



HNF990H

### Moulded Case Circuit Breaker h1600 3P 50kA 1250A LSI

#### Technical Features

##### Electric current

|                                                                                           |        |
|-------------------------------------------------------------------------------------------|--------|
| Rated current                                                                             | 1250 A |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 230 V AC IEC 60947-2 | 100 kA |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 240 V AC IEC 60947-2 | 100 kA |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 400 V AC IEC 60947-2 | 50 kA  |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 415 V AC IEC 60947-2 | 50 kA  |
| Breaking capacity on 1-pole for AC 230 V IEC 60947-2                                      | 60 kA  |
| Breaking capacity on 1-pole for AC 400 V IEC 60947-2                                      | 9 kA   |

##### Architecture

|                           |                |
|---------------------------|----------------|
| Number of poles           | 3              |
| Control/operation element | Toggle         |
| Device construction type  | Fixed built-in |

##### Capacity

|                   |    |
|-------------------|----|
| Number of modules | 12 |
|-------------------|----|

##### Tripping

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

##### Settings

|                                                           |                                                                         |
|-----------------------------------------------------------|-------------------------------------------------------------------------|
| Magnetic protection knob setting xI <sub>N</sub>          | 2.5<br>5<br>10                                                          |
| Range of magnetic adjustment                              | 7000 A<br>8750 A<br>11200 A<br>14000 A<br>15000 A<br>15000 A<br>15000 A |
| Thermal protection knob setting xI <sub>N</sub>           | 0.4<br>0.5<br>0.63<br>0.8<br>0.9<br>0.95<br>1                           |
| Adjustment range short-term delayed short-circuit release | 0 - 0 A                                                                 |

##### Frequency

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

##### Installation, mounting

|                               |            |
|-------------------------------|------------|
| Nominal tightening torque     | 65 - 65 Nm |
| Mounting-/Connection Position | Front      |

##### Voltage

|                                                  |             |
|--------------------------------------------------|-------------|
| Rated impulse withstand voltage U <sub>imp</sub> | 8000 V      |
| Rated insulation voltage U <sub>i</sub>          | 800 V       |
| Rated operational voltage U <sub>e</sub>         | 220 - 690 V |

##### Functions

|           |     |
|-----------|-----|
| Trip unit | LSI |
|-----------|-----|

##### Main electrical attributes

|                               |              |
|-------------------------------|--------------|
| Magnetic protection trip time | 100 - 200 ms |
|-------------------------------|--------------|

##### Power

|                                       |          |
|---------------------------------------|----------|
| Total power loss under I <sub>N</sub> | 187.50 W |
| Power loss per pole at I <sub>N</sub> | 62.50 W  |

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**Endurance**

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

**Equipment**

|                                                         |   |
|---------------------------------------------------------|---|
| Number of auxiliary contacts as change-over contact     | 0 |
| Number of auxiliary contacts as normally closed contact | 0 |
| Number of auxiliary contacts as normally open contact   | 0 |

**Safety**

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

**Use conditions**

|                       |             |
|-----------------------|-------------|
| Operating temperature | -25 - 70 °C |
|-----------------------|-------------|

**Connection**

|                                  |                        |
|----------------------------------|------------------------|
| Cross-section flexible conductor | 3x 240 mm <sup>2</sup> |
| Cross-section rigid conductor    | 3x 240 mm <sup>2</sup> |
| Connector/plug type              | Terminal               |

**Controls and indicators**

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

**Compatibility**

|                       |    |
|-----------------------|----|
| Suitable for DIN Rail | No |
|-----------------------|----|

**Power supply**

|                       |               |
|-----------------------|---------------|
| Position power supply | Bidirectional |
|-----------------------|---------------|

**Sustainability**

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