



HNA160U

Moulded Case Circuit Breaker h3 x160 TM ADJ 3P3D 160A 40kA CTC

Technical properties

Architecture

| | |
|---------------------------|-----------------|
| Neutral position | without neutral |
| Number of protected poles | 3 |
| Number of poles | 3 P |
| Type of pole | 3P3D |

Functions

| | |
|-----------------------------------|--------|
| Trip Unit | TM A/F |
| Integrated earth fault protection | No |
| Concurrently switching N-neutral | No |

Controls and indicators

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

Main electrical features

| | |
|------------------------------|-------------|
| Rated operational voltage Ue | 220 / 415 V |
| Frequency | 50/60 Hz |

Voltage

| | |
|---------------------------------|-------|
| Rated insulation voltage | 690 V |
| Rated impulse withstand voltage | 8 kV |
| With under voltage release | No |

Electric current

| | |
|--|----------------|
| Rated current | 160 A |
| Thermal protection nob setting xIN | 0.63 / 0.8 / 1 |
| Rating current 10°C according to IEC 60947 | 188.5 A |
| Rating current 15°C according to IEC 60947 | 185.2 A |
| Rating current 20°C according to IEC 60947 | 181.8 A |
| Rating current 25°C according to IEC 60947 | 178.3 A |
| Rating current 30°C according to IEC 60947 | 174.8 A |
| Rating current 35°C according to IEC 60947 | 171.2 A |
| Rating current 40°C according to IEC 60947 | 167.5 A |
| Rating current 45°C according to IEC 60947 | 163.8 A |
| Rating current 50°C according to IEC 60947 | 160 A |
| Rating current 55°C according to IEC 60947 | 156 A |
| Rating current 60°C according to IEC 60947 | 152 A |
| Rating current 65°C according to IEC 60947 | 147.8 A |
| Rating current 70°C according to IEC 60947 | 143.6 A |

| | |
|--|-------------------|
| Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 | 85 kA |
| Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 | 85 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 |
| Range of the thermal adjustment | 100 / 125 / 160 A |
| Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2 | 40 kA |

Dimensions

| | |
|-----------------------------|--------|
| Depth of installed product | 68 mm |
| Height of installed product | 130 mm |
| Width of installed product | 75 mm |

Frequency

| | |
|-----------|-------------|
| Frequency | 50 to 60 Hz |
|-----------|-------------|

Power

| | |
|--------------------------------|--------|
| Power loss per pole at 0.63*In | 5.7 W |
| Power loss per pole at 0.8*In | 8.9 W |
| Total power loss at 0.63*In | 17.1 W |
| Total power loss at 0.8*In | 26.7 W |
| Total power loss under IN | 43.8 W |
| Power loss per pole at In | 14.6 W |

Endurance

| | |
|--|------|
| Electric endurance in number of cycles | 1000 |
| Number of mechanical operations | 4000 |

Settings

| | |
|----------------------------------|--------|
| Range of the magnetic adjustment | 1600 A |
|----------------------------------|--------|

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 |
| Can be accessorized | Yes |

Standards

| | |
|-------------------------|-------------|
| Standard text | IEC 60947-2 |
| European directive WEEE | concerned |

Safety

| | |
|---------------|-----|
| REACH conform | Yes |
| RoHS conform | Yes |
| Halogen free | No |

Use conditions

| | |
|---|---|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 3 |
|---|---|

| | |
|----------|--------|
| Altitude | 2000 m |
|----------|--------|

temperatur

| | |
|----------------------------|-------|
| Temperature of calibration | 50 °C |
|----------------------------|-------|