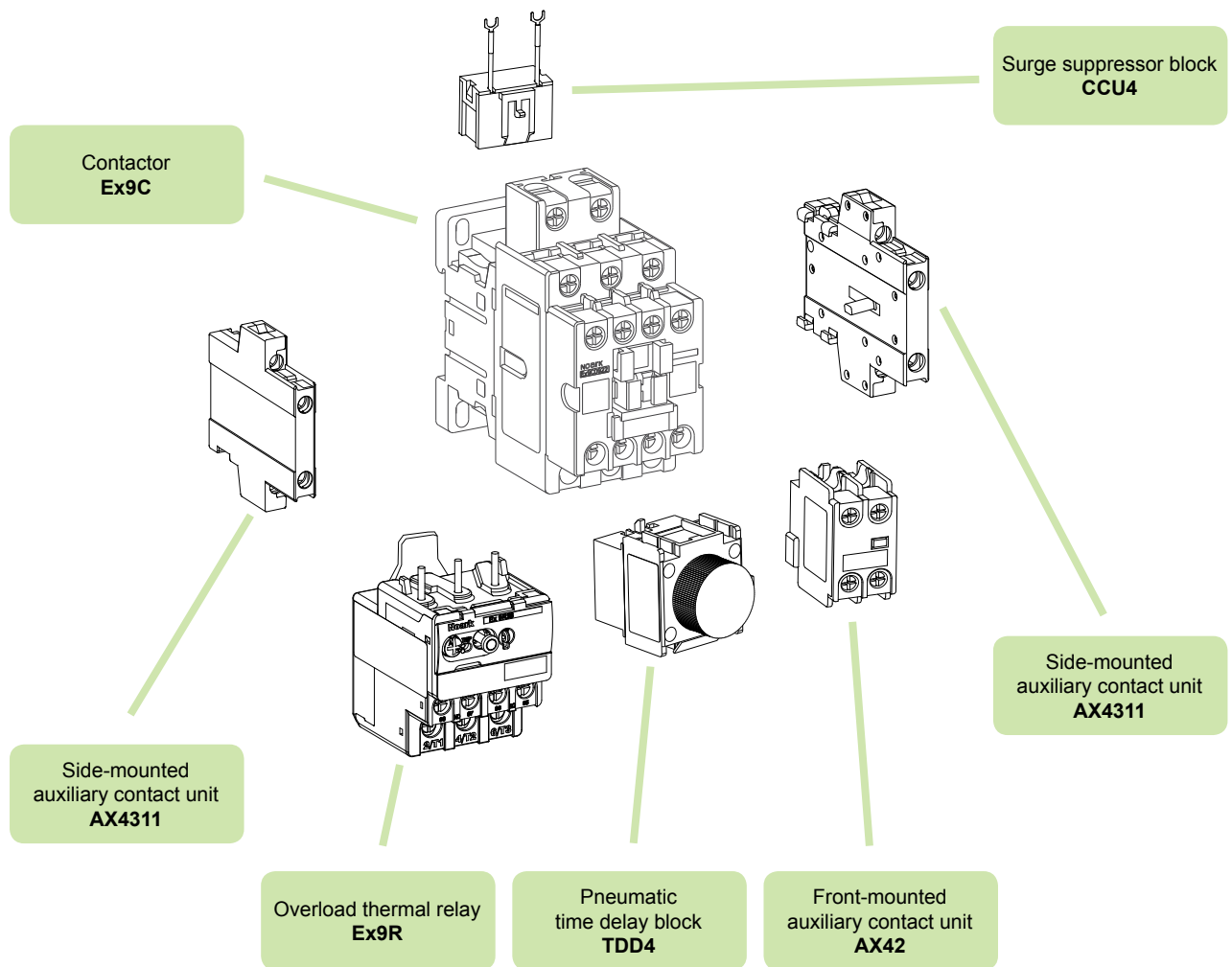
**Frame size 65**  
Rated currents 40, 50,  
65 A



**Frame size 100**  
Rated currents 80, 100 A

# Contactors Ex9C

## Accessories



Auxiliary contacts AX4311

Auxiliary contacts AX42

Overload thermal relays Ex9R

Pneumatic time delay block TDD4

Surge suppressor block CCU4

# Contactors Ex9C, frame size 18

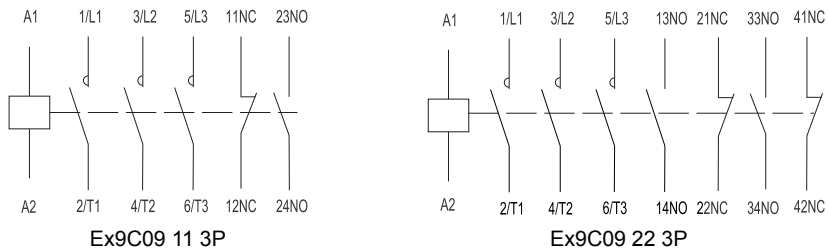
## Rated current 9 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	9 A	18	3	1 NO + 1 NC	101100	Ex9C09 11 3P 415V	1/40
400 V AC	9 A	18	3	1 NO + 1 NC	101101	Ex9C09 11 3P 400V	1/40
380 V AC	9 A	18	3	1 NO + 1 NC	101102	Ex9C09 11 3P 380V	1/40
240 V AC	9 A	18	3	1 NO + 1 NC	101103	Ex9C09 11 3P 240V	1/40
230 V AC	9 A	18	3	1 NO + 1 NC	101104	Ex9C09 11 3P 230V	1/40
220 V AC	9 A	18	3	1 NO + 1 NC	101105	Ex9C09 11 3P 220V	1/40
127 V AC	9 A	18	3	1 NO + 1 NC	101106	Ex9C09 11 3P 127V	1/40
110 V AC	9 A	18	3	1 NO + 1 NC	101107	Ex9C09 11 3P 110V	1/40
48 V AC	9 A	18	3	1 NO + 1 NC	101108	Ex9C09 11 3P 48V	1/40
42 V AC	9 A	18	3	1 NO + 1 NC	101109	Ex9C09 11 3P 42V	1/40
36 V AC	9 A	18	3	1 NO + 1 NC	101110	Ex9C09 11 3P 36V	1/40
24 V AC	9 A	18	3	1 NO + 1 NC	101111	Ex9C09 11 3P 24V	1/40
415 V AC	9 A	18	3	2 NO + 2 NC	101112	Ex9C09 22 3P 415V	1/40
400 V AC	9 A	18	3	2 NO + 2 NC	101113	Ex9C09 22 3P 400V	1/40
380 V AC	9 A	18	3	2 NO + 2 NC	101114	Ex9C09 22 3P 380V	1/40
240 V AC	9 A	18	3	2 NO + 2 NC	101115	Ex9C09 22 3P 240V	1/40
230 V AC	9 A	18	3	2 NO + 2 NC	101116	Ex9C09 22 3P 230V	1/40
220 V AC	9 A	18	3	2 NO + 2 NC	101117	Ex9C09 22 3P 220V	1/40
127 V AC	9 A	18	3	2 NO + 2 NC	101118	Ex9C09 22 3P 127V	1/40
110 V AC	9 A	18	3	2 NO + 2 NC	101119	Ex9C09 22 3P 110V	1/40
48 V AC	9 A	18	3	2 NO + 2 NC	101120	Ex9C09 22 3P 48V	1/40
42 V AC	9 A	18	3	2 NO + 2 NC	101121	Ex9C09 22 3P 42V	1/40
36 V AC	9 A	18	3	2 NO + 2 NC	101122	Ex9C09 22 3P 36V	1/40
24 V AC	9 A	18	3	2 NO + 2 NC	101123	Ex9C09 22 3P 24V	1/40

### Wiring diagrams



# Contactors Ex9C, frame size 18

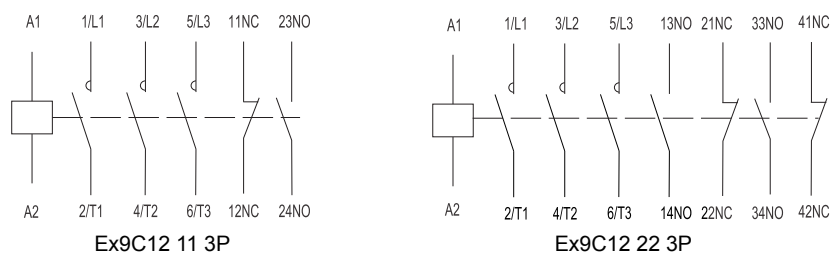
## Rated current 12 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	12 A	18	3	1 NO + 1 NC	101124	Ex9C12 11 3P 415V	1/40
400 V AC	12 A	18	3	1 NO + 1 NC	101125	Ex9C12 11 3P 400V	1/40
380 V AC	12 A	18	3	1 NO + 1 NC	101126	Ex9C12 11 3P 380V	1/40
240 V AC	12 A	18	3	1 NO + 1 NC	101127	Ex9C12 11 3P 240V	1/40
230 V AC	12 A	18	3	1 NO + 1 NC	101128	Ex9C12 11 3P 230V	1/40
220 V AC	12 A	18	3	1 NO + 1 NC	101129	Ex9C12 11 3P 220V	1/40
127 V AC	12 A	18	3	1 NO + 1 NC	101130	Ex9C12 11 3P 127V	1/40
110 V AC	12 A	18	3	1 NO + 1 NC	101131	Ex9C12 11 3P 110V	1/40
48 V AC	12 A	18	3	1 NO + 1 NC	101132	Ex9C12 11 3P 48V	1/40
42 V AC	12 A	18	3	1 NO + 1 NC	101133	Ex9C12 11 3P 42V	1/40
36 V AC	12 A	18	3	1 NO + 1 NC	101134	Ex9C12 11 3P 36V	1/40
24 V AC	12 A	18	3	1 NO + 1 NC	101135	Ex9C12 11 3P 24V	1/40
415 V AC	12 A	18	3	2 NO + 2 NC	101136	Ex9C12 22 3P 415V	1/40
400 V AC	12 A	18	3	2 NO + 2 NC	101137	Ex9C12 22 3P 400V	1/40
380 V AC	12 A	18	3	2 NO + 2 NC	101138	Ex9C12 22 3P 380V	1/40
240 V AC	12 A	18	3	2 NO + 2 NC	101139	Ex9C12 22 3P 240V	1/40
230 V AC	12 A	18	3	2 NO + 2 NC	101140	Ex9C12 22 3P 230V	1/40
220 V AC	12 A	18	3	2 NO + 2 NC	101141	Ex9C12 22 3P 220V	1/40
127 V AC	12 A	18	3	2 NO + 2 NC	101142	Ex9C12 22 3P 127V	1/40
110 V AC	12 A	18	3	2 NO + 2 NC	101143	Ex9C12 22 3P 110V	1/40
48 V AC	12 A	18	3	2 NO + 2 NC	101144	Ex9C12 22 3P 48V	1/40
42 V AC	12 A	18	3	2 NO + 2 NC	101145	Ex9C12 22 3P 42V	1/40
36 V AC	12 A	18	3	2 NO + 2 NC	101146	Ex9C12 22 3P 36V	1/40
24 V AC	12 A	18	3	2 NO + 2 NC	101147	Ex9C12 22 3P 24V	1/40

### Wiring diagrams



# Contactors Ex9C, frame size 18

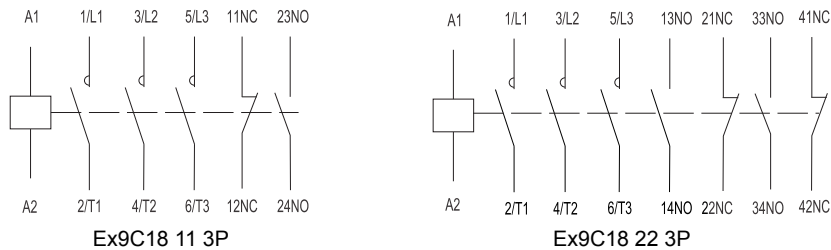
## Rated current 18 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	18 A	18	3	1 NO + 1 NC	101148	Ex9C18 11 3P 415V	1/40
400 V AC	18 A	18	3	1 NO + 1 NC	101149	Ex9C18 11 3P 400V	1/40
380 V AC	18 A	18	3	1 NO + 1 NC	101150	Ex9C18 11 3P 380V	1/40
240 V AC	18 A	18	3	1 NO + 1 NC	101151	Ex9C18 11 3P 240V	1/40
230 V AC	18 A	18	3	1 NO + 1 NC	101152	Ex9C18 11 3P 230V	1/40
220 V AC	18 A	18	3	1 NO + 1 NC	101153	Ex9C18 11 3P 220V	1/40
127 V AC	18 A	18	3	1 NO + 1 NC	101154	Ex9C18 11 3P 127V	1/40
110 V AC	18 A	18	3	1 NO + 1 NC	101155	Ex9C18 11 3P 110V	1/40
48 V AC	18 A	18	3	1 NO + 1 NC	101156	Ex9C18 11 3P 48V	1/40
42 V AC	18 A	18	3	1 NO + 1 NC	101157	Ex9C18 11 3P 42V	1/40
36 V AC	18 A	18	3	1 NO + 1 NC	101158	Ex9C18 11 3P 36V	1/40
24 V AC	18 A	18	3	1 NO + 1 NC	101159	Ex9C18 11 3P 24V	1/40
415 V AC	18 A	18	3	2 NO + 2 NC	101160	Ex9C18 22 3P 415V	1/40
400 V AC	18 A	18	3	2 NO + 2 NC	101161	Ex9C18 22 3P 400V	1/40
380 V AC	18 A	18	3	2 NO + 2 NC	101162	Ex9C18 22 3P 380V	1/40
240 V AC	18 A	18	3	2 NO + 2 NC	101163	Ex9C18 22 3P 240V	1/40
230 V AC	18 A	18	3	2 NO + 2 NC	101164	Ex9C18 22 3P 230V	1/40
220 V AC	18 A	18	3	2 NO + 2 NC	101165	Ex9C18 22 3P 220V	1/40
127 V AC	18 A	18	3	2 NO + 2 NC	101166	Ex9C18 22 3P 127V	1/40
110 V AC	18 A	18	3	2 NO + 2 NC	101167	Ex9C18 22 3P 110V	1/40
48 V AC	18 A	18	3	2 NO + 2 NC	101168	Ex9C18 22 3P 48V	1/40
42 V AC	18 A	18	3	2 NO + 2 NC	101169	Ex9C18 22 3P 42V	1/40
36 V AC	18 A	18	3	2 NO + 2 NC	101170	Ex9C18 22 3P 36V	1/40
24 V AC	18 A	18	3	2 NO + 2 NC	101171	Ex9C18 22 3P 24V	1/40

### Wiring diagrams



# Contactors Ex9C, frame size 38

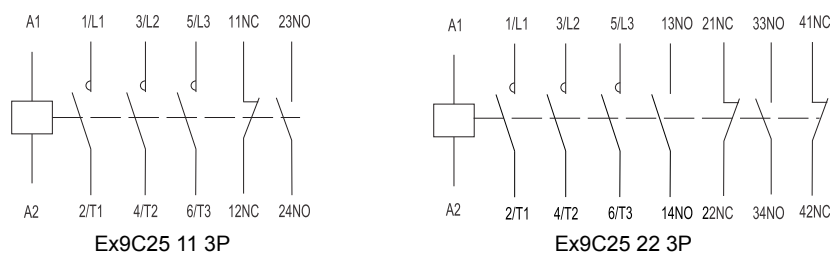
## Rated current 25 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	25 A	38	3	1 NO + 1 NC	101172	Ex9C25 11 3P 415V	1/20
400 V AC	25 A	38	3	1 NO + 1 NC	101173	Ex9C25 11 3P 400V	1/20
380 V AC	25 A	38	3	1 NO + 1 NC	101174	Ex9C25 11 3P 380V	1/20
240 V AC	25 A	38	3	1 NO + 1 NC	101175	Ex9C25 11 3P 240V	1/20
230 V AC	25 A	38	3	1 NO + 1 NC	101176	Ex9C25 11 3P 230V	1/20
220 V AC	25 A	38	3	1 NO + 1 NC	101177	Ex9C25 11 3P 220V	1/20
127 V AC	25 A	38	3	1 NO + 1 NC	101178	Ex9C25 11 3P 127V	1/20
110 V AC	25 A	38	3	1 NO + 1 NC	101179	Ex9C25 11 3P 110V	1/20
48 V AC	25 A	38	3	1 NO + 1 NC	101180	Ex9C25 11 3P 48V	1/20
42 V AC	25 A	38	3	1 NO + 1 NC	101181	Ex9C25 11 3P 42V	1/20
36 V AC	25 A	38	3	1 NO + 1 NC	101182	Ex9C25 11 3P 36V	1/20
24 V AC	25 A	38	3	1 NO + 1 NC	101183	Ex9C25 11 3P 24V	1/20
415 V AC	25 A	38	3	2 NO + 2 NC	101184	Ex9C25 22 3P 415V	1/20
400 V AC	25 A	38	3	2 NO + 2 NC	101185	Ex9C25 22 3P 400V	1/20
380 V AC	25 A	38	3	2 NO + 2 NC	101186	Ex9C25 22 3P 380V	1/20
240 V AC	25 A	38	3	2 NO + 2 NC	101187	Ex9C25 22 3P 240V	1/20
230 V AC	25 A	38	3	2 NO + 2 NC	101188	Ex9C25 22 3P 230V	1/20
220 V AC	25 A	38	3	2 NO + 2 NC	101189	Ex9C25 22 3P 220V	1/20
127 V AC	25 A	38	3	2 NO + 2 NC	101190	Ex9C25 22 3P 127V	1/20
110 V AC	25 A	38	3	2 NO + 2 NC	101191	Ex9C25 22 3P 110V	1/20
48 V AC	25 A	38	3	2 NO + 2 NC	101192	Ex9C25 22 3P 48V	1/20
42 V AC	25 A	38	3	2 NO + 2 NC	101193	Ex9C25 22 3P 42V	1/20
36 V AC	25 A	38	3	2 NO + 2 NC	101194	Ex9C25 22 3P 36V	1/20
24 V AC	25 A	38	3	2 NO + 2 NC	101195	Ex9C25 22 3P 24V	1/20

### Wiring diagrams



# Contactors Ex9C, frame size 38

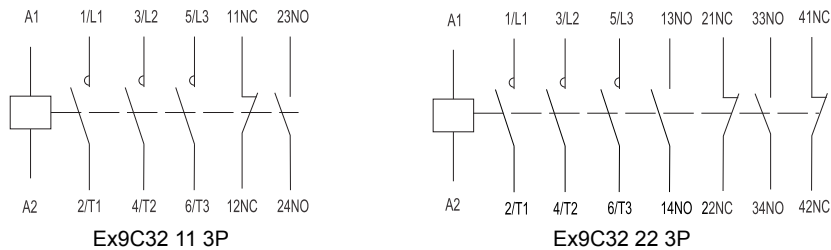
## Rated current 32 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	32 A	38	3	1 NO + 1 NC	101196	Ex9C32 11 3P 415V	1/20
400 V AC	32 A	38	3	1 NO + 1 NC	101197	Ex9C32 11 3P 400V	1/20
380 V AC	32 A	38	3	1 NO + 1 NC	101198	Ex9C32 11 3P 380V	1/20
240 V AC	32 A	38	3	1 NO + 1 NC	101199	Ex9C32 11 3P 240V	1/20
230 V AC	32 A	38	3	1 NO + 1 NC	101200	Ex9C32 11 3P 230V	1/20
220 V AC	32 A	38	3	1 NO + 1 NC	101201	Ex9C32 11 3P 220V	1/20
127 V AC	32 A	38	3	1 NO + 1 NC	101202	Ex9C32 11 3P 127V	1/20
110 V AC	32 A	38	3	1 NO + 1 NC	101203	Ex9C32 11 3P 110V	1/20
48 V AC	32 A	38	3	1 NO + 1 NC	101204	Ex9C32 11 3P 48V	1/20
42 V AC	32 A	38	3	1 NO + 1 NC	101205	Ex9C32 11 3P 42V	1/20
36 V AC	32 A	38	3	1 NO + 1 NC	101206	Ex9C32 11 3P 36V	1/20
24 V AC	32 A	38	3	1 NO + 1 NC	101207	Ex9C32 11 3P 24V	1/20
415 V AC	32 A	38	3	2 NO + 2 NC	101208	Ex9C32 22 3P 415V	1/20
400 V AC	32 A	38	3	2 NO + 2 NC	101209	Ex9C32 22 3P 400V	1/20
380 V AC	32 A	38	3	2 NO + 2 NC	101210	Ex9C32 22 3P 380V	1/20
240 V AC	32 A	38	3	2 NO + 2 NC	101211	Ex9C32 22 3P 240V	1/20
230 V AC	32 A	38	3	2 NO + 2 NC	101212	Ex9C32 22 3P 230V	1/20
220 V AC	32 A	38	3	2 NO + 2 NC	101213	Ex9C32 22 3P 220V	1/20
127 V AC	32 A	38	3	2 NO + 2 NC	101214	Ex9C32 22 3P 127V	1/20
110 V AC	32 A	38	3	2 NO + 2 NC	101215	Ex9C32 22 3P 110V	1/20
48 V AC	32 A	38	3	2 NO + 2 NC	101216	Ex9C32 22 3P 48V	1/20
42 V AC	32 A	38	3	2 NO + 2 NC	101217	Ex9C32 22 3P 42V	1/20
36 V AC	32 A	38	3	2 NO + 2 NC	101218	Ex9C32 22 3P 36V	1/20
24 V AC	32 A	38	3	2 NO + 2 NC	101219	Ex9C32 22 3P 24V	1/20

### Wiring diagrams





# Contactors Ex9C, frame size 38

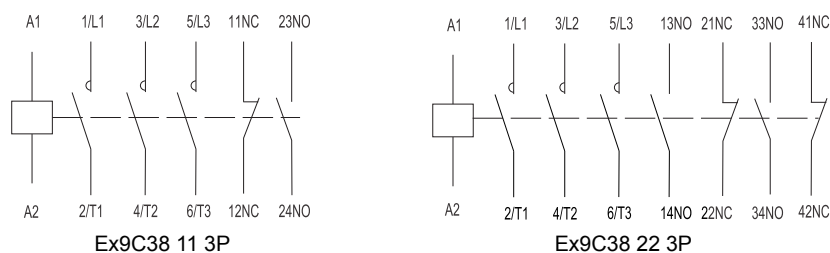
## Rated current 38 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	38 A	38	3	1 NO + 1 NC	101220	Ex9C38 11 3P 415V	1/20
400 V AC	38 A	38	3	1 NO + 1 NC	101221	Ex9C38 11 3P 400V	1/20
380 V AC	38 A	38	3	1 NO + 1 NC	101222	Ex9C38 11 3P 380V	1/20
240 V AC	38 A	38	3	1 NO + 1 NC	101223	Ex9C38 11 3P 240V	1/20
230 V AC	38 A	38	3	1 NO + 1 NC	101224	Ex9C38 11 3P 230V	1/20
220 V AC	38 A	38	3	1 NO + 1 NC	101225	Ex9C38 11 3P 220V	1/20
127 V AC	38 A	38	3	1 NO + 1 NC	101226	Ex9C38 11 3P 127V	1/20
110 V AC	38 A	38	3	1 NO + 1 NC	101227	Ex9C38 11 3P 110V	1/20
48 V AC	38 A	38	3	1 NO + 1 NC	101228	Ex9C38 11 3P 48V	1/20
42 V AC	38 A	38	3	1 NO + 1 NC	101229	Ex9C38 11 3P 42V	1/20
36 V AC	38 A	38	3	1 NO + 1 NC	101230	Ex9C38 11 3P 36V	1/20
24 V AC	38 A	38	3	1 NO + 1 NC	101231	Ex9C38 11 3P 24V	1/20
415 V AC	38 A	38	3	2 NO + 2 NC	101232	Ex9C38 22 3P 415V	1/20
400 V AC	38 A	38	3	2 NO + 2 NC	101233	Ex9C38 22 3P 400V	1/20
380 V AC	38 A	38	3	2 NO + 2 NC	101234	Ex9C38 22 3P 380V	1/20
240 V AC	38 A	38	3	2 NO + 2 NC	101235	Ex9C38 22 3P 240V	1/20
230 V AC	38 A	38	3	2 NO + 2 NC	101236	Ex9C38 22 3P 230V	1/20
220 V AC	38 A	38	3	2 NO + 2 NC	101237	Ex9C38 22 3P 220V	1/20
127 V AC	38 A	38	3	2 NO + 2 NC	101238	Ex9C38 22 3P 127V	1/20
110 V AC	38 A	38	3	2 NO + 2 NC	101239	Ex9C38 22 3P 110V	1/20
48 V AC	38 A	38	3	2 NO + 2 NC	101240	Ex9C38 22 3P 48V	1/20
42 V AC	38 A	38	3	2 NO + 2 NC	101241	Ex9C38 22 3P 42V	1/20
36 V AC	38 A	38	3	2 NO + 2 NC	101242	Ex9C38 22 3P 36V	1/20
24 V AC	38 A	38	3	2 NO + 2 NC	101243	Ex9C38 22 3P 24V	1/20

### Wiring diagrams



# Contactors Ex9C, frame size 65

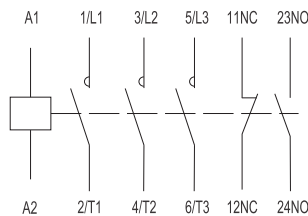
## Rated current 40 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	40 A	65	3	1 NO + 1 NC	101244	Ex9C40 11 3P 415V	1/12
400 V AC	40 A	65	3	1 NO + 1 NC	101245	Ex9C40 11 3P 400V	1/12
380 V AC	40 A	65	3	1 NO + 1 NC	101246	Ex9C40 11 3P 380V	1/12
240 V AC	40 A	65	3	1 NO + 1 NC	101247	Ex9C40 11 3P 240V	1/12
230 V AC	40 A	65	3	1 NO + 1 NC	101248	Ex9C40 11 3P 230V	1/12
220 V AC	40 A	65	3	1 NO + 1 NC	101249	Ex9C40 11 3P 220V	1/12
127 V AC	40 A	65	3	1 NO + 1 NC	101250	Ex9C40 11 3P 127V	1/12
110 V AC	40 A	65	3	1 NO + 1 NC	101251	Ex9C40 11 3P 110V	1/12
48 V AC	40 A	65	3	1 NO + 1 NC	101252	Ex9C40 11 3P 48V	1/12
42 V AC	40 A	65	3	1 NO + 1 NC	101253	Ex9C40 11 3P 42V	1/12
36 V AC	40 A	65	3	1 NO + 1 NC	101254	Ex9C40 11 3P 36V	1/12
24 V AC	40 A	65	3	1 NO + 1 NC	101255	Ex9C40 11 3P 24V	1/12

### Wiring diagram



Ex9C40 11 3P

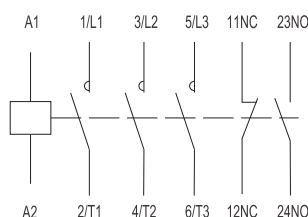
## Rated current 50 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	50 A	65	3	1 NO + 1 NC	101256	Ex9C50 11 3P 415V	1/12
400 V AC	50 A	65	3	1 NO + 1 NC	101257	Ex9C50 11 3P 400V	1/12
380 V AC	50 A	65	3	1 NO + 1 NC	101258	Ex9C50 11 3P 380V	1/12
240 V AC	50 A	65	3	1 NO + 1 NC	101259	Ex9C50 11 3P 240V	1/12
230 V AC	50 A	65	3	1 NO + 1 NC	101260	Ex9C50 11 3P 230V	1/12
220 V AC	50 A	65	3	1 NO + 1 NC	101261	Ex9C50 11 3P 220V	1/12
127 V AC	50 A	65	3	1 NO + 1 NC	101262	Ex9C50 11 3P 127V	1/12
110 V AC	50 A	65	3	1 NO + 1 NC	101263	Ex9C50 11 3P 110V	1/12
48 V AC	50 A	65	3	1 NO + 1 NC	101264	Ex9C50 11 3P 48V	1/12
42 V AC	50 A	65	3	1 NO + 1 NC	101265	Ex9C50 11 3P 42V	1/12
36 V AC	50 A	65	3	1 NO + 1 NC	101266	Ex9C50 11 3P 36V	1/12
24 V AC	50 A	65	3	1 NO + 1 NC	101267	Ex9C50 11 3P 24V	1/12

### Wiring diagram



Ex9C50 11 3P

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# Contactors Ex9C, frame size 65

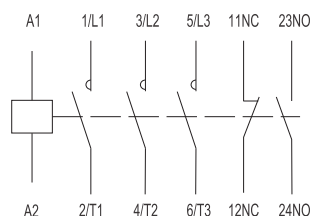
## Rated current 65 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	65 A	65	3	1 NO + 1 NC	101268	Ex9C65 11 3P 415V	1/12
400 V AC	65 A	65	3	1 NO + 1 NC	101269	Ex9C65 11 3P 400V	1/12
380 V AC	65 A	65	3	1 NO + 1 NC	101270	Ex9C65 11 3P 380V	1/12
240 V AC	65 A	65	3	1 NO + 1 NC	101271	Ex9C65 11 3P 240V	1/12
230 V AC	65 A	65	3	1 NO + 1 NC	101272	Ex9C65 11 3P 230V	1/12
220 V AC	65 A	65	3	1 NO + 1 NC	101273	Ex9C65 11 3P 220V	1/12
127 V AC	65 A	65	3	1 NO + 1 NC	101274	Ex9C65 11 3P 127V	1/12
110 V AC	65 A	65	3	1 NO + 1 NC	101275	Ex9C65 11 3P 110V	1/12
48 V AC	65 A	65	3	1 NO + 1 NC	101276	Ex9C65 11 3P 48V	1/12
42 V AC	65 A	65	3	1 NO + 1 NC	101277	Ex9C65 11 3P 42V	1/12
36 V AC	65 A	65	3	1 NO + 1 NC	101278	Ex9C65 11 3P 36V	1/12
24 V AC	65 A	65	3	1 NO + 1 NC	101279	Ex9C65 11 3P 24V	1/12

### Wiring diagram



Ex9C65 11 3P

# Contactors Ex9C, frame size 100

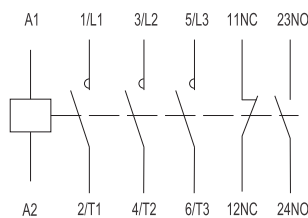
## Rated current 80 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	80 A	100	3	1 NO + 1 NC	101335	Ex9C80 11 3P 415V	1/12
400 V AC	80 A	100	3	1 NO + 1 NC	101336	Ex9C80 11 3P 400V	1/12
380 V AC	80 A	100	3	1 NO + 1 NC	101337	Ex9C80 11 3P 380V	1/12
240 V AC	80 A	100	3	1 NO + 1 NC	101338	Ex9C80 11 3P 240V	1/12
230 V AC	80 A	100	3	1 NO + 1 NC	101339	Ex9C80 11 3P 230V	1/12
220 V AC	80 A	100	3	1 NO + 1 NC	101340	Ex9C80 11 3P 220V	1/12
127 V AC	80 A	100	3	1 NO + 1 NC	101341	Ex9C80 11 3P 127V	1/12
110 V AC	80 A	100	3	1 NO + 1 NC	101342	Ex9C80 11 3P 110V	1/12
48 V AC	80 A	100	3	1 NO + 1 NC	101343	Ex9C80 11 3P 48V	1/12
42 V AC	80 A	100	3	1 NO + 1 NC	101344	Ex9C80 11 3P 42V	1/12
36 V AC	80 A	100	3	1 NO + 1 NC	101345	Ex9C80 11 3P 36V	1/12
24 V AC	80 A	100	3	1 NO + 1 NC	101346	Ex9C80 11 3P 24V	1/12

### Wiring diagram



Ex9C80 11 3P

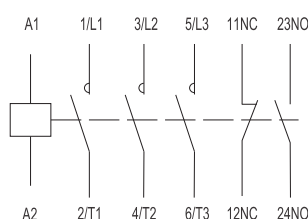
## Rated current 100 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100



Control Voltage	$I_e$	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	100 A	100	3	1 NO + 1 NC	101347	Ex9C100 11 3P 415V	1/12
400 V AC	100 A	100	3	1 NO + 1 NC	101348	Ex9C100 11 3P 400V	1/12
380 V AC	100 A	100	3	1 NO + 1 NC	101349	Ex9C100 11 3P 380V	1/12
240 V AC	100 A	100	3	1 NO + 1 NC	101350	Ex9C100 11 3P 240V	1/12
230 V AC	100 A	100	3	1 NO + 1 NC	101351	Ex9C100 11 3P 230V	1/12
220 V AC	100 A	100	3	1 NO + 1 NC	101352	Ex9C100 11 3P 220V	1/12
127 V AC	100 A	100	3	1 NO + 1 NC	101353	Ex9C100 11 3P 127V	1/12
110 V AC	100 A	100	3	1 NO + 1 NC	101354	Ex9C100 11 3P 110V	1/12
48 V AC	100 A	100	3	1 NO + 1 NC	101355	Ex9C100 11 3P 48V	1/12
42 V AC	100 A	100	3	1 NO + 1 NC	101356	Ex9C100 11 3P 42V	1/12
36 V AC	100 A	100	3	1 NO + 1 NC	101357	Ex9C100 11 3P 36V	1/12
24 V AC	100 A	100	3	1 NO + 1 NC	101358	Ex9C100 11 3P 24V	1/12

### Wiring diagram



Ex9C100 11 3P

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# Technical Data Ex9C, frame size 18

## Contactors Ex9C09, Ex9C12, Ex9C18

### General parameters

Standard contactors		
Contactors rated at AC-3		
Suitable mainly for industrial applications		
3-pole versions		
Mounting onto device rail (DIN) 35 mm or onto panel		
With built-in auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX4311	101292
Surge suppressor block	CCU42	104498, 104499, 104500

### Electrical parameters - main contacts and general

	Ex9C09	Ex9C12	Ex9C18
Tested according to	IEC/EN 60947-4-1		
Rated op. voltage $U_e$	690 V AC		
Rated insulating voltage $U_i$	690 V AC		
Rated impulse withstand voltage $U_{imp}$	6 kV	6 kV	6 kV
Rated frequency	50/60 Hz		
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes	yes
Conventional free air thermal current $I_{th}$	25 A	25 A	32 A
Rated operational current $I_e$			
AC-1	25 A	25 A	32 A
AC-2/AC-3/AC-4, 380/400 V	9 A	12 A	18 A
AC-3, 660/690 V	6.7 A	9 A	10.6 A
AC-2/AC-4, 660/690 V	4.9 A	4.9 A	6.7 A
Rated power of 3-phase motor			
AC-3/AC-4, 380/400 V	4 kW	5.5 kW	7.5 kW
AC-3, 660/690 V	5.5 kW	7.5 kW	9 kW
AC-4, 660/690 V	4 kW	4 kW	5.5 kW
Maximum short circuit protection fuse			
Coordination type 1 at 500 V AC	25 A gG/gL	40 A gG/gL	50 A gG/gL
Coordination type 2 at 500 V AC	20 A gG/gL	25 A gG/gL	36 A gG/gL
Safe isolation (EN 61140)			
Main contact — main contact	400 V AC	400 V AC	400 V AC
Main contact — coil	400 V AC	400 V AC	400 V AC
3-phase power AC-1			
Maximum back-up fuse gG/gL	50 A	50 A	63 A
Power at 230/240 V	10 kW	10 kW	13 kW
Power at 380/400 V	17 kW	17 kW	21 kW
Power at 660/690 V	29 kW	29 kW	37 kW
Rated current $I_e = I_{th}$	25 A	25 A	32 A
1-phase power AC-1, 3 contacts in parallel			
Maximum back-up fuse gG/gL	80 A	80 A	100 A
Power at 230/240 V	23 kW	23 kW	29 kW
Power at 380/400 V	37 kW	37 kW	48 kW
Power at 660/690 V	64 kW	64 kW	82 kW
Rated current $I_e = I_{th}$	56 A	56 A	72 A

# Technical Data Ex9C, frame size 18

## Contactors Ex9C09, Ex9C12, Ex9C18

### Electrical parameters - main contacts and general

	Ex9C09	Ex9C12	Ex9C18
Making capacity			
230/240 V	144 A	144 A	216 A
380/400 V	144 A	144 A	216 A
660/690 V	144 A	144 A	216 A
Breaking capacity			
230/240 V	90 A	120 A	180 A
380/400 V	90 A	120 A	180 A
660/690 V	67 A	90 A	106 A
Mechanical service life	10 000 000 operation cycles		
Electrical service life 380/400 V			
AC-3	1 200 000 operation cycles		
AC-4	50 000 operation cycles	40 000 operation cycles	40 000 operation cycles
Overvoltage category	III		
EMC environment	A		
Comparative Tracking Index	400 V		
Prospective short circuit current $I_q$	50 kA		

### Electrical parameters - coil

	Ex9C09	Ex9C12	Ex9C18
Control Voltage $U_c$	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC		
Tolerance of Control Voltage $U_c$	0.8 — 1.1 $U_c$	0.8 — 1.1 $U_c$	0.8 — 1.1 $U_c$
Frequency	50 Hz	50 Hz	50 Hz
Power consumption			
Pick-up	90 VA / 40 W	90 VA / 40 W	90 VA / 40 W
Hold	9.5 VA / 4 W	9.5 VA / 4 W	9.5 VA / 4 W
Duty	100 %	100 %	100 %
Closing delay	12 — 24 ms	12 — 24 ms	12 — 24 ms
Opening delay	6 — 20 ms	6 — 20 ms	6 — 20 ms
Closing delay with front-mounted AX	8 — 18 ms	8 — 18 ms	8 — 18 ms

### Electrical parameters - built-in auxiliary contacts

Rated op. 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 / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
DC-13	0.55 A / 125 V, 0.27 A / 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current $I_k$ with max. back-up fuse	1 kA

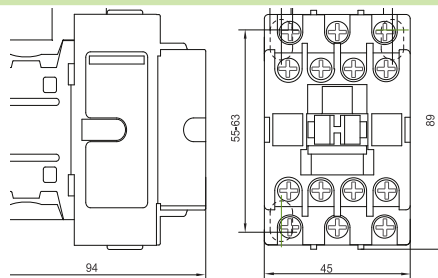
# Technical Data Ex9C, frame size 18

## Contactors Ex9C09, Ex9C12, Ex9C18

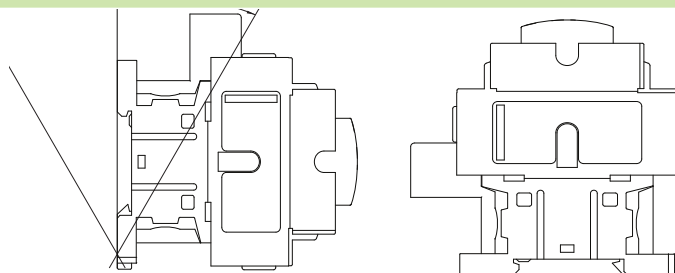
### Mechanical parameters

	Ex9C09	Ex9C12	Ex9C18
Device width	45 mm (without side-mounted auxiliary contact)		
Device height	89 mm including rail clip		
Device depth	94 mm (without front-mounted auxiliary contact)		
Mounting	easy fastening onto 35 mm device rail (DIN) or onto panel		
Degree of protection	IP20		
Terminals	lift		
Terminal capacity	(1 — 2) x (1.5 — 6 mm <sup>2</sup> ) wired; 1 x (1 — 6 mm <sup>2</sup> ), 2 x (1 — 4 mm <sup>2</sup> ) solid		
Fastening torque of terminals	1.5 — 1.7 Nm		
Ambient temperature	-20 — +60 °C		
Altitude	≤ 2000 m		
Relative humidity	≤ 95 %		
Resistance to humidity and heat	class 2		
Pollution degree	3		
Installation class	III		
Weight	0.35 kg	0.35 kg	0.35 kg
Power loss at $I_e$	0.2 W	0.36 W	0.8 W

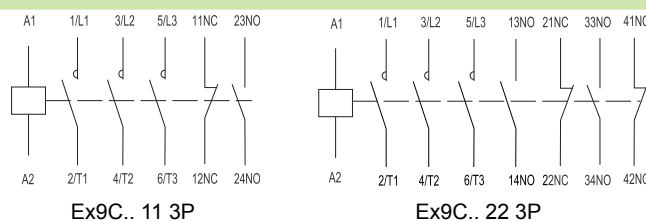
### Dimensions



### Mounting positions



### Wiring diagrams



Ordering data p. 4

# Technical Data Ex9C, frame size 38

## Contactors Ex9C25, Ex9C32, Ex9C38

### General parameters

Standard contactors		
Contactors rated at AC-3		
Suitable mainly for industrial applications		
3-pole versions		
Mounting onto device rail (DIN) 35 mm and 75 mm or onto panel		
With built-in auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX4311	101292
Surge suppressor block	CCU42	104498, 104499, 104500

### Electrical parameters - main contacts and general

	Ex9C25	Ex9C32	Ex9C38
Tested according to	IEC/EN 60947-4-1		
Rated op. voltage $U_e$	690 V AC		
Rated insulating voltage $U_i$	690 V AC		
Rated impulse withstand voltage $U_{imp}$	6 kV	6 kV	6 kV
Rated frequency	50/60 Hz		
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes	yes
Conventional free air thermal current $I_{th}$	40 A	50 A	50 A
Rated operational current $I_e$			
AC-1	40 A	50 A	50 A
AC-2/AC-3/AC-4, 380/400 V	25 A	32 A	38 A
AC-3, 660/690 V	17.3 A	21.9 A	21.9 A
AC-2/AC-4, 660/690 V	14 A	17.3 A	17.3 A
Rated power of 3-phase motor			
AC-3/AC-4, 380/400 V	11 kW	15 kW	18.5 kW
AC-3, 660/690 V	15 kW	18.5 kW	18.5 kW
AC-4, 660/690 V	11 kW	15 kW	15 kW
Maximum short circuit protection fuse			
Coordination type 1 at 500 V AC	63 A gG/gL	63 A gG/gL	63 A gG/gL
Coordination type 2 at 500 V AC	40 A gG/gL	63 A gG/gL	63 A gG/gL
Safe isolation (EN 61140)			
Main contact — main contact	400 V AC	400 V AC	400 V AC
Main contact — coil	400 V AC	400 V AC	400 V AC
3-phase power AC-1			
Maximum back-up fuse gG/gL	80 A	100 A	100 A
Power at 230/240 V	16 kW	20 kW	20 kW
Power at 380/400 V	26 kW	33 kW	33 kW
Power at 660/690 V	46 kW	57 kW	57 kW
Rated current $I_e = I_{th}$	40 A	50 A	50 A
1-phase power AC-1, 3 contacts in parallel			
Maximum back-up fuse gG/gL	160 A	160 A	160 A
Power at 230/240 V	34 kW	42 kW	42 kW
Power at 380/400 V	55 kW	69 kW	69 kW
Power at 660/690 V	96 kW	120 kW	120 kW
Rated current $I_e = I_{th}$	84 A	105 A	105 A



# Technical Data Ex9C, frame size 38

## Contactors Ex9C25, Ex9C32, Ex9C38

### Electrical parameters - main contacts and general

	Ex9C25	Ex9C32	Ex9C38
Making capacity			
230/240 V	300 A	384 A	456 A
380/400 V	300 A	384 A	456 A
660/690 V	300 A	384 A	456 A
Breaking capacity			
230/240 V	250 A	320 A	320 A
380/400 V	250 A	320 A	320 A
660/690 V	173 A	219 A	219 A
Mechanical service life	10 000 000 operation cycles		
Electrical service life 380/400 V			
AC-3	1 200 000 operation cycles		
AC-4	50 000 operation cycles	40 000 operation cycles	40 000 operation cycles
Overvoltage category	III		
EMC environment	A		
Comparative Tracking Index	400 V		
Prospective short circuit current $I_q$	50 kA		

### Electrical parameters - coil

	Ex9C25	Ex9C32	Ex9C38
Control Voltage $U_c$	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC		
Tolerance of Control Voltage $U_c$	0.8 — 1.1 $U_c$	0.8 — 1.1 $U_c$	0.8 — 1.1 $U_c$
Frequency	50 Hz	50 Hz	50 Hz
Power consumption			
Pick-up	100 VA / 50 W	100 VA / 50 W	100 VA / 50 W
Hold	10.5 VA / 5 W	10.5 VA / 5 W	10.5 VA / 5 W
Duty	100 %	100 %	100 %
Closing delay	14 — 27 ms	14 — 27 ms	14 — 27 ms
Opening delay	7 — 22 ms	7 — 22 ms	7 — 22 ms
Closing delay with front-mounted AX	9 — 20 ms	9 — 20 ms	9 — 20 ms

### Electrical parameters - built-in auxiliary contacts

Rated op. 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 / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
DC-13	0.55 A / 125 V, 0.27 A / 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current $I_k$ with max. back-up fuse	1 kA

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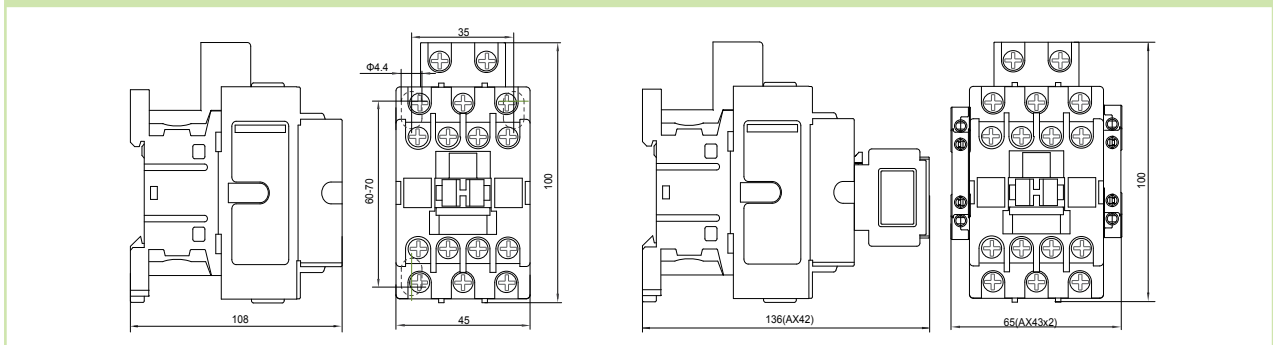
# Technical Data Ex9C, frame size 38

## Contactors Ex9C25, Ex9C32, Ex9C38

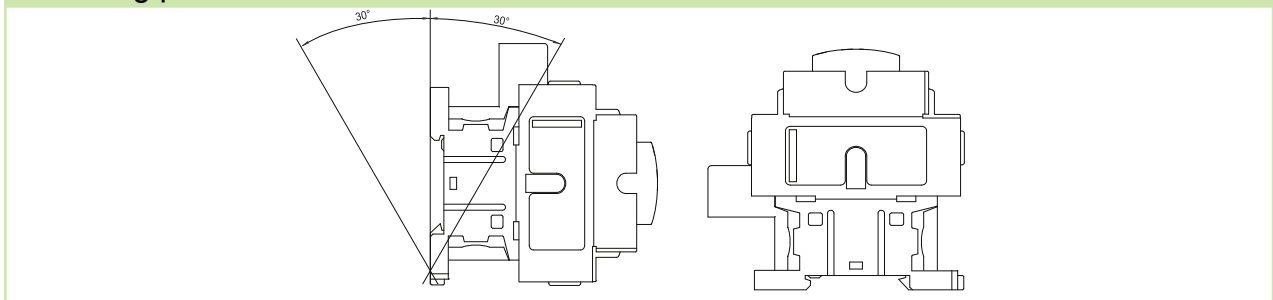
### Mechanical parameters

	Ex9C25	Ex9C32	Ex9C38
Device width	45 mm (without side-mounted auxiliary contact)		
Device height	100 mm including rail clip		
Device depth	108 mm (without front-mounted auxiliary contact)		
Mounting	easy fastening onto 35 or 75 mm device rail (DIN) or onto panel		
Degree of protection	IP20		
Terminals	lift		
Terminal capacity	(1 — 2) x (2.5 — 10 mm <sup>2</sup> ) wired; 1 x (1 — 10 mm <sup>2</sup> ), 2 x (1.5 — 6 mm <sup>2</sup> ) solid		
Fastening torque of terminals	2 — 2.5 Nm		
Ambient temperature	-20 — +60 °C		
Altitude	≤ 2000 m		
Relative humidity	≤ 95 %		
Resistance to humidity and heat	class 2		
Pollution degree	3		
Installation class	III		
Weight	0.4 kg	0.4 kg	0.4 kg
Power loss at $I_e$	1.25 W	2 W	3 W

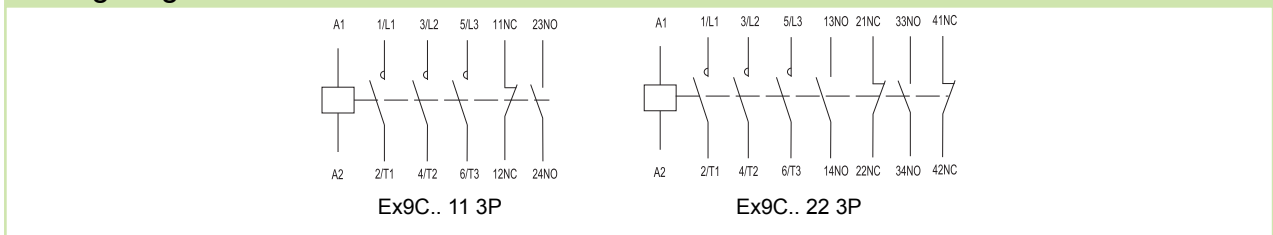
### Dimensions



### Mounting positions



### Wiring diagrams



Ordering data p. 7

# Technical Data Ex9C, frame size 65

## Contactors Ex9C40, Ex9C50, Ex9C65

### General parameters

Standard contactors		
Contactors rated at AC-3		
Suitable mainly for industrial applications		
3-pole versions		
Mounting onto device rail (DIN) 35 mm and 75 mm or onto panel		
With built-in auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX4311	101292
Surge suppressor block	CCU43	104495, 104496, 104497

### Electrical parameters - main contacts and general

	Ex9C40	Ex9C50	Ex9C65
Tested according to	IEC/EN 60947-4-1		
Rated op. voltage $U_e$	690 V AC		
Rated insulating voltage $U_i$	1000 V AC		
Rated impulse withstand voltage $U_{imp}$	6 kV	6 kV	6 kV
Rated frequency	50/60 Hz		
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes	yes
Conventional free air thermal current $I_{th}$	60 A	80 A	80 A
Rated operational current $I_e$			
AC-1	60 A	80 A	80 A
AC-2/AC-3/AC-4, 380/400 V	40 A	50 A	65 A
AC-2/AC-3/AC-4, 660/690 V	34 A	39 A	42 A
Rated power of 3-phase motor			
AC-3/AC-4, 380/400 V	18.5 kW	22 kW	30 kW
AC-3/AC-4, 660/690 V	30 kW	33 kW	37 kW
Maximum short circuit protection fuse			
Coordination type 1 at 500 V AC	80 A gG/gL	100 A gG/gL	160 A gG/gL
Coordination type 2 at 500 V AC	80 A gG/gL	100 A gG/gL	125 A gG/gL
Safe isolation (EN 61140)			
Main contact — main contact	690 V AC	690 V AC	690 V AC
Main contact — coil	690 V AC	690 V AC	690 V AC
3-phase power AC-1			
Maximum back-up fuse gG/gL	125 A	160 A	160 A
Power at 230/240 V	24 kW	32 kW	32 kW
Power at 380/400 V	40 kW	53 kW	53 kW
Power at 660/690 V	69 kW	92 kW	92 kW
Rated current $I_e = I_{th}$	60 A	80 A	80 A
1-phase power AC-1, 3 contacts in parallel			
Maximum back-up fuse gG/gL	200 A	250 A	250 A
Power at 230/240 V	50 kW	67 kW	67 kW
Power at 380/400 V	83 kW	110 kW	110 kW
Power at 660/690 V	144 kW	192 kW	192 kW
Rated current $I_e = I_{th}$	126 A	168 A	168 A

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# Technical Data Ex9C, frame size 65

## Contactors Ex9C40, Ex9C50, Ex9C65

### Electrical parameters - main contacts and general

	Ex9C40	Ex9C50	Ex9C65
Making capacity			
230/240 V	480 A	600 A	780 A
380/400 V	480 A	600 A	780 A
660/690 V	480 A	600 A	780 A
Breaking capacity			
230/240 V	400 A	500 A	650 A
380/400 V	400 A	500 A	650 A
660/690 V	340 A	390 A	420 A
Mechanical service life	10 000 000 operation cycles		
Electrical service life 380/400 V			
AC-3	1 200 000 operation cycles		
AC-4	35 000 operation cycles	30 000 operation cycles	30 000 operation cycles
Overvoltage category	III		
EMC environment	A		
Comparative Tracking Index	400 V		
Prospective short circuit current $I_q$	50 kA		

### Electrical parameters - coil

	Ex9C40	Ex9C50	Ex9C65
Control Voltage $U_c$	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC		
Tolerance of Control Voltage $U_c$	0.8 — 1.1 $U_c$	0.8 — 1.1 $U_c$	0.8 — 1.1 $U_c$
Frequency	50 Hz	50 Hz	50 Hz
Power consumption			
Pick-up	240 VA / 100 W	240 VA / 100 W	240 VA / 100 W
Hold	25 VA / 10 W	25 VA / 10 W	25 VA / 10 W
Duty	100 %	100 %	100 %
Closing delay	20 — 30 ms	20 — 30 ms	20 — 30 ms
Opening delay	8 — 20 ms	8 — 20 ms	8 — 20 ms
Closing delay with front-mounted AX	12 — 25 ms	12 — 25 ms	12 — 25 ms

### Electrical parameters - built-in auxiliary contacts

Rated op. 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 / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
DC-13	0.55 A / 125 V, 0.27 A / 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current $I_k$ with max. back-up fuse	1 kA

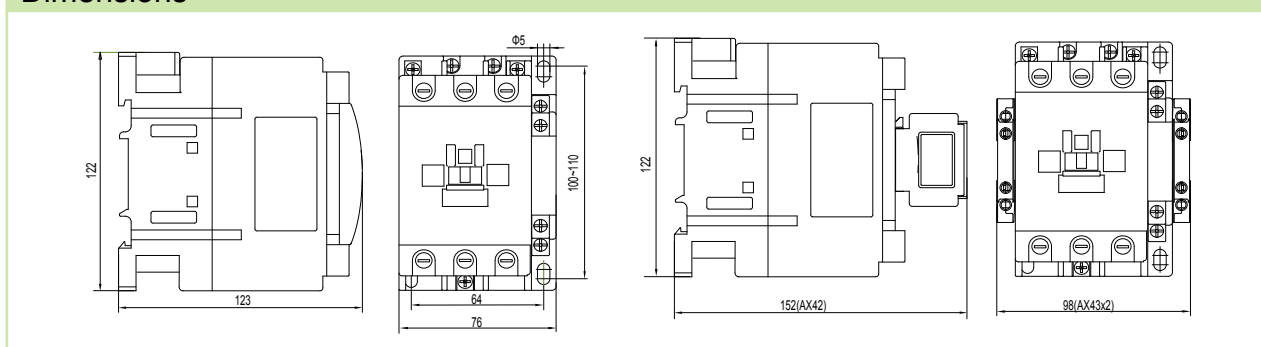
# Technical Data Ex9C, frame size 65

## Contactors Ex9C40, Ex9C50, Ex9C65

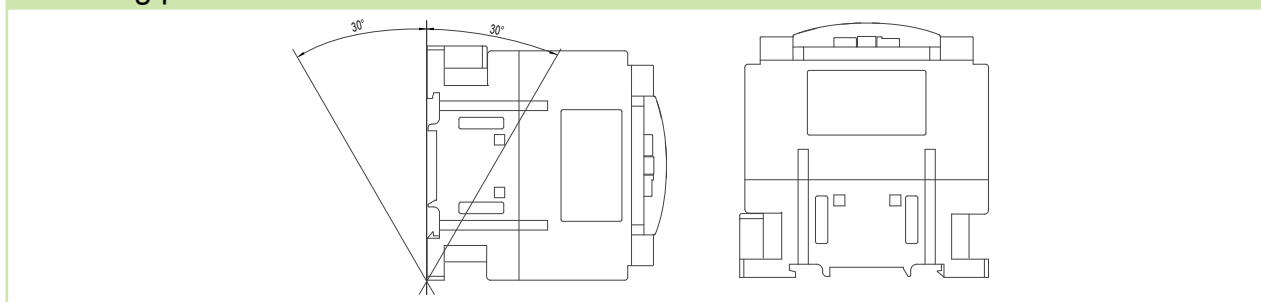
### Mechanical parameters

	Ex9C40	Ex9C50	Ex9C65
Device width	76 mm (without side-mounted auxiliary contact)		
Device height	122 mm including rail clip		
Device depth	123 mm (without front-mounted auxiliary contact)		
Mounting	easy fastening onto 35 or 75 mm device rail (DIN) or onto panel		
Degree of protection	IP20		
Terminals	lift		
Terminal capacity	(1 — 2) x (2.5 — 25 mm <sup>2</sup> )		
Fastening torque of terminals	5.5 — 6 Nm		
Ambient temperature	-20 — +60 °C		
Altitude	≤ 2000 m		
Relative humidity	≤ 95 %		
Resistance to humidity and heat	class 2		
Pollution degree	3		
Installation class	III		
Weight	1.23 kg	1.23 kg	1.23 kg
Power loss at $I_e$	2.4 W	3.7 W	4.2 W

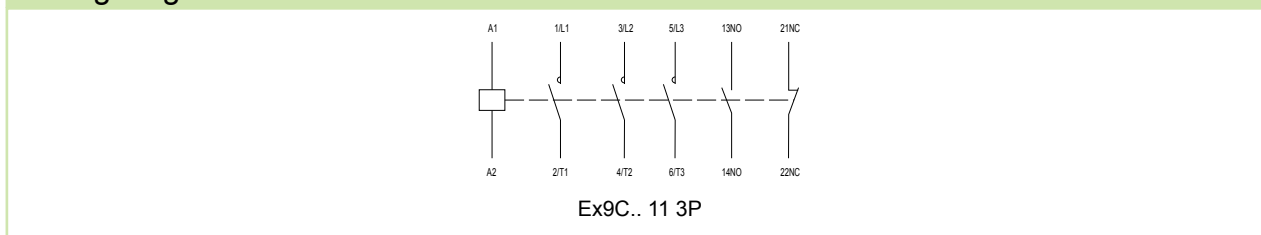
### Dimensions



### Mounting positions



### Wiring diagram



Ordering data p. 10

# Technical Data Ex9C, frame size 100

## Contactors Ex9C80, Ex9C100

### General parameters

Standard contactors		
Contactors rated at AC-3		
Suitable mainly for industrial applications		
3-pole versions		
Mounting onto device rail (DIN) 35 mm and 75 mm or onto panel		
With built-in auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX4311	101292
Surge suppressor block	CCU43	104495, 104496, 104497

### Electrical parameters - main contacts and general

	Ex9C80	Ex9C100
Tested according to	IEC/EN 60947-4-1	
Rated op. voltage $U_e$	690 V AC	
Rated insulating voltage $U_i$	1000 V AC	
Rated impulse withstand voltage $U_{imp}$	6 kV	6 kV
Rated frequency	50/60 Hz	
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes
Conventional free air thermal current $I_{th}$	125 A	125 A
Rated operational current $I_e$		
AC-1	125 A	125 A
AC-2/AC-3/AC-4, 380/400 V	80 A	100 A
AC-2/AC-3/AC-4, 660/690 V	49 A	49 A
Rated power of 3-phase motor		
AC-3/AC-4, 380/400 V	37 kW	45 kW
AC-3/AC-4, 660/690 V	45 kW	45 kW
Maximum short circuit protection fuse		
Coordination type 1 at 500 V AC	200 A gG/gL	200 A gG/gL
Coordination type 2 at 500 V AC	160 A gG/gL	160 A gG/gL
Safe isolation (EN 61140)		
Main contact — main contact	690 V AC	690 V AC
Main contact — coil	690 V AC	690 V AC
3-phase power AC-1		
Maximum back-up fuse gG/gL	250 A	250 A
Power at 230/240 V	50 kW	50 kW
Power at 380/400 V	82 kW	82 kW
Power at 660/690 V	143 kW	143 kW
Rated current $I_e = I_{th}$	125 A	125 A
1-phase power AC-1, 3 contacts in parallel		
Maximum back-up fuse gG/gL	400 A	400 A
Power at 230/240 V	105 kW	105 kW
Power at 380/400 V	172 kW	172 kW
Power at 660/690 V	300 kW	300 kW
Rated current $I_e = I_{th}$	262 A	262 A

Ordering data p. 12

# Technical Data Ex9C, frame size 100

## Contactors Ex9C80, Ex9C100

### Electrical parameters - main contacts and general

	Ex9C80	Ex9C100
Making capacity		
230/240 V	960 A	1200 A
380/400 V	960 A	1200 A
660/690 V	960 A	1200 A
Breaking capacity		
230/240 V	800 A	1000 A
380/400 V	800 A	1000 A
660/690 V	490 A	490 A
Mechanical service life	10 000 000 operation cycles	
Electrical service life 380/400 V		
AC-3	1 200 000 operation cycles	
AC-4	25 000 operation cycles	25 000 operation cycles
Overvoltage category	III	
EMC environment	A	
Comparative Tracking Index	400 V	
Prospective short circuit current $I_q$	50 kA	

### Electrical parameters - coil

	Ex9C80	Ex9C100
Control Voltage $U_c$	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC	
Tolerance of Control Voltage $U_c$	0.8 — 1.1 $U_c$	
Frequency	50 Hz	
Power consumption		
Pick-up	280 VA / 120 W	280 VA / 120 W
Hold	30 VA / 12 W	30 VA / 12 W
Duty	100 %	
Closing delay	20 — 35 ms	
Opening delay	6 — 20 ms	
Closing delay with front-mounted AX	12 — 30 ms	

### Electrical parameters - built-in auxiliary contacts

Rated op. 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 / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
DC-13	0.55 A / 125 V, 0.27 A / 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current $I_k$ with max. back-up fuse	1 kA

Ordering data p. 12

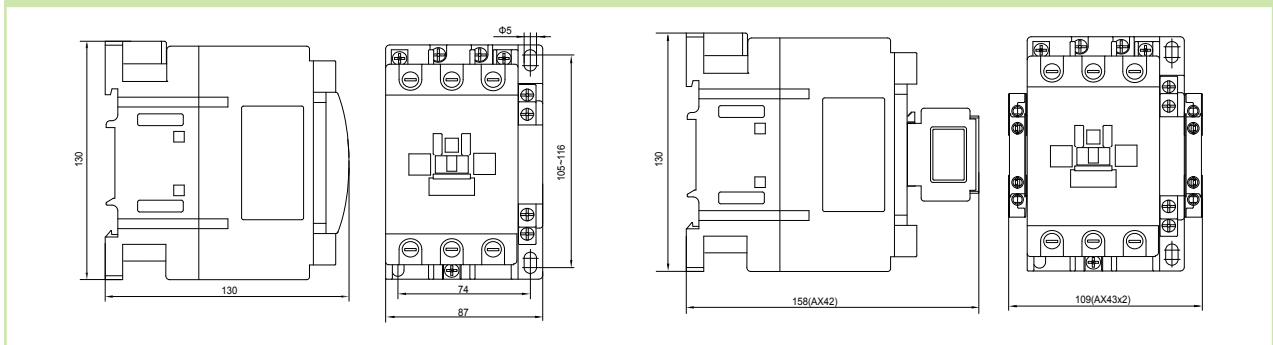
# Technical Data Ex9C, frame size 100

## Contactors Ex9C80, Ex9C100

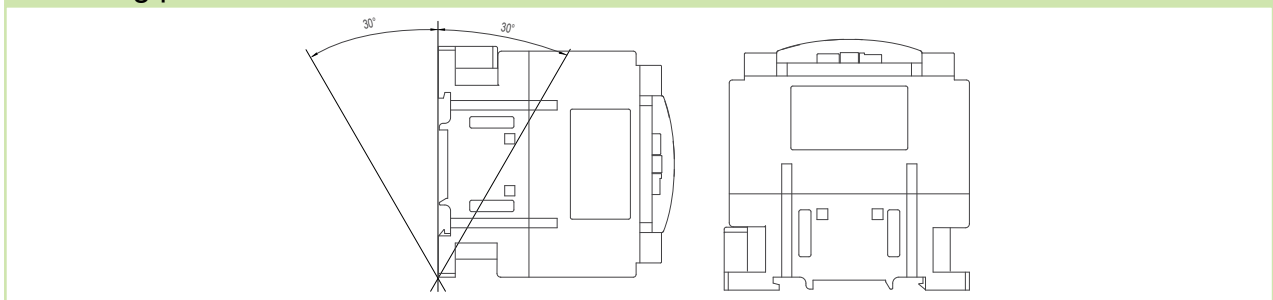
### Mechanical parameters

	Ex9C80	Ex9C100
Device width	87 mm (without side-mounted auxiliary contact)	
Device height	130 mm including rail clip	
Device depth	130 mm (without front-mounted auxiliary contact)	
Mounting	easy fastening onto 35 or 75 mm device rail (DIN) or onto panel	
Degree of protection	IP20	
Terminals	lift	
Terminal capacity	(1 — 2) x (4 — 50 mm <sup>2</sup> )	
Fastening torque of terminals	5.5 — 6 Nm	
Ambient temperature	-20 — +60 °C	
Altitude	≤ 2000 m	
Relative humidity	≤ 95 %	
Resistance to humidity and heat	class 2	
Pollution degree	3	
Installation class	III	
Weight	1.5 kg	1.5 kg
Power loss at $I_e$	5.1 W	7.5 W

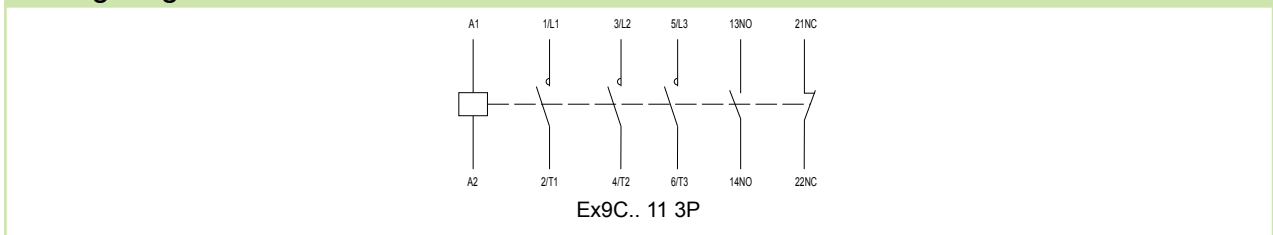
### Dimensions



### Mounting positions



### Wiring diagram



Ordering data p. 12