



CE

(S)

(V)

(PC)

SAA

UB Miniature Circuit Breaker

1. General

1.1 Function

protection of circuits against short-circuit currents,
protection of circuits against overload currents,
switch,
isolation.

1.2 Selection

Technical data of the network at the point considered:
the earthing systems (TNS, TNC),
short-circuit current at the circuit-breaker installation point,
which must always be less than the breaking capacity of
this device,

Network normal voltage.

Tripping curves:

B curve (3-5In)

protection for people and big length cables in TN and IT
systems.

C curve (5-10In)

protection for resistive and inductive loads with low inrush
current.

1.3 Approvals and certificates

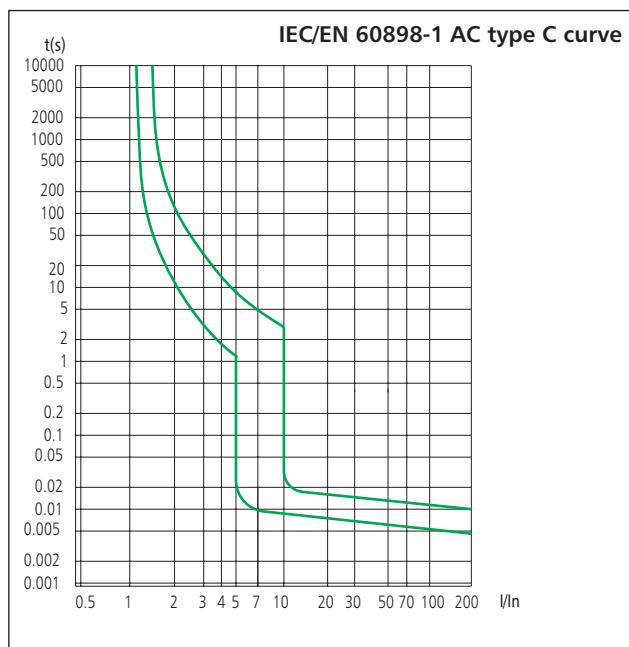
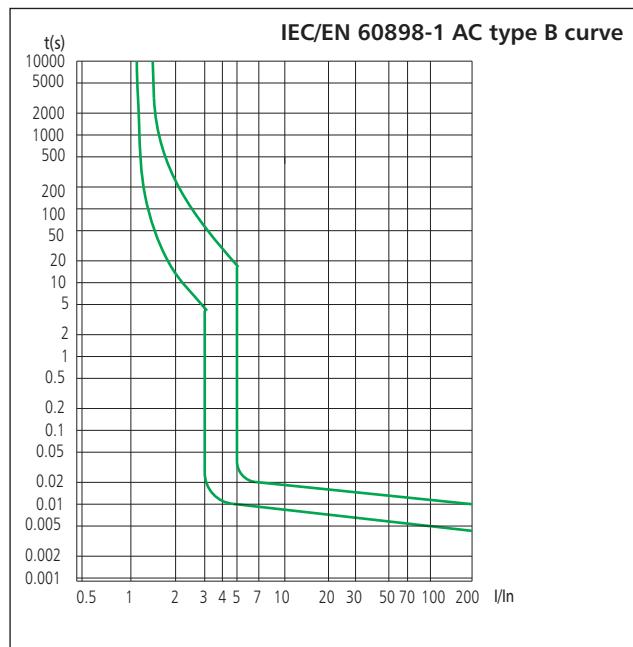
Detailed information, please refer to Certificates Table
on the last page.

A

2. Technical data

2.1 Curves

UB MCB is of high current limiting performance to limit the destruction energy due to short circuit to the greatest extent.



2.2

| | Standard | | IEC/EN 60898-1 |
|---------------------|---|-----------------|--|
| Electrical features | Rated current I_n | A | 6, 10, 16, 20, 25, 32, 40 |
| | Poles | | 1P, 2P, 3P, 4P |
| | Rated voltage U_e | V | 230/400~240/415 |
| | Insulation voltage U_i | V | 500 |
| | Rated frequency | | 50/60Hz |
| | Rated breaking capacity | A | 6000 |
| | Rated impulse withstand voltage(1.2/50) U_{imp} | V | 4000 |
| | Dielectric test voltage at ind. Freq. for 1 min | kV | 2 |
| | Pollution degree | | 2 |
| Mechanical features | Thermo-magnetic release characteristic | | B, C |
| | Electrical life | | 4,000 |
| | Mechanical life | | 10,000 |
| | Protection degree | | IP20 |
| | Reference temperature for setting of thermal element | °C | 30 |
| Installation | Ambient temperature (with daily average $\leq 35^{\circ}\text{C}$) | °C | -5...+40 |
| | Storage temperature | °C | -25...+70 |
| | Terminal connection type | | Cable/U-type busbar/Pin-type busbar |
| | Terminal size top/bottom for cable | mm ² | 1~25 |
| | | AWG | 17~3 |
| | Terminal size top/bottom for busbar | mm ² | 1~10 |
| | | AWG | 17~7 |
| | Tightening torque | N*m | 2 |
| | | In-lbs. | 18 |
| | Mounting | | On DIN rail EN 60715 (35mm) by means of fast clip device |
| | Connection | | From top and bottom |

2.3 Temperature derating

The maximum permissible current in a circuit breaker depends on the ambient temperature where the circuit breaker is placed. Ambient temperature is the temperature inside the enclosure or switchboard in which the circuit breakers are installed.

The reference temperature is 30°C

| Rated current In (A) | Temperature compensation coefficient under various operational temperature | | | | | | | | |
|-------------------------|--|------|------|------|------|------|------|------|------|
| | -10°C | 0°C | 10°C | 20°C | 30°C | 40°C | 50°C | 55°C | 60°C |
| 6 | 1.20 | 1.14 | 1.09 | 1.05 | 1.00 | 0.96 | 0.80 | 0.75 | 0.70 |
| 10~32 | 1.18 | 1.12 | 1.08 | 1.04 | 1.00 | 0.96 | 0.92 | 0.88 | 0.84 |
| 40 | 1.16 | 1.12 | 1.07 | 1.03 | 1.00 | 0.97 | 0.87 | 0.83 | 0.80 |

3. Overall and mounting dimensions (mm)

