



HNA020Z

### Moulded Case Circuit Breaker h3 x160 TM FIX 3P3D 20A 40kA CTC

#### Technical Features

##### Electric current

|                                                                                           |         |
|-------------------------------------------------------------------------------------------|---------|
| Rated current                                                                             | 20 A    |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 400 V AC IEC 60947-2 | 40 kA   |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 240 V AC IEC 60947-2 | 85 kA   |
| Rated service breaking capacity I <sub>cs</sub> under 230 V AC according to IEC 60947-2   | 40 kA   |
| Rated service breaking capacity I <sub>cs</sub> under 400 V AC according to IEC 60947-2   | 20 kA   |
| Rated current 10°C according to IEC 60947                                                 | 24.90 A |
| Rated current 15°C according to IEC 60947                                                 | 24.40 A |
| Rated current 20°C according to IEC 60947                                                 | 23.80 A |
| Rated current 25°C according to IEC 60947                                                 | 23.20 A |
| Rated current 30°C according to IEC 60947                                                 | 22.60 A |
| Rated current at 35°C according to IEC 60947                                              | 22 A    |
| Rated current at 40°C according to IEC 60947                                              | 21.30 A |
| Rated current 45°C according to IEC 60947                                                 | 20.60 A |
| Rated current 50°C according to IEC 60947                                                 | 20 A    |
| Rated current 55°C according to IEC 60947                                                 | 19.20 A |
| Rated current at 60°C according to IEC 60947                                              | 18.50 A |
| Rated current 65°C according to IEC 60947                                                 | 17.70 A |
| Rated current 70°C according to IEC 60947                                                 | 16.90 A |

##### Architecture

|                           |                 |
|---------------------------|-----------------|
| Number of poles           | 3               |
| Control/operation element | Toggle          |
| Device construction type  | Fixed built-in  |
| Neutral position          | Without neutral |

##### Tripping

|                            |       |
|----------------------------|-------|
| Response time when opening | 10 ms |
|----------------------------|-------|

##### Frequency

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

##### Voltage

|                                                  |        |
|--------------------------------------------------|--------|
| Rated impulse withstand voltage U <sub>imp</sub> | 8000 V |
| Rated insulation voltage U <sub>i</sub>          | 690 V  |

##### Functions

|           |        |
|-----------|--------|
| Trip unit | TM F/F |
|-----------|--------|

##### Power

|                                       |        |
|---------------------------------------|--------|
| Total power loss under I <sub>N</sub> | 8.70 W |
|---------------------------------------|--------|

##### Endurance

|                                        |       |
|----------------------------------------|-------|
| Electric endurance in number of cycles | 10000 |
| Number of mechanical operations        | 20000 |

##### Safety

|                               |      |
|-------------------------------|------|
| Ingress Protection (IP) class | IP4X |
|-------------------------------|------|

##### Connection

|                                  |                        |
|----------------------------------|------------------------|
| Cross-section flexible conductor | 4 - 70 mm <sup>2</sup> |
| Cross-section rigid conductor    | 4 - 95 mm <sup>2</sup> |

##### Installation, mounting

|                               |       |
|-------------------------------|-------|
| Mounting-/Connection Position | Front |
|-------------------------------|-------|

##### Connectivity

|                    |                |
|--------------------|----------------|
| Type of connection | Screw terminal |
|--------------------|----------------|

Settings

|                                     |   |
|-------------------------------------|---|
| Thermal protection knob setting xIN | 1 |
|                                     | 1 |

Dimensions

|        |        |
|--------|--------|
| Height | 130 mm |
| Width  | 75 mm  |
| Depth  | 68 mm  |

Compatibility

|                       |     |
|-----------------------|-----|
| Suitable for DIN Rail | Yes |
|-----------------------|-----|

Main electrical attributes

|                               |          |
|-------------------------------|----------|
| Magnetic protection trip time | 0 - 0 ms |
|-------------------------------|----------|

Sustainability

|                 |     |
|-----------------|-----|
| REACH-SVHC free | Yes |
| RoHS conform    | Yes |