

# Silent installation contactors **Ex9CHH**



- Silent installation contactors with AC/DC control voltage Ex9CHH
- Meet requirements of IEC/EN 61095 IEC/EN 60947-4-1, IEC/EN 60947-5-1
- Rated current up to 16, 20, 25, 32, 40, 63 A
- Control coil voltage 12, 24, 48, 110, 230 V
- AC/DC control coil voltage
- Rated frequency 50/60 Hz
- 1 up to 4-contact versions
- Hum free (silent)
- Various contact combinations

The Ex9CHH installation contactors are designed for use in household and building modular distribution boards. These contactors are primarily utilized in building automation systems for the switching and control of lighting, heating systems, ventilation, pumps, heat pumps, and other applications. The silent operation of these contactors makes them particularly well-suited for environments where noise reduction is critical, such as offices and residential settings. Additionally, their AC/DC control voltage capabilities meet higher technical demands, ensuring dependable operation in more demanding scenarios.

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

The contactor provides the option to add an auxiliary contact AX-CHH as an accessory.

## Type Key

| Ex9            | CH                             | 16                                           | H                                                  | 20                                                 | 24V                                                                  |
|----------------|--------------------------------|----------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------|
| Product family | Product                        | Rated current                                | Operation                                          | NO+NC main contacts                                | Rated voltage                                                        |
| Ex9            | CH:<br>Installation contactors | 16 A<br>20 A<br>25 A<br>32 A<br>40 A<br>63 A | H:<br>Hum free (silent) &<br>AC/DC control voltage | 10, 01<br>20, 02, 11<br>30, 03<br>40, 04<br>31, 22 | 12 V AC/DC<br>24 V AC/DC<br>48 V AC/DC<br>110 V AC/DC<br>230 V AC/DC |

## Certification marks



# Silent installation contactors **Ex9CHH**

## Accessories



Silent  
Contactor  
**Ex9CHH**

Auxiliary contacts  
**AX-CHH11**  
**AX-CHH20**  
1 unit

Auxiliary contact AX-CHH11  
Auxiliary contact AX-CHH20

All accessories are mounted to the Ex9CHH from the right side.

# Silent installation contactors **Ex9CHH**

## Silent installation contactors 16 A, width 1MU



| Control voltage | Contacts NO+NC | Article No. | Type                   | Packing  |
|-----------------|----------------|-------------|------------------------|----------|
| 230 V AC/DC     | 1+0            | 116944      | Ex9CH16H 10 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 1+0            | 116945      | Ex9CH16H 10 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 1+0            | 116946      | Ex9CH16H 10 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 1+0            | 116947      | Ex9CH16H 10 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 1+0            | 116948      | Ex9CH16H 10 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 0+1            | 116949      | Ex9CH16H 01 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 0+1            | 116950      | Ex9CH16H 01 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 0+1            | 116951      | Ex9CH16H 01 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 0+1            | 116952      | Ex9CH16H 01 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 0+1            | 116953      | Ex9CH16H 01 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 2+0            | 116954      | Ex9CH16H 20 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 2+0            | 116955      | Ex9CH16H 20 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 2+0            | 116956      | Ex9CH16H 20 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 2+0            | 116957      | Ex9CH16H 20 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 2+0            | 116958      | Ex9CH16H 20 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 0+2            | 116959      | Ex9CH16H 02 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 0+2            | 116960      | Ex9CH16H 02 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 0+2            | 116961      | Ex9CH16H 02 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 0+2            | 116962      | Ex9CH16H 02 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 0+2            | 116963      | Ex9CH16H 02 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 1+1            | 116964      | Ex9CH16H 11 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 1+1            | 116965      | Ex9CH16H 11 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 1+1            | 116966      | Ex9CH16H 11 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 1+1            | 116967      | Ex9CH16H 11 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 1+1            | 116968      | Ex9CH16H 11 12V AC/DC  | 1/12/120 |

## Silent installation contactors 16 A, width 2MU



| Control voltage | Contacts NO+NC | Article No. | Type                   | Packing |
|-----------------|----------------|-------------|------------------------|---------|
| 230 V AC/DC     | 3+0            | 117044      | Ex9CH16H 30 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 3+0            | 117045      | Ex9CH16H 30 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 3+0            | 117046      | Ex9CH16H 30 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 3+0            | 117047      | Ex9CH16H 30 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 3+0            | 117048      | Ex9CH16H 30 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+3            | 117049      | Ex9CH16H 03 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+3            | 117050      | Ex9CH16H 03 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+3            | 117051      | Ex9CH16H 03 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+3            | 117052      | Ex9CH16H 03 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+3            | 117053      | Ex9CH16H 03 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 4+0            | 117054      | Ex9CH16H 40 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 4+0            | 117055      | Ex9CH16H 40 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 4+0            | 117056      | Ex9CH16H 40 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 4+0            | 117057      | Ex9CH16H 40 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 4+0            | 117058      | Ex9CH16H 40 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+4            | 117059      | Ex9CH16H 04 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+4            | 117060      | Ex9CH16H 04 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+4            | 117061      | Ex9CH16H 04 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+4            | 117062      | Ex9CH16H 04 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+4            | 117063      | Ex9CH16H 04 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 2+2            | 117064      | Ex9CH16H 22 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 2+2            | 117065      | Ex9CH16H 22 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 2+2            | 117066      | Ex9CH16H 22 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 2+2            | 117067      | Ex9CH16H 22 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 2+2            | 117068      | Ex9CH16H 22 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 3+1            | 117069      | Ex9CH16H 31 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 3+1            | 117070      | Ex9CH16H 31 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 3+1            | 117071      | Ex9CH16H 31 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 3+1            | 117072      | Ex9CH16H 31 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 3+1            | 117073      | Ex9CH16H 31 12V AC/DC  | 1/6/60  |

# Silent installation contactors **Ex9CHH**

## Silent installation contactors 20 A, width 1MU



| Control voltage | Contacts NO+NC | Article No. | Type                   | Packing  |
|-----------------|----------------|-------------|------------------------|----------|
| 230 V AC/DC     | 1+0            | 116969      | Ex9CH20H 10 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 1+0            | 116970      | Ex9CH20H 10 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 1+0            | 116971      | Ex9CH20H 10 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 1+0            | 116972      | Ex9CH20H 10 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 1+0            | 116973      | Ex9CH20H 10 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 0+1            | 116974      | Ex9CH20H 01 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 0+1            | 116975      | Ex9CH20H 01 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 0+1            | 116976      | Ex9CH20H 01 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 0+1            | 116977      | Ex9CH20H 01 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 0+1            | 116978      | Ex9CH20H 01 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 2+0            | 116979      | Ex9CH20H 20 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 2+0            | 116980      | Ex9CH20H 20 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 2+0            | 116981      | Ex9CH20H 20 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 2+0            | 116982      | Ex9CH20H 20 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 2+0            | 116983      | Ex9CH20H 20 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 0+2            | 116984      | Ex9CH20H 02 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 0+2            | 116985      | Ex9CH20H 02 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 0+2            | 116986      | Ex9CH20H 02 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 0+2            | 116987      | Ex9CH20H 02 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 0+2            | 116988      | Ex9CH20H 02 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 1+1            | 116989      | Ex9CH20H 11 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 1+1            | 116990      | Ex9CH20H 11 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 1+1            | 116991      | Ex9CH20H 11 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 1+1            | 116992      | Ex9CH20H 11 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 1+1            | 116993      | Ex9CH20H 11 12V AC/DC  | 1/12/120 |

## Silent installation contactors 20 A, width 2MU



| Control voltage | Contacts NO+NC | Article No. | Type                   | Packing |
|-----------------|----------------|-------------|------------------------|---------|
| 230 V AC/DC     | 3+0            | 117074      | Ex9CH20H 30 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 3+0            | 117075      | Ex9CH20H 30 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 3+0            | 117076      | Ex9CH20H 30 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 3+0            | 117077      | Ex9CH20H 30 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 3+0            | 117078      | Ex9CH20H 30 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+3            | 117079      | Ex9CH20H 03 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+3            | 117080      | Ex9CH20H 03 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+3            | 117081      | Ex9CH20H 03 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+3            | 117082      | Ex9CH20H 03 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+3            | 117083      | Ex9CH20H 03 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 4+0            | 117084      | Ex9CH20H 40 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 4+0            | 117085      | Ex9CH20H 40 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 4+0            | 117086      | Ex9CH20H 40 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 4+0            | 117087      | Ex9CH20H 40 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 4+0            | 117088      | Ex9CH20H 40 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+4            | 117089      | Ex9CH20H 04 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+4            | 117090      | Ex9CH20H 04 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+4            | 117091      | Ex9CH20H 04 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+4            | 117092      | Ex9CH20H 04 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+4            | 117093      | Ex9CH20H 04 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 2+2            | 117094      | Ex9CH20H 22 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 2+2            | 117095      | Ex9CH20H 22 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 2+2            | 117096      | Ex9CH20H 22 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 2+2            | 117097      | Ex9CH20H 22 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 2+2            | 117098      | Ex9CH20H 22 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 3+1            | 117099      | Ex9CH20H 31 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 3+1            | 117100      | Ex9CH20H 31 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 3+1            | 117101      | Ex9CH20H 31 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 3+1            | 117102      | Ex9CH20H 31 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 3+1            | 117103      | Ex9CH20H 31 12V AC/DC  | 1/6/60  |

# Silent installation contactors **Ex9CHH**

## Silent installation contactors 25 A, width 1MU



| Control voltage | Contacts<br>NO+NC | Article No. | Type                   | Packing  |
|-----------------|-------------------|-------------|------------------------|----------|
| 230 V AC/DC     | 1+0               | 116994      | Ex9CH25H 10 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 1+0               | 116995      | Ex9CH25H 10 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 1+0               | 116996      | Ex9CH25H 10 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 1+0               | 116997      | Ex9CH25H 10 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 1+0               | 116998      | Ex9CH25H 10 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 0+1               | 116999      | Ex9CH25H 01 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 0+1               | 117000      | Ex9CH25H 01 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 0+1               | 117001      | Ex9CH25H 01 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 0+1               | 117002      | Ex9CH25H 01 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 0+1               | 117003      | Ex9CH25H 01 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 2+0               | 117004      | Ex9CH25H 20 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 2+0               | 117005      | Ex9CH25H 20 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 2+0               | 117006      | Ex9CH25H 20 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 2+0               | 117007      | Ex9CH25H 20 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 2+0               | 117008      | Ex9CH25H 20 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 0+2               | 117009      | Ex9CH25H 02 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 0+2               | 117010      | Ex9CH25H 02 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 0+2               | 117011      | Ex9CH25H 02 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 0+2               | 117012      | Ex9CH25H 02 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 0+2               | 117013      | Ex9CH25H 02 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 1+1               | 117014      | Ex9CH25H 11 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 1+1               | 117015      | Ex9CH25H 11 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 1+1               | 117016      | Ex9CH25H 11 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 1+1               | 117017      | Ex9CH25H 11 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 1+1               | 117018      | Ex9CH25H 11 12V AC/DC  | 1/12/120 |

## Silent installation contactors 25 A, width 2MU



| Control voltage | Contacts<br>NO+NC | Article No. | Type                   | Packing |
|-----------------|-------------------|-------------|------------------------|---------|
| 230 V AC/DC     | 3+0               | 117104      | Ex9CH25H 30 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 3+0               | 117105      | Ex9CH25H 30 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 3+0               | 117106      | Ex9CH25H 30 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 3+0               | 117107      | Ex9CH25H 30 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 3+0               | 117108      | Ex9CH25H 30 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+3               | 117109      | Ex9CH25H 03 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+3               | 117110      | Ex9CH25H 03 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+3               | 117111      | Ex9CH25H 03 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+3               | 117112      | Ex9CH25H 03 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+3               | 117113      | Ex9CH25H 03 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 4+0               | 117114      | Ex9CH25H 40 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 4+0               | 117115      | Ex9CH25H 40 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 4+0               | 117116      | Ex9CH25H 40 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 4+0               | 117117      | Ex9CH25H 40 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 4+0               | 117118      | Ex9CH25H 40 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+4               | 117119      | Ex9CH25H 04 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+4               | 117120      | Ex9CH25H 04 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+4               | 117121      | Ex9CH25H 04 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+4               | 117122      | Ex9CH25H 04 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+4               | 117123      | Ex9CH25H 04 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 2+2               | 117124      | Ex9CH25H 22 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 2+2               | 117125      | Ex9CH25H 22 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 2+2               | 117126      | Ex9CH25H 22 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 2+2               | 117127      | Ex9CH25H 22 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 2+2               | 117128      | Ex9CH25H 22 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 3+1               | 117129      | Ex9CH25H 31 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 3+1               | 117130      | Ex9CH25H 31 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 3+1               | 117131      | Ex9CH25H 31 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 3+1               | 117132      | Ex9CH25H 31 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 3+1               | 117133      | Ex9CH25H 31 12V AC/DC  | 1/6/60  |

# Silent installation contactors **Ex9CHH**

## Silent installation contactors 32 A, width 1MU



| Control voltage | Contacts<br>NO+NC | Article No. | Type                   | Packing  |
|-----------------|-------------------|-------------|------------------------|----------|
| 230 V AC/DC     | 1+0               | 117019      | Ex9CH32H 10 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 1+0               | 117020      | Ex9CH32H 10 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 1+0               | 117021      | Ex9CH32H 10 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 1+0               | 117022      | Ex9CH32H 10 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 1+0               | 117023      | Ex9CH32H 10 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 0+1               | 117024      | Ex9CH32H 01 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 0+1               | 117025      | Ex9CH32H 01 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 0+1               | 117026      | Ex9CH32H 01 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 0+1               | 117027      | Ex9CH32H 01 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 0+1               | 117028      | Ex9CH32H 01 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 2+0               | 117029      | Ex9CH32H 20 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 2+0               | 117030      | Ex9CH32H 20 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 2+0               | 117031      | Ex9CH32H 20 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 2+0               | 117032      | Ex9CH32H 20 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 2+0               | 117033      | Ex9CH32H 20 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 0+2               | 117034      | Ex9CH32H 02 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 0+2               | 117035      | Ex9CH32H 02 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 0+2               | 117036      | Ex9CH32H 02 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 0+2               | 117037      | Ex9CH32H 02 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 0+2               | 117038      | Ex9CH32H 02 12V AC/DC  | 1/12/120 |
| 230 V AC/DC     | 1+1               | 117039      | Ex9CH32H 11 230V AC/DC | 1/12/120 |
| 110 V ACDC      | 1+1               | 117040      | Ex9CH32H 11 110V AC/DC | 1/12/120 |
| 48 V AC/DC      | 1+1               | 117041      | Ex9CH32H 11 48V AC/DC  | 1/12/120 |
| 24 V AC/DC      | 1+1               | 117042      | Ex9CH32H 11 24V AC/DC  | 1/12/120 |
| 12 V AC/DC      | 1+1               | 117043      | Ex9CH32H 11 12V AC/DC  | 1/12/120 |

## Silent installation contactors 32 A, width 2MU



| Control voltage | Contacts<br>NO+NC | Article No. | Type                   | Packing |
|-----------------|-------------------|-------------|------------------------|---------|
| 230 V AC/DC     | 3+0               | 117134      | Ex9CH32H 30 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 3+0               | 117135      | Ex9CH32H 30 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 3+0               | 117136      | Ex9CH32H 30 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 3+0               | 117137      | Ex9CH32H 30 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 3+0               | 117138      | Ex9CH32H 30 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+3               | 117139      | Ex9CH32H 03 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+3               | 117140      | Ex9CH32H 03 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+3               | 117141      | Ex9CH32H 03 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+3               | 117142      | Ex9CH32H 03 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+3               | 117143      | Ex9CH32H 03 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 4+0               | 117144      | Ex9CH32H 40 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 4+0               | 117145      | Ex9CH32H 40 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 4+0               | 117146      | Ex9CH32H 40 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 4+0               | 117147      | Ex9CH32H 40 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 4+0               | 117148      | Ex9CH32H 40 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+4               | 117149      | Ex9CH32H 04 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+4               | 117150      | Ex9CH32H 04 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+4               | 117151      | Ex9CH32H 04 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+4               | 117152      | Ex9CH32H 04 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+4               | 117153      | Ex9CH32H 04 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 2+2               | 117154      | Ex9CH32H 22 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 2+2               | 117155      | Ex9CH32H 22 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 2+2               | 117156      | Ex9CH32H 22 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 2+2               | 117157      | Ex9CH32H 22 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 2+2               | 117158      | Ex9CH32H 22 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 3+1               | 117159      | Ex9CH32H 31 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 3+1               | 117160      | Ex9CH32H 31 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 3+1               | 117161      | Ex9CH32H 31 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 3+1               | 117162      | Ex9CH32H 31 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 3+1               | 117163      | Ex9CH32H 31 12V AC/DC  | 1/6/60  |

# Silent installation contactors Ex9CHH

## Silent installation contactors 40 A, width 2MU



| Control voltage | Contacts NO+NC | Article No. | Type                   | Packing |
|-----------------|----------------|-------------|------------------------|---------|
| 230 V AC/DC     | 1+0            | 117164      | Ex9CH40H 10 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 1+0            | 117165      | Ex9CH40H 10 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 1+0            | 117166      | Ex9CH40H 10 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 1+0            | 117167      | Ex9CH40H 10 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 1+0            | 117168      | Ex9CH40H 10 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+1            | 117169      | Ex9CH40H 01 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+1            | 117170      | Ex9CH40H 01 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+1            | 117171      | Ex9CH40H 01 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+1            | 117172      | Ex9CH40H 01 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+1            | 117173      | Ex9CH40H 01 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 2+0            | 117174      | Ex9CH40H 20 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 2+0            | 117175      | Ex9CH40H 20 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 2+0            | 117176      | Ex9CH40H 20 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 2+0            | 117177      | Ex9CH40H 20 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 2+0            | 117178      | Ex9CH40H 20 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+2            | 117179      | Ex9CH40H 02 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+2            | 117180      | Ex9CH40H 02 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+2            | 117181      | Ex9CH40H 02 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+2            | 117182      | Ex9CH40H 02 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+2            | 117183      | Ex9CH40H 02 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 1+1            | 117184      | Ex9CH40H 11 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 1+1            | 117185      | Ex9CH40H 11 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 1+1            | 117186      | Ex9CH40H 11 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 1+1            | 117187      | Ex9CH40H 11 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 1+1            | 117188      | Ex9CH40H 11 12V AC/DC  | 1/6/60  |

## Silent installation contactors 40 A, width 3MU



| Control voltage | Contacts NO+NC | Article No. | Type                   | Packing |
|-----------------|----------------|-------------|------------------------|---------|
| 230 V AC/DC     | 3+0            | 117214      | Ex9CH40H 30 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 3+0            | 117215      | Ex9CH40H 30 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 3+0            | 117216      | Ex9CH40H 30 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 3+0            | 117217      | Ex9CH40H 30 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 3+0            | 117218      | Ex9CH40H 30 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 0+3            | 117219      | Ex9CH40H 03 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 0+3            | 117220      | Ex9CH40H 03 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 0+3            | 117221      | Ex9CH40H 03 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 0+3            | 117222      | Ex9CH40H 03 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 0+3            | 117223      | Ex9CH40H 03 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 4+0            | 117224      | Ex9CH40H 40 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 4+0            | 117225      | Ex9CH40H 40 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 4+0            | 117226      | Ex9CH40H 40 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 4+0            | 117227      | Ex9CH40H 40 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 4+0            | 117228      | Ex9CH40H 40 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 0+4            | 117229      | Ex9CH40H 04 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 0+4            | 117230      | Ex9CH40H 04 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 0+4            | 117231      | Ex9CH40H 04 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 0+4            | 117232      | Ex9CH40H 04 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 0+4            | 117233      | Ex9CH40H 04 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 2+2            | 117234      | Ex9CH40H 22 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 2+2            | 117235      | Ex9CH40H 22 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 2+2            | 117236      | Ex9CH40H 22 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 2+2            | 117237      | Ex9CH40H 22 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 2+2            | 117238      | Ex9CH40H 22 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 3+1            | 117239      | Ex9CH40H 31 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 3+1            | 117240      | Ex9CH40H 31 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 3+1            | 117241      | Ex9CH40H 31 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 3+1            | 117242      | Ex9CH40H 31 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 3+1            | 117243      | Ex9CH40H 31 12V AC/DC  | 1/4/40  |

# Silent installation contactors Ex9CHH

## Silent installation contactors 63 A, width 2MU



| Control voltage | Contacts NO+NC | Article No. | Type                   | Packing |
|-----------------|----------------|-------------|------------------------|---------|
| 230 V AC/DC     | 1+0            | 117189      | Ex9CH63H 10 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 1+0            | 117190      | Ex9CH63H 10 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 1+0            | 117191      | Ex9CH63H 10 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 1+0            | 117192      | Ex9CH63H 10 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 1+0            | 117193      | Ex9CH63H 10 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+1            | 117194      | Ex9CH63H 01 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+1            | 117195      | Ex9CH63H 01 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+1            | 117196      | Ex9CH63H 01 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+1            | 117197      | Ex9CH63H 01 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+1            | 117198      | Ex9CH63H 01 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 2+0            | 117199      | Ex9CH63H 20 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 2+0            | 117200      | Ex9CH63H 20 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 2+0            | 117201      | Ex9CH63H 20 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 2+0            | 117202      | Ex9CH63H 20 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 2+0            | 117203      | Ex9CH63H 20 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 0+2            | 117204      | Ex9CH63H 02 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 0+2            | 117205      | Ex9CH63H 02 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 0+2            | 117206      | Ex9CH63H 02 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 0+2            | 117207      | Ex9CH63H 02 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 0+2            | 117208      | Ex9CH63H 02 12V AC/DC  | 1/6/60  |
| 230 V AC/DC     | 1+1            | 117209      | Ex9CH63H 11 230V AC/DC | 1/6/60  |
| 110 V ACDC      | 1+1            | 117210      | Ex9CH63H 11 110V AC/DC | 1/6/60  |
| 48 V AC/DC      | 1+1            | 117211      | Ex9CH63H 11 48V AC/DC  | 1/6/60  |
| 24 V AC/DC      | 1+1            | 117212      | Ex9CH63H 11 24V AC/DC  | 1/6/60  |
| 12 V AC/DC      | 1+1            | 117213      | Ex9CH63H 11 12V AC/DC  | 1/6/60  |

## Silent installation contactors 63 A, width 3MU



| Control voltage | Contacts NO+NC | Article No. | Type                   | Packing |
|-----------------|----------------|-------------|------------------------|---------|
| 230 V AC/DC     | 3+0            | 117244      | Ex9CH63H 30 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 3+0            | 117245      | Ex9CH63H 30 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 3+0            | 117246      | Ex9CH63H 30 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 3+0            | 117247      | Ex9CH63H 30 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 3+0            | 117248      | Ex9CH63H 30 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 0+3            | 117249      | Ex9CH63H 03 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 0+3            | 117250      | Ex9CH63H 03 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 0+3            | 117251      | Ex9CH63H 03 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 0+3            | 117252      | Ex9CH63H 03 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 0+3            | 117253      | Ex9CH63H 03 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 4+0            | 117254      | Ex9CH63H 40 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 4+0            | 117255      | Ex9CH63H 40 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 4+0            | 117256      | Ex9CH63H 40 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 4+0            | 117257      | Ex9CH63H 40 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 4+0            | 117258      | Ex9CH63H 40 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 0+4            | 117259      | Ex9CH63H 04 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 0+4            | 117260      | Ex9CH63H 04 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 0+4            | 117261      | Ex9CH63H 04 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 0+4            | 117262      | Ex9CH63H 04 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 0+4            | 117263      | Ex9CH63H 04 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 2+2            | 117264      | Ex9CH63H 22 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 2+2            | 117265      | Ex9CH63H 22 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 2+2            | 117266      | Ex9CH63H 22 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 2+2            | 117267      | Ex9CH63H 22 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 2+2            | 117268      | Ex9CH63H 22 12V AC/DC  | 1/4/40  |
| 230 V AC/DC     | 3+1            | 117269      | Ex9CH63H 31 230V AC/DC | 1/4/40  |
| 110 V ACDC      | 3+1            | 117270      | Ex9CH63H 31 110V AC/DC | 1/4/40  |
| 48 V AC/DC      | 3+1            | 117271      | Ex9CH63H 31 48V AC/DC  | 1/4/40  |
| 24 V AC/DC      | 3+1            | 117272      | Ex9CH63H 31 24V AC/DC  | 1/4/40  |
| 12 V AC/DC      | 3+1            | 117273      | Ex9CH63H 31 12V AC/DC  | 1/4/40  |

# Silent installation contactors **Ex9CHH**

## Distance block between Ex9CH devices, width 0.5MU



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

# Technical Data **Ex9CHH**

## Silent installation contactors with AC/DC control voltage

| General parameters                                        |  |
|-----------------------------------------------------------|--|
| AC/DC coil control voltage                                |  |
| Indication window help users to know the status of device |  |
| Silent and hum free operation                             |  |

| Electrical parameters                       |              | 16A                                              | 20A    | 25A    | 32A    | 40A   | 63A    |
|---------------------------------------------|--------------|--------------------------------------------------|--------|--------|--------|-------|--------|
| Tested according to                         |              | IEC/EN 61095, IEC/EN 60947-4-1, IEC/EN 60947-5-1 |        |        |        |       |        |
| Rated operational voltage $U_e$             |              | 250 (2P), 400 (4P) V                             |        |        |        |       |        |
| Rated control power voltage $U_s$           |              | 12, 24, 48, 110, 230V AC/DC ( 85%-110% )         |        |        |        |       |        |
| Rated insulation voltage $U_i$              |              | 500 V                                            |        |        |        |       |        |
| Rated impulse withstand voltage $U_{imp}$   |              | 4 kV                                             |        |        |        |       |        |
| Rated conventional thermal current $I_{th}$ |              | 32 A                                             | 32 A   | 32 A   | 32 A   | 63 A  | 63 A   |
| Rated current $I_n$                         |              |                                                  |        |        |        |       |        |
|                                             | AC-7a        | 16 A                                             | 20 A   | 25 A   | 32 A   | 40 A  | 63 A   |
|                                             | AC-7b        | 6 A                                              | 7 A    | 9 A    | 12 A   | 18 A  | 25 A   |
| Controlled power                            |              |                                                  |        |        |        |       |        |
| AC-7a                                       | 250 V        | 3.5 kW                                           | 4.5 kW | 5.5 kW | 8 kW   | 9 kW  | 14 kW  |
|                                             | 400 V        | 6 kW                                             | 7.5 kW | 9.5 kW | 12 kW  | 15 kW | 24 kW  |
| AC-7b                                       | 250 V        | 1.4 kW                                           | 1.6 kW | 2 kW   | 3 kW   | 4 kW  | 5.5 kW |
|                                             | 400 V        | 2.2 kW                                           | 2.5 kW | 3.2 kW | 4.5 kW | 6 kW  | 8 kW   |
| Electrical service life                     |              | 100 000 operating cycles                         |        |        |        |       |        |
| Number of main contacts                     |              |                                                  |        |        |        |       |        |
|                                             | 2P           | 1NO, 1NC, 1NO+1NC, 2NO, 2NC                      |        |        |        |       |        |
|                                             | 4P           | 3NO, 3NC, 2NO+2NC, 3NO+1NC, 4NO, 4NC             |        |        |        |       |        |
| Rated duty system                           |              |                                                  |        |        |        |       |        |
|                                             | Intermittent | 30 times/h load factor 40%                       |        |        |        |       |        |
|                                             | Eight hours  | basic duty system                                |        |        |        |       |        |

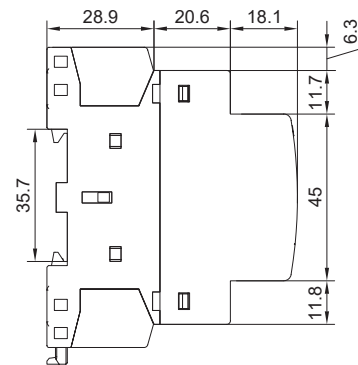
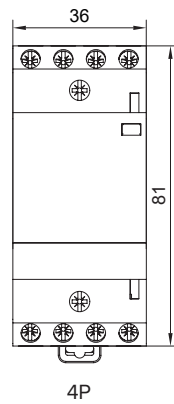
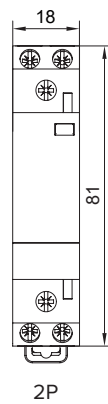
| Mechanical parameters   |                 |                                                   |     |     |           |                              |     |
|-------------------------|-----------------|---------------------------------------------------|-----|-----|-----------|------------------------------|-----|
|                         |                 | 16A                                               | 20A | 25A | 32A       | 40A                          | 63A |
| Frame size              |                 | 45 mm                                             |     |     |           |                              |     |
| Width (2P / 4P)         |                 | 18 / 36 mm                                        |     |     |           | 36 / 54 mm                   |     |
| Mounting                |                 | easy fastening onto 35 mm device rail (DIN)       |     |     |           |                              |     |
| Degree of protection    |                 | IP20                                              |     |     |           |                              |     |
| Terminals               |                 | M3.5 screws                                       |     |     | M5 screws |                              |     |
| Control coil terminal   |                 | M3.5 screws                                       |     |     |           |                              |     |
| Wiring                  |                 |                                                   |     |     |           |                              |     |
| Control circuit         | Hard wire       | 1.5 — 2.5 mm <sup>2</sup> / 2×1.5 mm <sup>2</sup> |     |     |           |                              |     |
|                         | Flexible wire   | 1.5 — 2.5 mm <sup>2</sup> / 2×2.5 mm <sup>2</sup> |     |     |           |                              |     |
| Power circuit           | Hard wire       | 1.5 — 6 mm <sup>2</sup>                           |     |     |           | 6 — 25 mm <sup>2</sup>       |     |
|                         | Flexible wire   | 1 — 4 mm <sup>2</sup>                             |     |     |           | 6 — 16 mm <sup>2</sup>       |     |
| Fastening torque        | Control circuit | 0.8 Nm                                            |     |     |           |                              |     |
|                         | Power circuit   | 0.8 Nm                                            |     |     |           | 3.5 Nm                       |     |
| Mechanical service life |                 | 1 000 000 operating cycles                        |     |     |           |                              |     |
| Pollution degree        |                 | 2                                                 |     |     |           |                              |     |
| Installation class      |                 | II                                                |     |     |           |                              |     |
| Weight                  |                 | 0.130 kg (2P), 0.240 kg (4P)                      |     |     |           | 0.270 kg (2P), 0.390 kg (4P) |     |
| Ambient temperature     |                 | -5 — +40 °C                                       |     |     |           |                              |     |

# Technical Data **Ex9CHH**

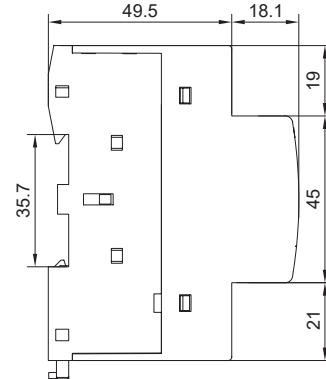
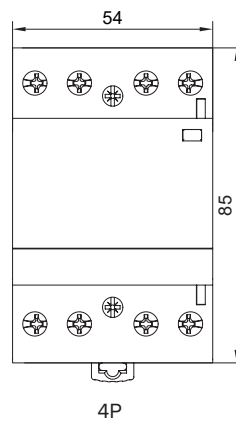
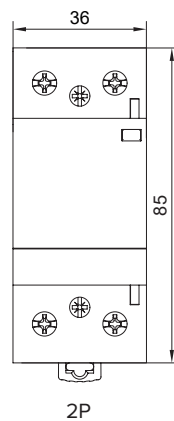
## Silent installation contactors with AC/DC control voltage

### Dimensions

Ex9CH16H  
Ex9CH20H  
Ex9CH25H  
Ex9CH32H



Ex9CH40H  
Ex9CH63H



### Wiring diagrams

