



HDA040L

Moulded Case Circuit Breaker X160 3P 18kA 40A

Technical properties

| | Toggle |
|---|--|
| Number of poles | 3 F |
| 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 | 40 A |
| Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 | 4 kA |
| | 1 |
| Thermal protection nob setting xIN | 1 |
| Thermal protection nob setting xIN Breaking capacity on 1 pole for IT 230V NF 60947-2 | 15 kA |
| Breaking capacity on 1 pole for IT 230V NF | |
| Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF | 15 kA 9 kA |
| Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF 60947-2 Rated service breaking capacity Ics AC | 15 kA 9 kA 100 % |
| Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF 60947-2 Rated service breaking capacity Ics AC according IEC 60947-2 Rated ultimate short-circuit breaking | 15 kA 9 kA 100 % 25 kA |
| Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF 60947-2 Rated service breaking capacity Ics AC according IEC 60947-2 Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 Rated ultimate short-circuit breaking | 15 kA 9 kA 100 % 25 kA 25 kA |
| Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF 60947-2 Rated service breaking capacity Ics AC according IEC 60947-2 Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 Rated ultimate short-circuit breaking | 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 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 | 11 W |
| Power loss per pole at In | 3.7 W |
| Tripping | |
| Tripmode | ТМ |
| 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 | No |
| | |
| Connection | |
| | |
| Connection cross-sect. flexible conductor | 4 / 70mm² |
| | |
| Connection cross-sect. rigid cable | 4 / 95mm² |
| Connection cross-sect. rigid cable Connection | 4 / 95mm² Front connection |
| Connection cross-sect. rigid cable Connection Type of connection | 4 / 95mm² Front connection |
| Connection cross-sect. rigid cable Connection Type of connection Settings | 4 / 95mm ² Front connection with screw |
| 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 | 4 / 95mm ² Front connection with screw 600 A |
| Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith | 4 / 95mm ² Front connection with screw 600 A |
| 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 | 4 / 95mm ² Front connection with screw 600 A IN |
| 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 ² Front connection with screw 600 A IN |
| 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 | 4 / 95mm ² Front connection with screw 600 A IN 0 |
| 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 change- over contact | 4 / 95mm ² Front connection with screw 600 A IN 0 0 |
| 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 change- over contact Motor drive optional | 4 / 95mm ² Front connection with screw 600 A IN 0 0 |
| Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment | 4 / 95mm² Front connection with screw 600 A IN 0 0 0 0 0 0 |
| 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 change- over contact Motor drive optional Use cases | 4 / 95mm² Front connection with screw 600 A IN 0 0 0 0 0 0 |
| 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 change- over contact Motor drive optional Use cases Category of use | 4 / 70mm² 4 / 95mm² Front connection with screw 600 A IN 600 A IN 0 0 0 0 0 0 0 0 0 0 0 |

Use conditions

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