



HMT160JR

**Moulded Case Circuit Breaker h3+ P250 LSI 3P3D 160A 50kA FTC**

**Technical properties**

**Architecture**

|                           |                 |
|---------------------------|-----------------|
| Type of order             | Toggle          |
| Neutral position          | without neutral |
| Number of protected poles | 3               |
| Number of poles           | 3 P             |
| Type of pole              | 3P3D            |
| Fixing mode               | Screwed         |
| Type of case              | Fixed built-in  |

**Functions**

|  |     |
|--|-----|
| Complete device with protection unit   | Yes |
| Reversing switch                       | No  |
| Version as main switch                 | Yes |
| Version as emergency stop installation | No  |
| Version as safety switch               | No  |
| Version as maintenance-/service switch | Yes |
| Trip Unit                              | LSI |
| Integrated earth fault protection      | No  |

**Controls and indicators**

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

**Main electrical features**

|                              |             |
|------------------------------|-------------|
| Rated operational voltage Ue | 220 / 690 V |
| Type of supply voltage       | AC          |
| Frequency                    | 50/60 Hz    |

**Voltage**

|                                 |       |
|---------------------------------|-------|
| Rated insulation voltage        | 800 V |
| Rated impulse withstand voltage | 8 kV  |
| With under voltage release      | No    |

**Electric current**

|  |        |
|--|--------|
| Rated current  | 160 A  |
| Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2     | 6 kA   |
| Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2 | 2.5 kA |
| Rated short-time withstand current Icw t=0.4S 380-415 V AC according IEC 60947-2 | 2.5 kA |

|   |             |
|---|-------------|
| Rated short-time withstand current I <sub>cs</sub><br>t=0.4S 660-690 V AC according IEC 60947-2 | 2.5 kA      |
| Rating current 10°C according to IEC 60947  | 160 A       |
| Rating current 15°C according to IEC 60947  | 160 A       |
| Rating current 20°C according to IEC 60947  | 160 A       |
| Rating current 25°C according to IEC 60947  | 160 A       |
| Rating current 30°C according to IEC 60947  | 160 A       |
| Rating current 35°C according to IEC 60947  | 160 A       |
| Rating current 40°C according to IEC 60947  | 160 A       |
| Rating current 45°C according to IEC 60947  | 160 A       |
| Rating current 50°C according to IEC 60947  | 160 A       |
| Rating current 55°C according to IEC 60947  | 160 A       |
| Rating current 60°C according to IEC 60947  | 160 A       |
| Rating current 65°C according to IEC 60947  | 145 A       |
| Rating current 70°C according to IEC 60947  | 135 A       |
| Rated service breaking capacity I <sub>cs</sub> under<br>660V AC according IEC 60947-2          | 6 kA        |
| Breaking capacity on 1 pole for IT 230V NF<br>60947-2   | 2.5 kA      |
| Breaking capacity on 1 pole for IT 400V NF<br>60947-2   | 2.5 kA      |
| Breaking capacity on 1 pole for IT 415V NF<br>60947-2   | 2.5 kA      |
| Rated ultimate short-circuit breaking<br>capacity I <sub>cu</sub> under 230V AC IEC 60947-2     | 65 kA       |
| Rated ultimate short-circuit breaking<br>capacity I <sub>cu</sub> under 240V AC IEC 60947-2     | 65 kA       |
| Rated ultimate short-circuit breaking<br>capacity I <sub>cu</sub> under 400V AC IEC 60947-2     | 50 kA       |
| Rated ultimate short-circuit breaking<br>capacity I <sub>cu</sub> under 415V AC IEC 60947-2     | 50 kA       |
| Rated service breaking capacity I <sub>cs</sub> under<br>110-138V AC according IEC 60947-2      | 65 kA       |
| Rated ultimate short-circuit breaking<br>capacity I <sub>cu</sub> under 220V AC IEC 60947-2     | 65 kA       |
| Rated ultimate short-circuit breaking<br>capacity I <sub>cu</sub> under 380V AC IEC 60947-2     | 50 kA       |
| Rated ultimate short-circuit breaking<br>capacity I <sub>cu</sub> under 660V AC IEC 60947-2     | 6 kA        |
| <b>Dimensions</b>   |             |
| Depth of installed product  | 97 mm       |
| Height of installed product   | 165 mm      |
| Width of installed product  | 105 mm      |
| <b>Frequency</b>  |             |
| Frequency   | 50 to 60 Hz |
| <b>Power</b>  |             |
| Total power loss under I <sub>N</sub>   | 18.42 W     |
| Power loss per pole at I <sub>N</sub>   | 6.14 W      |
| <b>Endurance</b>  |             |
| Electric endurance in number of cycles  | 10000       |

Subject to technical modifications

|   |                         |
|---|-------------------------|
| Number of mechanical operations                         | 40000                   |
| <b>Cover, door</b>                                      |                         |
| Interlockable   | Yes                     |
| <b>Installation, mounting</b>                           |                         |
| Tightening torque                                       | 12Nm                    |
| DIN rail mounting with optional adaptor                 | No                      |
| Suitable for front mounting center                      | No                      |
| Suitable for front mounting                             | No                      |
| Suitable for ground mounting                            | Yes                     |
| <b>Connection</b>                                       |                         |
| Connection cross-sect. flexible conductor               | 35 / 150mm <sup>2</sup> |
| Connection cross-sect. rigid cable                      | 35 / 185mm <sup>2</sup> |
| Connection  | Front connection        |
| Type of connection                                      | Terminal                |
| <b>Protection</b>                                       |                         |
| Instantaneous protection (II): type                     | adjustable              |
| <b>Cable</b>  |                         |
| Cable Material  | Cu / Al                 |
| <b>Equipment</b>  |                         |
| 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                       |
| Motor drive optional                                    | Yes                     |
| Can be accessorized                                     | Yes                     |
| <b>Use cases</b>  |                         |
| Category of use   | A                       |
| <b>Use</b>  |                         |
| Vibrations and shocks withstand                         | IEC 68068-2-52 Test FC  |
| <b>Standards</b>  |                         |
| Standard text   | IEC 60947-2             |
| European directive WEEE                                 | concerned               |
| <b>Safety</b>   |                         |
| Protection index IP                                     | IP4X                    |
| REACH conform   | No                      |
| RoHS conform  | Yes                     |
| Halogen free  | No                      |
| <b>Use conditions</b>                                   |                         |

|  |                                    |
|--|------------------------------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 3                                  |
| Altitude   | 2000 m                             |
| Air humidity protection                                  | 95%HR 55°C sev Kn (IEC 68-2-30/52) |
| <b>temperatur</b>  |                                    |
| Temperature of calibration                               | 50 °C                              |