



HNA051Z

### Moulded Case Circuit Breaker h3 x160 TM FIX 4P4D 50A 40kA CTC

#### Technical Features

##### Electric current

|                                                                                           |         |
|-------------------------------------------------------------------------------------------|---------|
| Rated current                                                                             | 50 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                                                 | 60.40 A |
| Rated current 15°C according to IEC 60947                                                 | 59.20 A |
| Rated current 20°C according to IEC 60947                                                 | 58 A    |
| Rated current 25°C according to IEC 60947                                                 | 56.70 A |
| Rated current 30°C according to IEC 60947                                                 | 55.40 A |
| Rated current at 35°C according to IEC 60947                                              | 54.10 A |
| Rated current at 40°C according to IEC 60947                                              | 52.80 A |
| Rated current 45°C according to IEC 60947                                                 | 51.40 A |
| Rated current 50°C according to IEC 60947                                                 | 50 A    |
| Rated current 55°C according to IEC 60947                                                 | 48.50 A |
| Rated current at 60°C according to IEC 60947                                              | 47 A    |
| Rated current 65°C according to IEC 60947                                                 | 45.40 A |
| Rated current 70°C according to IEC 60947                                                 | 43.80 A |

##### Architecture

|                 |   |
|-----------------|---|
| Number of poles | 4 |
|-----------------|---|

##### 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> | 17.30 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> |

##### Connectivity

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

##### Settings

|                                                 |   |
|-------------------------------------------------|---|
| Thermal protection knob setting xI <sub>N</sub> | 1 |
|                                                 | 1 |

|                                   |  |          |
|-----------------------------------|--|----------|
| <b>Dimensions</b>                 |  |          |
| Height                            |  | 130 mm   |
| Width                             |  | 100 mm   |
| Depth                             |  | 68 mm    |
| <b>Compatibility</b>              |  |          |
| Suitable for DIN Rail             |  | No       |
| <b>Main electrical attributes</b> |  |          |
| Magnetic protection trip time     |  | 0 - 0 ms |
| <b>Sustainability</b>             |  |          |
| REACH-SVHC free                   |  | Yes      |
| RoHS conform                      |  | Yes      |