

1.General

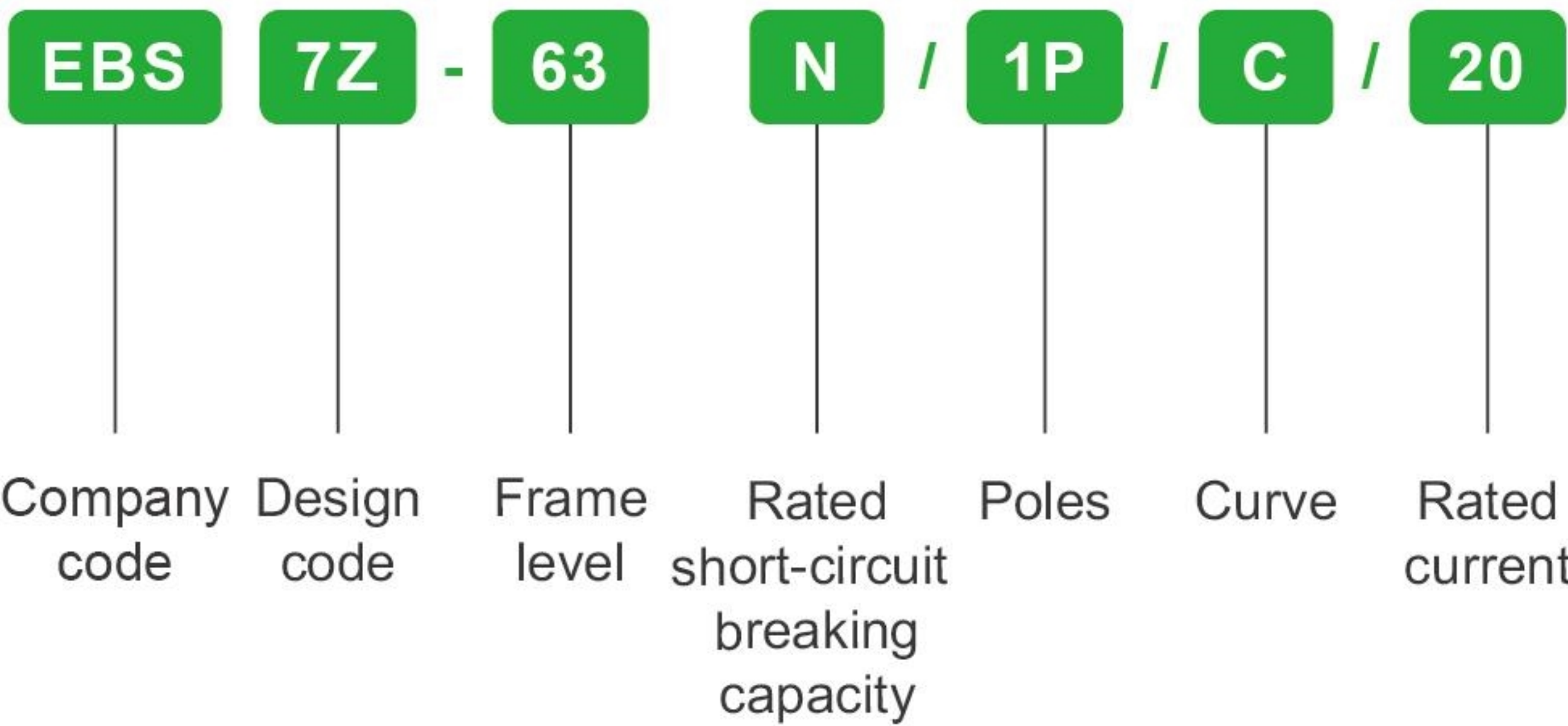
**1.1 Function**  
Protection of DC circuits against short-circuit and overload currents, switching and isolation.  
EBS7Z-63 DC mini circuit breakers are suitable for DC power distribution systems and electrical equipment, including photovoltaic, energy storage and other DC applications.

**1.2 Selection**  
Technical data of the DC system at the point considered: rated voltage, rated current, number of poles and prospective short-circuit current.  
The prospective short-circuit current at the circuit-breaker installation point must not exceed the breaking capacity of the device.

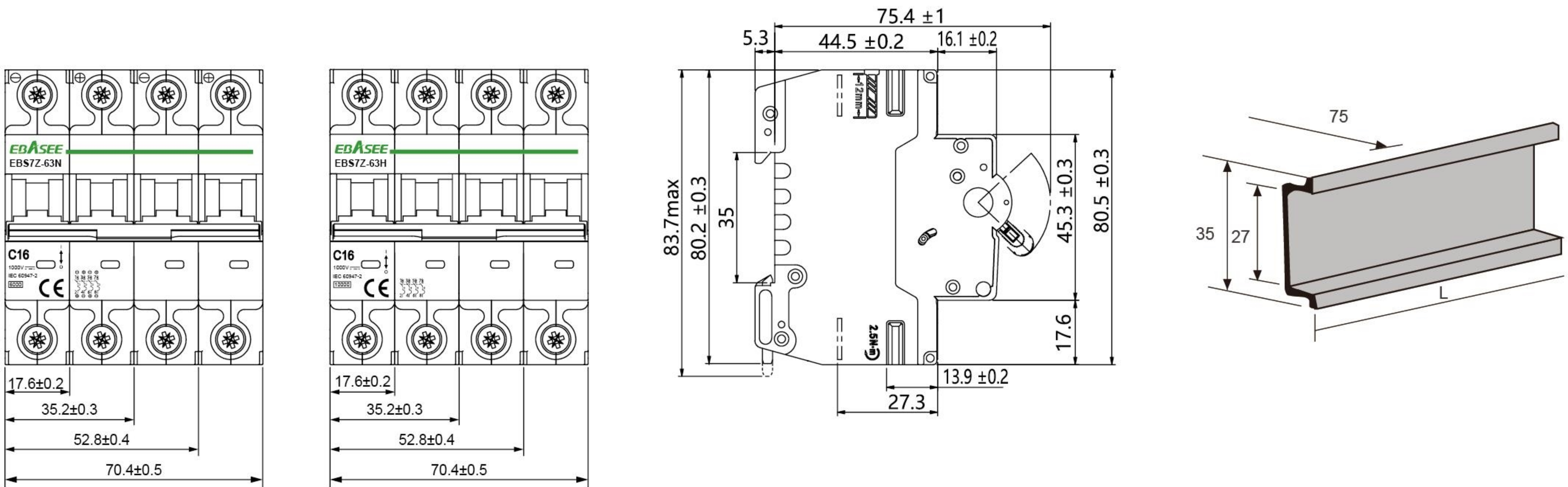
The appropriate tripping curve should be selected according to the load characteristics:  
**B curve (4I<sub>n</sub>–7I<sub>n</sub>)**  
Suitable for circuits with relatively low inrush current.  
**C curve (6I<sub>n</sub>–10I<sub>n</sub>)**  
Suitable for general circuits and loads with moderate inrush current.  
**D curve (10I<sub>n</sub>–14I<sub>n</sub>)**  
Suitable for circuits supplying loads with high inrush current.  
  
Both polarized and non-polarized versions are available according to different DC system and wiring requirements.



2.Nomenclature



3.Dimensions



4.Specifications

| Standard                                                          |                 | IEC60947-2                                                                                                                 |           |
|-------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------|-----------|
| Model                                                             |                 | EBS7Z-63N                                                                                                                  | EBS7Z-63H |
| Rated frame current                                               | A               | 1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63                                                                              |           |
| Rated insulation voltage U <sub>i</sub>                           | V               | Non-polarized DC300V(1P), DC600V(2P), DC900V(3P), DC1200V(4P)<br>Polarized DC250V(1P), DC500V(2P), DC750V(3P), DC1000V(4P) |           |
| Rated impulse withstand U <sub>imp</sub> voltage U <sub>imp</sub> | kV              | 6kV                                                                                                                        |           |
| Rated current                                                     |                 | 1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63                                                                              |           |
| Rated voltage                                                     | V               | DC250V(1P), DC500V(2P), DC750V(3P), DC1000V(4P)                                                                            |           |
| Tripping curve                                                    |                 | B: (4I <sub>n</sub> -7I <sub>n</sub> ), C: 8I <sub>n</sub> ±20%, D: 12I <sub>n</sub> ±20%                                  |           |
| Poles                                                             |                 | 1P, 2P, 3P, 4P                                                                                                             |           |
| Unipolar width                                                    | mm              | 18                                                                                                                         |           |
| Ultimate short-circuitbreaking capacity I <sub>cu</sub>           | kA              | 6                                                                                                                          | 10        |
| Reference temperature                                             | °C              | 30°C                                                                                                                       |           |
| Usage Category                                                    |                 | A                                                                                                                          |           |
| Mechanical life                                                   |                 | 20,000/order                                                                                                               |           |
| Electrical lifespan                                               |                 | 1000/order                                                                                                                 |           |
| Protection grade                                                  |                 | IP20                                                                                                                       |           |
| Wiring capacity                                                   | mm <sup>2</sup> | 16                                                                                                                         |           |
| Connection                                                        |                 | Both upper and lower incoming lines are acceptable                                                                         |           |