



## NB2-80ZT Smart Miniature Circuit Breaker

### 1. General

#### 1.1 function

This product is mainly suitable for AC 50Hz, rated voltage 230/400V, rated current to 80A line, overload, short circuit, overvoltage, undervoltage protection, can also be used as infrequent line on and off under normal circumstances.

The product also features remote control, electrical parameter (voltage, current, power) measurement, and networking with external devices via RS485 communication interface or Bluetooth

Main functions: overload protection, short circuit protection, overvoltage protection, undervoltage protection, electrical parameter measurement, remote opening and closing.

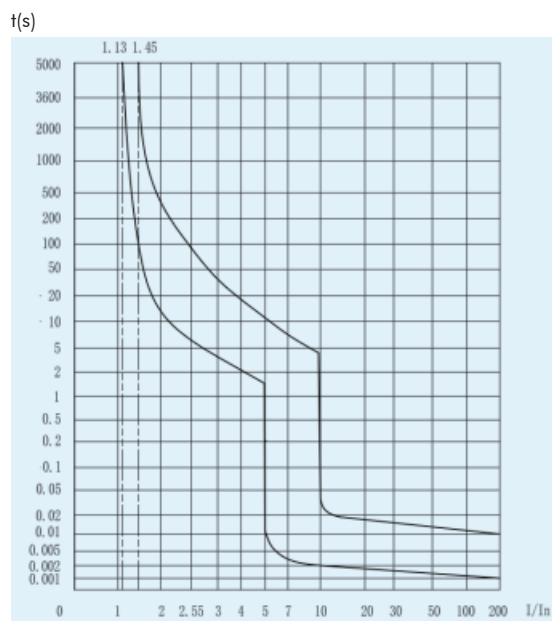
#### 1.2 approvals and certificate

Standard: IEC/EN 60898-1

Certification: CE

### 2. Technical data

#### 2.1 curve



C curve

## 2.2 Technical parameter

|  |   |   |             |
|--|---|---|-------------|
| Product  |   | NB2-80ZT  |             |
| Rated current(A)   |   | 6,10,16,20,25,32,40,50,63,80  |             |
| Rated voltage (V)  |   | AC 230 (1P+N), AC400 (3P+N)   |             |
| Rated frequency (Hz)   |   | 50  |             |
| Poles  |   | 1P+N, 3P+N  |             |
| Thermo-magnetic release characteristic   |   | Type C  |             |
| Mechanical life  |   | 10,000  |             |
| Electrical life  |   | 6,000   |             |
| Rated breaking capacity (kA)   |   | 6   |             |
| Rated insulation voltage (V)   |   | 690   |             |
| Rated impulse withstand voltage (kV)   |   | 4(1P+N);6(3P+N)   |             |
| Dielectric test voltage (kV)   |   | 2   |             |
| Installation   | Terminal connection type                                      | Cable/Pin type busbar   |             |
|  | Minimum cross-sectional area of the wiring(mm <sup>2</sup> )  | 1   |             |
|  | Maximum cross-sectional area of the wiring (mm <sup>2</sup> ) | 25  |             |
|  | Tightening torque(N·m)  | 3   |             |
|  | Connection  | From top  |             |
| Mounting   |   | Type TH35-7.5 Standard DIN rails  |             |
| Reference temperature(°C)  |   | 30  |             |
| Working ambient temperature (°C)   |   | -25-70  |             |
| Storage temperature (°C)   |   | -40-70  |             |
| Applicable altitude (m)  |   | <=2000  |             |
| Overvoltage and undervoltage protection (parameters can be set, and the factory default values are in the table) |   | overvoltage action threshold range 280V±5V  |             |
|  |   | overvoltage recovery threshold range 250V±5V  |             |
|  |   | overvoltage minimum no-drive time 3s  |             |
|  |   | undervoltage action threshold range 165V±5V   |             |
|  |   | undervoltage recovery threshold range 190V±5V   |             |
|  |   | undervoltage minimum non-driving time 3s  |             |
|  |   | overvoltage recovery time>=10s  |             |
| Communication function   |   | Communication protocols: Modbus-RTU<br>RS485 interface: A, B/Bluetooth BLE5.0, Backward compatible with BLE4.0, BLE4.1, BLE 4.2 |             |
| Electrical parameter measurement function  | Current   | 1A<=I<0.1In   | ±1.0%       |
|  |   | 0.1I≤I≤1.0In  | ±0.5%       |
|  | Voltage   | 0.9U≤U≤1.1U   | ±0.5%       |
|  |   | Power   | 1A<=I<0.1In |
|  | 0.1In<=I<=1.0In   |   | ±1.0%       |
| Flame retardant grade of shell   |   | V-0   |             |
| Pollution degree   |   | 2   |             |
| Protection degree  |   | IP20  |             |
| Assembled accessories  |   | None  |             |

## 3. Overall and mounting dimension (mm)

