



NCN420A



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MCB 4P 10kA C-20A 4M

Technische Merkmale

Architecture

| Neutral position | without neutral |
|---------------------------|-----------------|
| Number of protected poles | 4 |
| Number of poles | 4 P |
| Type of pole | 4 P |
| Curve | С |

Connectivity

| Bottom connection alignement for modular devices | Aligned terminal |
|--|------------------|
| Top connection alignement for modular devices | Aligned terminal |

Main electrical features

| Type of supply voltage | AC |
|------------------------------|-------|
| Rated operational voltage Ue | 415 V |

Voltage

| Minimum threshold voltage (Ue min) | 12 V |
|------------------------------------|--------|
| Rated insulation voltage | 500 V |
| Max operating voltage | 440 V |
| Rated impulse withstand voltage | 6000 V |



Electric current

| Rated ultimate short-circuit breaking capacity Icu | 15 kA |
|--|--------------|
| under 400V AC IEC 60947-2 | |
| Rated short circuit breaking capacity Icn under 230V AC according IEC60898-1 | 10 kA |
| Rated short circuit breaking capacity Icn under 400V AC according IEC60898-1 | 10 kA |
| Rated short circuit breaking capacity Icn under 240V AC according IEC 60898-1 | 10 kA |
| Rated short circuit breaking capacity Icn under 380V AC according IEC 60898-1 | 10 kA |
| Rated short circuit breaking capacity Icn under 415V AC according IEC 60898-1 | 10 kA |
| Rated service breaking capacity Ics AC according IEC 60898-1 | 7,5 kA |
| Rated service breaking capacity Ics under 220V AC according IEC 60947-2 | 15 kA |
| Rated service breaking capacity Ics under 230V AC according IEC 60947-2 | 15 kA |
| Rated service breaking capacity Ics under 240V AC according IEC 60947-2 | 15 kA |
| Rated service breaking capacity Ics under 380V AC according IEC 60947-2 | 7,5 kA |
| Rated service breaking capacity Ics under 400V AC according IEC 60947-2 | 7,5 kA |
| Rated service breaking capacity Ics under 415V AC according IEC 60947-2 | 7,5 kA |
| Rated service breaking capacity Ics under 220V AC according IEC 60898-1 | 7,5 kA |
| Rated service breaking capacity Ics under 230V AC according IEC 60898-1 | 7,5 kA |
| Rated service breaking capacity Ics under 240V AC according IEC 60898-1 | 7,5 kA |
| Rated service breaking capacity Ics under 380V AC according IEC 60898-1 | 7,5 kA |
| Rated service breaking capacity Ics under 400V AC according IEC 60898-1 | 7,5 kA |
| Rated service breaking capacity Ics under 415V AC according IEC 60898-1 | 7,5 kA |
| Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2 | 30 kA |
| Rated ultimate short-circuit breaking capacity lcu under 230V AC IEC 60947-2 | 30 kA |
| Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 | 30 kA |
| Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2 | 15 kA |
| Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2 | 15 kA |
| Magnetic regulating currrent at 40° C | 5/10 ln |
| min/maxi threshold value of the DC magnetic operation | 7/15 ln |
| min/maxi threshold value of the AC thermal operation | 1,13/1,45 ln |
| min/maxi threshold value of the DC thermal operation | 1,13/1,45 ln |



Electric current / temperature

| Rating current -15°C | 23,98 A |
|---|---------|
| Rating current -20°C | 24,38 A |
| Rating current 0°C | 22,73 A |
| Rating current 10°C | 21,86 A |
| Rating current -10°C | 23,57 A |
| Rating current 25°C | 20,48 A |
| Rating current -25°C | 24,78 A |
| Rating current 30°C | 20 A |
| Rating current 35°C | 19,48 A |
| Rating current 40°C | 18,94 A |
| Rating current 45°C | 18,39 A |
| Rating current 5°C | 22,3 A |
| Rating current -5°C | 23,16 A |
| Rating current 50°C | 17,81 A |
| Rating current 55°C | 17,22 A |
| Rating current 60°C | 16,61 A |
| Rating current 65°C | 15,98 A |
| Rating current 70°C | 15,32 A |
| Rating current 0°C according to IEC 60947-2 | 25,33 A |
| Rating current 10°C according to IEC 60947-2 | 24,36 A |
| Rating current -10°C according to IEC 60947-2 | 26,27 A |
| Rating current 150°C according to IEC 60947-2 | 23,86 A |
| Rating current -15°C according to IEC 60947-2 | 26,72 A |
| Rating current 20°C according to IEC 60947-2 | 23,34 A |
| Rating current -20°C according to IEC 60947-2 | 27,17 A |
| Rating current 25°C according to IEC 60947-2 | 22,82 A |
| Rating current -25°C according to IEC 60947-2 | 27,61 A |
| Rating current 30°C according to IEC 60947-2 | 22,29 A |
| Rating current 35°C according to IEC 60947-2 | 21,74 A |
| Rating current 40°C according to IEC 60947-2 | 21,17 A |
| Rating current 45°C according to IEC 60947-2 | 20,6 A |
| Rating current 5°C according to IEC 60947-2 | 24,85 A |
| Rating current -5°C according to IEC 60947-2 | 25,8 A |
| Rating current 50°C according to IEC 60947-2 | 20 A |
| Rating current 55°C according to IEC 60947-2 | 19,34 A |
| Rating current 60°C according to IEC 60947-2 | 18,65 A |
| Rating current 65°C according to IEC 60947-2 | 17,94 A |
| Rating current 70°C according to IEC 60947-2 | 17,2 A |



| Current correction factors | |
|--|------------|
| 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 400 Hz | 1,5 |
| Correction factor of magnetic tripping with 60 Hz | 1,1 |
| Correction factor of rating current for 2 devices placed side-by-side | 1 |
| Correction factor of rating current for 3 devices placed side-by-side | 0,95 |
| Correction factor of rating current for 4 and 5 devices placed side-by-side | 0,9 |
| Correction factor of rating current for 6 devices placed side-by-side | 0,85 |
| Power | |
| Power loss per pole at In | 2,74 W |
| Maximum power loss per pole according to the product standard | 4,5 W |
| Total power loss under IN | 10,87 W |
| | |
| Endurance | |
| Electric endurance in number of cycles | 4000 |
| Number of mechanical operations | 20000 |
| Dimensions | |
| Depth of installed product | 70 mm |
| Height of installed product | 83 mm |
| Width of installed product | 70 mm |
| Installation, mounting | |
| Type of top connection for modular devices | with screw |
| Tightening torque | 2,8Nm |
| Type of bottom rail clip for modular devices | plastic |
| Type of top rail clip for modular devices | NA |
| Type of Bottom Connection for modular devices | Blconnect |
| Bottom removability for modular devices | yes |
| Top removability for modular devices | yes |
| Suitable for flush-mounting | yes |
| Connection | |
| Upstream cage clamp delivery status | opened |
| Downstream cage clamp delivery status | opened |
| Connection cross-section at output with screw, for flexible conductor | 1/25 mm² |
| Connection cross-section of the access with screws, with flexible conductor | 1/25 mm² |
| Connection cross-section at output with screw, for massive conductor | 1/35 mm² |
| Connection cross-section for rigid conductor, upstream terminals with screws | 1/35 mm² |
| | |



| Equipment | |
|--|--------------|
| Can be accessorized | yes |
| Standards | |
| Standard text | EN 60898-1 |
| European directive WEEE | concerned |
| Safety | |
| Protection index IP | IP20 |
| Use conditions | |
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 |
| Class of energy limitation I ² t | 3 |
| Altitude | 2000 m |
| Storage temperature | -25 to 80 °C |
| temperatur | |
| Temperature of calibration | 30 °C |