



## MCB 1P 6kA C-40A 1M

MCN140A

### Architecture

|                           |     |
|---------------------------|-----|
| Number of protected poles | 1   |
| Number of poles           | 1 P |
| Type of pole              | 1 P |
| Curve                     | C   |

### Connectivity

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

### Main electrical features

|                                                                        |           |
|------------------------------------------------------------------------|-----------|
| Frequency                                                              | 50/60 Hz  |
| Rated short circuit breaking capacity $I_{cn}$ AC according IEC60898-1 | 6 kA      |
| Type of supply voltage                                                 | AC        |
| Rated operational voltage $U_e$                                        | 230/400 V |

### Voltage

|                                 |        |
|---------------------------------|--------|
| Rated insulation voltage        | 500 V  |
| Rated impulse withstand voltage | 4000 V |

### Electric current

|                                                                                   |                 |
|-----------------------------------------------------------------------------------|-----------------|
| Rated short circuit breaking capacity $I_{cn}$ under 230V AC according IEC60898-1 | 6 kA            |
| Rated service breaking capacity $I_{cs}$ AC according IEC 60898-1                 | 6 kA            |
| Breaking capacity on 1 pole with 400 V NF 60947-2                                 | 3 kA            |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ under 230V AC IEC 60947-2 | 10 kA           |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ under 240V AC IEC 60947-2 | 10 kA           |
| Magnetic regulating current at 40° C                                              | 5/10 $I_n$      |
| min/maxi threshold value of the DC magnetic operation                             | 7/15 $I_n$      |
| min/maxi threshold value of the AC thermal operation                              | 1,13/1,45 $I_n$ |
| min/maxi threshold value of the DC thermal operation                              | 1,13/1,45 $I_n$ |

#### Electric current / temperature

|                      |        |
|----------------------|--------|
| Rating current -15°C | 49,5 A |
| Rating current -20°C | 50,4 A |
| Rating current 0°C   | 46,5 A |
| Rating current 10°C  | 44,5 A |
| Rating current -10°C | 48,5 A |
| Rating current 15°C  | 43,4 A |
| Rating current 20°C  | 42,3 A |
| Rating current 25°C  | 41,2 A |
| Rating current -25°C | 51,4 A |
| Rating current 30°C  | 40 A   |
| Rating current 35°C  | 38,8 A |
| Rating current 40°C  | 37,6 A |
| Rating current 45°C  | 36,3 A |
| Rating current 5°C   | 45,5 A |
| Rating current -5°C  | 47,5 A |
| Rating current 50°C  | 35 A   |
| Rating current 55°C  | 33,6 A |
| Rating current 60°C  | 32,2 A |
| Rating current 65°C  | 30,7 A |
| Rating current 70°C  | 29,1 A |

#### Current correction factors

|                                                                             |     |
|-----------------------------------------------------------------------------|-----|
| Correction factor of magnetic tripping with 100 Hz                          | 1,1 |
| Correction factor of magnetic tripping with 200 Hz                          | 1,2 |
| Correction factor of magnetic tripping with 400 Hz                          | 1,5 |
| Correction factor of magnetic tripping with 60 Hz                           | 1   |
| 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 0,85 side-by-side  |     |

#### Power

|                           |       |
|---------------------------|-------|
| Power loss per pole at In | 4,8 W |
| Total power loss under IN | 4,8 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 | 83 mm   |
| Width of installed product  | 17,5 mm |

#### Installation, mounting

|                                               |            |
|-----------------------------------------------|------------|
| Type of top connection for modular devices    | with screw |
| Tightening torque                             | 2,8Nm      |
| Type of Bottom Connection for modular devices | Blconnect  |

#### Connection

|                                                                                  |                       |
|----------------------------------------------------------------------------------|-----------------------|
| Connection cross-sect. rigid cable                                               | 1 / 35mm <sup>2</sup> |
| Connection cross-sect. flexible conductor                                        | 1 / 25mm <sup>2</sup> |
| Type of connection                                                               | with screw            |
| Connection cross section of access and exit with screws, for flexible conductor  | 1/25 mm <sup>2</sup>  |
| Connection cross-section of input and output with screws, for massive conductors | 1/35 mm <sup>2</sup>  |

#### Standards

|                         |            |
|-------------------------|------------|
| Standard text           | EN 60898-1 |
| European directive WEEE | concerned  |

#### Safety

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

#### Use conditions

|                                                          |                  |
|----------------------------------------------------------|------------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2                |
| Operating temperature                                    | -25 70 °C        |
| Class of energy limitation I <sup>2</sup> t              | 3                |
| Altitude                                                 | 2000 m           |
| Storage temperature                                      | -25 to 80 °C     |
| Air humidity protection                                  | for all climates |
| Storage/transport temperature                            | -25 80 °C        |