# DATASHEET
## Circuit Breaker



## Main Features

| | |
|---|---|
| Reference | : MPW80 |
| Product code | : 12425428 |
| Setting range for thermal release | : 40-50 A |
| Maximum rated current Ie | : 80 A |
| Terminal type | : Box |

### Basic Data

| | |
|---|---|
| Rated operational voltage Ue | |
| - IEC | : 690 V |
| - UL | : Not available |
| Rated insutation voltage Ui | |
| - IEC | : 690 V |
| - UL | : Not available |
| Number of poles | : 3 |
| Short-circuit release | : 13 x Iemax |
| Rated operational frequency | : 50/60 Hz |
| Utilization category | |
| - IEC60947-2 (motor starter protector/circuit breaker) | : A |
| - IEC60947-4-1 (Motor Starters) | : AC-3 |
| Trip test | : Yes |
| Overload protection | : Yes |
| Phase failure sensitivity | : Yes |
| Trip indication | : Yes |
| Tripping class | : 10 |
| Maximum operating frequency (ops./h) | : 15 |
| Mechanical lifespan | : 5000 operations |
| Electrical lifespan | : 25000 operations |
| Power dissipation per circuit breaker | : 25 W |
| Resistance to impact (IEC 60068-2-27) | : 15 g |
| Degree of protection | : IP20 |

### Breaking capacity (IEC 60947-2)

| Voltage | Icu | Ics |
|---|---|---|
| 220 - 240 V | 100 | 100 |
| 380 - 415 V | 65 | 65 |
| 440 V | 65 | 65 |
| 460 - 500 V | 35 | 35 |
| 630 - 690 V | 8 | 8 |

### Connection

| | |
|---|---|
| Terminal type | : Box |
| Screw type | : Screw Allen (4mm) |
| Tightening torque | : 6 N.m / 55 lb.in |

### Ambient conditions

| | |
|---|---|
| Temperature | |
| - Operation | -20 °C (-4 °F) ... +70 °C (158 °F) |
| - storage | -50 °C (-58 °F) ... +80 °C (176 °F) |
| Temperature compensation (IEC 60947-4-1) | -20 °C (-4 °F) ... +60 °C (140 °F) |
| Maximum operating altitude without changing the rated values | : 2000 m |

Correction factors for altitude:

| Altitude (h) | Rated operating voltage | Current reduction factor |
|---|---|---|
| h ≤ 2000 m | 690 V | 690 V |
| 2000 m < h ≤ 3000 m | 550 V | 550 V |
| 3000 m < h ≤ 4000 m | 480 V | 480 V |
| 4000 m < h ≤ 5000 m | 420 V | 420 V |

### Dimensions

| | |
|---|---|
| Height | : 125 mm / 4.92 in |
| Width | : 54 mm / 2.13 in |
| Depth | : 157 mm / 6.18 in |
| Gross weight | : 1,07 kg / 2.36 lb |

### Compliance/Standards

IEC/EN 60947-1, DIN VDE 0660 (part 100)
IEC/EN 60947-2, DIN VDE 0660 (part 101)
IEC/EN 60947-4-1, DIN VDE 0660 (part 102)
UL 508

**Certifications**
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**Notes**
1) Reduce current for temperatures exceeding +60 °C (87% to 70 °C);
2) Image merely illustrative.