

Miniature Circuit Breakers

DIN rail mounting

CE
Certificate
Patent
protection



BKN-b 2P

BKN-b type (High rupturing capacity)



Technical data

| | | |
|--|--|-------------------------------|
| Standard | Confirming to IEC 60898-1, IEC 60947-2 | |
| Approval | KEMA CB, SABS, CE | |
| Protection | Against overload and short circuit | |
| Rated current [In] | 1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63A | |
| Rated voltage [Ue] | 1pole 240/415VAC 50/60Hz 2, 3, 4pole 415VAC 50/60Hz | 1pole 70VDC 2~4pole 125VDC |
| Ambient temperature | -5°C to +40°C pursuant to IEC 60898-1 | |
| Breaking capacity | 10kA | |
| Characteristic | B, C, D curve | |
| Number of poles | 1P, 1P+N, 2P, 3P, 3P+N and 4P | |
| Rated insulation voltage [Ui] | 500V | |
| Rated impulse withstand voltage [Uimp] | 4kV | |
| Type of trip | Thermal-magnetic release | |
| Type of terminal | Dual type (Lug & Screw) | |
| Terminal capacity | Cables up to 25mm ² | |
| Installation | Mounting on 35mm DIN rail | |
| Width | 17.8mm per pole | |
| Electrical endurance | — | |
| In | 1 ... 32A | 40 ... 63A |
| Endurance | 4,000 operations | 4,000 operations |
| Max. frequency (Cycles/hour) | 240 | 120 |

Optional accessories ... Auxiliary switch, AX



| | | |
|-------------------|--|---|
| Composition | Consists of 1 changeover contact | |
| Rating | AC circuit 6A at 240VAC 3A at 415VAC | DC circuit 2A at 48VDC 1A at 130VDC |
| Type of terminal | Lug type | |
| Terminal capacity | Cables up to 2.5mm ² | |
| Width | 9mm | |

Optional accessories ... Auxiliary switch, AL

| | | |
|-------------------|--|---|
| Composition | Consists of 1 changeover contact | |
| Rating | AC circuit 6A at 230VAC 3A at 415VAC | DC circuit 2A at 48VDC 1A at 130VDC |
| Type of terminal | Lug type | |
| Terminal capacity | Cables up to 2.5mm ² | |
| Width | 9mm | |

Optional accessories. SHT, OVT/UVT



| | | |
|---------|-------------------------------|---|
| SHT-b | Rated voltage (Ue) | AC 110~415V |
| | Operate voltage range | 70~110% Ue |
| U/OVT-b | Rated voltage (Ue) | AC 230V |
| | Over-voltage tripping range | AC 280V±5% |
| | Under-voltage tripping range | AC 170V±5% |
| | Electric-mechanical endurance | 10,000 operations |
| | Terminal | MS screw (cable up to 25mm ²) |
| | Width | 18mm |

*SHT or UVT accessory are not tripped when zero voltage

Miniature Circuit Breakers DIN rail mounting

BKN-b type (High rupturing capacity)

CE 10000
3

CE
Certificate
Patent
protection



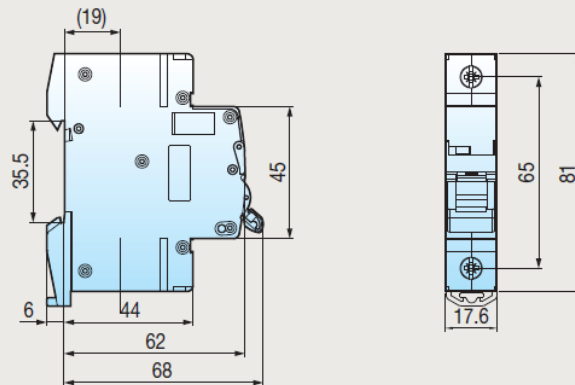
BKN-b 2P

Influence of ambient temperature on nominal currents

| Nominal current of MCB (A) | Internally resistance (mohm) | Power loss (W) | Max. impedance of impedance loop (Ohm) | | | Thermal correction of nominal currents | | | | |
|----------------------------|------------------------------|----------------|--|-------|-------|--|------|-------|-------|-------|
| | | | B | C | D | 20°C | 30°C | 40°C | 50°C | 60°C |
| 1 | 1215.69 | 1.24 | 46.20 | 25.70 | 14.40 | 1.05 | 1 | 0.95 | 0.90 | 0.85 |
| 2 | 343.28 | 1.38 | 21.60 | 12.02 | 6.73 | 2.08 | 2 | 1.92 | 1.84 | 1.74 |
| 3 | 128.09 | 1.15 | 16.90 | 9.40 | 5.26 | 3.18 | 3 | 2.82 | 2.61 | 2.37 |
| 4 | 105.53 | 1.68 | 10.68 | 5.94 | 3.33 | 4.24 | 4 | 3.76 | 3.52 | 3.24 |
| 6 | 29.22 | 1.08 | 7.14 | 3.97 | 2.22 | 6.24 | 6 | 5.76 | 5.52 | 5.30 |
| 10 | 14.49 | 1.55 | 3.87 | 2.15 | 1.21 | 10.60 | 10 | 9.30 | 8.60 | 7.80 |
| 16 | 10.00 | 2.56 | 2.24 | 1.25 | 0.70 | 16.80 | 16 | 15.20 | 14.20 | 13.30 |
| 20 | 8.02 | 3.32 | 1.55 | 0.86 | 0.48 | 21.00 | 20 | 19.00 | 17.80 | 16.80 |
| 25 | 3.11 | 2.00 | 2.43 | 1.35 | 0.76 | 26.20 | 25 | 23.70 | 22.20 | 20.70 |
| 32 | 3.05 | 3.17 | 1.27 | 0.71 | 0.40 | 33.50 | 32 | 30.40 | 28.40 | 27.50 |
| 40 | 2.16 | 3.40 | 0.60 | 0.33 | 0.19 | 42.00 | 40 | 38.00 | 35.60 | 33.20 |
| 50 | 1.65 | 4.20 | 0.71 | 0.39 | 0.22 | 52.50 | 50 | 47.40 | 44.00 | 40.50 |
| 63 | 1.68 | 6.30 | 0.47 | 0.32 | 0.15 | 66.20 | 63 | 58.00 | 54.20 | 49.20 |

Overall dimensions

BKN-b



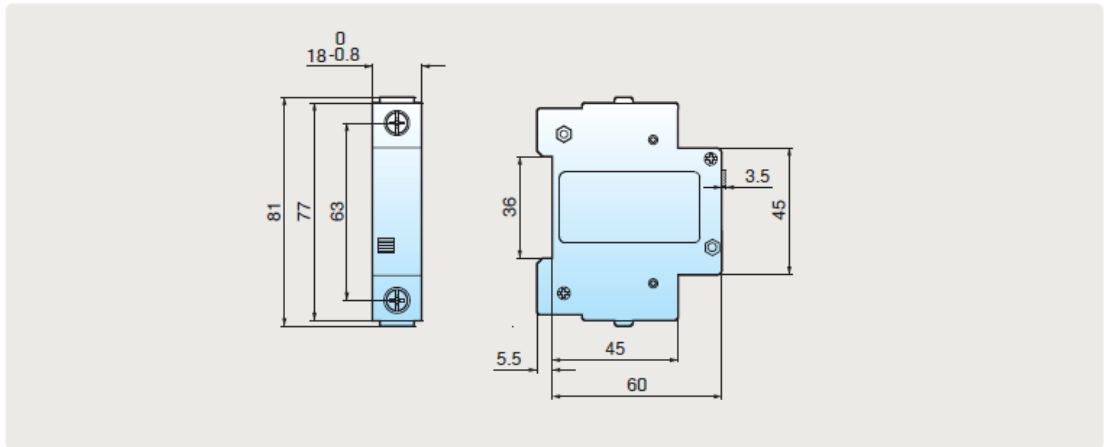
Miniature Circuit Breakers

DIN rail mounting

Overall dimensions

SHT

UVT/OVT



AX/AL

