



HNS160NC

Moulded Case Circuit Breaker h3+ P160 Energy 3P3D 160A 40kA CTC

Technical characteristics

Architecture

| | |
|---------------------------|-----------------|
| Neutral position | without neutral |
| Number of protected poles | 3 |
| Number of poles | 3 P |
| Type of case | Fixed built-in |

Functions

| | |
|--|--------|
| Complete device with protection unit | Yes |
| Reversing switch | No |
| Version as main switch | Yes |
| Version as emergency stop installation | No |
| Version as safety switch | No |
| Version as maintenance-/service switch | Yes |
| Trip Unit | ENERGY |
| Integrated earth fault protection | No |

Controls and indicators

| | |
|------------------------|----|
| Motor drive integrated | No |
|------------------------|----|

Main electrical features

| | |
|------------------------------|-------------|
| Rated operational voltage Ue | 220 / 690 V |
| Type of supply voltage | AC |
| Frequency | 50/60 Hz |

Voltage

| | |
|---------------------------------|-------|
| Rated insulation voltage | 800 V |
| Rated impulse withstand voltage | 8 kV |
| With under voltage release | No |

Electric current

| | |
|---|--------|
| Rated current | 160 A |
| Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 | 6 kA |
| Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2 | 1.6 kA |
| Rated short-time withstand current Icw t=0.4S 380-415 V AC according IEC 60947-2 | 1.6 kA |
| Rated short-time withstand current Icw t=0.4S 660-690 V AC according IEC 60947-2 | 1.6 kA |
| Rating current 10°C according to IEC 60947 | 160 A |
| Rating current 15°C according to IEC 60947 | 160 A |

| | |
|--|-------------|
| Rating current 20°C according to IEC 60947 | 160 A |
| Rating current 25°C according to IEC 60947 | 160 A |
| Rating current 30°C according to IEC 60947 | 160 A |
| Rating current 35°C according to IEC 60947 | 160 A |
| Rating current 40°C according to IEC 60947 | 160 A |
| Rating current 45°C according to IEC 60947 | 160 A |
| Rating current 50°C according to IEC 60947 | 160 A |
| Rating current 55°C according to IEC 60947 | 160 A |
| Rating current 60°C according to IEC 60947 | 160 A |
| Rating current 65°C according to IEC 60947 | 160 A |
| Rating current 70°C according to IEC 60947 | 150 A |
| Rated service breaking capacity Ics under 660V AC according IEC 60947-2 | 6 kA |
| Breaking capacity on 1 pole for IT 230V NF 60947-2 | 2.5 kA |
| Breaking capacity on 1 pole for IT 400V NF 60947-2 | 2.5 kA |
| Breaking capacity on 1 pole for IT 415V NF 60947-2 | 2.5 kA |
| Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 | 50 kA |
| Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 | 50 kA |
| Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2 | 40 kA |
| Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2 | 40 kA |
| Rated service breaking capacity Ics under 110-138V AC according IEC 60947-2 | 50 kA |
| Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2 | 50 kA |
| Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2 | 40 kA |
| Rated ultimate short-circuit breaking capacity Icu under 660V AC IEC 60947-2 | 6 kA |
| Dimensions | |
| Depth of installed product | 97 mm |
| Height of installed product | 130 mm |
| Width of installed product | 90 mm |
| Frequency | |
| Frequency | 50 to 60 Hz |
| Power | |
| Total power loss under IN | 27 W |
| Power loss per pole at In | 9 W |
| Endurance | |
| Electric endurance in number of cycles | 10000 |
| Number of mechanical operations | 40000 |
| Cover, door | |

| | |
|--|------------------------|
| Interlockable | Yes |
| Installation, mounting | |
| Tightening torque | 6Nm |
| DIN rail mounting with optional adaptor | Yes |
| Suitable for front mounting center | No |
| Suitable for front mounting | No |
| Suitable for ground mounting | Yes |
| Connection | |
| Connection cross-sect. rigid cable | 6 / 95mm ² |
| Protection | |
| Instantaneous protection (II): type | adjustable |
| Cable | |
| Cable Material | Cu |
| Equipment | |
| Number of auxiliary contacts as normally closed contact | 0 |
| Number of auxiliary contacts as normally open contact | 0 |
| Number of auxiliary contacts as change-over contact | 0 |
| Motor drive optional | No |
| Can be accessorized | Yes |
| Use cases | |
| Category of use | A |
| Use | |
| Vibrations and shocks withstand | IEC 68068-2-52 Test FC |
| Standards | |
| Standard text | IEC 60947-2 |
| European directive WEEE | concerned |
| Use conditions | |
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 3 |
| Altitude | 2000 m |