



HNF981H

MCCB h1600 4P 50kA 1250A LSI

Technische Merkmale

Architecture

| | |
|-----------------|------------------|
| Type of order | Toggle |
| Type of case | Fixed built-in |
| Number of poles | 4 P |
| Type of pole | 4P4D N:0;50;100% |

Functions

| | |
|--------------------------------------|-----|
| Complete device with protection unit | yes |
| Trip Unit | LSI |
| Integrated earth fault protection | no |

Compatibility

| | |
|-----------------------------------|----|
| Compatible with DIN rail mounting | no |
|-----------------------------------|----|

Controls and indicators

| | |
|------------------------|----|
| Motor drive integrated | no |
|------------------------|----|

Main electrical features

| | |
|------------------------------|-----------|
| Frequency | 50/60 Hz |
| Rated operational voltage Ue | 220/690 V |

Voltage

| | |
|---------------------------------|--------|
| Rated insulation voltage | 800 V |
| Rated impulse withstand voltage | 8000 V |
| With under voltage release | no |

Electric current

| | |
|--|-----------------------------|
| Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2 | 50 kA |
| Rated service breaking capacity Ics AC according IEC 60947-2 | 100 % |
| Breaking capacity on 1 pole with 230 V NF 60947-2 | 60 kA |
| Breaking capacity on 1 pole with 400 V NF 60947-2 | 9 kA |
| Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 | 100 kA |
| Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 | 100 kA |
| Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2 | 50 kA |
| Rated ultimate short-circuit breaking capacity Icu under 440V AC IEC 60947-2 | 70 kA |
| Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 | 45 kA |
| Thermal protection nob setting xI _N | 0,4/0,5/0,63/0,8/0,9/0,95/1 |
| Thermal setting current on neutral pole | 0/0,5/1 I _n |

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

| | |
|---|---------|
| Power loss per pole at I_n | 62,5 W |
| Power loss per pole at $0.63 \cdot I_n$ | 24,8 W |
| Power loss per pole at $0.8 \cdot I_n$ | 40 W |
| Total power loss under I_n | 187,5 W |
| Total power loss at $0.63 \cdot I_n$ | 74,4 W |
| Total power loss at $0.8 \cdot I_n$ | 120 W |

Tripping

| | |
|-------------------------------|---------------------|
| Trip mode | LSI |
| Thermal protection trip time | 5/10/11/19/21/29 ms |
| Time of response when opening | 10 ms |

Electrical specifications

| | |
|--------------------------|---------------|
| Magnetic trip delay time | 100 to 200 ms |
|--------------------------|---------------|

Endurance

| | |
|--|------|
| Electric endurance in number of cycles | 1000 |
| Number of mechanical operations | 4000 |

Installation, mounting

| | |
|---|-------|
| Tightening torque | 65 Nm |
| DIN rail mounting with optional adaptor | no |

Connection

| | |
|---|-----------------------|
| Connection cross-sect. rigid cable | 3x240 mm ² |
| Connection cross-sect. flexible conductor | 3x240 mm ² |
| Connection | Front connection |
| Type of connection | Terminal |

Settings

| | |
|--|---|
| Magnetic protection nob setting $\times I_n$ | 2,5/5/10 |
| Setting type I_n or I_{th} | $I_r I_{th}$ |
| Range of the magnetic adjustment | 7000/8750/11200/14000/15000/15000/15000 A |

Equipment

| | |
|----------------------|-----|
| Motor drive optional | yes |
|----------------------|-----|

| | |
|-------------------------|------------------|
| Use cases | |
| Category of use | A |
| Standards | |
| Standard text | IEC 60947-2 |
| European directive WEEE | concerned |
| Safety | |
| Protection index IP | IP4X |
| Use conditions | |
| Altitude | 2000 m |
| Storage temperature | -35 to 70 °C |
| Air humidity protection | for all climates |