



HDA081Z

## Moulded Case Circuit Breaker X160 4P 18kA 80A

### Technical properties

#### Architecture

|                 |        |
|-----------------|--------|
| Type of order   | Toggle |
| Number of poles | 4 P    |
| Type of pole    | 4P4D   |

#### Functions

|                                      |        |
|--------------------------------------|--------|
| Complete device with protection unit | Yes    |
| Trip Unit                            | TM F/F |
| Integrated earth fault protection    | No     |

#### Configuration

|                   |   |
|-------------------|---|
| Number of modules | 6 |
|-------------------|---|

#### Main electrical features

|                              |             |
|------------------------------|-------------|
| Rated operational voltage Ue | 220 / 415 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  | 80 A  |
| Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 | 4 kA  |
| Thermal protection nob setting xIN   | 1     |
| Thermal setting current on neutral pole                                      | 1 In  |
| Breaking capacity on 1 pole for IT 230V NF 60947-2                           | 15 kA |
| Breaking capacity on 1 pole for IT 400V NF 60947-2                           | 9 kA  |
| Rated service breaking capacity Ics AC according IEC 60947-2                 | 100 % |
| Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 | 25 kA |
| Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 | 25 kA |
| Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2 | 18 kA |
| Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2 | 18 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 5 devices placed side-by-side | 1 |
| Correction factor of rating current for 6 devices placed side-by-side       | 1 |

### Power

|                           |        |
|---------------------------|--------|
| Total power loss under IN | 18.9 W |
| Power loss per pole at In | 6.3 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 adaptor | Yes |
|---|-----|

### Connection

|   |                       |
|---|-----------------------|
| Connection cross-sect. flexible conductor | 4 / 70mm <sup>2</sup> |
| Connection cross-sect. rigid cable        | 4 / 95mm <sup>2</sup> |
| Connection                                | Front connection      |
| Type of connection                        | with screw            |

### Settings

|                                  |        |
|----------------------------------|--------|
| Range of the magnetic adjustment | 1000 A |
| Setting type In or Ith           | IN     |

### Equipment

|   |    |
|---|----|
| 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                                    | No |

### Use cases

|                 |   |
|-----------------|---|
| Category of use | A |
|-----------------|---|

**Standards**

Standard text

IEC 60947-2

**Use conditions**

Operating temperature

-25...70 °C

Altitude

2000 m

Air humidity protection

for all climates

Storage/transport temperature

-35...70 °C