



## MCB 3P 10kA C-50A 3M

Similar image  
(Picture shows NT304C)

### Architecture

|                           |                               |
|---------------------------|-------------------------------|
| Number of protected poles | 3                             |
| Number of poles           | 3 P                           |
| Type of pole              | 3 P                           |
| Fixing mode               | DIN rail type O (symmetrical) |
| Curve                     | C                             |

### Functions

|                                  |    |
|----------------------------------|----|
| Concurrently switching N-neutral | no |
|----------------------------------|----|

### Connectivity

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

### Main electrical features

|                                                                        |          |
|------------------------------------------------------------------------|----------|
| Rated short circuit breaking capacity $I_{cn}$ AC according IEC60898-1 | 10 kA    |
| Rated operational voltage $U_e$                                        | 415 V    |
| Type of supply voltage                                                 | AC       |
| Frequency                                                              | 50/60 Hz |

### Voltage

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

### Electric current

|                                                                                    |                   |
|------------------------------------------------------------------------------------|-------------------|
| Rated current                                                                      | 50 A              |
| Rated service breaking capacity $I_{cs}$ AC according IEC 60898-1                  | 7,5 kA            |
| min/maxi threshold value of the AC thermal operation                               | 1,13 / 1,45 $I_n$ |
| Magnetic regulating current                                                        | 5 / 10 $I_n$      |
| Rated short circuit breaking capacity $I_{cn}$ under 400V AC according IEC60898-1  | 10 kA             |
| Rated short circuit breaking capacity $I_{cn}$ under 415V AC according IEC 60898-1 | 10 kA             |

Technical Properties

|                                                                         |        |
|-------------------------------------------------------------------------|--------|
| Rated service breaking capacity Ics under 400V AC according IEC 60898-1 | 7,5 kA |
| Rated service breaking capacity Ics under 415V AC according IEC 60898-1 | 7,5 kA |

**Electric current / temperature**

|                      |        |
|----------------------|--------|
| Rating current -25°C | 64 A   |
| Rating current -20°C | 62,8 A |
| Rating current -15°C | 61,7 A |
| Rating current -10°C | 60,5 A |
| Rating current -5°C  | 59,3 A |
| Rating current 0°C   | 58 A   |
| Rating current 5°C   | 56,8 A |
| Rating current 10°C  | 55,5 A |
| Rating current 15°C  | 54,2 A |
| Rating current 20°C  | 52,8 A |
| Rating current 25°C  | 51,4 A |
| Rating current 30°C  | 50 A   |
| Rating current 35°C  | 48,5 A |
| Rating current 40°C  | 47 A   |
| Rating current 45°C  | 45,5 A |
| Rating current 50°C  | 43,8 A |
| Rating current 55°C  | 42,1 A |
| Rating current 60°C  | 40,4 A |
| Rating current 65°C  | 38,9 A |
| Rating current 70°C  | 37,2 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 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    |

**Frequency**

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

**Power**

|                           |        |
|---------------------------|--------|
| Total power loss under IN | 14,8 W |
| Power loss per pole at In | 5,75 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  | 52,5 mm |

#### Installation, mounting

|                                               |                   |
|-----------------------------------------------|-------------------|
| Type of top connection for modular devices    | with screw        |
| Tightening torque                             | 2,8Nm             |
| Type of top rail clip for modular devices     | NA                |
| Type of bottom rail clip for modular devices  | metallic isolated |
| Type of Bottom Connection for modular devices | Blconnect         |
| Top removability for modular devices          | no                |
| Bottom removability for modular devices       | no                |
| 360° product mounting position                | yes               |

#### Connection

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

#### Standards

|               |                             |
|---------------|-----------------------------|
| Standard text | IEC 60898-1, AS/NZS 60898-1 |
|---------------|-----------------------------|

#### Safety

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

#### Use conditions

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