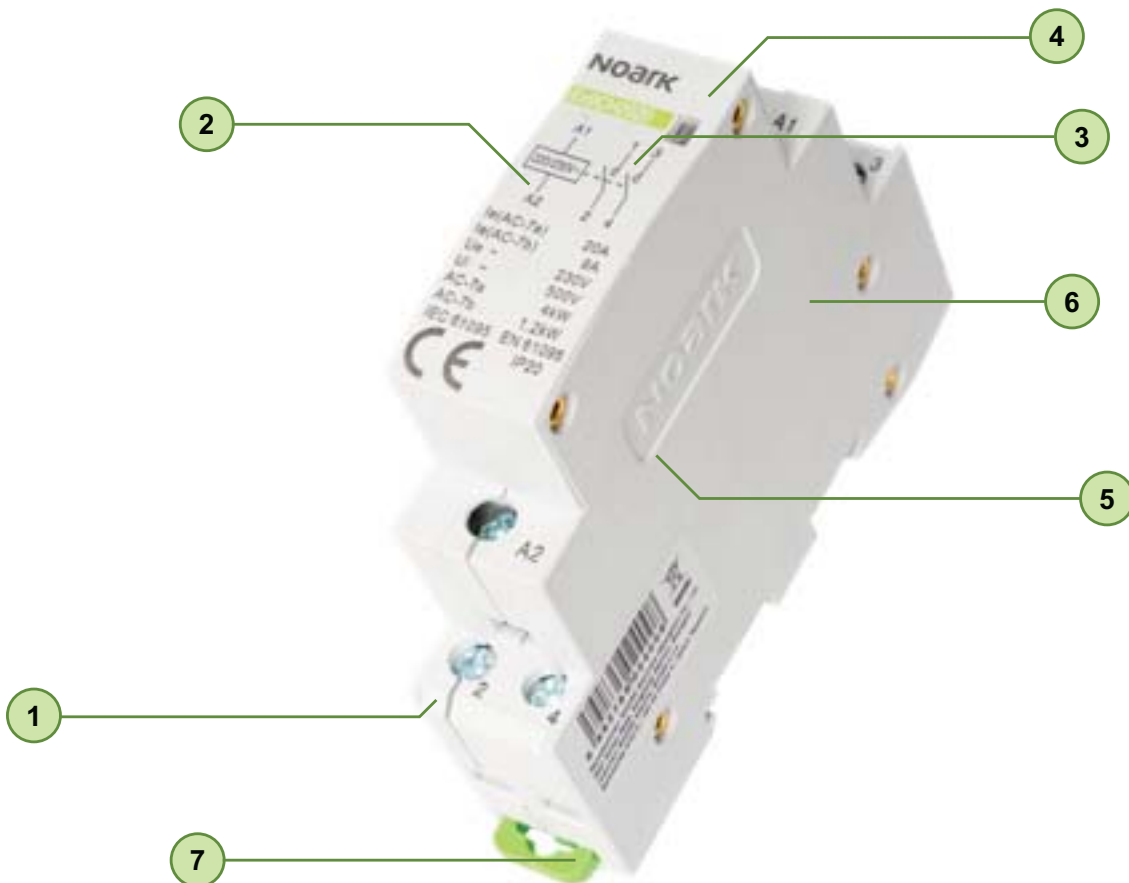


Installation relays and contactors



Installation relays and contactors

Professional Tips



1 5 year warranty

2 Connection diagram on the device

3 Contact state indicator

4 Various contact combinations

5 Various coil voltages

6 1-pole to 4-pole version

7 Easy mounting on DIN rail

Installation relays Ex9CH20

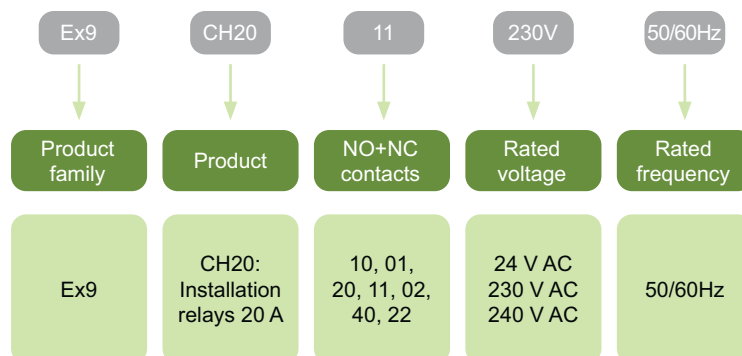


- Installation relays
- Meet requirements of IEC / EN 61095
- Rated current up to 20 A
- Control coil voltage 24, 230 or 240 V AC
- Rated frequency 50/60 Hz
- 1, 2 or 4-contact versions
- Various contact combinations

Modular relays Ex9CH20 are suitable for household and building modular distribution boards. They are mainly used in building automation processes for switching and controlling lightings, heating systems, ventilations, pumps, heating pumps and other applications.

Optical indicator on the front side indicates status of the contacts and voltage on control coil.

Type Key



Certification marks



Installation relays Ex9CH20

Installation relays 20 A, width 1 MU



Control voltage	Contacts NO+NC	Article No.	Type	Packing
230 V AC	10	107011	Ex9CH20 10 230V 50/60Hz	2/162
230 V AC	01	107014	Ex9CH20 01 230V 50/60Hz	2/162
240 V AC	10	107012	Ex9CH20 10 240V 50/60Hz	2/162
240 V AC	01	107015	Ex9CH20 01 240V 50/60Hz	2/162
24 V AC	10	107010	Ex9CH20 10 24V 50/60Hz	2/162
24 V AC	01	107013	Ex9CH20 01 24V 50/60Hz	2/162
230 V AC	20	102399	Ex9CH20 20 230V 50/60Hz	2/162
230 V AC	11	102402	Ex9CH20 11 230V 50/60Hz	2/162
230 V AC	02	102405	Ex9CH20 02 230V 50/60Hz	2/162
240 V AC	20	102400	Ex9CH20 20 240V 50/60Hz	2/162
240 V AC	11	102403	Ex9CH20 11 240V 50/60Hz	2/162
240 V AC	02	102406	Ex9CH20 02 240V 50/60Hz	2/162
24 V AC	20	102398	Ex9CH20 20 24V 50/60Hz	2/162
24 V AC	11	102401	Ex9CH20 11 24V 50/60Hz	2/162
24 V AC	02	102404	Ex9CH20 02 24V 50/60Hz	2/162

Installation relays 20 A, width 2 MU



Control voltage	Contacts NO+NC	Article No.	Type	Packing
230 V AC	40	102408	Ex9CH20 40 230V 50/60Hz	1/81
230 V AC	22	102410	Ex9CH20 22 230V 50/60Hz	1/81
230 V AC	31	107318	Ex9CH20 31 230V 50/60Hz	1/81
24 V AC	40	102407	Ex9CH20 40 24V 50/60Hz	1/81
24 V AC	22	102409	Ex9CH20 22 24V 50/60Hz	1/81
24 V AC	31	107317	Ex9CH20 31 24V 50/60Hz	1/81

Distance block between Ex9CH devices, width 0.5 MU



Description	Article No.	Type
Distance block/separator	107956	Ex9CH20 SP

Installation contactors Ex9CH

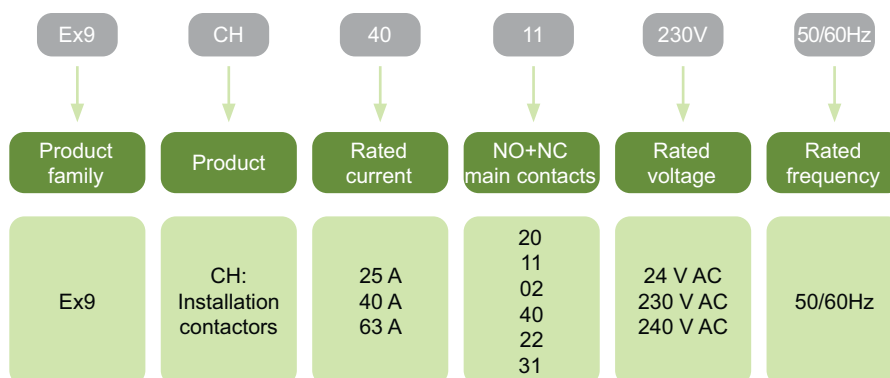


- Installation contactors Ex9CH
- Meet requirements of IEC / EN 61095
- Rated current up to 25, 40, 63 A
- Control coil voltage 24, 230 or 240 V AC
- Rated frequency 50/60 Hz
- 2 or 4-contact versions
- Various contact combinations

Modular contactors Ex9CH are suitable for household and building modular distribution boards. They are mainly used in building automation processes for switching and controlling lightings, heating systems, ventilations, pumps, heating pumps and other applications.

Optical indicator on the front side indicates status of the contacts and voltage on control coil.

Type Key



Certification marks



Installation contactors Ex9CH

Installation contactors 25 A, width 1MU



Control voltage	Contacts NO+NC	Article No.	Type	Packing
230 V AC	02	107017	Ex9CH25 02 230V 50/60Hz	2/162
240 V AC	02	107018	Ex9CH25 02 240V 50/60Hz	2/162
24 V AC	02	107016	Ex9CH25 02 24V 50/60Hz	2/162
230 V AC	11	107322	Ex9CH25 11 230V 50/60Hz	2/108

Installation contactors 25 A, width 2MU



Control voltage	Contacts NO+NC	Article No.	Type	Packing
230 V AC	40	102412	Ex9CH25 40 230V 50/60Hz	1/81
230 V AC	31	107020	Ex9CH25 31 230V 50/60Hz	1/81
230 V AC	22	102414	Ex9CH25 22 230V 50/60Hz	1/81
24 V AC	40	102411	Ex9CH25 40 24V 50/60Hz	1/81
24 V AC	31	107019	Ex9CH25 31 24V 50/60Hz	1/81
24 V AC	22	102413	Ex9CH25 22 24V 50/60Hz	1/81

Installation contactors Ex9CH

Installation contactors 40 A, width 2MU



Control voltage	Contacts NO+NC	Article No.	Type	Packing
230 V AC	20	102416	Ex9CH40 20 230V 50/60Hz	1/81
230 V AC	02	107024	Ex9CH40 02 230V 50/60Hz	1/81
230 V AC	11	102418	Ex9CH40 11 230V 50/60Hz	1/81
24 V AC	20	102415	Ex9CH40 20 24V 50/60Hz	1/81
24 V AC	02	107023	Ex9CH40 02 24V 50/60Hz	1/81
24 V AC	11	102417	Ex9CH40 11 24V 50/60Hz	1/81

Installation contactors 40 A, width 3MU



Control voltage	Contacts NO+NC	Article No.	Type	Packing
230 V AC	40	102420	Ex9CH40 40 230V 50/60Hz	1/54
230 V AC	31	107022	Ex9CH40 31 230V 50/60Hz	1/54
240 V AC	40	102421	Ex9CH40 40 240V 50/60Hz	1/54
24 V AC	40	102419	Ex9CH40 40 24V 50/60Hz	1/54
24 V AC	31	107021	Ex9CH40 31 24V 50/60Hz	1/54

Installation contactors Ex9CH

Installation contactors 63 A, width 2MU



Control voltage	Contacts NO+NC	Article No.	Type	Packing
230 V AC	20	102423	Ex9CH63 20 230V 50/60Hz	1/81
230 V AC	02	107026	Ex9CH63 02 230V 50/60Hz	1/81
230 V AC	11	102425	Ex9CH63 11 230V 50/60Hz	1/81
24 V AC	20	102422	Ex9CH63 20 24V 50/60Hz	1/81
24 V AC	02	107025	Ex9CH63 02 24V 50/60Hz	1/81
24 V AC	11	102424	Ex9CH63 11 24V 50/60Hz	1/81

Installation contactors 63 A, width 3MU



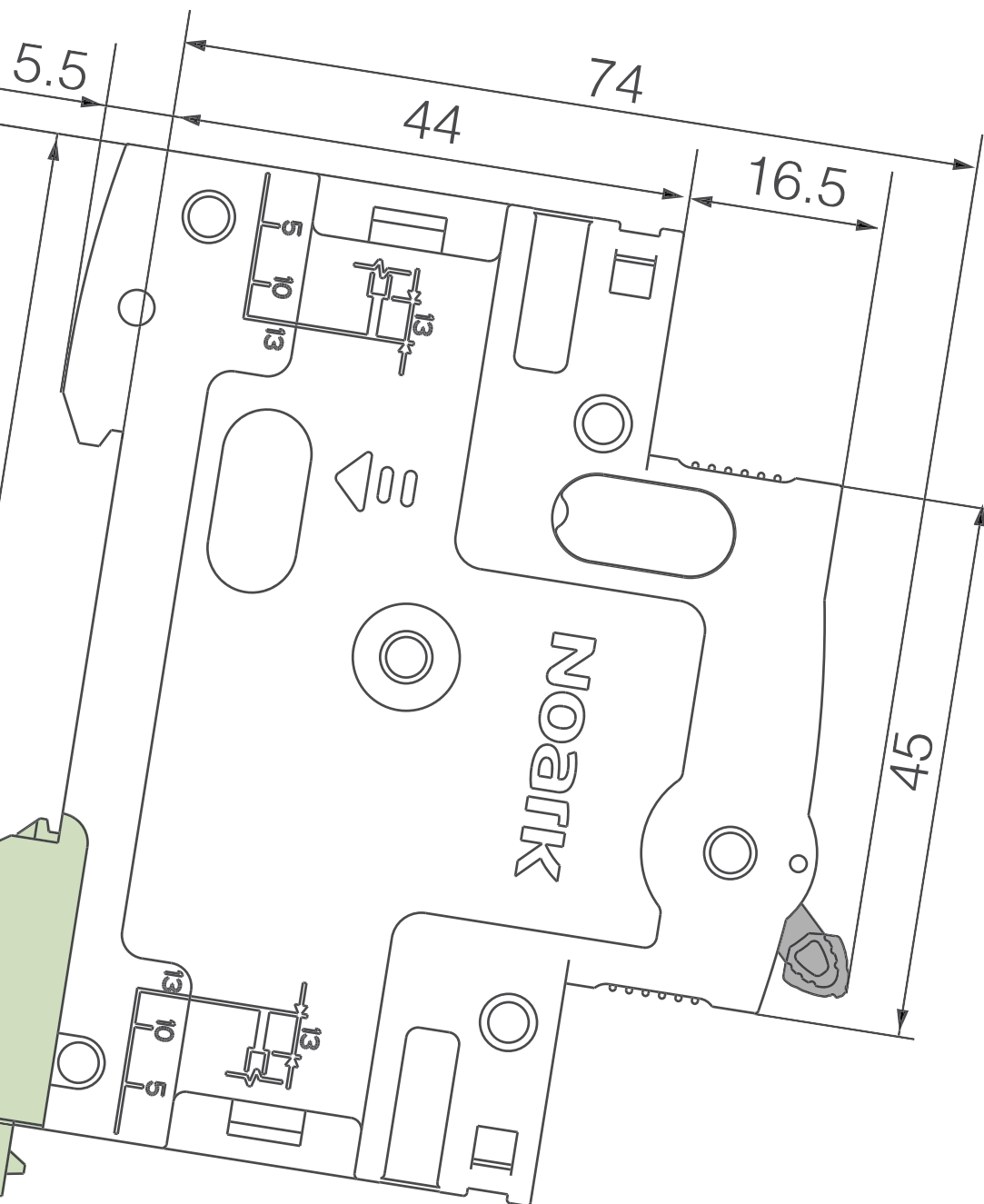
Control voltage	Contacts NO+NC	Article No.	Type	Packing
230 V AC	40	102427	Ex9CH63 40 230V 50/60Hz	1/54
230 V AC	31	107028	Ex9CH63 31 230V 50/60Hz	1/54
240 V AC	40	102428	Ex9CH63 40 240V 50/60Hz	1/54
24 V AC	40	102426	Ex9CH63 40 24V 50/60Hz	1/54
24 V AC	31	107027	Ex9CH63 31 24V 50/60Hz	1/54

Distance block between Ex9CH devices, width 0.5MU



Description	Article No.	Type
Distance block/separator	107956	Ex9CH20 SP

Technical Data



Technical Data Ex9CH20

Installation relays

General parameters

1, 2 and 4-contact versions, various contact combinations
Indication window help users to know the status of device
Low operating noise level

Electrical parameters

Tested according to	IEC / EN 61095
Rated operational voltage U_e	230/400 V AC
Control voltage U_c	24 V AC / 230 V AC / 240 V AC
Rated insulation voltage U_i	500 V
Rated impulse withstand voltage U_{imp}	4 kV
Rated conventional thermal current I_{th}	20 A
Rated current I_e AC-1, AC-7a	20 A
Rated current I_e AC-7b	9 A
Controlled power AC-7a	4 kW
Electrical service life	100 000 operating cycles
Max. switching frequency	300 per hour
Duty	100 %
Making and breaking conditions AC-7a	
I_c/I_e	1.0
U_f/U_e	1.05
$\cos \varphi$	0.8
Coil power consumption (2P / 4P)	3.68 / 5.31 VA 1.47 / 1.56 W
Ambient temperature	-5 — +40 °C (+40 — +70 °C derated)
Rated thermal current in different ambient temperature (derating)	
40 °C	20 A
50 °C	18 A
60 °C	16 A
70 °C	14 A

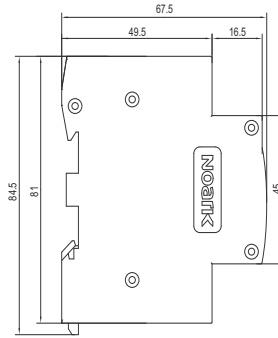
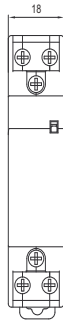
Mechanical parameters

Device width	1 and 2-contact versions: 18 mm (1MU) 4-contact versions: 36 mm (2MU)
Device height	81 mm (84.5 including rail clip)
Frame size	45 mm
Mounting	easy fastening onto 35 mm device rail (DIN)
Degree of protection	IP20
Terminals	M3.5 screws
Terminal capacity	1 — 4 mm ²
Fastening torque of terminals	0.8 Nm
Control coil terminal	M3.5 screws
Control coil terminal capacity	1 — 4 mm ²
Fastening torque of control terminals	0.8 Nm
Mechanical service life	1 000 000 operating cycles
Pollution degree	2
Installation class	III
Weight	0.12 kg (1MU), 0.21 kg (2MU)

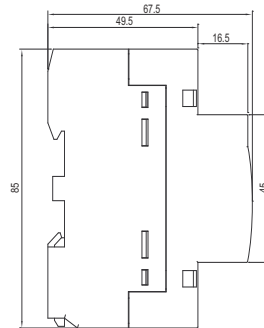
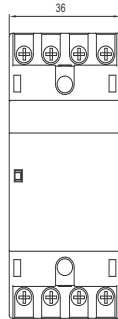
Technical Data Ex9CH20

Installation relays

Dimensions

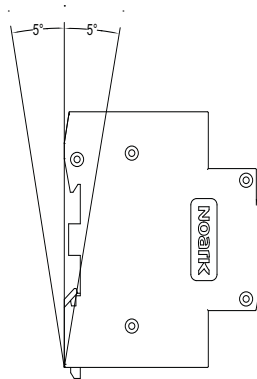


1, 2-contact versions

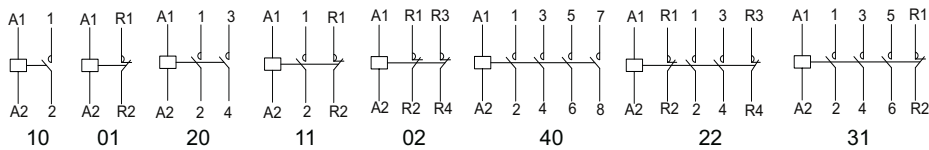


4-contact versions

Mounting position



Wiring diagrams



Technical Data Ex9CH

Installation contactors

General parameters

Indication window help users to know the status of device

Low operating noise level

Electrical parameters

	ExCH25	ExCH40	ExCH63
Tested according to	IEC / EN 61095		
Rated operational voltage U_e	230/400 V AC		
Control coil voltage U_c	24 V AC / 230 V AC / 240 V AC		
Rated insulation voltage U_i	500 V		
Rated impulse withstand voltage U_{imp}	4 kV		
Rated conventional thermal current I_{th}	25 A	40 A	63 A
Rated current AC-1, AC-7a I_e	25 A	40 A	63 A
Controlled power AC-7a	16 kW	26 kW	40 kW
Electrical service life	100 000 operating cycles		
Max. switching frequency	300 per hour		
Duty	100 %		
Making and breaking conditions AC-7a			
I_c/I_e	1.0		
U_c/U_e	1.05		
$\cos \varphi$	0.8		
Coil power consumption (2P / 4P)	- / 5.31 VA - / 1.56 W	5.10 / 7.13 VA 1.50 / 2.09 W	5.10 / 7.13 VA 1.50 / 2.09 W
Ambient temperature	-5 — +40 °C (+40 — +70 °C derated)		
I_{th} in different ambient temperature			
40°C	25 A	40 A	63 A
50°C	22 A	38 A	57 A
60°C	18 A	36 A	50 A
70°C	16 A	32 A	46 A

Mechanical parameters

	ExCH25	ExCH40	ExCH63
Modules	2-contact: 18 mm (1MU) 4-contact: 36 mm (2MU)	2-contact: 36 mm (2MU) 4-contact: 54 mm (3MU)	2-contact: 36 mm (2MU) 4-contact: 54 mm (3MU)
Device width	18 mm (per module)		
Device height	81 mm (84.5 incl. rail clip)	85 mm	85 mm
Frame size	45 mm		
Mounting	easy fastening onto 35 mm device rail (DIN)		
Degree of protection	IP20		
Terminals	M3.5 screws	M5 screws	M5 screws
Terminal capacity	1 — 4 mm ²	2.5 — 16 mm ²	2.5 — 16 mm ²
Fastening torque of terminals	0.8 Nm	2 Nm	2 Nm
Control coil terminal	M3.5 screws		
Control coil terminal capacity	1 — 4 mm ²		
Fastening torque of control terminals	0.8 Nm		
Mechanical service life	1 000 000 operating cycles		
Pollution degree	2		
Installation class	III		
Weight	0.12 kg (1MU), 0.21 kg (2MU)	0.22 kg (2MU), 0.4 kg (3MU)	0.22 kg (2MU), 0.4 kg (3MU)