

# Installation relays Ex9CH20

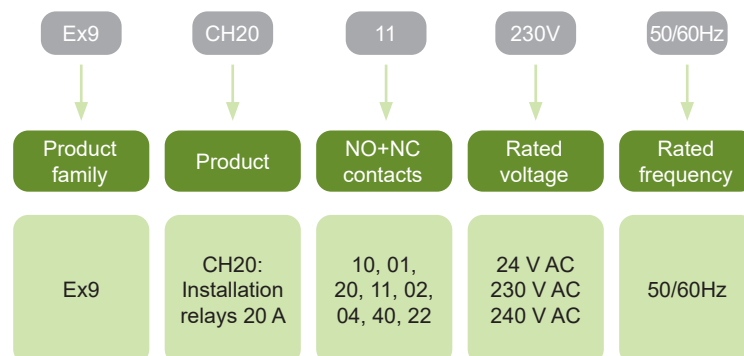


- Installation relays
- Meet requirements of IEC / EN 61095
- Rated current up to 20 A
- Control coil voltage 24, 230 or 240 V AC
- Rated frequency 50/60 Hz
- 1, 2 or 4-contact versions
- Various contact combinations

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	0+4	113644	Ex9CH20 04 230V 50/60Hz	1/81
230 V AC	4+0	102408	Ex9CH20 40 230V 50/60Hz	1/81
230 V AC	2+2	102410	Ex9CH20 22 230V 50/60Hz	1/81
230 V AC	3+1	107318	Ex9CH20 31 230V 50/60Hz	1/81
24 V AC	0+4	113643	Ex9CH20 04 24V 50/60Hz	1/81
24 V AC	4+0	102407	Ex9CH20 40 24V 50/60Hz	1/81
24 V AC	2+2	102409	Ex9CH20 22 24V 50/60Hz	1/81
24 V AC	3+1	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

# 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

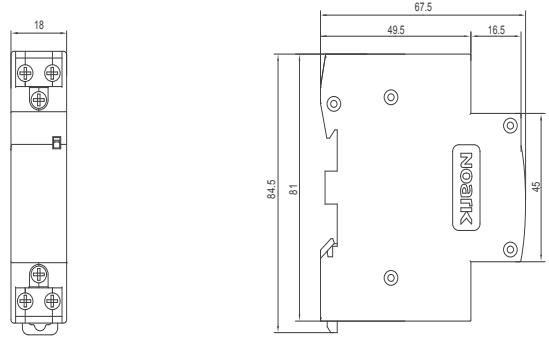
### Mechanical parameters

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 <sup>2</sup>
Fastening torque of terminals	0.8 Nm
Control coil terminal	M3.5 screws
Control coil terminal capacity	1 — 4 mm <sup>2</sup>
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)

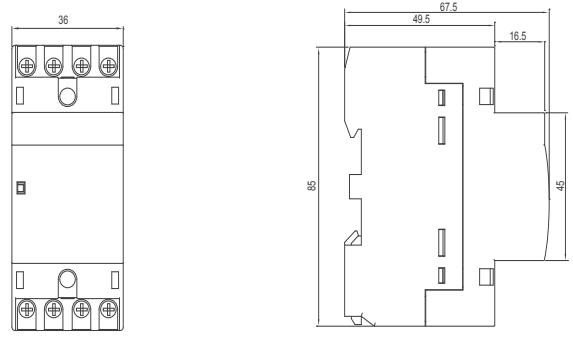
# Technical Data Ex9CH20

## Installation relays

### Dimensions

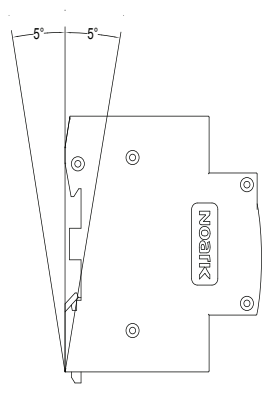


1, 2-contact versions



4-contact versions

### Mounting position



### Wiring diagrams

