Product data sheet MBN440





 $\begin{array}{c|c} \mathsf{MBN440} \\ 1 & 3 & 5 & 7 \\ \mathsf{MBN440} \\ \mathsf{MBN40} \\ \mathsf$

MCB 4P 6kA B-40A 4M

Technical properties

| Number of protected poles | |
|---|--------------------------------------|
| Number of poles | 4 |
| Curve | |
| Functions | |
| Concurrently switching N-neutral | Ν |
| Configuration | |
| Number of modules | |
| Connectivity | |
| Top connection alignement for modular devices | Aligned termin |
| Bottom connection alignement for modular devices | Aligned termin |
| Main electrical features | |
| Rated short circuit breaking capacity Icn AC according IEC60898-1 | 6 k |
| Rated operational voltage Ue | 230 / 400 |
| Type of supply voltage | A |
| Frequency | 50/60 H |
| Voltage | |
| Rated insulation voltage | 500 |
| Rated impulse withstand voltage | 4000 |
| Electric current | |
| Rated current | 40 |
| Rated service breaking capacity Ics AC according IEC 60898-1 | 6 k |
| | 1.13 / 1.45 |
| min/maxi threshold value of the AC thermal operation | |
| | 3 / 5 |
| operation | |
| operation Magnetic regulating currrent min/maxi threshold value of the DC | 4 / 7 |
| operation Magnetic regulating currrent min/maxi threshold value of the DC magnetic operation min/maxi threshold value of the DC thermal | 3 / 5 4 / 7 1.13 / 1.45 3 k |

| Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2 | 10 kA |
|--|-------|
| Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2 | 10 kA |

Electric current / temperature

| Rating current -25°C | 50 A |
|----------------------|--------|
| Rating current -20°C | 49.2 A |
| Rating current -15°C | 48.4 A |
| Rating current -10°C | 47.5 A |
| Rating current -5°C | 46.6 A |
| Rating current 0°C | 45.8 A |
| Rating current 5°C | 44.8 A |
| Rating current 10°C | 43.9 A |
| Rating current 15°C | 43 A |
| Rating current 20°C | 42 A |
| Rating current 25°C | 41 A |
| Rating current 30°C | 40 A |
| Rating current 35°C | 38.8 A |
| Rating current 40°C | 37.5 A |
| Rating current 45°C | 36.2 A |
| Rating current 50°C | 34.8 A |
| Rating current 55°C | 33.4 A |
| Rating current 60°C | 31.9 A |
| Rating current 65°C | 30.3 A |
| Rating current 70°C | 28.6 A |
| | |

Current correction factors

| Correction factor of rating current for 2 devices placed side-by-side | 1 |
|--|-------------|
| Correction factor of rating current for 3 devices placed side-by-side | 0.95 |
| 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 |
| Dimensions | |
| Depth of installed product | 70 mm |
| Height of installed product | 83 mm |
| Width of installed product | 70 mm |
| Frequency | |
| Frequency | 50 to 60 Hz |

| Total power loss under IN | 22.4 W |
|--|------------------------|
| Power loss per pole at In | 6.2 W |
| Endurance | |
| Electric endurance in number of cycles | 4000 |
| Number of mechanical operations | 20000 |
| Installation, mounting | |
| Type of top connection for modular devices | with screw |
| Tightening torque | 2,8Nm |
| Type of Bottom Connection for modular devices | Biconnect |
| Connection | |
| Connection cross-section of input and output with screws, for massive conductors | 1 / 35 mm ² |
| Connection cross section of access and exit with screws, for flexible conductor | 1 / 25 mm |
| Type of connection | with screw |
| Standards | |
| Standard text | EN 60898-1 |
| Safety | |
| Protection index IP | IP20 |
| REACH conform | No |
| RoHS conform | Yes |
| Halogen free | Nc |
| Use conditions | |
| Operating temperature | -2570 °C |
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 |
| Class of energy limitation I ² t | 3 |
| Altitude | 2000 m |
| Air humidity protection | for all climates |
| Storage/transport temperature | -2580 °C |
| | |