

HDA098Z

## Moulded Case Circuit Breaker X160 1P 18kA 100A

## **Technical properties**

| Type of order   | Toggle      |
|---|-------------|
| Number of poles   | 1 P         |
| Type of pole  | 1P1D        |
| Functions   |             |
| Complete device with protection unit  | Yes         |
| Trip Unit   | TM F/F      |
| With integrated earth leakage fault protec-<br>tion                               | No          |
| Configuration   |             |
| Number of modules   | 1.5         |
| Main electrical features  |             |
| Rated operational voltage Ue  | 220 / 240 V |
| Frequency   | 50/60 Hz    |
| Voltage   |             |
| Rated insulation voltage  | 690 V       |
| Rated impulse withstand voltage   | 8 kV        |
| With under voltage release  | No          |
| Electric current  |             |
| Rated current   | 100 A       |
| Rated ultimate short-circuit breaking capa-<br>city Icu under 690V AC IEC 60947-2 | 4 kA        |
| Thermal protection nob setting xIN  | 1           |
| Breaking capacity on 1 pole for IT 230V NF<br>60947-2                             | 15 kA       |
| Breaking capacity on 1 pole for IT 400V NF<br>60947-2                             | 9 kA        |
| Rated service breaking capacity Ics AC<br>according IEC 60947-2                   | 100 %       |
| Rated ultimate short-circuit breaking capa-<br>city Icu under 230V AC IEC 60947-2 | 18 kA       |
| Rated ultimate short-circuit breaking capa-<br>city Icu under 240V AC IEC 60947-2 | 25 kA       |
| Rated ultimate short-circuit breaking capa-<br>city Icu under 400V AC IEC 60947-2 | 18 kA       |
| Rated ultimate short-circuit breaking capa-<br>city Icu under 415V AC IEC 60947-2 | 18 kA       |
| Rated ultimate short-circuit breaking capa-<br>city Icu under 440V AC IEC 60947-2 | 15 kA       |
|   |             |

## **Current correction factors**

| Correction factor of rating current for 2   |  |
|---|--|
| devices placed side-by-side   | 1  |
| Correction factor of rating current for 3 devices placed side-by-side   | 1  |
| Correction factor of rating current for 4 and<br>5 devices placed side-by-side  | 1  |
| Correction factor of rating current for 6<br>devices placed side-by-side  | 1  |
| Power   |  |
| Total power loss under IN   | 8.4 W  |
| Power loss per pole at In   | 8.4 W  |
| Tripping  |  |
| Tripmode  | TM   |
| Thermal protection trip time  | 0 ms   |
| Time of response when opening   | 10 ms  |
| Electrical specifications   |  |
| Magnetic trip delay time  | 0 ms   |
| Endurance   |  |
| Electric endurance in number of cycles  | 1000   |
| Number of mechanical operations   | 4000   |
| Installation, mounting  |  |
| DIN rail mounting with optional adaptator   | Yes  |
|   |  |
| Connection  |  |
|   | 4 / 70mm²  |
| Connection cross-sect. flexible conductor   |  |
| Connection cross-sect. flexible conductor   | 4 / 70mm²<br>4 / 95mm²<br>Front connection   |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable   | 4 / 95mm²  |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable<br>Connection<br>Type of connection   | 4 / 95mm²<br>Front connection  |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable<br>Connection<br>Type of connection<br>Settings   | 4 / 95mm²<br>Front connection<br>with screw  |
| Connection cross-sect. flexible conductor Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment  | 4 / 95mm <sup>2</sup><br>Front connection<br>with screw<br>1500 A                                      |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable<br>Connection<br>Type of connection<br>Settings<br>Range of the magnetic adjustment<br>Setting type In or Ith   | 4 / 95mm <sup>2</sup><br>Front connection<br>with screw<br>1500 A                                      |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable<br>Connection<br>Type of connection<br>Settings<br>Range of the magnetic adjustment<br>Setting type In or Ith<br>Equipment<br>Number of auxiliary contacts as normally  | 4 / 95mm <sup>2</sup><br>Front connection<br>with screw<br>1500 A<br>IN                                |
| Connection cross-sect. flexible conductor Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally  | 4 / 95mm <sup>2</sup><br>Front connection<br>with screw<br>1500 A<br>IN                                |
| Connection cross-sect. flexible conductor Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-   | 4 / 95mm <sup>2</sup><br>Front connection<br>with screw<br>1500 A<br>IN<br>0                           |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable<br>Connection<br>Type of connection<br>Settings<br>Range of the magnetic adjustment<br>Setting type In or Ith<br>Equipment<br>Number of auxiliary contacts as normally<br>closed contact<br>Number of auxiliary contacts as normally<br>open contact<br>Number of auxiliary contacts as change-<br>over contact   | 4 / 95mm²<br>Front connection<br>with screw<br>1500 A<br>IN<br>0<br>0                                  |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable<br>Connection<br>Type of connection<br>Settings<br>Range of the magnetic adjustment<br>Setting type In or Ith<br>Equipment<br>Number of auxiliary contacts as normally<br>closed contact<br>Number of auxiliary contacts as normally<br>open contact<br>Number of auxiliary contacts as change-<br>over contact<br>Motor drive optional                                 | 4 / 95mm²<br>Front connection<br>with screw<br>1500 A<br>IN<br>0<br>0                                  |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable<br>Connection   | 4 / 95mm²<br>Front connection  |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable<br>Connection<br>Type of connection<br>Settings<br>Range of the magnetic adjustment<br>Setting type In or Ith<br>Equipment<br>Number of auxiliary contacts as normally<br>closed contact<br>Number of auxiliary contacts as normally<br>open contact<br>Number of auxiliary contacts as change-<br>over contact<br>Motor drive optional<br>Use cases                    | 4 / 95mm²<br>Front connection<br>with screw<br>1500 A<br>IN<br>0<br>0<br>0<br>0<br>0<br>0              |
| Connection cross-sect. flexible conductor<br>Connection cross-sect. rigid cable<br>Connection<br>Type of connection<br>Settings<br>Range of the magnetic adjustment<br>Setting type In or Ith<br>Equipment<br>Number of auxiliary contacts as normally<br>closed contact<br>Number of auxiliary contacts as normally<br>open contact<br>Number of auxiliary contacts as change-<br>over contact<br>Motor drive optional<br>Use cases<br>Category of use | 4 / 95mm <sup>2</sup><br>Front connection<br>with screw<br>1500 A<br>IN<br>0<br>0<br>0<br>0<br>0<br>No |

## **Use conditions**

| Operating temperature         | -2570 °C         |
|-------------------------------|------------------|
| Altitude                      | 2000 m           |
| Air humidity protection       | for all climates |
| Storage/transport temperature | -3570 °C         |