



MCB 1P 6kA D-50A 1M

MDN150P

Architecture

| | |
|---------------------------|-------------------------------|
| Neutral position | without neutral |
| Number of protected poles | 1 |
| Number of poles | 1 P |
| Type of pole | 1 P |
| Fixing mode | DIN rail type O (symmetrical) |
| Curve | D |

Functions

| | |
|----------------------------------|-----|
| Concurrently switching N-neutral | no |
| Sealable | yes |

Compatibility

| | |
|-----------------------------------|-----|
| Compatible with DIN rail mounting | yes |
|-----------------------------------|-----|

Controls and indicators

| | |
|---------------------------------|----|
| With Contact position indicator | no |
| With fault indicator | no |

Connectivity

| | |
|---|------------------|
| Top connection alignment for modular devices | Aligned terminal |
| Bottom connection alignment for modular devices | Aligned terminal |

Main electrical features

| | |
|------------------------------|-------------|
| Rated operational voltage Ue | 240 / 415 V |
| Type of supply voltage | AC |

Voltage

| | |
|------------------------------------|--------|
| Rated insulation voltage | 500 V |
| Max operating voltage | 440 V |
| Rated impulse withstand voltage | 6000 V |
| Minimum threshold voltage (Ue min) | 12 V |

Electric current

| | |
|---|----------------------------|
| Rated current | 50 A |
| min/maxi threshold value of the AC thermal operation | 1,13 / 1,45 I _n |
| Magnetic regulating current | 10 / 14,4 I _n |
| Rated short circuit breaking capacity I _{cn} under 230V AC according IEC60898-1 | 6 kA |
| Rated short circuit breaking capacity I _{cn} under 400V AC according IEC60898-1 | 6 kA |
| Rated short circuit breaking capacity I _{cn} under 240V AC according IEC 60898-1 | 6 kA |
| Rated short circuit breaking capacity I _{cn} under 415V AC according IEC 60898-1 | 6 kA |
| Rated service breaking capacity I _{cs} under 240V AC according IEC 60898-1 | 6 kA |
| Rated service breaking capacity I _{cs} under 415V AC according IEC 60898-1 | 6 kA |

Electric current / temperature

| | |
|----------------------|---------|
| Rating current -25°C | 65,12 A |
| Rating current -20°C | 63,89 A |
| Rating current -15°C | 62,64 A |
| Rating current -10°C | 61,37 A |
| Rating current -5°C | 60,15 A |
| Rating current 0°C | 58,92 A |
| Rating current 5°C | 57,69 A |
| Rating current 10°C | 56,47 A |
| Rating current 25°C | 52,84 A |
| Rating current 30°C | 50 A |
| Rating current 35°C | 49,4 A |
| Rating current 40°C | 48,22 A |
| Rating current 45°C | 46,72 A |
| Rating current 50°C | 46,96 A |
| Rating current 55°C | 42,77 A |
| Rating current 60°C | 40,33 A |
| Rating current 65°C | 37,57 A |
| Rating current 70°C | 34,49 A |

Current correction factors

| | |
|---|------|
| Correction factor of rating current for 2 devices placed 1 side-by-side | |
| Correction factor of rating current for 3 devices placed 0,95 side-by-side | |
| Correction factor of rating current for 4 and 5 devices placed side-by-side | 0,9 |
| Correction factor of rating current for 6 devices placed side-by-side | 0,85 |
| Correction factor of magnetic tripping with 60 Hz | 1 |

Frequency

| | |
|-----------|-------------|
| Frequency | 50 to 60 Hz |
|-----------|-------------|

Power

| | |
|---|-------|
| Maximum power loss per pole according to the product standard | 9 W |
| Total power loss under I _N | 4,7 W |
| Power loss per pole at I _n | 4,7 W |

Endurance

| | |
|--|-------|
| Electric endurance in number of cycles | 4000 |
| Number of mechanical operations | 20000 |

Dimensions

| | |
|-----------------------------|---------|
| Depth of installed product | 70 mm |
| Height of installed product | 84,6 mm |
| Width of installed product | 17,7 mm |

Installation, mounting

| | |
|---|------------|
| Type of top connection for modular devices | with screw |
| Tightening torque | 2,8Nm |
| Type of top rail clip for modular devices | Plastic |
| Type of bottom rail clip for modular devices | plastic |
| Type of Bottom Connection for modular devices | Blconnect |
| Top removability for modular devices | yes |
| Bottom removability for modular devices | yes |
| Suitable for flush-mounting | yes |
| 360° product mounting position | yes |

Connection

| | |
|--|------------------------|
| Connection cross-section at output with screw, for flexible conductor | 1 / 25 mm ² |
| Connection cross-section at output with screw, for massive conductor | 1 / 35 mm ² |
| Connection cross-section for rigid conductor, upstream terminals with screws | 1 / 35 mm ² |
| Connection cross-section of the access with screws, with flexible conductor | 1 / 25 mm ² |
| Downstream cage clamp delivery status | opened |
| Upstream cage clamp delivery status | opened |

Equipment

| | |
|---------------------------------------|-----|
| Can be accessorized | yes |
| With transparent product label holder | yes |

Standards

| | |
|--|----------------------------|
| Standard text | EN 60898-1, AS/NZS 60898-1 |
| European directive WEEE | concerned |
| Product categories described in the W3E directive 2012/19/EU | Category 5 |

Safety

| | |
|---------------------|------|
| Protection index IP | IP20 |
|---------------------|------|

Use conditions

| | |
|--|------------|
| Operating temperature | -25 70 °C |
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 |
| Altitude | 2000 m |
| Air humidity protection | 95% / 55°C |
| Storage/transport temperature | -25 80 °C |

temperatur

Temperature of calibration

30 °C
