

Accessories for contactors



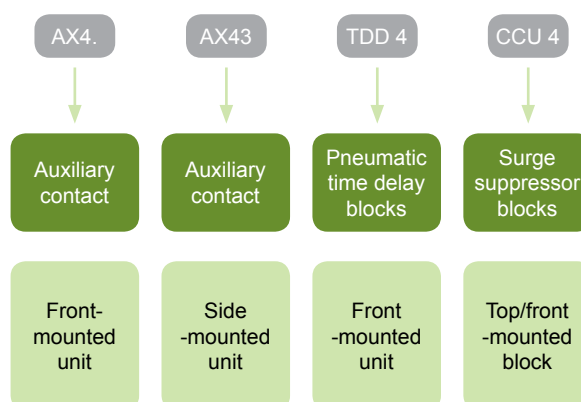
- Accessories for contactors of line Ex9CS, Ex9CSR, Ex9C, Ex9Ci, Ex9CR, Ex9CRi and Ex9CC
- Front-mounted auxiliary contacts AX4.
- Side-mounted auxiliary contacts AX43
- Pneumatic time delay blocks TDD4.
- Surge suppressor blocks CCU4.
- Installation of an front-mounted unit does not affect a possibility to install overload thermal relay Ex9R

AX41 auxiliary contact units and CCU41 surge suppressor blocks are designed in order to match miniature version of contactors Ex9CS or Ex9CSR. Auxiliary contact units are available with four contacts with all possible contact combinations.

Contactors Ex9C line (Ex9C, Ex9Ci, Ex9CR, Ex9CRi) share accessories, i.e. available portfolio can be used for all sizes of contactors (except miniature ones). Every contactor can be equipped with one front-mounted unit (AX42 or TDD4), two units of side-mounted contact AX4311 (one from the left, the other from the right) and surge suppressor block CCU42/43.

Capacity contactors Ex9CC can be equipped with two units of side-mounted contact AX4311 (one from the left, the other from the right) and surge suppressor block CCU42/43.

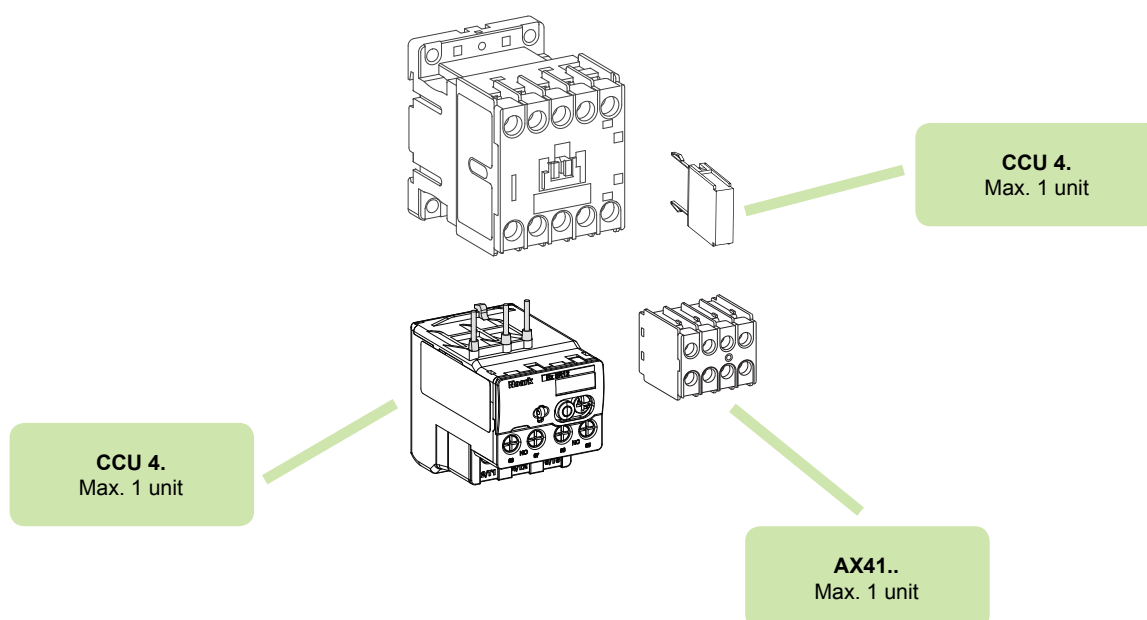
Type Key



Accessories for contactors

Miniature Contactors Ex9CS

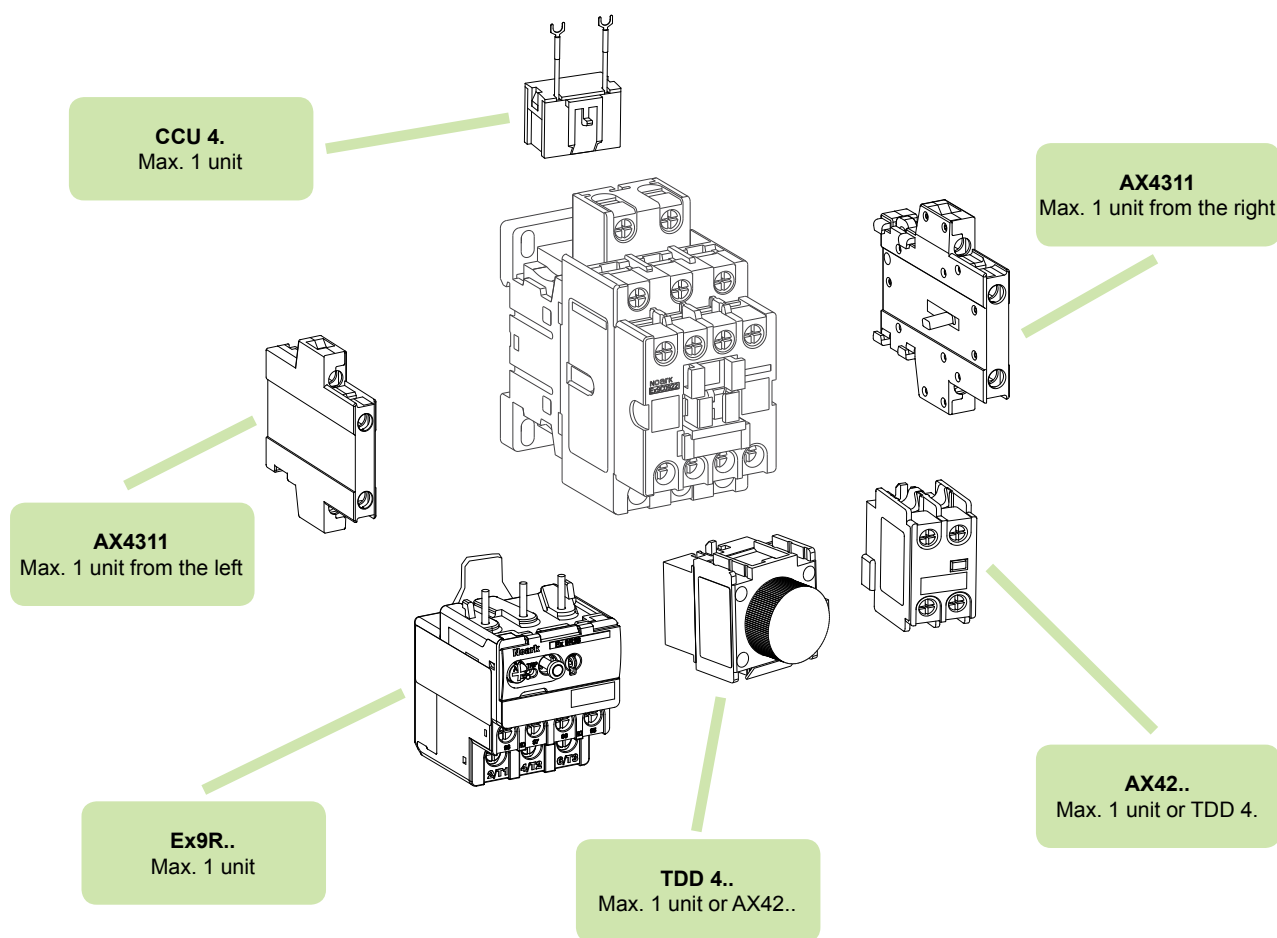
Miniature Reversible Contactors Ex9CSR



Accessories for contactors

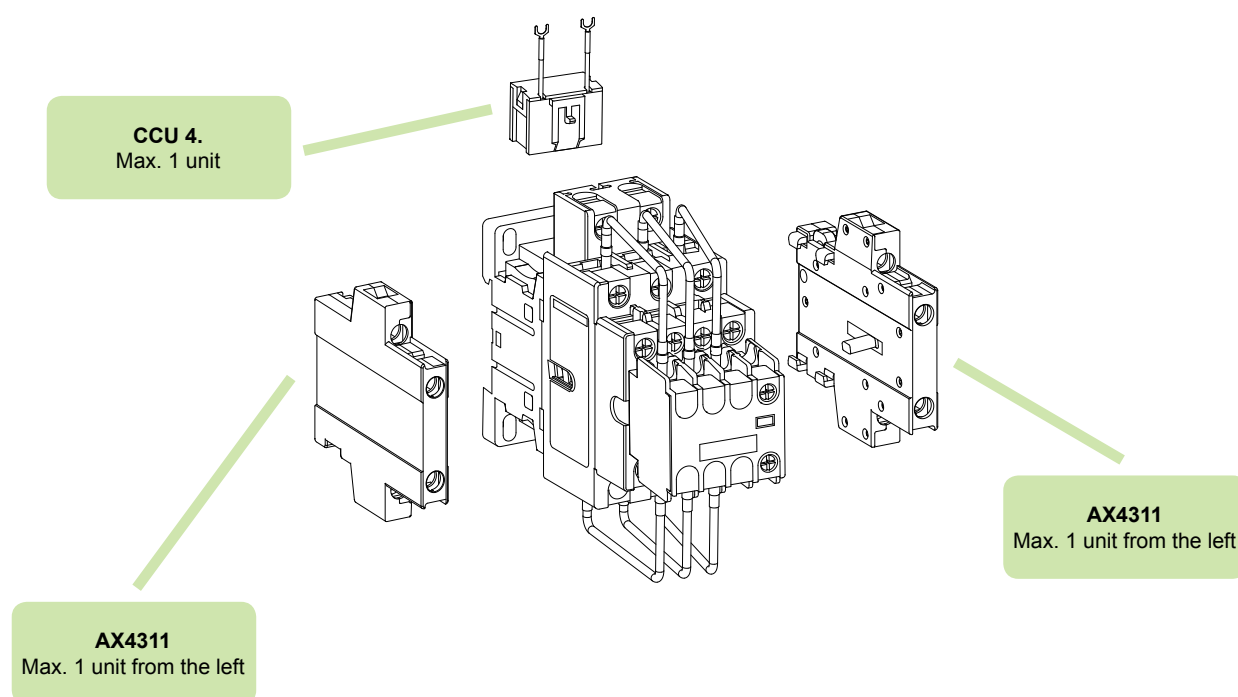
Contactors Ex9C, Ex9Ci

Reversible contactors Ex9CR, Ex9CRi



Accessories for contactors

Capacitor Contactors Ex9CC



Accessories for contactors

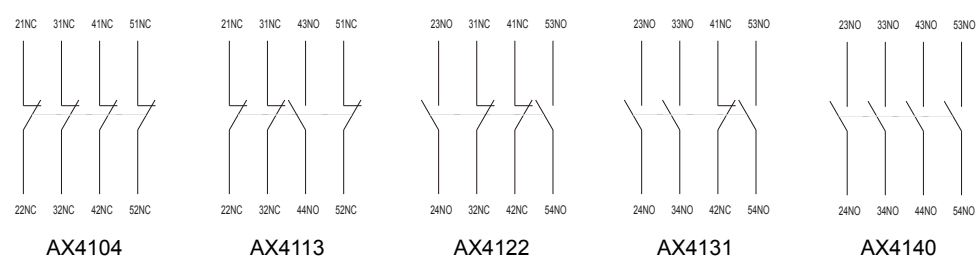
Auxiliary contacts for miniature contactors, front-mounted

- Auxiliary contacts for miniature contactors line Ex9CS and Ex9CSR, for subsequent mounting
- Front-mounted version
- 1 unit can be used with a contactor
- Do not limit a possibility to install overload relay Ex9R12



Contacts	Suitable for	Article No.	Type	Packing
4 NC	Ex9CS, Ex9CSR	101435	AX4104	6/216
1 NO + 3 NC	Ex9CS, Ex9CSR	101280	AX4113	6/216
2 NO + 2 NC	Ex9CS, Ex9CSR	101281	AX4122	6/216
3 NO + 1 NC	Ex9CS, Ex9CSR	101282	AX4131	6/216
4 NO	Ex9CS, Ex9CSR	101283	AX4140	6/216

Wiring diagrams



Accessories for contactors

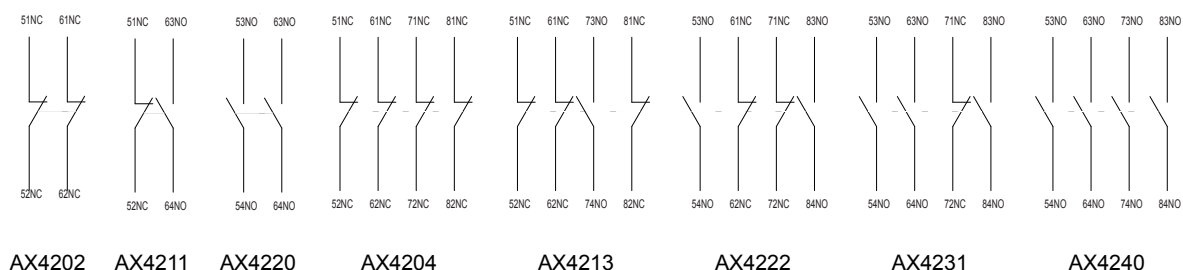
Auxiliary contacts for contactors, front-mounted

- Auxiliary contacts for contactors line Ex9C, Ex9Ci, Ex9CR and Ex9CRi
- For subsequent mounting
- Front-mounted version
- 1 unit can be used with a contactor
- Do not limit a possibility to install overload relays Ex9R38, Ex9R100



Contacts	Suitable for	Article No.	Type	Packing
2 NC	Ex9C, Ex9Ci, Ex9CR, Ex9CRi	101284	AX4202	12/624
1 NO + 1 NC	Ex9C, Ex9Ci, Ex9CR, Ex9CRi	101285	AX4211	12/624
2 NO	Ex9C, Ex9Ci, Ex9CR, Ex9CRi	101286	AX4220	12/624
4 NC	Ex9C, Ex9Ci, Ex9CR, Ex9CRi	101287	AX4204	6/312
1 NO + 3 NC	Ex9C, Ex9Ci, Ex9CR, Ex9CRi	101288	AX4213	6/312
2 NO + 2 NC	Ex9C, Ex9Ci, Ex9CR, Ex9CRi	101289	AX4222	6/312
3 NO + 1 NC	Ex9C, Ex9Ci, Ex9CR, Ex9CRi	101290	AX4231	6/312
4 NO	Ex9C, Ex9Ci, Ex9CR, Ex9CRi	101291	AX4240	6/312

Wiring diagrams



Technical data p. 10

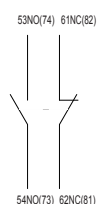
Auxiliary contacts for contactors, side-mounted

- Auxiliary contacts for contactors line Ex9C, Ex9Ci, Ex9CR and Ex9CRi
- For subsequent mounting
- Side-mounted version
- 1 unit can be used with a contactor at the left, another unit at the right
- Do not limit a possibility to install overload relays Ex9R38, Ex9R100



Contacts	Suitable for	Article No.	Type	Packing
1 NO + 1 NC	Ex9C, Ex9Ci, Ex9CR, Ex9CRi	101292	AX4311	10/120

Wiring diagram



AX4311

Technical data p. 12

Accessories for contactors

Pneumatic time delay blocks

- For delayed closing or with delayed opening of auxiliary contacts
- 1NO + 1NC internal auxiliary contact
- Suitable for contactors up to 100 A Ex9C lines (Ex9C, Ex9Ci, Ex9CR, Ex9CRi)
- Front mounted



Delay type	Delay range	Article No.	Type	Packing
ON delay	0.1 - 3 s	104494	TDD41A	
ON delay	0.1 - 30 s	104493	TDD41B	
ON delay	10 - 180 s	104492	TDD41C	
OFF delay	0.1 - 3 s	104491	TDD42A	
OFF delay	0.1 - 30 s	104490	TDD42B	
OFF delay	10 - 180 s	104489	TDD42C	

Surge suppressor blocks

- Reduces voltage peaks in control circuit
- Versions with varistor (CCU 41) and RC circuit technology (CCU 42, CCU 43)
- Includes cable lugs for connecting to contactor terminals



Protection range	Suitable for	Article No.	Type	Packing
380-415 V	Ex9CS06-12	104502	CCU41 415	
110-240 V	Ex9CS06-12	104503	CCU41 240	
24-48 V	Ex9CS06-12	104501	CCU41 48	
380-415 V	Ex9C09-38, Ex9CC09-38	104499	CCU42 415	
110-240 V	Ex9C09-38, Ex9CC09-38	104500	CCU42 240	
24-48 V	Ex9C09-38, Ex9CC09-38	104498	CCU42 48	
380-415 V	Ex9C40-100, Ex9CC50-100	104496	CCU43 415	
110-240 V	Ex9C40-100, Ex9CC50-100	104497	CCU43 240	
24-48 V	Ex9C40-100, Ex9CC50-100	104495	CCU43 48	

Technical Data accessories

Front-mounted auxiliary contact units AX41

General parameters

Auxiliary contacts for Miniature Contactors Ex9CS and Ex9CSR, for subsequent mounting

Front-mounted version

1 unit can be used with a contactor

Do not limit a possibility to install overload relay Ex9R12

Electrical parameters

	AX4104	AX4113	AX4122	AX4131	AX4140
Contacts	4 NC	1 NO + 3 NC	2 NO + 2 NC	3 NO + 1 NC	4 NO
Tested according to	IEC/EN 60947-5-1				
Rated op. voltage U_e	120 / 240 / 380 / 480 / 600 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 / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V				
Rated op. current I_e , ut. cat. DC-13	0.55 A / 125 V, 0.27 A / 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				

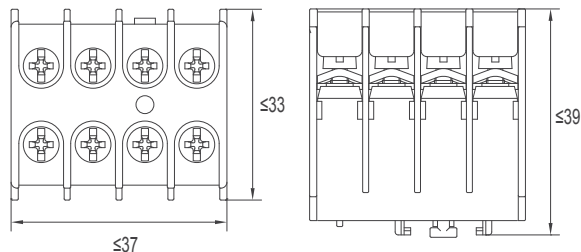
Mechanical parameters

	AX4104	AX4113	AX4122	AX4131	AX4140
Device width	33 mm				
Device height	39 mm				
Frame size	37 mm				
Mounting	front onto Ex9CS				
Degree of protection	IP20				
Terminals	lift				
Terminal capacity	1 — 6 mm ²				
Fastening torque of terminals	1 Nm				

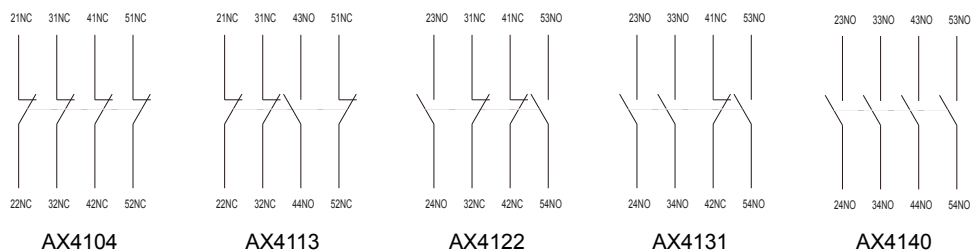
Technical Data accessories

Front-mounted auxiliary contact units AX41

Dimensions



Wiring diagrams



Technical Data accessories

Front-mounted auxiliary contact units AX42

General parameters

Auxiliary contacts for contactors line Ex9C, Ex9Ci, Ex9CR and Ex9CRi, for subsequent mounting

Front-mounted version

1 unit can be used with a contactor

Do not limit a possibility to install overload relay Ex9R38, Ex9R100

Electrical parameters

	AX4202	AX4211	AX4220	AX4204	AX4213	AX4222	AX4231	AX4240
Contacts	2 NC	1NO+1NC	2 NO	4 NC	1NO+3NC	2NO+2NC	3NO+1NC	4 NO
Tested according to	IEC/EN 60947-5-1							
Rated op. voltage U_e	120 / 240 / 380 / 480 / 600 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 / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V							
Rated op. current I_e , ut. cat. DC-13	0.55 A / 125 V, 0.27 A / 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							

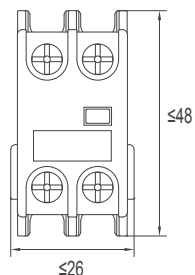
Mechanical parameters

	AX4202	AX4211	AX4220	AX4204	AX4213	AX4222	AX4231	AX4240
Device width	48 mm			48 mm				
Device height	37 mm			37 mm				
Frame size	26 mm			45 mm				
Mounting	front onto Ex9C							
Degree of protection	IP20							
Terminals	lift							
Terminal capacity	1 — 6 mm ²							
Fastening torque of terminals	1 Nm							

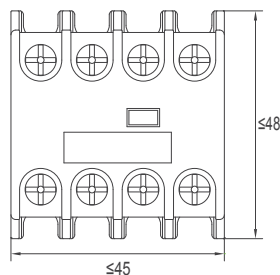
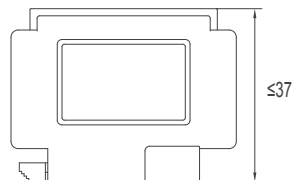
Technical Data accessories

Front-mounted auxiliary contact units AX42

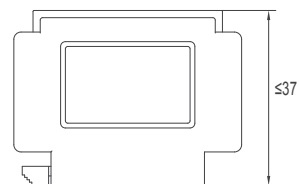
Dimensions



AX4202, AX4211, AX4220



AX4204, AX4213, AX4222, AX4231, AX4240



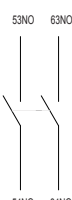
Wiring diagrams



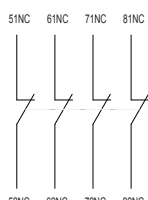
AX4202



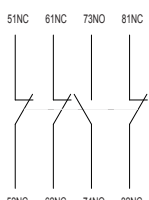
AX4211



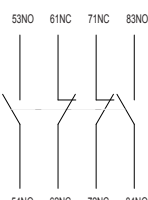
AX4220



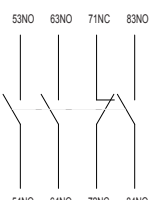
AX4204



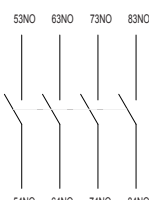
AX4213



AX4222



AX4231



AX4240

Technical Data accessories

Side-mounted auxiliary contact units AX4311

General parameters

Auxiliary contacts for contactors line Ex9C, Ex9Ci, Ex9CR and Ex9CRI, for subsequent mounting

Side-mounted version

1 unit can be used with a contactor at the left, another unit at the right

Do not limit a possibility to install overload relay Ex9R38, Ex9R100

Electrical parameters

	AX4311
Contacts	1 NO + 1 NC
Tested according to	IEC/EN 60947-5-1
Rated op. voltage U_e	120 / 240 / 380 / 480 / 600 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 / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
Rated op. current I_e , ut. cat. DC-13	0.55 A / 125 V, 0.27 A / 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

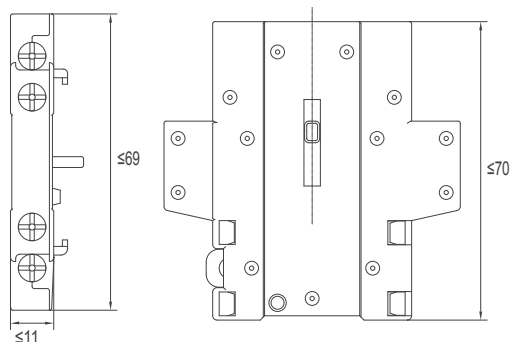
Mechanical parameters

	AX4311
Device width	11 mm
Device height	69 mm
Frame size	70 mm
Mounting	side onto Ex9C
Degree of protection	IP20
Terminals	lift
Terminal capacity	1 — 6 mm ²
Fastening torque of terminals	1 Nm

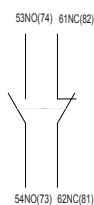
Technical Data accessories

Side-mounted auxiliary contact units AX4311

Dimensions



Wiring diagrams



AX4311

Technical Data accessories

Pneumatic time delay block TDD4i

General parameters

Pneumatic time delay block with delayed auxiliary contact operations (ON and OFF delay types)

Suitable for contactors line Ex9C, Ex9Ci, Ex9CR and Ex9CRi, for front subsequent mounting

1 unit can be used with a contactor

Do not limit a possibility to install overload relay Ex9R

Electrical parameters

Contacts	1NO + 1NC
Delay type	ON, OFF
Time delay	0.1 - 3 s (C) 0.1 - 30 s (B) 10 - 180 s (A)
Rated operational voltage U_e	400 / 690 V AC 220 V DC
Minimum switching capacity	17 V / 5 mA
Rated frequency	50 Hz
Rated thermal current I_{th}	10 A
Rated op. current I_e , ut. cat. AC-15	3 A / 120 V, 1.5 A / 240 V, 0.95 A / 380 V, 0.6 A / 600 V, 0.52 A / 660 V
Rated op. current I_e , ut. cat. DC-13	0.26 A / 125 V, 0.15 A / 250 V
Rated ON control capacity $U_e \times I_e$	3600 VA AC / 33 W DC
Rated OFF control capacity $U_e \times I_e$	360 VA AC / 33 W DC
Min. operational current I_{min}	5 mA AC/DC
Rated impulse withstand voltage U_{imp}	6 kV
Rated insulation voltage U_i	660 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

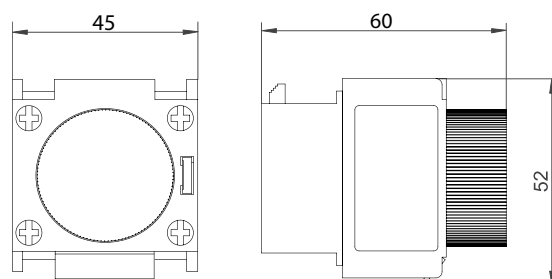
Mechanical parameters

Device width	45 mm
Device height	52 mm
Device depth	60 mm
Mounting	front onto Ex9C lines (Ex9C, Ex9Ci, Ex9CR, Ex9CRi) contactors
Mechanical service life	3 000 000 operating cycles
Degree of protection	IP20
Terminals	lift
Terminal capacity	1 — 2.5 mm ²
Fastening torque of terminals	0.8 Nm
Weight	0.06 kg

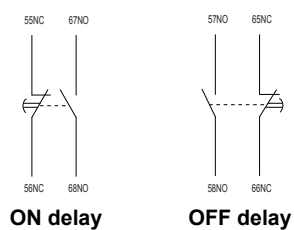
Technical Data accessories

Pneumatic time delay blocks TDD4i

Dimensions



Wiring diagram



Technical Data accessories

Surge suppressor blocks CCU4i

General parameters

Reduces voltage peaks in control circuit

Suitable for contactors line Ex9C, Ex9CR and Ex9CC, for subsequent mounting

Includes cable lugs for connecting to contactor terminals

Do not limit a possibility to install other accessories

Electrical parameters

	CCU41	CCU42	CCU43
Internal technology	varistor	RC circuit	RC circuit
Control coil voltage U_c (protection range)	380 - 415 V AC 110 - 240 V AC 24 - 48 V AC		
Maximal peak voltage U_p	$3 U_c$		

Mechanical parameters

	CCU41	CCU42	CCU43
Suitable for	Ex9CS06-12	Ex9C09-38 Ex9CC09-38	Ex9C40-100 Ex9CC50-100
Mounting	subsequent into contactor control coil terminals		
Weight	0.02 kg		

Wiring diagram

