



HMS040NR

### Moulded Case Circuit Breaker h3+ P160 Energy 3P3D 40A 50kA FTC

#### Technical Features

##### Electric current

|               |      |
|---------------|------|
| Rated current | 40 A |
|---------------|------|

##### Architecture

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

##### Electric current

|                                                                               |       |
|-------------------------------------------------------------------------------|-------|
| Rated ultimate short-circuit breaking capacity Icu under 400 V AC IEC 60947-2 | 50 kA |
| Rated ultimate short-circuit breaking capacity Icu under 240 V AC IEC 60947-2 | 65 kA |
| Rated ultimate short-circuit breaking capacity Icu under 415 V AC IEC 60947-2 | 50 kA |
| Rated ultimate short-circuit breaking capacity Icu under 690 V AC IEC 60947-2 | 6 kA  |
| Rated service breaking capacity Ics under 220 V AC according to IEC 60947-2   | 65 kA |
| Rated service breaking capacity Ics under 230 V AC according to IEC 60947-2   | 65 kA |
| Rated service breaking capacity Ics under 240 V AC according to IEC 60947-2   | 65 kA |
| Rated service breaking capacity Ics under 380 V AC according to IEC 60947-2   | 50 kA |
| Rated service breaking capacity Ics under 400 V AC according to IEC 60947-2   | 50 kA |
| Rated service breaking capacity Ics under 415 V AC according to IEC 60947-2   | 50 kA |
| Rated service breaking capacity Ics under 690 V AC according to IEC 60947-2   | 6 kA  |
| Rated current 10°C according to IEC 60947                                     | 40 A  |
| Rated current 15°C according to IEC 60947                                     | 40 A  |
| Rated current 20°C according to IEC 60947                                     | 40 A  |
| Rated current 25°C according to IEC 60947                                     | 40 A  |
| Rated current 30°C according to IEC 60947                                     | 40 A  |
| Rated current at 35°C according to IEC 60947                                  | 40 A  |
| Rated current at 40°C according to IEC 60947                                  | 40 A  |
| Rated current 45°C according to IEC 60947                                     | 40 A  |
| Rated current 50°C according to IEC 60947                                     | 40 A  |
| Rated current 55°C according to IEC 60947                                     | 40 A  |
| Rated current at 60°C according to IEC 60947                                  | 40 A  |
| Rated current 65°C according to IEC 60947                                     | 40 A  |
| Rated current 70°C according to IEC 60947                                     | 40 A  |

##### Frequency

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

##### Voltage

|                                      |             |
|--------------------------------------|-------------|
| Rated impulse withstand voltage Uimp | 8000 V      |
| Rated insulation voltage Ui          | 800 V       |
| Rated operational voltage Ue         | 220 - 690 V |

##### Power

|                           |        |
|---------------------------|--------|
| Total power loss under IN | 1.68 W |
|---------------------------|--------|

##### Functions

|           |        |
|-----------|--------|
| Trip unit | ENERGY |
|-----------|--------|

##### Endurance

|                                        |       |
|----------------------------------------|-------|
| Electric endurance in number of cycles | 10000 |
| Number of mechanical operations        | 40000 |

##### Safety

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

##### Installation, mounting

|                               |          |
|-------------------------------|----------|
| Nominal tightening torque     | 6 - 6 Nm |
| Mounting-/Connection Position | Front    |

#### Connection

|                                  |                        |
|----------------------------------|------------------------|
| Cross-section flexible conductor | 6 - 70 mm <sup>2</sup> |
| Cross-section rigid conductor    | 6 - 95 mm <sup>2</sup> |

#### Cover, door

|               |     |
|---------------|-----|
| Interlockable | Yes |
|---------------|-----|

#### Cable

|                |                     |
|----------------|---------------------|
| Cable material | Copper<br>Aluminium |
|----------------|---------------------|

#### Compatibility

|                                 |     |
|---------------------------------|-----|
| Compatible with RDC AOB         | No  |
| Suitable for DIN Rail           | No  |
| Suitable for distribution board | Yes |

#### Dimensions

|        |        |
|--------|--------|
| Height | 130 mm |
| Width  | 90 mm  |
| Depth  | 97 mm  |

#### Settings

|                                                           |            |
|-----------------------------------------------------------|------------|
| Adjustment range short-term delayed short-circuit release | 24 - 400 A |
|-----------------------------------------------------------|------------|

#### Electrical protection

|                                                 |       |
|-------------------------------------------------|-------|
| Long-time overload protection (ltd): delay (tr) | 0.5 s |
|                                                 | 1.5 s |
|                                                 | 2.5 s |
|                                                 | 5 s   |
|                                                 | 7.5 s |
|                                                 | 9 s   |
|                                                 | 10 s  |
|                                                 | 12 s  |
|                                                 | 14 s  |
|                                                 | 16 s  |
| Short-time protection (std): current (lsc)      | 1.5   |
|                                                 | 2     |
|                                                 | 2.5   |
|                                                 | 3     |
|                                                 | 3.5   |
|                                                 | 4     |
|                                                 | 4.5   |
|                                                 | 5     |
|                                                 | 5.5   |
|                                                 | 6     |
|                                                 | 6.5   |
|                                                 | 7     |
|                                                 | 7.5   |
|                                                 | 8     |
|                                                 | 8.5   |
|                                                 | 9     |
|                                                 | 9.5   |
|                                                 | 10    |

Electrical protection

|                                                         |        |
|---------------------------------------------------------|--------|
| Short-time protection (std): delay (tsd)                | 50 ms  |
|                                                         | 100 ms |
|                                                         | 200 ms |
|                                                         | 300 ms |
|                                                         | 400 ms |
| Instantaneous protection (li): dial setting coefficient | 3      |
|                                                         | 3.5    |
|                                                         | 4      |
|                                                         | 4.5    |
|                                                         | 5      |
|                                                         | 5.5    |
|                                                         | 6      |
|                                                         | 6.5    |
|                                                         | 7      |
|                                                         | 7.5    |
|                                                         | 8      |
|                                                         | 8.5    |
|                                                         | 9      |
|                                                         | 9.5    |
|                                                         | 10     |
|                                                         | 10.5   |
|                                                         | 11     |
|                                                         | 11.5   |
|                                                         | 12     |
|                                                         | 12.5   |
|                                                         | 13     |
|                                                         | 13.5   |
|                                                         | 14     |
|                                                         | 14.5   |
|                                                         | 15     |

Sustainability

|              |     |
|--------------|-----|
| RoHS conform | Yes |
|--------------|-----|