

# DATASHEET

## Circuit Breaker



### Main Features

|                                   |            |
|-----------------------------------|------------|
| Reference                         | : MPW40    |
| Product code                      | : 12428128 |
| Setting range for thermal release | : 10-16 A  |
| Maximum rated current Ie          | : 40 A     |
| Terminal type                     | : Screw    |

### Basic Data

|                                                        |                          |
|--------------------------------------------------------|--------------------------|
| Rated operational voltage Ue                           |                          |
| - IEC                                                  | : 690 V                  |
| - UL                                                   | : Not available          |
| Rated insulation voltage Ui                            |                          |
| - IEC                                                  | : 690 V                  |
| - UL                                                   | : Not available          |
| Number of poles                                        | : 3                      |
| Short-circuit release                                  | : 13 x I <sub>emax</sub> |
| 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                                    | : 100000 operations      |
| Electrical lifespan                                    | : 100000 operations      |
| Power dissipation per circuit breaker                  | : 8 W                    |
| Resistance to impact (IEC 60068-2-27)                  | : 15 g                   |
| Degree of protection                                   | : IP20                   |

### Breaking capacity (IEC 60947-2)

| Voltage     | I <sub>cu</sub> | I <sub>cs</sub> |
|-------------|-----------------|-----------------|
| 220 - 240 V | 100             | 100             |
| 380 - 415 V | 50              | 25              |
| 440 V       | 50              | 15              |
| 460 - 500 V | 10              | 8               |
| 630 - 690 V | 5               | 5               |

### Connection

|                   |                                 |
|-------------------|---------------------------------|
| Terminal type     | : Screw                         |
| Screw type        | : Screw Slot-Phillips (#2)      |
| Tightening torque | : 2,0...2,5 N.m / 18...22 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                   | 1 x I <sub>n</sub>       |
| 2000 m < h ≤ 3000 m | 550 V                   | 0,96 x I <sub>n</sub>    |
| 3000 m < h ≤ 4000 m | 480 V                   | 0,93 x I <sub>n</sub>    |
| 4000 m < h ≤ 5000 m | 420 V                   | 0,90 x I <sub>n</sub>    |

### Dimensions

|              |                     |
|--------------|---------------------|
| Height       | : 97 mm / 3.82 in   |
| Width        | : 45 mm / 1.77 in   |
| Depth        | : 98 mm / 3.86 in   |
| Gross weight | : 0,36 kg / 0.79 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

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## Circuit Breaker



**Certifications**

ANCE  
BUREAU VERITAS  
CE  
PCT  
IRAM  
CS  
UL

**Notes**

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