

Zhejiang VeKON  
Technology Co.,Ltd.

PROFESSIONAL CIRCUIT  
BREAKER MANUFACTURER



## VB12-63/VB12-63Z/VB12-63S MCB

### General introduction

#### Function

VB12-63 series MCB, used as overload and short circuit protection, applies to a circuit of AC 50Hz, rated voltage 230/400V, rated current up to 63A. Usually it functions as un frequently switching. In addition, it can be also used as an isolator to cut off the circuit for maintenance of circuit and equipment.

#### Application

Industry and commercial buildings, high-rise buildings and residential houses, etc.

#### Conforms to standard

IEC/EN 60898-1

**VB12-63/VB12-63Z/VB12-63S MCB**

**Main parameters**

Form 1

| Types                                      | Values                                               |
|--------------------------------------------|------------------------------------------------------|
| Rated voltage Un                           | 240V/415V AC(1P),415V AC(2P、 3P、 4P)                 |
| Rated current In                           | 1A,2A,3A,4A,6A, 10A,16A,20A,25A,32A,40A,50A,63A      |
| Poles                                      | 1P、 2P、 3P、 4P                                       |
| Instant tripping type                      | B,C,D                                                |
| Rated short circuit breaking capacity(Icn) | 6000A(VB12-63)<br>4500A(VB12-63Z)<br>3000A(VB12-63S) |
| Overcurrent protection properties          | See Form 2、 Diagram 1, 2 and 3                       |
| Mechanical and electrical life             | See Form 3                                           |
| Connection wire                            | See Form 4                                           |
| Tightening torque                          | 2.0N.m                                               |
| Nominal temperature ℃                      | 30                                                   |
| Operated ambient temperature ℃             | -5~+55                                               |
| Stored ambient temperature ℃               | -25~+70                                              |
| Pollution level                            | 2                                                    |
| Protection level                           | IP20                                                 |
| Mounting type                              | II                                                   |

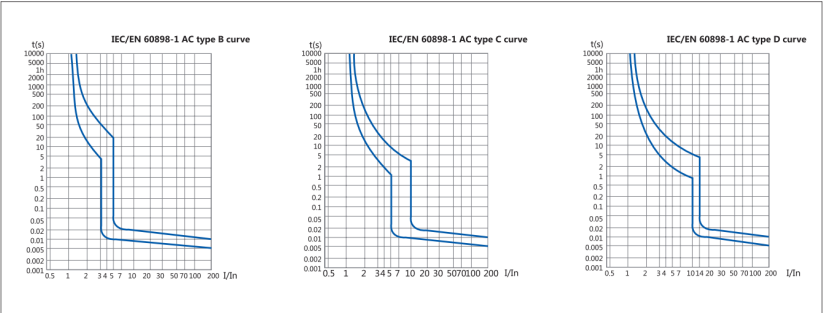
**Overcurrent protection properties(Nominal temperature 30 ℃ )**

Form 2

| Item | Type        | Test current        | Initial status                                               | Tripping or non tripping time limit                             | Expected result | Remarks                                           |
|------|-------------|---------------------|--------------------------------------------------------------|-----------------------------------------------------------------|-----------------|---------------------------------------------------|
| a    | BCD         | 1.13In              | Cold                                                         | ts1h                                                            | Non tripping    |                                                   |
| b    |             | 1.45In              | Test following the previous procedure;<br>Process after test | t < 1h                                                          | Trip            | Current increases to stipulated value within 5s   |
| c    |             | 2.55In              | Cold                                                         | 1s < t < 60s<br>(for In≤32A)<br>1s < t < 120s<br>(for In > 32A) | Trip            |                                                   |
| d    | B<br>C<br>D | 3In<br>5In<br>10In  | Cold                                                         | ts0.1s                                                          | Non tripping    | Connection of current by opening auxiliary switch |
| e    | B<br>C<br>D | 5In<br>10In<br>20In | Cold                                                         | ts0.1s                                                          | Trip            | Connection of current by opening auxiliary switch |

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Diagram 1,2 and 3



Mechanical and electrical life Form 3

| Type            | Time  |
|-----------------|-------|
| Electrical life | 10000 |
| Mechanical life | 20000 |

Connection wire Form 4

| Rated current $I_n$ (A) | Copper wire nominal cross-sectional area $S$ (mm <sup>2</sup> ) |
|-------------------------|-----------------------------------------------------------------|
| 1~6                     | 1.0                                                             |
| 10                      | 1.5                                                             |
| 16,20                   | 2.5                                                             |
| 25                      | 4                                                               |
| 32                      | 6                                                               |
| 40,50                   | 10                                                              |
| 63                      | 16                                                              |

Overall and mounting sizes(mm)

