

Accessories for contactors



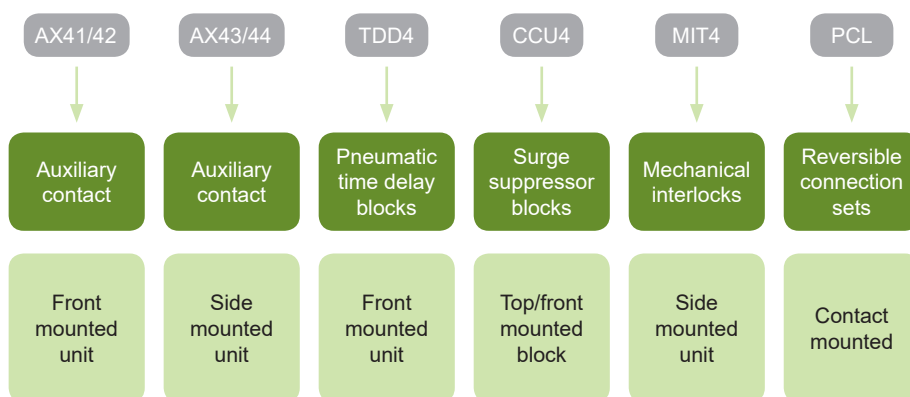
- Accessories for contactors of line Ex9CS, Ex9CSR, Ex9C, Ex9CR, Ex9C500 and Ex9CC
- Front-mounted auxiliary contacts AX41/42
- Side-mounted auxiliary contacts AX43/44
- Pneumatic time delay blocks TDD4
- Surge suppressor blocks CCU4
- Mechanical interlocks MIT4
- Connection set PCL for reversible combination

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, Ex9CR) 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 AX43/44 (one from the left, the other from the right) and surge suppressor block CCU42/43. Installation of an front-mounted unit does not affect a possibility to install overload thermal relay Ex9R.

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.

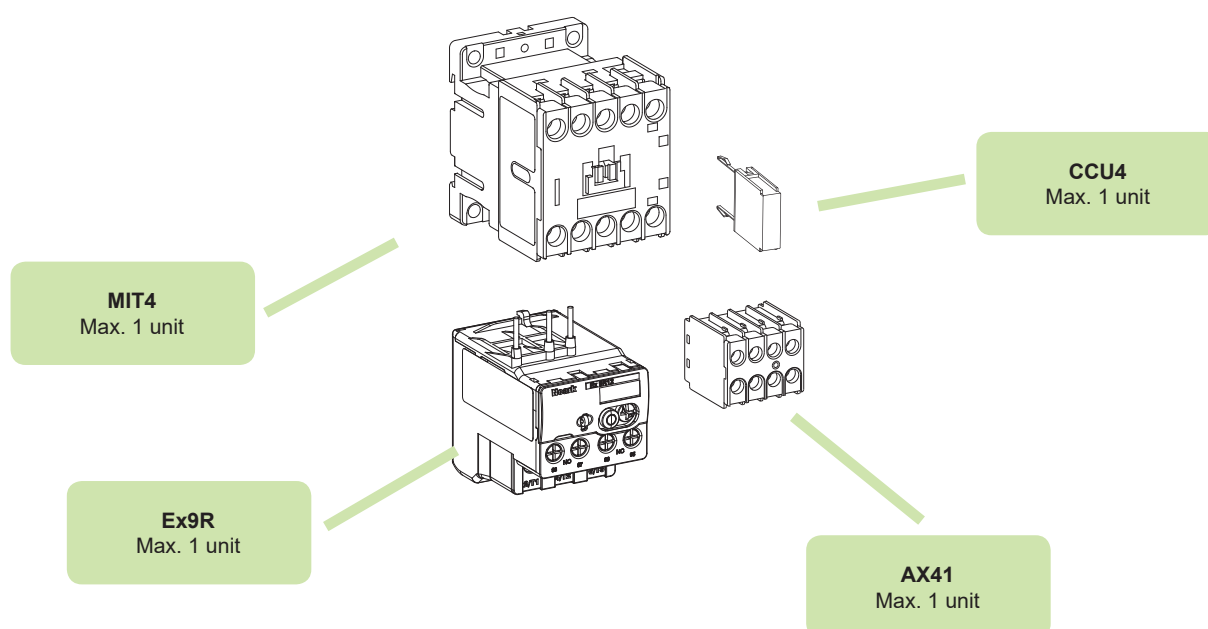
Type Key



Accessories for contactors

Miniature Contactors Ex9CS

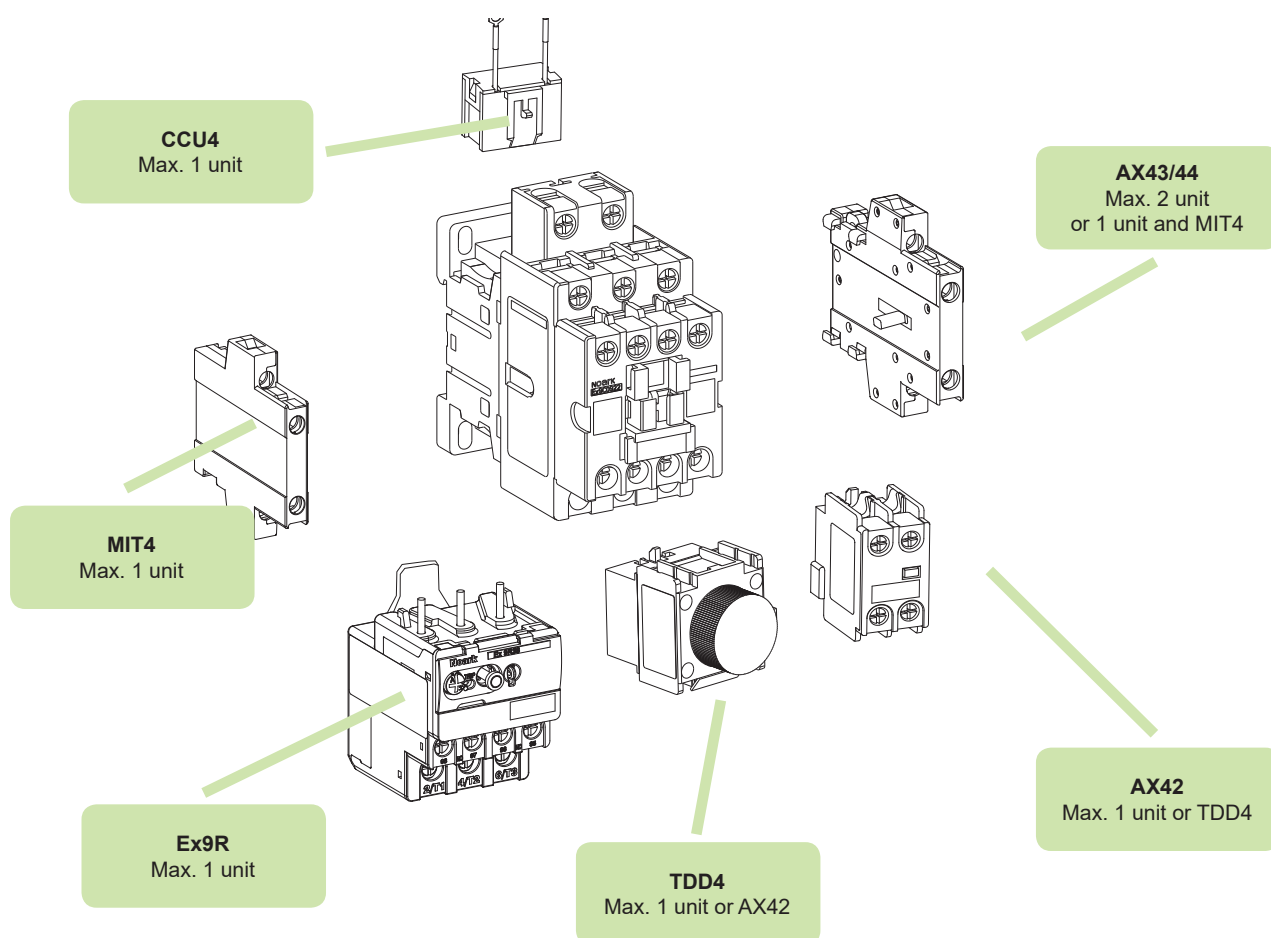
Miniature Reversible Contactors Ex9CSR



Accessories for contactors

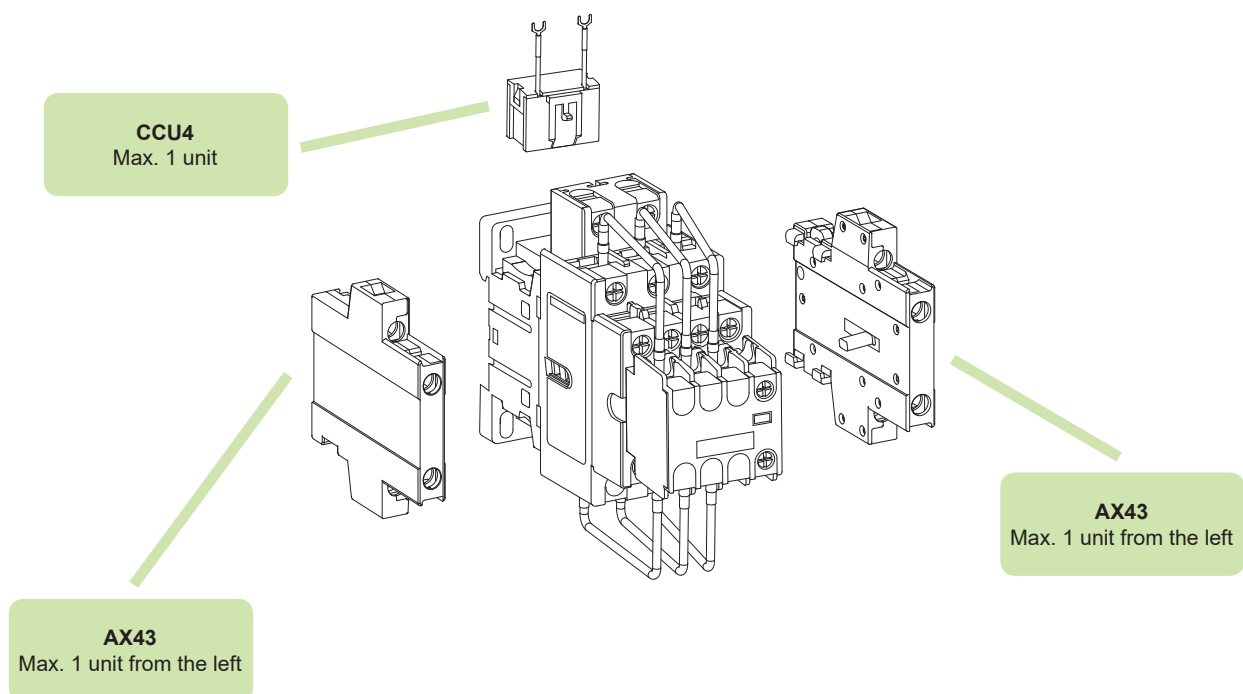
Contactors Ex9C, Ex9C500

Reversible contactors Ex9CR



Accessories for contactors

Capacitor Contactors Ex9CC



Accessories for contactors

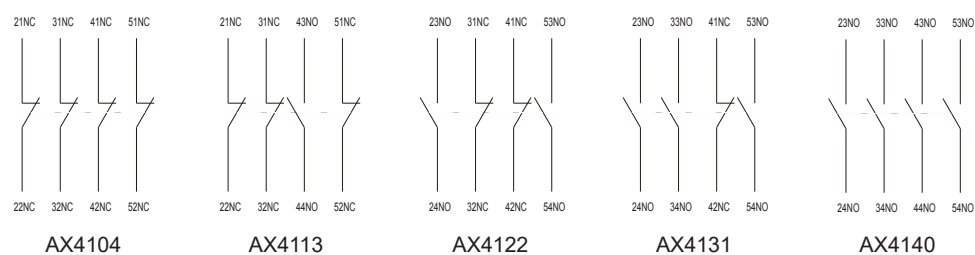
Auxiliary contacts for Ex9CS line miniature contactors, front-mounted

- 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 thermal relays 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

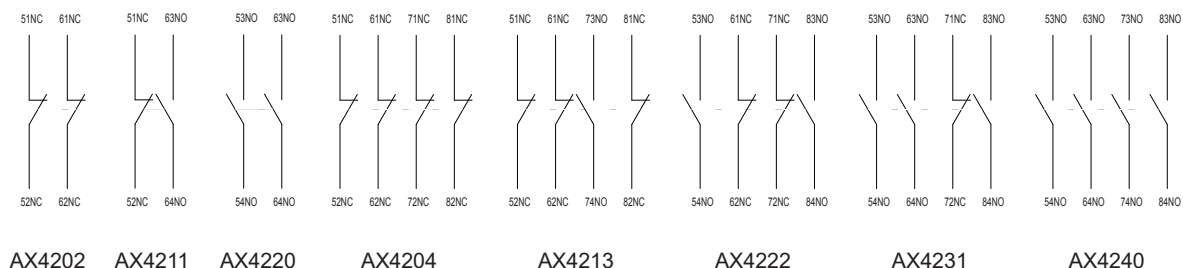
Auxiliary contacts for contactors, front-mounted

- Auxiliary contacts for contactors line Ex9C, Ex9CR up to 500 A
- For subsequent mounting
- Front-mounted version
- 1 unit or TDD4 unit can be used with a contactor
- Do not limit a possibility to install overload thermal relays Ex9R



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

Wiring diagrams



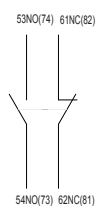
Auxiliary contacts for Ex9C line contactors, side-mounted

- Auxiliary contacts for contactors line Ex9C, Ex9CR up to 100 A
- 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 front mounted auxiliary contacts AX42/TDD4 or overload thermal relays Ex9R



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

Wiring diagram



AX4311

Accessories for contactors

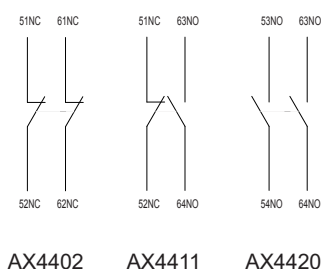
Auxiliary contacts for C500 line contactors, side-mounted

- Auxiliary contacts for contactors line Ex9C115-500
- 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 contacts AX42 or overload thermal relays Ex9R185, Ex9R500



Contacts	Suitable for	Article No.	Type	Packing
1 NO + 1 NC	Ex9C115-500	106322	AX4411	1/12/144
2 NO	Ex9C115-500	107958	AX4420	1/12/144
2 NC	Ex9C115-500	107957	AX4402	1/12/144

Wiring diagrams



Mechanical interlocks for Ex9C line contactors, side-mounted

- Mechanical interlock set for connecting of two contactors line Ex9C allows that only one contactor is switched at a given moment
- For subsequent mounting
- 1 unit can be used together with two contactors of the same frame size
- Limit using of side-mounted auxiliary contact unit AX43/44, do not limit a possibility to install front-mounted auxiliary contacts AX42 or overload thermal relays Ex9R



Description	Suitable for	Article No.	Type	Packing
Mechanical interlock	Ex9CS	107959	MIT41	1 set
Mechanical interlock	Ex9C09-38 11	107960	MIT42-11	1 set
Mechanical interlock	Ex9C09-38 22	108095	MIT42-22	1 set
Mechanical interlock	Ex9C40-100	107961	MIT43	1 set
Mechanical interlock	Ex9C115-185	107962	MIT44	1 set
Mechanical interlock	Ex9C225-300	107963	MIT45	1 set
Mechanical interlock	Ex9C400-500	107964	MIT46	1 set

Connection sets for reversible combination of Ex9C line contactors

- Connection set for reversible combination of two contactors line Ex9C115-500
- For subsequent mounting
- 1 unit can be used together with two contactors of the same frame size
- Do not limit a possibility to install front-mounted auxiliary contacts AX42 or overload thermal relays Ex9R



Description	Suitable for	Article No.	Type	Packing
Connection set	Ex9C115-185	107965	PCL185	1 set
Connection set	Ex9C225-300	107966	PCL300	1 set
Connection set	Ex9C400-500	107967	PCL500	1 set

Accessories for contactors

Pneumatic time delay blocks

- For delayed closing or delayed opening of internal 1 NO + 1 NC auxiliary contacts
- Suitable for contactors of Ex9C, Ex9CR up to 500 A
- For subsequent mounting
- Front mounted
- 1 unit or AX42 unit can be used with a contactor
- Do not limit a possibility to install overload thermal relays Ex9R



Delay type	Delay range	Article No.	Type	Packing
ON delay	0.1 - 3 s	104494	TDD41A	1/72
ON delay	0.1 - 30 s	104493	TDD41B	1/72
ON delay	10 - 180 s	104492	TDD41C	1/72
OFF delay	0.1 - 3 s	104491	TDD42A	1/72
OFF delay	0.1 - 30 s	104490	TDD42B	1/72
OFF delay	10 - 180 s	104489	TDD42C	1/72

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
- For subsequent mounting
- Front/top mounted
- 1 unit unit can be used with a contactor
- Do not limit a possibility to install front mounted auxiliary contacts AX42/TDD4 or overload thermal relays Ex9R

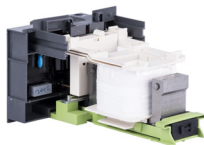


Protection range	Suitable for	Article No.	Type	Packing
380-415 V	Ex9CS06-12	104502	CCU41 415	1/10
110-240 V	Ex9CS06-12	104503	CCU41 240	1/10
24-48 V	Ex9CS06-12	104501	CCU41 48	1/10
380-415 V	Ex9C09-38, Ex9CC09-38	104499	CCU42 415	1/10
110-240 V	Ex9C09-38, Ex9CC09-38	104500	CCU42 240	1/10
24-48 V	Ex9C09-38, Ex9CC09-38	104498	CCU42 48	1/10
380-415 V	Ex9C40-100, Ex9CC50-100	104496	CCU43 415	1/4
110-240 V	Ex9C40-100, Ex9CC50-100	104497	CCU43 240	1/4
24-48 V	Ex9C40-100, Ex9CC50-100	104495	CCU43 48	1/4

Accessories for contactors

Spare control coils for Ex9C500 line contactors

- Spare control coils for contactors line Ex9C115-500
- Replaces the coil supplied in contactor
- Including holder
- Packed separately



Description	Suitable for	Control voltage	Article No.	Type	Packing
Spare control coil	Ex9C185	415 V AC/DC	107986	ECC44 415V AC/DC	1
Spare control coil	Ex9C185	400 V AC/DC	107985	ECC44 400V AC/DC	1
Spare control coil	Ex9C185	380 V AC/DC	107984	ECC44 380V AC/DC	1
Spare control coil	Ex9C185	240 V AC/DC	107983	ECC44 240V AC/DC	1
Spare control coil	Ex9C185	230 V AC/DC	107982	ECC44 230V AC/DC	1
Spare control coil	Ex9C185	220 V AC/DC	107981	ECC44 220V AC/DC	1
Spare control coil	Ex9C185	127 V AC/DC	107980	ECC44 127V AC/DC	1
Spare control coil	Ex9C185	110 V AC/DC	107979	ECC44 110V AC/DC	1
Spare control coil	Ex9C185	48 V AC/DC	107978	ECC44 48V AC/DC	1
Spare control coil	Ex9C185	42 V AC/DC	107977	ECC44 42V AC/DC	1
Spare control coil	Ex9C185	36 V AC/DC	107976	ECC44 36V AC/DC	1
Spare control coil	Ex9C185	24 V AC/DC	107975	ECC44 24V AC/DC	1
Spare control coil	Ex9C300	415 V AC/DC	107998	ECC45 415V AC/DC	1
Spare control coil	Ex9C300	400 V AC/DC	107997	ECC45 400V AC/DC	1
Spare control coil	Ex9C300	380 V AC/DC	107996	ECC45 380V AC/DC	1
Spare control coil	Ex9C300	240 V AC/DC	107995	ECC45 240V AC/DC	1
Spare control coil	Ex9C300	230 V AC/DC	107994	ECC45 230V AC/DC	1
Spare control coil	Ex9C300	220 V AC/DC	107993	ECC45 220V AC/DC	1
Spare control coil	Ex9C300	127 V AC/DC	107992	ECC45 127V AC/DC	1
Spare control coil	Ex9C300	110 V AC/DC	107991	ECC45 110V AC/DC	1
Spare control coil	Ex9C300	48 V AC/DC	107990	ECC45 48V AC/DC	1
Spare control coil	Ex9C300	42 V AC/DC	107989	ECC45 42V AC/DC	1
Spare control coil	Ex9C300	36 V AC/DC	107988	ECC45 36V AC/DC	1
Spare control coil	Ex9C300	24 V AC/DC	107987	ECC45 24V AC/DC	1
Spare control coil	Ex9C500	415 V AC/DC	108010	ECC46 415V AC/DC	1
Spare control coil	Ex9C500	400 V AC/DC	108009	ECC46 400V AC/DC	1
Spare control coil	Ex9C500	380 V AC/DC	108008	ECC46 380V AC/DC	1
Spare control coil	Ex9C500	240 V AC/DC	108007	ECC46 240V AC/DC	1
Spare control coil	Ex9C500	230 V AC/DC	108006	ECC46 230V AC/DC	1
Spare control coil	Ex9C500	220 V AC/DC	108005	ECC46 220V AC/DC	1
Spare control coil	Ex9C500	127 V AC/DC	108004	ECC46 127V AC/DC	1
Spare control coil	Ex9C500	110 V AC/DC	108003	ECC46 110V AC/DC	1
Spare control coil	Ex9C500	48 V AC/DC	108002	ECC46 48V AC/DC	1
Spare control coil	Ex9C500	42 V AC/DC	108001	ECC46 42V AC/DC	1
Spare control coil	Ex9C500	36 V AC/DC	108000	ECC46 36V AC/DC	1
Spare control coil	Ex9C500*	24 V AC/DC	107999	ECC46 24V AC/DC	1

*) for 24V version of Ex9C500 contactors cannot be used control coil with different U_c

Technical Data Ex9C accessories

Accessories for miniature contactors Ex9CS/Ex9CSR line

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

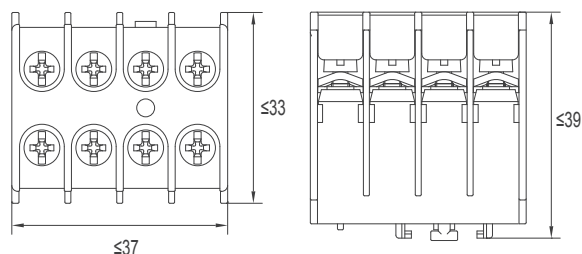
	AX4104	AX4113	AX4122	AX4131	AX4140
Device width	33 mm				
Device height	39 mm				
Device depth	37 mm				
Mounting	front				
Degree of protection	IP20				
Terminals	lift				
Terminal capacity	1 — 6 mm ²				
Fastening torque of terminals	1 Nm				

Technical Data Ex9C accessories

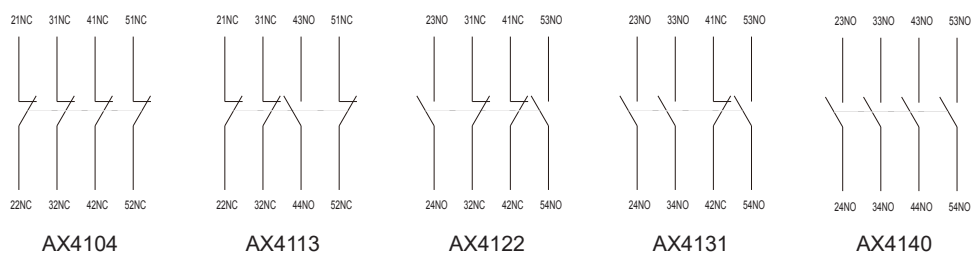
Accessories for miniature contactors Ex9CS/Ex9CSR line

Front-mounted auxiliary contact units AX41

Dimensions



Wiring diagrams



Technical Data Ex9C accessories

Accessories for contactors Ex9C line

Front-mounted auxiliary contact units AX42

General parameters

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

Front-mounted version

1 unit can be used with a contactor

Do not limit a possibility to install overload relay Ex9R

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

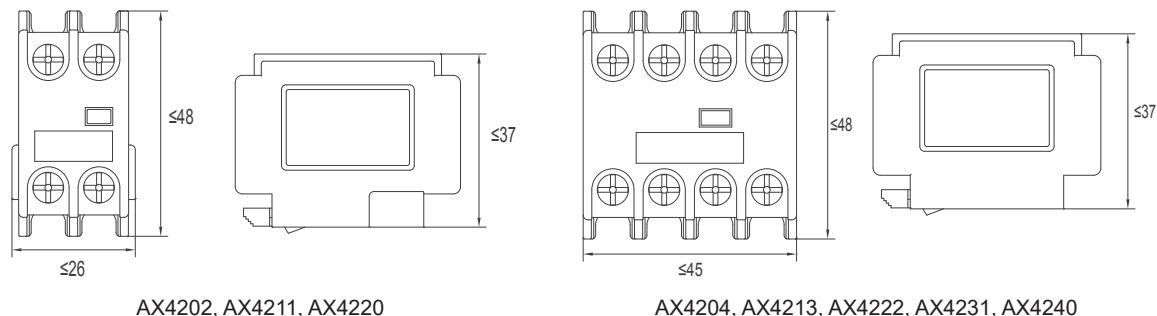
	AX4202	AX4211	AX4220	AX4204	AX4213	AX4222	AX4231	AX4240
Device width	48 mm			48 mm				
Device height	37 mm			37 mm				
Device depth	26 mm			45 mm				
Mounting	front							
Degree of protection	IP20							
Terminals	lift							
Terminal capacity	1 — 6 mm ²							
Fastening torque of terminals	1 Nm							

Technical Data Ex9C accessories

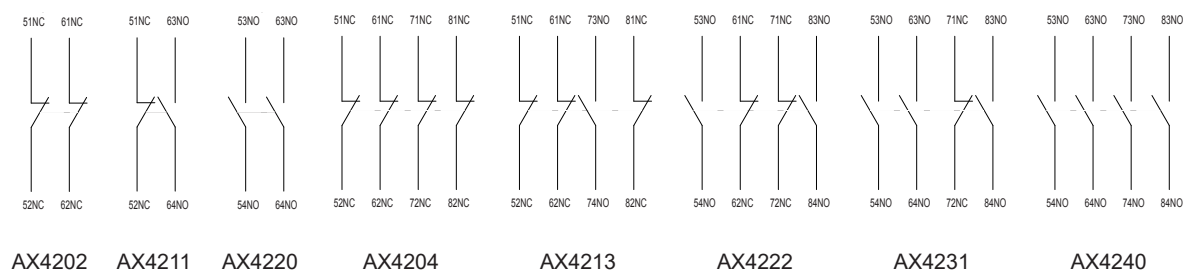
Accessories for contactors Ex9C line

Front-mounted auxiliary contact units AX42

Dimensions



Wiring diagrams



Technical Data Ex9C accessories

Accessories for contactors Ex9C line, frame sizes Ex9C18, Ex9C38, Ex9C65, Ex9C100

Side-mounted auxiliary contact units AX4311

General parameters

Auxiliary contacts for contactors line Ex9C and Ex9CR, 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 Ex9R

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

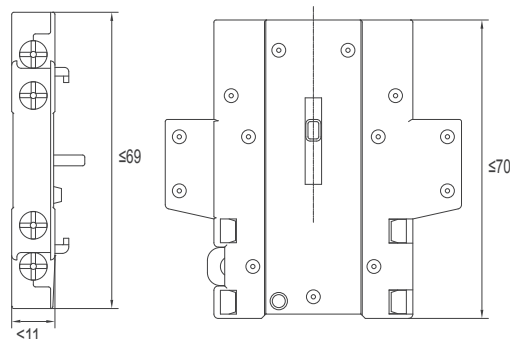
	AX4311
Device width	11 mm
Device height	69 mm
Device depth	70 mm
Mounting	side
Degree of protection	IP20
Terminals	lift
Terminal capacity	1 — 6 mm ²
Fastening torque of terminals	1 Nm

Technical Data Ex9C accessories

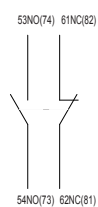
Accessories for contactors Ex9C line, frame sizes Ex9C18, Ex9C38, Ex9C65, Ex9C100

Side-mounted auxiliary contact units AX4311

Dimensions



Wiring diagrams



AX4311

Technical Data Ex9C accessories

Accessories for contactors Ex9C line

Pneumatic time delay block TDD4

General parameters

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

Suitable for contactors line Ex9C and Ex9CR, 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 (A) 0.1 - 30 s (B) 10 - 180 s (C)
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 making capacity $U_e \times I_e$	3600 VA AC / 33 W DC
Rated breaking 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

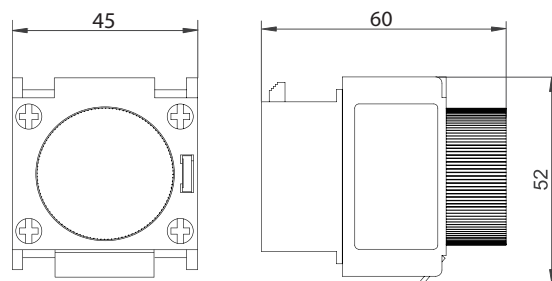
Device width	45 mm
Device height	52 mm
Device depth	60 mm
Mounting	front
Mechanical service life	3 000 000 operating cycles
Degree of protection	IP20
Terminals	lift
Terminal capacity	1 — 2.5 mm ²
Fastening torque of terminals	0.8 Nm
Weight	0.06 kg

Technical Data Ex9C accessories

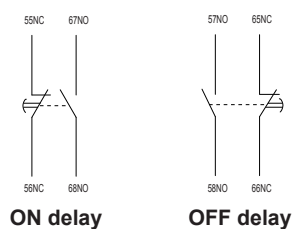
Accessories for contactors Ex9C line

Pneumatic time delay blocks TDD4

Dimensions



Wiring diagram



Technical Data Ex9C accessories

Accessories for contactors Ex9C line

Surge suppressor blocks CCU4

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

