



NSN332

## MCB 3P 20kA D-32A 3M

**Technical properties** 

| Neutral position                                                     | without neutra  |
|----------------------------------------------------------------------|-----------------|
| Number of protected poles                                            | 3               |
| Number of poles                                                      | 3 F             |
| Type of pole                                                         | 3 F             |
| Curve                                                                | Γ               |
| Functions                                                            |                 |
| Concurrently switching N-neutral                                     | Να              |
| Configuration                                                        |                 |
| Number of modules                                                    | 3               |
| Connectivity                                                         |                 |
| Top connection alignement for modular<br>devices                     | Aligned termina |
| Bottom connection alignement for modular<br>devices                  | Aligned termina |
| Main electrical features                                             |                 |
| Rated short circuit breaking capacity Icn AC<br>according IEC60898-1 | 10 k/           |
| Rated operational voltage Ue                                         | 415 \           |
| Type of supply voltage                                               | AC              |
| Voltage                                                              |                 |
| Rated insulation voltage                                             | 500 \           |
| Max operating voltage                                                | 415 \           |
| Rated impulse withstand voltage                                      | 6000 \          |
| Electric current                                                     |                 |
| Rated current                                                        | 32 /            |
| Rated service breaking capacity Ics AC<br>according IEC 60898-1      | 7.5 kA          |
| min/maxi threshold value of the AC thermal operation                 | 1.13 / 1.45     |
| Magnetic regulating currrent                                         | 10 / 20 li      |
| min/maxi threshold value of the DC<br>magnetic operation             | 10 / 30 lı      |
| min/maxi threshold value of the DC thermal operation                 | 1.13 / 1.45     |
| operation.                                                           |                 |

| Rating current -15°C according to IEC<br>60947                                    | 41.74 A |
|-----------------------------------------------------------------------------------|---------|
| Rating current -20°C according to IEC<br>60947                                    | 42.4 A  |
| Rating current -25°C according to IEC<br>60947                                    | 43.05 A |
| Rating current -5°C according to IEC 60947                                        | 40.4 A  |
| Rating current 0°C according to IEC 60947                                         | 39.71 A |
| Rating current 10°C according to IEC 60947                                        | 38.29 A |
| Rating current 15°C according to IEC 60947                                        | 37.56 A |
| Rating current 20°C according to IEC 60947                                        | 36.82 A |
| Rating current 25°C according to IEC 60947                                        | 36.06 A |
| Rating current 30°C according to IEC 60947                                        | 35.29 A |
| Rating current 35°C according to IEC 60947                                        | 34.49 A |
| Rating current 40°C according to IEC 60947                                        | 33.68 A |
| Rating current 45°C according to IEC 60947                                        | 32.85 A |
| Rating current 5°C according to IEC 60947                                         | 39.01 A |
| Rating current 50°C according to IEC 60947                                        | 32 A    |
| Rating current 55°C according to IEC 60947                                        | 31.09 A |
| Rating current 60°C according to IEC 60947                                        | 30.16 A |
| Rating current 65°C according to IEC 60947                                        | 29.19 A |
| Rating current 70°C according to IEC 60947                                        | 28.19 A |
| Breaking capacity on 1 pole for IT 400V NF<br>60947-2                             | 3 kA    |
| Rated short circuit breaking capacity Icn<br>under 230V AC according IEC60898-1   | 10 kA   |
| Rated short circuit breaking capacity Icn<br>under 400V AC according IEC60898-1   | 10 kA   |
| Rated ultimate short-circuit breaking capa-<br>city lcu under 230V AC IEC 60947-2 | 40 kA   |
| Rated ultimate short-circuit breaking capa-<br>city lcu under 240V AC IEC 60947-2 | 40 kA   |
| Rated ultimate short-circuit breaking capa-<br>city lcu under 400V AC IEC 60947-2 | 20 kA   |
| Rated ultimate short-circuit breaking capa-<br>city lcu under 415V AC IEC 60947-2 | 20 kA   |
| Rated short circuit breaking capacity Icn<br>under 240V AC according IEC 60898-1  | 10 kA   |
| Rated short circuit breaking capacity Icn<br>under 415V AC according IEC 60898-1  | 10 kA   |
| Rated ultimate short-circuit breaking capa-<br>city lcu under 220V AC IEC 60947-2 | 40 kA   |
| Rated ultimate short-circuit breaking capa-<br>city lcu under 380V AC IEC 60947-2 | 20 kA   |
| Current correction factors                                                        |         |
| Correction factor of rating current for 2<br>devices placed side-by-side          | 1       |
| Correction factor of rating current for 3<br>devices placed side-by-side          | 0.95    |
| Correction factor of rating current for 4 and<br>5 devices placed side-by-side    | 0.9     |
| Correction factor of rating current for 6 devices placed side-by-side             | 0.85    |

| Correction factor of magnetic tripping with 100 Hz                              | 1.1                    |
|---------------------------------------------------------------------------------|------------------------|
| Correction factor of magnetic tripping with 200 Hz                              | 1.2                    |
| Correction factor of magnetic tripping with<br>400 Hz                           | 1.5                    |
| Correction factor of magnetic tripping with<br>60 Hz                            | 1                      |
| Dimensions                                                                      |                        |
| Depth of installed product                                                      | 70 mm                  |
| Height of installed product                                                     | 83 mm                  |
| Width of installed product                                                      | 52.5 mm                |
| Frequency                                                                       |                        |
| Frequency                                                                       | 50 to 60 Hz            |
| Power                                                                           |                        |
| Maximum power loss per pole according to the product standard                   | 6 W                    |
| Total power loss under IN                                                       | 12.3 W                 |
| Power loss per pole at In                                                       | 4.22 W                 |
| Tripping                                                                        |                        |
| Time of response when opening                                                   | 7 m:                   |
| Endurance                                                                       |                        |
| Electric endurance in number of cycles                                          | 4000                   |
| Number of mechanical operations                                                 | 20000                  |
| Installation, mounting                                                          |                        |
| Type of top connection for modular devices                                      | with screw             |
| Tightening torque                                                               | 2,8Nm                  |
| Type of top rail clip for modular devices                                       | NA                     |
| Type of bottom rail clip for modular devices                                    | plastic                |
| Type of Bottom Connection for modular<br>devices                                | Blconnect              |
| Top removability for modular devices                                            | Yes                    |
| Bottom removability for modular devices                                         | Yes                    |
| Suitable for flush-mounting                                                     | Yes                    |
| Connection                                                                      |                        |
| Connection cross-section at output with screw, for flexible conductor           | 1 / 25 mm <sup>2</sup> |
| Connection cross-section at output with screw, for massive conductor            | 1 / 35 mm <sup>2</sup> |
| Connection cross-section for rigid<br>conductor, upstream terminals with screws | 1 / 35 mm <sup>:</sup> |
| Connection cross-section of the access with screws, with flexible conductor     | 1 / 25 mm              |
| Downstream cage clamp delivery status                                           | openec                 |
| Upstream cage clamp delivery status                                             | opened                 |
|                                                                                 |                        |

## Equipment

|               | Can be accessorized                                                                                    |
|---------------|--------------------------------------------------------------------------------------------------------|
|               | Standards                                                                                              |
| IEC 60947-2   | Standard text                                                                                          |
|               | Safety                                                                                                 |
| No            | REACH conform                                                                                          |
| Yes           | RoHS conform                                                                                           |
| No            | Halogen free                                                                                           |
| 140           | halogen nee                                                                                            |
|               |                                                                                                        |
| -2570 °C      | Use conditions Operating temperature                                                                   |
|               | Use conditions<br>Operating temperature<br>Degree of pollution according to IEC 60664 /                |
| -2570 °C      | Use conditions<br>Operating temperature<br>Degree of pollution according to IEC 60664 /<br>IEC 60947-2 |
| -2570 °C<br>2 | Use conditions                                                                                         |

Temperature of calibration

50 °C