



HHA080Z

Moulded Case Circuit Breaker X160 3P 25kA 80A

Technical properties

Architecture

| | |
|-----------------|--------|
| Type of order | Toggle |
| Number of poles | 3 P |
| Type of pole | 3P3D |

Functions

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

Configuration

| | |
|-------------------|-----|
| Number of modules | 4.5 |
|-------------------|-----|

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 |
| Breaking capacity on 1 pole for IT 230V NF 60947-2 | 21 kA |
| Breaking capacity on 1 pole for IT 400V NF 60947-2 | 9 kA |
| Rated service breaking capacity Ics AC according IEC 60947-2 | 80 % |
| Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 | 35 kA |
| Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 | 35 kA |
| Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2 | 25 kA |
| Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2 | 25 kA |
| Rated ultimate short-circuit breaking capacity Icu under 440V AC IEC 60947-2 | 20 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

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|-------------------------------|-------|
| 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 ² |
| Connection cross-sect. rigid cable | 4 / 95mm ² |
| 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 |
|---------------|-------------|

Safety

| | |
|---------------------|------|
| Protection index IP | IP4X |
|---------------------|------|

Use conditions

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

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|----------|--------|
| Altitude | 2000 m |
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|-------------------------|------------------|
| Air humidity protection | for all climates |
|-------------------------|------------------|

| | |
|-------------------------------|-------------|
| Storage/transport temperature | -35...70 °C |
|-------------------------------|-------------|