

# Molded Case Circuit Breakers

**NF32-SV**  
**NF63-CV**  
**NF63-SV**  
**NF63-HV**

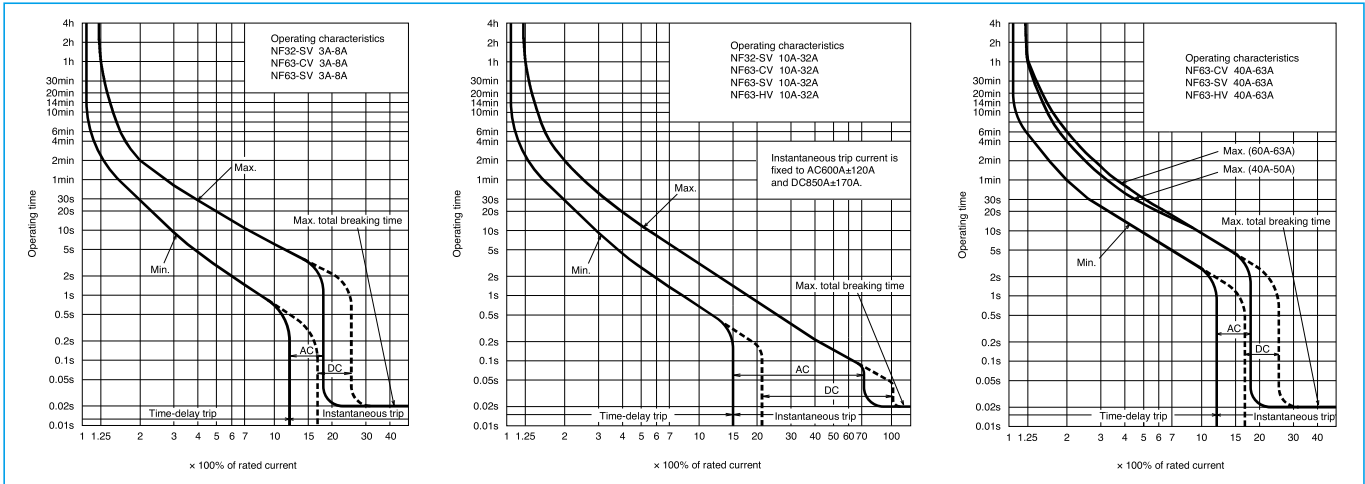


NF63-SV

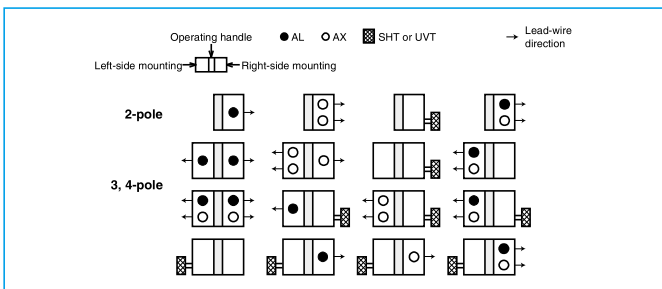
| Model   | NF32-SV  | NF63-CV  | NF63-SV  | NF63-HV   | NF32-SV [MB]          | NF63-CV [MB]                            | NF63-SV [MB]                            |         |         |
|---|--|--|--|---|-----------------------|---|---|---------|---------|
| Rated current In (A)<br>Reference ambient temperature 40 °C | 3 4 (5)<br>6 10 (15)<br>16 20 25<br>(30) 32  | 3 4 (5) 6<br>10 (15) 16<br>20 25 (30)<br>32 40 50<br>(60) 63 | 3 4 (5) 6<br>10 (15) 16<br>20 25 (30)<br>32 40 50<br>(60) 63 | 10 (15) 16<br>20 25 (30)<br>32 40 50<br>(60) 63 | 4 5<br>7.1 8<br>16 25 | 4 5 7.1<br>8 10 12<br>16 25 32<br>40 45 | 4 5 7.1<br>8 10 12<br>16 25 32<br>40 45 |         |         |
| Number of poles   | 2 3  | 2 3  | 2 3 4  | 2 3 4   | 3                     | 3                                       | 3                                       |         |         |
| Rated insulation voltage Ui (V)                             | 600  | 600  | 600  | 690   | 500                   | 500                                     | 500                                     |         |         |
| Rated short-circuit breaking capacity (kA)                  | IEC 60947-2<br>EN 60947-2<br>(Icu/Ics)   | AC   | 690V   | –   | –                     | –                                       | –                                       | –       |         |
|   |  |  | 500V   | 2.5/2.5   | 2.5/2.5               | 7.5/7.5                                 | 7.5/7.5                                 | –       | –       |
|   |  |  | 440V   | 2.5/2.5   | 2.5/2.5               | 7.5/7.5                                 | 10/8                                    | 2.5/2.5 | 2.5/2.5 |
|   |  |  | 415V   | 2.5/2.5   | 2.5/2.5               | 7.5/7.5                                 | 10/8                                    | 2.5/2.5 | 2.5/2.5 |
|   |  |  | 400V   | 5/5   | 5/5                   | 7.5/7.5                                 | 10/8                                    | 5/5     | 5/5     |
|   |  |  | 380V   | 5/5   | 5/5                   | 7.5/7.5                                 | 10/8                                    | 5/5     | 5/5     |
|   |  |  | 230V   | 7.5/7.5   | 7.5/7.5               | 15/15                                   | 25/19                                   | 7.5/7.5 | 7.5/7.5 |
|   |  |  | 200V   | 7.5/7.5   | 7.5/7.5               | 15/15                                   | 25/19                                   | –       | –       |
| DC  | 250V (*1)  | 2.5/2.5  | 2.5/2.5  | 7.5/7.5   | –                     | –                                       | –                                       |         |         |
| Standard attached parts (front connection)                  | Terminal screw: 50A or less M5×14 (2P: 4pcs, 3P: 6pcs, 4P: 8pcs)<br>60A or more M8×14 (2P: 4pcs, 3P: 6pcs, 4P: 8pcs)<br>Mounting screw: M4×0.7×55 (2 and 3P: 2pcs, 4P: 4pcs)<br>Insulation barrier: (2P: 1pc, 3P: 2pcs, 4P: 3pcs) (*2) |  |  |   |                       |   |   |         |         |

Notes \*1 Use two poles for three- and four-pole products. Not available for use with connection as shown at the bottom of page 18.  
 \*2 Supplied with NF63-SV and NF63-HV.

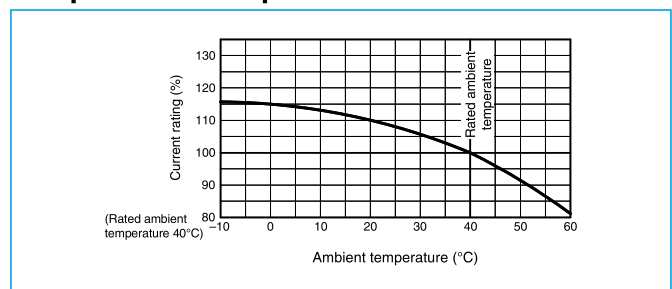
## Operating Characteristics



## Internal Accessories



## Temperature Compensation Curve



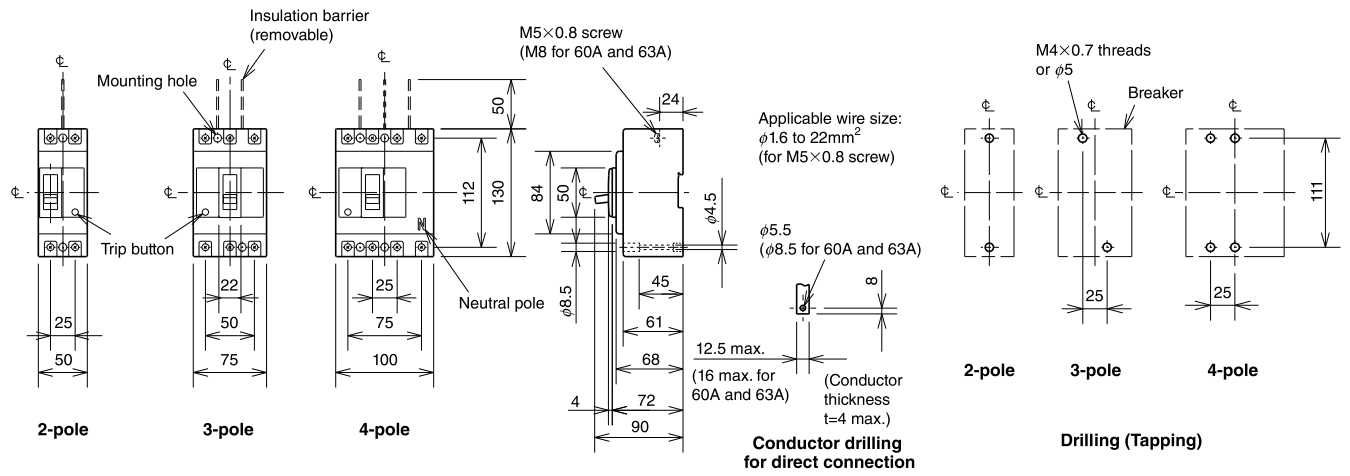
## External Accessories

| Accessories          | Type name | Reference page | Accessories                     | Type name | Reference page |           |
|----------------------|-----------|----------------|---------------------------------|-----------|----------------|-----------|
| Operating handle     | F 2P      | F-05SV2        | Small                           | TC-S      | 2P             | TCS-05SV2 |
|                      | 3, 4P     | F-05SV         |                                 |           | 3P             | TCS-05SV3 |
| Lock cover           | V 2P      | V-05SV2        | Large                           | TC-L      | 4P             | TCS-05SV4 |
|                      | 3, 4P     | V-05SV         |                                 |           | 2P             | TCL-05SV2 |
| Handle lock device   | LC        | LC-05SV        | Skeleton                        | TTC       | 3P             | TTC-05SV3 |
|                      | HL(*1)    | HLF-05SV       |                                 |           | 4P             | TTC-05SV4 |
| Mechanical interlock | HL-S      | HLN-05SV       | Rear                            | BTC       | 2P             | BTC-05SV2 |
|                      | MI 2, 3P  | HLS-05SV       |                                 |           | 3P             | BTC-05SV3 |
|                      | MI 3, 4P  | MI-05SV3       | Plug-in                         | PTC       | 4P             | BTC-05SV4 |
|                      |           | MI-05SV4       |                                 |           | 2P             | PTC-05SV2 |
|                      |           |                |                                 |           | 3P             | PTC-05SV3 |
|                      |           |                |                                 |           | 4P             | PTC-05SV4 |
|                      |           |                | IEC 35mm rail mounting adapters |           | DIN-05SV       | 143       |

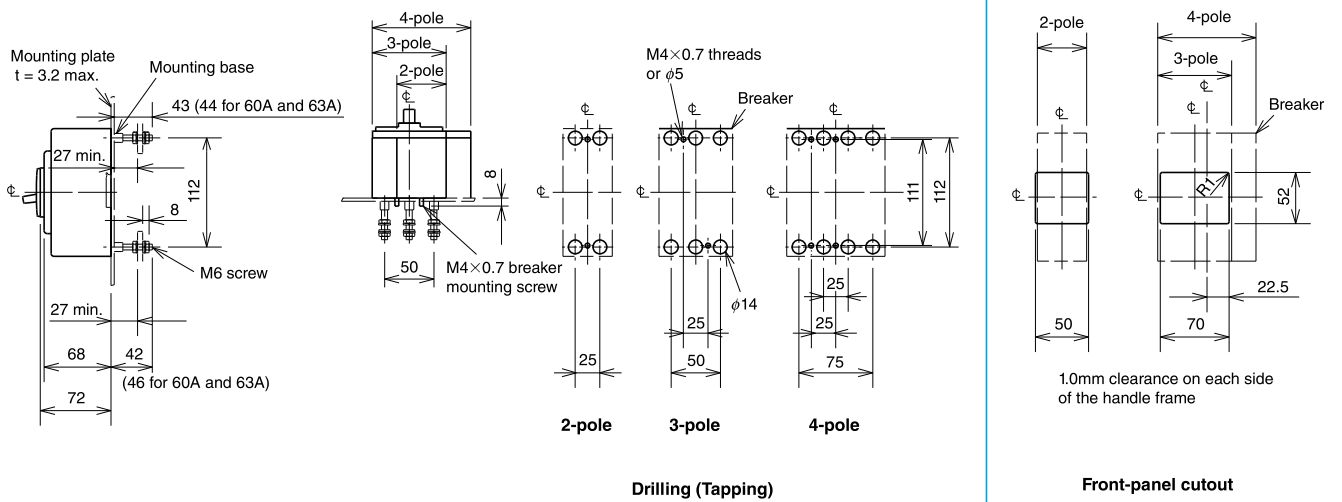
Note \*1 HLF types are used for OFF lock and HLN types for ON lock.

# Outline Drawing

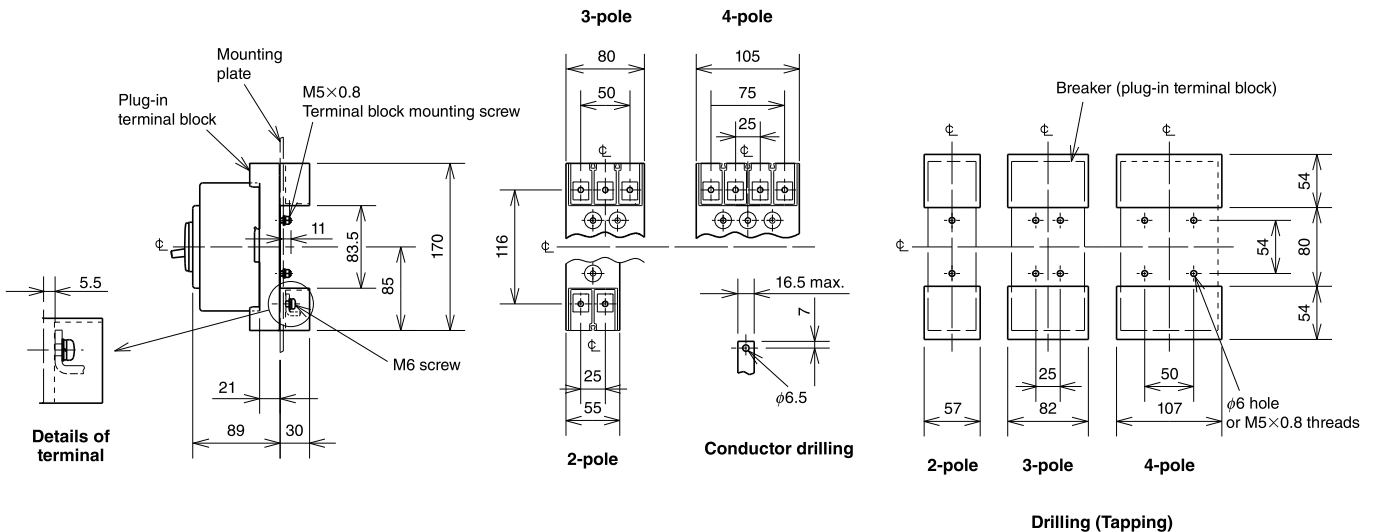
## Front connection



## Rear connection



## Plug-in



Remark: 1. Only 2-pole and 3-pole models are available for NF32-SV and NF63-CV.  
2. We only have motor breakers for 3-pole models.