



MBN120



MCB 1P 6kA B-20A 1M

Technical properties

Architecture

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

Functions

| | |
|----------------------------------|----|
| Concurrently switching N-neutral | No |
|----------------------------------|----|

Configuration

| | |
|-------------------|---|
| Number of modules | 1 |
|-------------------|---|

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 | 6 kA |
| Rated operational voltage U_e | 230 / 400 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 | 20 A |
| Rated service breaking capacity I_{cs} AC according IEC 60898-1 | 6 kA |
| min/maxi threshold value of the AC thermal operation | 1.13 / 1.45 I_n |
| Magnetic regulating current | 3 / 5 I_n |
| Rated short circuit breaking capacity I_{cn} under 230V AC according IEC60898-1 | 6 kA |
| Rated ultimate short-circuit breaking capacity I_{cu} under 230V AC IEC 60947-2 | 6 kA |

Electric current / temperature

| | |
|----------------------|---------|
| Rating current -25°C | 27.18 A |
|----------------------|---------|

| | |
|----------------------|---------|
| Rating current -20°C | 26.55 A |
| Rating current -15°C | 25.93 A |
| Rating current -10°C | 25.4 A |
| Rating current -5°C | 24.68 A |
| Rating current 0°C | 24.05 A |
| Rating current 5°C | 23.43 A |
| Rating current 10°C | 22.8 A |
| Rating current 15°C | 22.18 A |
| Rating current 20°C | 21.55 A |
| Rating current 25°C | 20.93 A |
| Rating current 30°C | 20 A |
| Rating current 35°C | 19.68 A |
| Rating current 40°C | 19.05 A |
| Rating current 45°C | 18.43 A |
| Rating current 50°C | 18 A |
| Rating current 55°C | 17.18 A |
| Rating current 60°C | 16.55 A |
| Rating current 65°C | 15.93 A |
| Rating current 70°C | 15.3 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 | 17.5 mm |

Frequency

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

Power

| | |
|---------------------------|--------|
| Total power loss under IN | 2.79 W |
| Power loss per pole at In | 2.79 W |

Endurance

| | |
|--|------|
| Electric endurance in number of cycles | 4000 |
|--|------|

Subject to technical modifications

| | |
|---------------------------------|-------|
| Number of mechanical operations | 20000 |
|---------------------------------|-------|

Installation, mounting

| | |
|--|------------|
| Type of top connection for modular devices | with screw |
|--|------------|

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|-------------------|-------|
| Tightening torque | 2,8Nm |
|-------------------|-------|

| | |
|---|-----------|
| Type of Bottom Connection for modular devices | Blconnect |
|---|-----------|

Connection

| | |
|---|-----------------------|
| Connection cross-sect. flexible conductor | 1 / 25mm ² |
|---|-----------------------|

| | |
|------------------------------------|-----------------------|
| Connection cross-sect. rigid cable | 1 / 35mm ² |
|------------------------------------|-----------------------|

| | |
|--|------------------------|
| 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 ² |
|---|------------------------|

| | |
|--------------------|------------|
| Type of connection | with screw |
|--------------------|------------|

Standards

| | |
|---------------|------------|
| Standard text | EN 60898-1 |
|---------------|------------|

| | |
|-------------------------|-----------|
| European directive WEEE | concerned |
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Safety

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

Use conditions

| | |
|-----------------------|-------------|
| Operating temperature | -25...70 °C |
|-----------------------|-------------|

| | |
|--|---|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 |
|--|---|

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|---|---|
| Class of energy limitation I ² t | 3 |
|---|---|

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|----------|--------|
| Altitude | 2000 m |
|----------|--------|

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|-------------------------|------------------|
| Air humidity protection | for all climates |
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|-------------------------------|-------------|
| Storage/transport temperature | -25...80 °C |
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