

# Motor protective circuit breakers Ex9SN25B



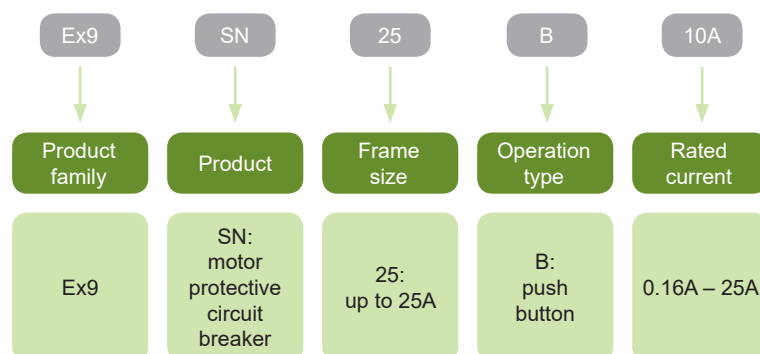
- Manual motor protective circuit breakers
- Meet requirements of EN 60947-2 and EN 60947-4-1
- Rated current  $I_n$  up to 25 A at 415 V AC-3
- Rated operating voltage  $U_n$  up to 400/415 V
- Short-circuit protection
- Disconnect function
  - Overload protection
  - Loss-phase protection
- Suitable for three and single-phase applications
- Wide range of accessories

Manual motor starters are electromechanical protection devices for the main circuit. They are used mainly to switch motors manually ON/OFF and protect them fuseless against short circuit and loss-phase.

Fuseless protection with a manual motor starter saves costs, space and ensures a quick reaction under short-circuit condition, by switching off the motor within milliseconds.

Manual motor starter combinations are setup together with contactors and overload relays.

## Type Key

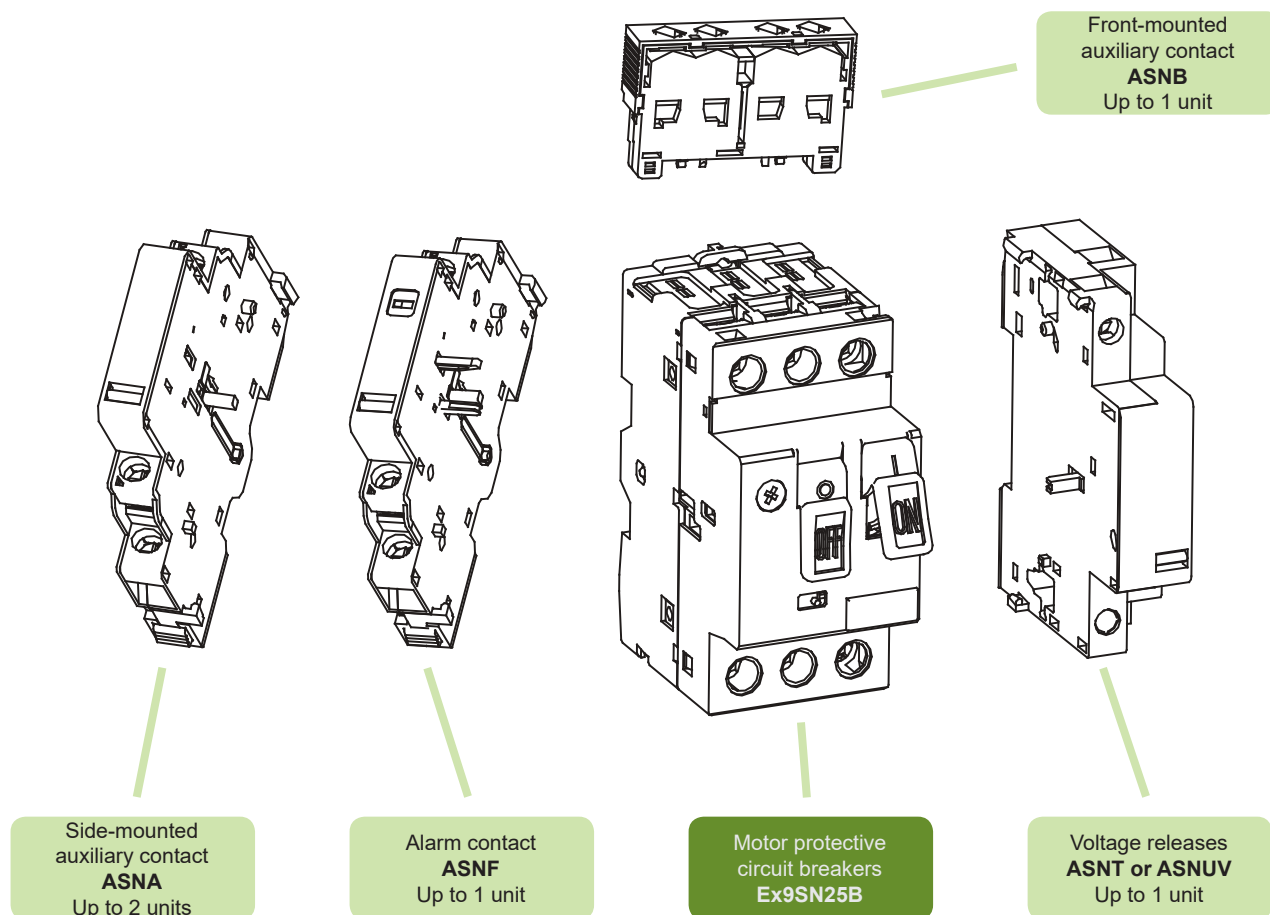


## Certification marks



# Motor protective circuit breakers Ex9SN25B

## Accessories



Auxiliary contacts ASNA

Auxiliary contacts ASNB

Alarm contact ASNF

Shunt trip release ASNT

Undervoltage release ASNUV

Isolated boxes for surface mounting ASNE

# Motor protective circuit breakers Ex9SN25B

## Motor protective circuit breakers, 3-pole

- Adjustable overload protection  $I_r$
- Fixed instantaneous short-circuit current protection  $I_i$  (ca.  $11 - 14 \times I_n$ )
- Temperature compensation function to reduce the impact of ambient temperature



| Rated current $I_n$ | Tripping current setting range $I_r$ | Short-circuit current $I_i$ | Article No. | Type           | Packing |
|---------------------|--------------------------------------|-----------------------------|-------------|----------------|---------|
| 0.16 A              | 0.10 – 0.16 A                        | 1.5 A                       | 108940      | Ex9SN25B 0.16A | 1/64    |
| 0.25 A              | 0.16 – 0.25 A                        | 2.4 A                       | 108941      | Ex9SN25B 0.25A | 1/64    |
| 0.40 A              | 0.25 – 0.40 A                        | 5 A                         | 108942      | Ex9SN25B 0.4A  | 1/64    |
| 0.63 A              | 0.40 – 0.63 A                        | 8 A                         | 108943      | Ex9SN25B 0.63A | 1/64    |
| 1.0 A               | 0.63 – 1.00 A                        | 13 A                        | 108944      | Ex9SN25B 1A    | 1/64    |
| 1.6 A               | 1.0 – 1.6 A                          | 22.5 A                      | 108945      | Ex9SN25B 1.6A  | 1/64    |
| 2.5 A               | 1.6 – 2.5 A                          | 33.5 A                      | 108946      | Ex9SN25B 2.5A  | 1/64    |
| 4.0 A               | 2.5 – 4.0 A                          | 51 A                        | 108947      | Ex9SN25B 4A    | 1/64    |
| 6.3 A               | 4.0 – 6.3 A                          | 78 A                        | 108948      | Ex9SN25B 6.3A  | 1/64    |
| 10 A                | 6.0 – 10 A                           | 138 A                       | 108949      | Ex9SN25B 10A   | 1/64    |
| 14 A                | 9.0 – 14 A                           | 170 A                       | 108950      | Ex9SN25B 14A   | 1/64    |
| 18 A                | 13 – 18 A                            | 223 A                       | 108951      | Ex9SN25B 18A   | 1/64    |
| 23 A                | 17 – 23 A                            | 327 A                       | 108952      | Ex9SN25B 23A   | 1/64    |
| 25 A                | 20 – 25 A                            | 327 A                       | 108953      | Ex9SN25B 25A   | 1/64    |

# Technical Data Ex9SN25B

## Motor protective circuit breakers

### General parameters

For protection of various motor applications

Provide overload, short-circuit and phase-failure protection

Can replace the circuit breaker and thermal relay to reduce costs and space

Temperature compensation function to reduce the impact of ambient temperature

#### Accessories

|                                     |       |                                |
|-------------------------------------|-------|--------------------------------|
| Front-mounted auxiliary contacts    | ASNB  | 108954, 108955                 |
| Side-mounted auxiliary contacts     | ASNA  | 108956, 108957                 |
| Alarm contacts                      | ASNF  | 108964, 108965, 108966, 108967 |
| Undervoltage releases               | ASNUV | 108958, 108959, 108960         |
| Shunt trip releases                 | ASNT  | 108961, 108962, 108963         |
| Isolated boxes for surface mounting | ASNE  | 108968, 108969                 |

Max. number of installed accessories are 2 pcs of contact or signal units (2 pcs ASNA or 1 pc of ASNA + 1 pc of ASNF) or 1 pc of front-mounted contact unit (ASNB) and 1 pc of voltage release (ASNT, ASNUV)

### Electrical parameters

|                                                                      |                                        |
|----------------------------------------------------------------------|----------------------------------------|
| Tested according to                                                  | EN 60947-4-1<br>EN 60947-2             |
| Rated operating voltage $U_e$                                        | 230/240, 400/415, 440, 500, 690 V AC   |
| Rated frequency $f$                                                  | 50/60 Hz                               |
| Rated insulation voltage $U_i$                                       | 690 V                                  |
| Rated impulse withstand voltage $U_{imp}$                            | 8 kV                                   |
| Rated current $I_e$                                                  | 0.16 – 25 A                            |
| Fixed rated inst. short-circuit current $I_i$                        | see table below for exact values       |
| Conventional free air thermal current $I_{th}$                       | $I_{th} = I_e$                         |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ (EN 60947-2) |                                        |
| $I_e$ 0.1 – 18 A at 230/240 V AC                                     | 100 kA                                 |
| $I_e$ 17 – 25 A at 230/240 V AC                                      | 50 kA                                  |
| $I_e$ 0.1 – 10 A at 400/415 V AC                                     | 100 kA                                 |
| $I_e$ 9 – 25 A at 400/415 V AC                                       | 15 kA                                  |
| $I_e$ 0.1 – 1.6 A at 660/690 V AC                                    | 100 kA                                 |
| $I_e$ 1.6 – 25 A at 660/690 V AC                                     | 3 kA                                   |
| Rated service short-circuit breaking capacity $I_{cs}$ (EN 60947-2)  |                                        |
| $I_e$ 0.1 – 18 A at 230/240 V AC                                     | 100 kA                                 |
| $I_e$ 17 – 25 A at 230/240 V AC                                      | 50 kA                                  |
| $I_e$ 0.1 – 6.3 A at 400/415 V AC                                    | 100 kA                                 |
| $I_e$ 6 – 18 A at 400/415 V AC                                       | 7.5 kA                                 |
| $I_e$ 17 – 25 A at 400/415 V AC                                      | 6 kA                                   |
| $I_e$ 0.1 – 1.6 A at 660/690 V AC                                    | 100 kA                                 |
| $I_e$ 1.6 – 25 A at 660/690 V AC                                     | 2.25 kA                                |
| Required contactor type                                              |                                        |
| $I_e$ 0.1 – 10 A                                                     | Ex9CS06/09 or Ex9C12 frame size        |
| $I_e$ 14 – 25 A                                                      | Ex9C18/25 frame size                   |
| Maximum operating frequency                                          | 30 operating cycles per hour           |
| Electrical service life                                              | 2 000 operating cycles (at 400 V AC-3) |
| Power loss                                                           | 9 W                                    |

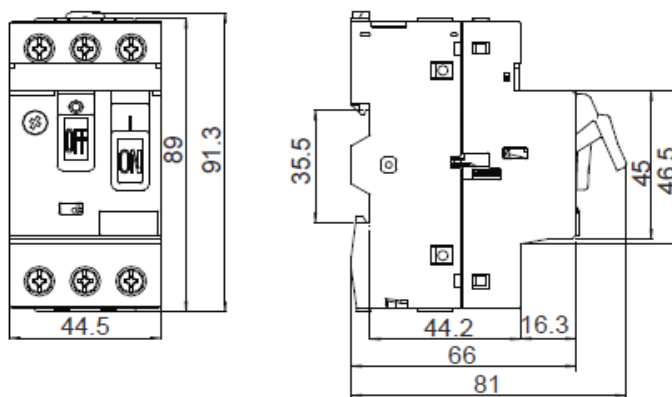
# Technical Data Ex9SN25B

## Motor protective circuit breakers

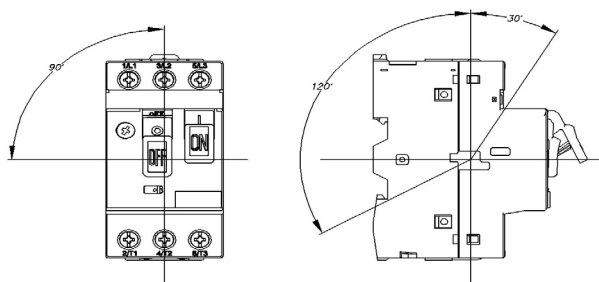
### Mechanical parameters

|                                   |                                                      |
|-----------------------------------|------------------------------------------------------|
| Device width                      | 44.5 mm                                              |
| Device height                     | 91.3 mm                                              |
| Device depth                      | 81 mm                                                |
| Frame size                        | 45 mm                                                |
| Mounting                          | easy fastening onto 35 mm device rail (DIN)          |
| Safety arcing distance            | 40 mm                                                |
| Degree of protection              | IP20                                                 |
| Mechanical service life           | 10 000 operating cycles                              |
| Terminals                         | lift                                                 |
| Terminal capacity                 | 1 – 6 mm <sup>2</sup>                                |
| Fastening torque of terminals     | 1.7 Nm                                               |
| Ambient temperature               | -5 – +40 °C                                          |
| Altitude                          | ≤ 2 000 m                                            |
| Relative humidity                 | ≤ 50 %                                               |
| Resistance to climatic conditions | class 2, according to EN 60068-2-3 and EN 60068-2-30 |
| Resistance to mechanical shock    | 30 gn (shock duration 11 ms)                         |
| Resistance to vibrations          | 5 gn (5 – 150 Hz)                                    |
| Pollution degree                  | 3                                                    |
| Overvoltage class                 | III                                                  |
| Weight                            | 0.33 kg                                              |

### Dimensions



### Mounting positions



# Technical Data Ex9SN25B

## Motor protective circuit breakers Ex9SN25B

### Rated instantaneous short-circuit current $I_i$

| $I_e$ [A] | 0.16 A | 0.25 A | 0.40 A | 0.63 A | 1 A | 1.6 A | 2.5 A | 4.0 A | 6.3 A | 10 A | 14 A | 18 A | 23 A | 25 A |
|-----------|--------|--------|--------|--------|-----|-------|-------|-------|-------|------|------|------|------|------|
| $I_i$ [A] | 1.5    | 2.4    | 5      | 8      | 13  | 22.5  | 33.5  | 51    | 78    | 138  | 170  | 223  | 327  | 327  |

### Rated power of three-phase motor

| $I_e$ [A] | AC-3, 50/60 Hz [W] |       |       |       |       |       |
|-----------|--------------------|-------|-------|-------|-------|-------|
|           | 230/240 V          | 400 V | 415 V | 440 V | 500 V | 690 V |
| 0.16 A    | -                  | -     | -     | -     | -     | -     |
| 0.25 A    | -                  | -     | -     | -     | -     | -     |
| 0.40 A    | -                  | -     | -     | -     | -     | -     |
| 0.63 A    | -                  | -     | -     | -     | -     | 0.37  |
| 1 A       | -                  | -     | -     | 0.37  | 0.37  | 0.55  |
| 1.6 A     | -                  | 0.37  | -     | 0.55  | 0.75  | 1.1   |
| 2.5 A     | 0.37               | 0.75  | 0.75  | 1.1   | 1.1   | 1.5   |
| 4.0 A     | 0.75               | 1.5   | 1.5   | 1.5   | 2.2   | 3.0   |
| 6.3 A     | 1.1                | 2.2   | 2.2   | 3.0   | 3.7   | 4.0   |
| 10 A      | 2.2                | 4.0   | 4.0   | 4.0   | 5.5   | 7.5   |
| 14 A      | 3.0                | 5.5   | 5.5   | 7.5   | 7.5   | 9     |
| 18 A      | 4.0                | 7.5   | 9     | 9     | 9     | 11    |
| 23 A      | 5.5                | 11    | 11    | 11    | 11    | 15    |
| 25 A      | 5.5                | 11    | 11    | 11    | 15    | 18.5  |

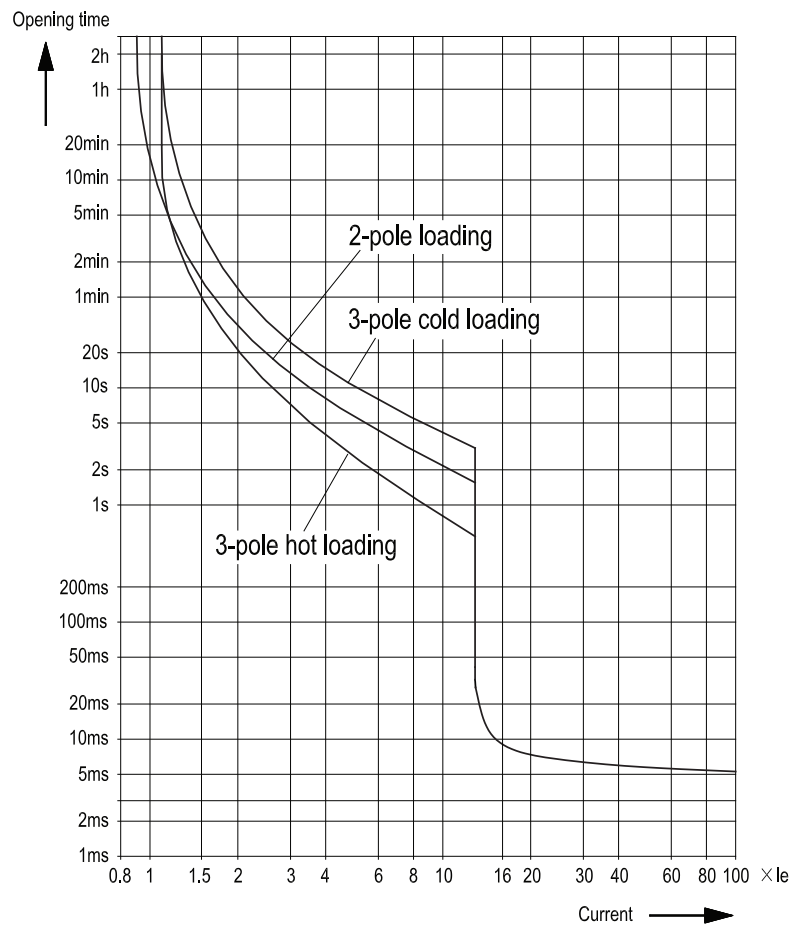
### Maximum value of backup fuse for short-circuit protection for $I_{cc} > I_{cu}$

| $I_e$ [A] | 230/240 V |         | 400/415 V |         | 440 V |         | 500 V |         | 690 V |         |
|-----------|-----------|---------|-----------|---------|-------|---------|-------|---------|-------|---------|
|           | aM A      | gL/gG A | aM A      | gL/gG A | aM A  | gL/gG A | aM A  | gL/gG A | aM A  | gL/gG A |
| 0.16 A    | -         | -       | -         | -       | -     | -       | -     | -       | -     | -       |
| 0.25 A    | -         | -       | -         | -       | -     | -       | -     | -       | -     | -       |
| 0.40 A    | -         | -       | -         | -       | -     | -       | -     | -       | -     | -       |
| 0.63 A    | -         | -       | -         | -       | -     | -       | -     | -       | -     | -       |
| 1 A       | -         | -       | -         | -       | -     | -       | -     | -       | -     | -       |
| 1.6 A     | -         | -       | -         | -       | -     | -       | -     | -       | -     | -       |
| 2.5 A     | -         | -       | -         | -       | -     | -       | -     | -       | 16    | 20      |
| 4.0 A     | -         | -       | -         | -       | -     | -       | -     | -       | 25    | 32      |
| 6.3 A     | -         | -       | -         | -       | 50    | 63      | 50    | 63      | 32    | 40      |
| 10 A      | -         | -       | -         | -       | 50    | 63      | 50    | 63      | 32    | 40      |
| 14 A      | -         | -       | 63        | 80      | 50    | 63      | 50    | 63      | 40    | 50      |
| 18 A      | -         | -       | 63        | 80      | 50    | 63      | 50    | 63      | 40    | 50      |
| 23 A      | 80        | 100     | 80        | 100     | 63    | 80      | 50    | 63      | 40    | 50      |
| 25 A      | 80        | 100     | 80        | 100     | 63    | 80      | 50    | 63      | 40    | 50      |

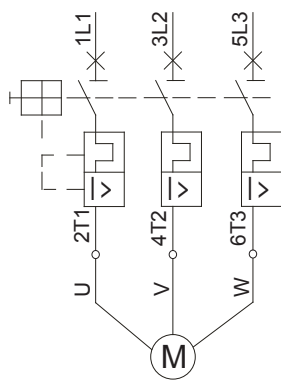
# Technical Data Ex9SN25B

## Motor protective circuit breakers Ex9SN25B

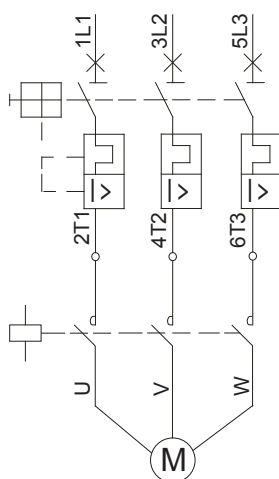
### Tripping characteristics



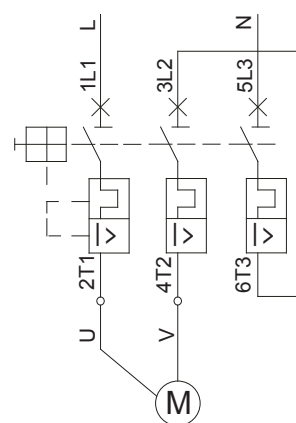
### Connection diagram



3-phase motor protection



3-phase motor protection  
with contactor



1-phase or DC motor protection

# Accessories for Ex9SN25B

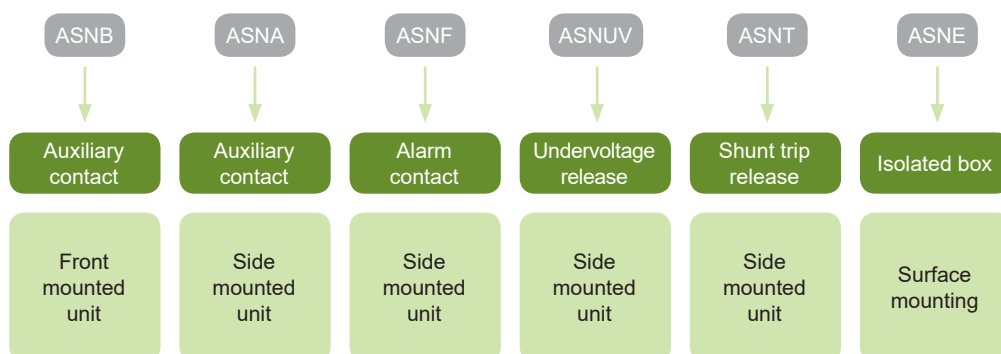


- Accessories for motor protective circuit breakers Ex9SN25B
- Front-mounted auxiliary contacts ASNB
- Side-mounted auxiliary contacts ASNA
- Side-mounted alarm contact ASNF
- Undervoltage release ASNUV
- Shunt trip release ASNT
- Isolated boxes for surface mounting

Ex9SN25B motor protective circuit breakers can be equipped with various types of additional accessories. All the accessories are designed in the way to be possible to combine different types with one device. There can be used up to three auxiliary or alarm contact units plus one voltage release.

Auxiliary contact units are available with three possible contact combinations. Auxiliary and alarm contact units are mounted from the left to the device. Release units are mounted from the right side. Installation of an auxiliary or alarm contact units does not affect the possibility of installing voltage release.

## Type Key





# Accessories for Ex9SN25B

## Auxiliary contacts for Ex9SN25B, front-mounted



| Contacts    | Suitable for | Article No. | Type   | Packing |
|-------------|--------------|-------------|--------|---------|
| 2 NO        | Ex9SN25B     | 108956      | ASNB20 | 20/1280 |
| 1 NO + 1 NC | Ex9SN25B     | 108957      | ASNB11 | 20/1280 |

## Auxiliary contacts for Ex9SN25B, side-mounted



| Contacts    | Suitable for | Article No. | Type   | Packing |
|-------------|--------------|-------------|--------|---------|
| 2 NO        | Ex9SN25B     | 108954      | ASNA20 | 4/256   |
| 1 NO + 1 NC | Ex9SN25B     | 108955      | ASNA11 | 4/256   |

## Alarm contacts for Ex9SN25B, side-mounted



| Contacts                  | Suitable for | Article No. | Type     | Packing |
|---------------------------|--------------|-------------|----------|---------|
| 1 NO (Fault) + 1 NC (Aux) | Ex9SN25B     | 108964      | ASNF1001 | 3/192   |
| 1 NC (Fault) + 1 NC (Aux) | Ex9SN25B     | 108965      | ASNF0101 | 3/192   |
| 1 NO (Fault) + 1 NO (Aux) | Ex9SN25B     | 108966      | ASNF1010 | 3/192   |
| 1 NC (Fault) + 1 NO (Aux) | Ex9SN25B     | 108967      | ASNF0110 | 3/192   |

# Accessories for Ex9SN25B

## Undervoltage releases for Ex9SN25B, side-mounted



| AC operating voltage     | Suitable for | Article No. | Type   | Packing |
|--------------------------|--------------|-------------|--------|---------|
| 110-115V 50Hz/127V 60Hz  | Ex9SN25B     | 108958      | ASNUVA | 2/128   |
| 220-240V 50Hz            | Ex9SN25B     | 108959      | ASNUVB | 2/128   |
| 380-400V 50Hz/ 440V 60Hz | Ex9SN25B     | 108960      | ASNUVC | 2/128   |

## Shunt trip releases for Ex9SN25B, side-mounted



| AC operating voltage     | Suitable for | Article No. | Type  | Packing |
|--------------------------|--------------|-------------|-------|---------|
| 110-115V 50Hz/127V 60Hz  | Ex9SN25B     | 108961      | ASNTA | 2/128   |
| 220-240V 50Hz            | Ex9SN25B     | 108962      | ASNTB | 2/128   |
| 380-400V 50Hz/ 440V 60Hz | Ex9SN25B     | 108963      | ASNTC | 2/128   |

## Isolated boxes for Ex9SN25B, surface mounting



| Description               | Suitable for | Article No. | Type  | Packing |
|---------------------------|--------------|-------------|-------|---------|
| Actuating diaphragm       | Ex9SN25B     | 108968      | ASNEA | 1/20    |
| Emergency stop pushbutton | Ex9SN25B     | 108969      | ASNEB | 1/12    |

# Technical Data Ex9SN25B Accessories

## Accessories for motor protective circuit breakers Ex9SN25B

### Front-mounted auxiliary contact unit ASNB

#### General parameters

For subsequent mounting

Front-mounted version

1 unit can be used with a motor protective circuit breaker

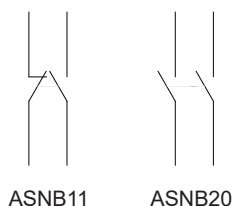
#### Electrical parameters

|                                           | ASNB20                    | ASNB11      |
|-------------------------------------------|---------------------------|-------------|
| Contacts                                  | 2 NO                      | 1 NO + 1 NC |
| Tested according to                       | EN 60947-5-1              |             |
| Rated operating voltage $U_e$             | 240V AC, 415V AC, 220V DC |             |
| Rated frequency                           | 50/60 Hz                  |             |
| Rated thermal current $I_{th}$            | 2.5 A                     |             |
| Rated op. current $I_e$ , ut. cat. AC-15  | 0.5 A at 240 V            |             |
| Rated op. current $I_e$ , ut. cat. DC-13  | 0.15 A at 60 V            |             |
| Rated impulse withstand voltage $U_{imp}$ | 2.5 kV                    |             |
| Rated insulation voltage $U_i$            | 250 V                     |             |

#### Mechanical parameters

|                               | ASNB20                  | ASNB11 |
|-------------------------------|-------------------------|--------|
| Device width                  | 45 mm                   |        |
| Device height                 | 9.5 mm                  |        |
| Device depth                  | 28.7 mm                 |        |
| Mounting                      | front                   |        |
| Degree of protection          | IP20                    |        |
| Terminals                     | lift                    |        |
| Terminal capacity             | 1 – 2.5 mm <sup>2</sup> |        |
| Fastening torque of terminals | 0.8 Nm                  |        |

#### Wiring diagram



# Technical Data Ex9SN25B Accessories

## Accessories for motor protective circuit breakers Ex9SN25B

### Side-mounted auxiliary contact unit ASNA

#### General parameters

For subsequent mounting

Side-mounted version, mounting from the left

Up to 2 units can be used with a motor protective circuit breaker

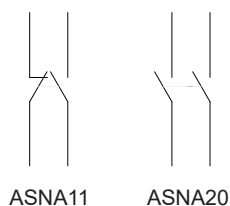
#### Electrical parameters

|                                           | ASNA20                         | ASNA11      |
|-------------------------------------------|--------------------------------|-------------|
| Contacts                                  | 2 NO                           | 1 NO + 1 NC |
| Tested according to                       | EN 60947-5-1                   |             |
| Rated operating voltage $U_e$             | 240 V AC, 415 V AC, 220 V DC   |             |
| Rated frequency $f$                       | 50/60 Hz                       |             |
| Rated thermal current $I_{th}$            | 6 A                            |             |
| Rated op. current $I_e$ , ut. cat. AC-15  | 3.3 A at 240 V, 1.5 A at 415 V |             |
| Rated op. current $I_e$ , ut. cat. DC-13  | 3 A at 60 V                    |             |
| Rated impulse withstand voltage $U_{imp}$ | 4 kV                           |             |
| Rated insulation voltage $U_i$            | 690 V                          |             |

#### Mechanical parameters

|                               | ASNA20                  | ASNA11 |
|-------------------------------|-------------------------|--------|
| Device width                  | 9.5 mm                  |        |
| Device height                 | 91.3 mm                 |        |
| Device depth                  | 65.6 mm                 |        |
| Mounting                      | left side               |        |
| Degree of protection          | IP20                    |        |
| Terminals                     | lift                    |        |
| Terminal capacity             | 1 – 2.5 mm <sup>2</sup> |        |
| Fastening torque of terminals | 0.8 Nm                  |        |

#### Wiring diagram



# Technical Data Ex9SN25B Accessories

## Accessories for motor protective circuit breakers Ex9SN25B

### Front-mounted auxiliary contact unit ASNF

#### General parameters

For subsequent mounting

Front-mounted version

1 unit can be used with a motor protective circuit breaker

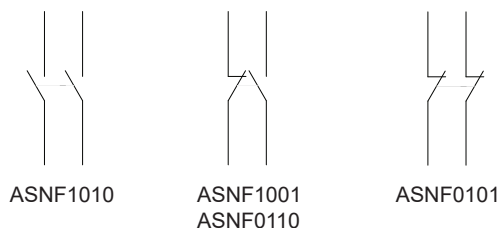
#### Electrical parameters

|                                           | ASNF1001                             | ASNF0101                     | ASNF1010                     | ASNF0110                     |
|-------------------------------------------|--------------------------------------|------------------------------|------------------------------|------------------------------|
| Contacts                                  | 1 NO (Fault)<br>+ 1 NC (Aux)         | 1 NC (Fault)<br>+ 1 NC (Aux) | 1 NO (Fault)<br>+ 1 NO (Aux) | 1 NC (Fault)<br>+ 1 NO (Aux) |
| Tested according to                       | EN 60947-5-1                         |                              |                              |                              |
| Rated operating voltage $U_e$             | Fault: 240 V AC, Auxiliary: 690 V AC |                              |                              |                              |
| Rated frequency                           | 50/60 Hz                             |                              |                              |                              |
| Rated thermal current $I_{th}$            | Fault: 2.5 A, Auxiliary: 6 A         |                              |                              |                              |
| Rated op. current $I_e$ , ut. cat. AC-14  | Fault: 0.3 A at 240 V                |                              |                              |                              |
| Rated op. current $I_e$ , ut. cat. DC-13  | Fault: 0.15 A at 60 V                |                              |                              |                              |
| Rated impulse withstand voltage $U_{imp}$ | 4 kV                                 |                              |                              |                              |
| Rated insulation voltage $U_i$            | 690 V                                |                              |                              |                              |

#### Mechanical parameters

|                               | ASNF1001                | ASNF0101 | ASNF1010 | ASNF0110 |
|-------------------------------|-------------------------|----------|----------|----------|
| Device width                  | 9.5 mm                  |          |          |          |
| Device height                 | 91.3 mm                 |          |          |          |
| Device depth                  | 65.5 mm                 |          |          |          |
| Mounting                      | left side               |          |          |          |
| Degree of protection          | IP20                    |          |          |          |
| Terminals                     | lift                    |          |          |          |
| Terminal capacity             | 1 – 2.5 mm <sup>2</sup> |          |          |          |
| Fastening torque of terminals | 0.8 Nm                  |          |          |          |

#### Wiring diagram



# Technical Data Ex9SN25B Accessories

## Accessories for motor protective circuit breakers Ex9SN25B

### Shunt trip releases ASNT

#### General parameters

For subsequent mounting

Side-mounted version, mounting from the right

1 unit can be used with a motor protective circuit breaker or ASNUV unit

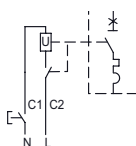
#### Electrical parameters

|                                           | ASNTA                                      | ASNTB                  | ASNTC                                      |
|-------------------------------------------|--------------------------------------------|------------------------|--------------------------------------------|
| Tested according to                       | EN 60947-2                                 |                        |                                            |
| Rated operating voltage $U_e$             | 110 – 115 V AC @ 50 Hz<br>127 V AC @ 60 Hz | 220 – 240 V AC @ 50 Hz | 380 – 400 V AC @ 50 Hz<br>440 V AC @ 60 Hz |
| Oper. voltage tripping tolerance          | 70 – 110 % $U_e$                           |                        |                                            |
| Rated frequency $f$                       | 50/60 Hz                                   |                        |                                            |
| Rated impulse withstand voltage $U_{imp}$ | 6 kV                                       |                        |                                            |
| Rated insulation voltage $U_i$            | 690 V                                      |                        |                                            |

#### Mechanical parameters

|                               | ASNTA                   | ASNTB | ASNTC |
|-------------------------------|-------------------------|-------|-------|
| Device width                  | 18.5 mm                 |       |       |
| Device height                 | 91.3 mm                 |       |       |
| Device depth                  | 65.5 mm                 |       |       |
| Mounting                      | right side              |       |       |
| Degree of protection          | IP20                    |       |       |
| Terminals                     | lift                    |       |       |
| Terminal capacity             | 1 – 2.5 mm <sup>2</sup> |       |       |
| Fastening torque of terminals | 0.8 Nm                  |       |       |

#### Wiring diagram



# Technical Data Ex9SN25B Accessories

## Accessories for motor protective circuit breakers Ex9SN25B

### Undervoltage releases ASNUV

#### General parameters

For subsequent mounting

Side-mounted version, mounting from the right

1 unit can be used with a motor protective circuit breaker or ASNT unit

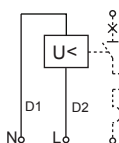
#### Electrical parameters

|                                           | ASNUVA                                     | ASNUVB                 | ASNUVC                                     |
|-------------------------------------------|--------------------------------------------|------------------------|--------------------------------------------|
| Tested according to                       | EN 60947-2                                 |                        |                                            |
| Rated operating voltage $U_e$             | 110 – 115 V AC @ 50 Hz<br>127 V AC @ 60 Hz | 220 – 240 V AC @ 50 Hz | 380 – 400 V AC @ 50 Hz<br>440 V AC @ 60 Hz |
| Oper. voltage tripping tolerance          | 35 – 70 % $U_e$                            |                        |                                            |
| Rated frequency $f$                       | 50/60 Hz                                   |                        |                                            |
| Rated impulse withstand voltage $U_{imp}$ | 6 kV                                       |                        |                                            |
| Rated insulation voltage $U_i$            | 690 V                                      |                        |                                            |
| Tripping time                             | 200 ms                                     |                        |                                            |
| Making threshold                          | 85 – 110 % $U_e$                           |                        |                                            |

#### Mechanical parameters

|                               | ASNUVA                  | ASNUVB | ASNUVC |
|-------------------------------|-------------------------|--------|--------|
| Device width                  | 18.5 mm                 |        |        |
| Device height                 | 91.3 mm                 |        |        |
| Device depth                  | 65.5 mm                 |        |        |
| Mounting                      | right side              |        |        |
| Degree of protection          | IP20                    |        |        |
| Terminals                     | lift                    |        |        |
| Terminal capacity             | 1 – 2.5 mm <sup>2</sup> |        |        |
| Fastening torque of terminals | 0.8 Nm                  |        |        |

#### Wiring diagram



# Technical Data Ex9SN25B Accessories

## Accessories for motor protective circuit breakers Ex9SN25B

### Isolated boxes for surface mounting ASNE

#### General parameters

Plastic IP55 boxes for single Ex9SN25B device.

Insulated boxes for surface mounting.

#### Electrical parameters

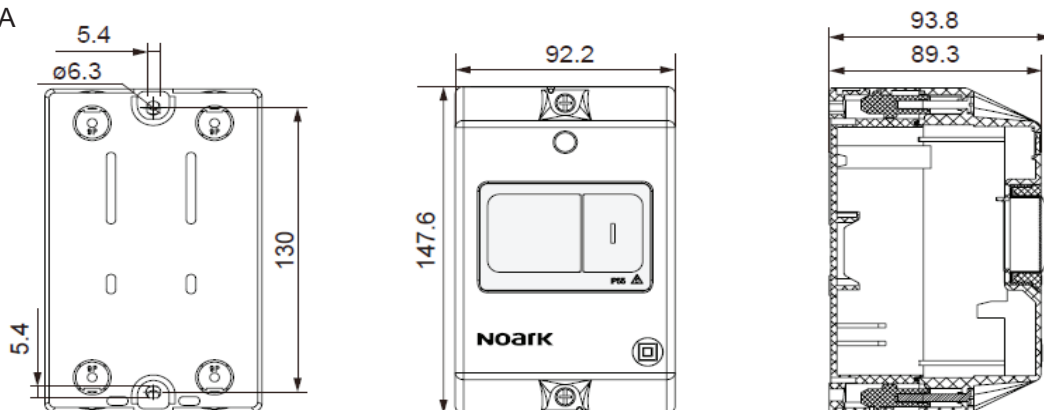
|                               | ASNEA    | ASNEB |
|-------------------------------|----------|-------|
| Tested according to           | EN 62208 |       |
| Rated operating voltage $U_e$ | 400 V AC |       |
| Rated frequency $f$           | 50 Hz    |       |

#### Mechanical parameters

|                      | ASNEA   | ASNEB  |
|----------------------|---------|--------|
| Device width         | 93 mm   |        |
| Device height        | 148 mm  |        |
| Device depth         | 94 mm   | 152 mm |
| Mounting             | surface |        |
| Degree of protection | IP55    |        |

#### Dimensions

ANSEA



ANSEB

