






## NV-C (Economy class) Harmonic Surge Ready

| Frame (A)  |  | 50  |       | 60                        |       | 63                        |       | 100   |       | 125  |   |  |
|--|--|---|-------|---------------------------|-------|---------------------------|-------|---|-------|--|---|--|
| Model  |  | NV63-CV   |       |                           |       |                           |       | NV125-CV  |       |  |   |  |
| Image  |  |  |       |                           |       |                           |       |  |       |  |   |  |
| Rated current In (A)<br>Rated ambient temperature 40°C   |  | (5) (10) (15) 16 20 25<br>(30) 32 40 50   |       | (60)                      |       | 63                        |       | (60) 63 (75) 80 100   |       | 125  |   |  |
| Number of poles  |  | 2 3   |       | 2 3                       |       | 2 3                       |       | 3   |       | 3  |   |  |
| Phase line (*1)  |  | 1φ2W 3φ3W, 1φ3W, 1φ2W   |       | 1φ2W 3φ3W, 1φ3W, 1φ2W     |       | 1φ2W 3φ3W, 1φ3W, 1φ2W     |       | 3φ3W, 1φ3W, 1φ2W  |       | 3φ3W, 1φ3W, 1φ2W                           |   |  |
| Rated operational voltage Ue (V) (*2) AC                 |  | 100-240 100-440   |       | 100-240 100-440           |       | 100-240 100-440           |       | 100-440   |       | 100-440                                    |   |  |
| High-speed type  | Rated current sensitivity (mA)                                       | 30  |       | 30                        |       | 30                        |       | 30, 100/200/500 selectable  |       | 30, 100/200/500 selectable                 |   |  |
|  | Max. operating time (s)<br>at IΔn<br>at 5IΔn                         | 0.1<br>0.04   |       | 0.1<br>0.04               |       | 0.1<br>0.04               |       | 0.1<br>0.04   |       | 0.1<br>0.04                                |   |  |
| Time-delay type  | Rated current sensitivity (mA)                                       | -   |       | -                         |       | -                         |       | (100/200/500 selectable)  |       | (100/200/500 selectable)                   |   |  |
|  | Max. operating time (s) (*3)<br>Internal non-operating (s) (or more) | -   |       | -                         |       | -                         |       | (0.45/1.0/2.0 selectable)<br>(0.1/0.5/1.0)  |       | (0.45/1.0/2.0 selectable)<br>(0.1/0.5/1.0) |   |  |
| Earth leakage protection characteristic                  |  | Type AC   |       |                           |       |                           |       |   |       |  |   |  |
| Earth leakage indication system                          |  | Mechanical type (button)  |       | Mechanical type (button)  |       | Mechanical type (button)  |       | Mechanical type (button)  |       | Mechanical type (button)                   |   |  |
| Rated short-circuit breaking capacities (kA)             | AC   | 440V<br>415V<br>400V  |       | 2.5/2.5<br>2.5/2.5<br>5/5 |       | 2.5/2.5<br>2.5/2.5<br>5/5 |       | 2.5/2.5<br>2.5/2.5<br>5/5   |       | 10/5<br>10/5<br>10/5                       |   |  |
|  | 230V   | 7.5/7.5   |       | 7.5/7.5                   |       | 7.5/7.5                   |       | 30/15   |       | 30/15                                      |   |  |
|  | 200V   | 7.5/7.5   |       | 7.5/7.5                   |       | 7.5/7.5                   |       | 30/15   |       | 30/15                                      |   |  |
|  | 100V   | 7.5/7.5   |       | 7.5/7.5                   |       | 7.5/7.5                   |       | 30/15   |       | 30/15                                      |   |  |
|  | Rated impulse withstand voltage Uimp (kV)                            | 6   |       | 6                         |       | 6                         |       | 6   |       | 6  |   |  |
|  | Current  | AC  |       | AC                        |       | AC                        |       | AC  |       | AC   |   |  |
| Suitability for isolation                                |  | Yes   |       |                           |       |                           |       |   |       |  |   |  |
| Reverse connection (below 230VAC)                        |  | Available   |       |                           |       |                           |       |   |       |  |   |  |
| Number of operating cycles                               | Without current  | 10,000  |       | 10,000                    |       | 10,000                    |       | 10,000  |       | 10,000                                     |   |  |
|  | With current   | 6,000   |       | 6,000                     |       | 6,000                     |       | 6,000   |       | 6,000                                      |   |  |
| Utilization category                                     |  | A   |       |                           |       |                           |       |   |       |  |   |  |
| Pollution degree   |  | 2   |       |                           |       |                           |       |   |       |  |   |  |
| EMC environment condition (environment A or B)           |  | A   |       |                           |       |                           |       |   |       |  |   |  |
| Overall dimensions (mm)                                  | a  | 75  |       | 75                        |       | 75                        |       | 90  |       | 90   |   |  |
|  | b  | 130   |       | 130                       |       | 130                       |       | 130   |       | 130  |   |  |
|  | c  | 68  |       | 68                        |       | 68                        |       | 68  |       | 68   |   |  |
|  | ca   | 90  |       | 90                        |       | 90                        |       | 90  |       | 90   |   |  |
| Mass of front-face type (kg)                             |  | 0.7 0.75  |       | 0.7 0.75                  |       | 0.7 0.75                  |       | 1.0   |       | 1.0  |   |  |
| Installation and connections                             | Front connection (F)   | ●Screw terminal   |       |                           |       |                           |       |   |       |  |   |  |
|  | Solderless (BOX) terminal (SL)                                       | -   |       |                           |       |                           |       |   |       |  |   |  |
|  | Rear connection (B)  | ●Round stud   |       |                           |       |                           |       |   |       |  |   |  |
|  | Plug-in (PM)   | -   |       |                           |       |                           |       |   |       |  |   |  |
| Cassette-type accessories                                | Alarm switch (AL)  | ●(*4)   |       | ●(*4)                     |       | ●(*4)                     |       | ●(*4)   |       | ●(*4)                                      |   |  |
|  | Auxiliary switch (AX)  | ●(*4)   |       | ●(*4)                     |       | ●(*4)                     |       | ●(*4)   |       | ●(*4)                                      |   |  |
|  | Shunt trip (SHT)   | ●(*4)   |       | ●(*4)                     |       | ●(*4)                     |       | ●(*4)   |       | ●(*4)                                      |   |  |
|  | Undervoltage trip (UVT)  | ●(*4)   |       | ●(*4)                     |       | ●(*4)                     |       | ●(*4)   |       | ●(*4)                                      |   |  |
|  | Earth leakage alarm switch (EAL)                                     | -   |       | -                         |       | -                         |       | -   |       | -  |   |  |
|  | With lead-wire terminal block (SLT)                                  | ●   |       | ●                         |       | ●                         |       | ●   |       | ●  |   |  |
| Test button module (TBM)                                 | ●(*5)  |   | ●(*5) |                           | ●(*5) |                           | ●(*5) |   | ●(*5) |  |   |  |
| External accessories                                     | Enclosure  | Closed (S)  | -     |                           | -     |                           | -     |   | -     |  | - |  |
|  |  | Dustproof (I)   | -     |                           | -     |                           | -     |   | -     |  | - |  |
|  |  | Waterproof (W)  | -     |                           | -     |                           | -     |   | -     |  | - |  |
|  | Electrical operation device (NFM)                                    | Panel mounting  | ●     |                           | ●     |                           | ●     |   | ●     |  | ● |  |
|  |  | Breaker mounting  | ●     |                           | ●     |                           | ●     |   | ●     |  | ● |  |
|  | Handle lock device   | LC  | ●     |                           | ●     |                           | ●     |   | ●     |  | ● |  |
|  |  | HL  | ●     |                           | ●     |                           | ●     |   | ●     |  | ● |  |
|  |  | HL-S  | ●     |                           | ●     |                           | ●     |   | ●     |  | ● |  |
|  | External operating handle  | (F)   | ●     |                           | ●     |                           | ●     |   | ●     |  | ● |  |
|  |  | (V)   | ●     |                           | ●     |                           | ●     |   | ●     |  | ● |  |
| Terminal cover (TC-L, TC-S, TTC, BTC, PTC)               | ●  |   | ●     |                           | ●     |                           | ●     |   | ●     |  |   |  |
| Rear stud (B-ST)   | ●  |   | ●     |                           | ●     |                           | ●     |   | ●     |  |   |  |
| Plug-in (PM)   | -  |   | -     |                           | -     |                           | -     |   | -     |  |   |  |
| IEC 35mm rail mounting adapters                          | ●  |   | ●     |                           | ●     |                           | -     |   | -     |  |   |  |
| CE marking   |  | Self-declaration  |       |                           |       |                           |       |   |       |  |   |  |
| CCC recognition  |  | Recognized  |       |                           |       |                           |       |   |       |  |   |  |
| Marine use approval (☆: Certified) (NK, LR, ABS, DNV-GL) |  | -   |       |                           |       |                           |       |   |       |  |   |  |
| Automatic tripping device                                |  | Thermal-magnetic  |       | Thermal-magnetic          |       | Thermal-magnetic          |       | Thermal-magnetic  |       | Thermal-magnetic                           |   |  |
| Trip button  |  | Equipped  |       | Equipped                  |       | Equipped                  |       | Equipped  |       | Equipped                                   |   |  |
| Page of Characteristics and dimensions                   |  | 186   |       |                           |       |                           |       | 188   |       |  |   |  |

Notes: \*1 When using 3-pole earth-leakage circuit breakers for 1-phase 2-wire system, connect cables/busbars to left and right poles, not to center pole. When using 1-phase 3-wire system, connect neutral conductor to center pole of earth leakage circuit breaker.  
 \*2 For time-delay type, the rated voltage is 200-440VAC.  
 \*3 When the operating time are 0.45, 1.0 and 2.0 seconds, the Earth Leakage circuit breaker operates between 0.15 and 0.45 seconds, between 0.6 and 1.0 seconds and between 1.2 and 2.0 seconds respectively.  
 \*4 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.  
 \*5 Standard type is SLT equipped.

\*6 Place an order with circuit breaker.  
 \*7 No isolation function except 400A to 630A frame.  
 \*8 AC100V does not acquire the CCC certification.

**NV-C (Economy class) Harmonic Surge Ready**

| 225   | 250                       | 400   | 600                       | 630   |
|---|---------------------------|---|---------------------------|---|
| NV250-CV  |                           | NV400-CW  |                           | NV630-CW  |
|  |                           |  |                           |  |
| 125 150 175 200 225   | 250                       | 250 300 350 400   | 500 600                   | (630)   |
| 3   | 3                         | 3   | 3                         | 3   |
| 3φ3W, 1φ3W, 1φ2W  | 3φ3W, 1φ3W, 1φ2W          | 3φ3W, 1φ3W, 1φ2W  | 3φ3W, 1φ3W, 1φ2W          | 3φ3W, 1φ3W, 1φ2W  |
| 100-440   | 100-440                   | 100-440   | 200-440                   | 200-440   |
| 30,100/200/500 selectable   | 30,100/200/500 selectable | (30),100/200/500 selectable   | -                         | -   |
| 0.1   | 0.1                       | 0.1   | -                         | -   |
| 0.04  | 0.04                      | 0.04  | -                         | -   |
| (100/200/500 selectable)  | (100/200/500 selectable)  | (100/200/500 selectable)  | (100/200/500 selectable)  | (100/200/500 selectable)  |
| (0.45/1.0/2.0 selectable)   | (0.45/1.0/2.0 selectable) | (0.45/1.0/2.0 selectable)   | (0.45/1.0/2.0 selectable) | (0.45/1.0/2.0 selectable)   |
| (0.1/0.5/1.0)   | (0.1/0.5/1.0)             | (0.1/0.5/1.0)   | (0.1/0.5/1.0)             | (0.1/0.5/1.0)   |
| Type AC   |                           | Type AC   |                           | Type AC   |
| Mechanical type (button)  | Mechanical type (button)  | Mechanical type (button)  | Mechanical type (button)  | Mechanical type (button)  |
| 15/12   | 15/12                     | 25/13   | 36/18                     | 36/18   |
| 25/19   | 25/19                     | 36/18   | 36/18                     | 36/18   |
| 25/19   | 25/19                     | 36/18   | 36/18                     | 36/18   |
| 36/27   | 36/27                     | 50/25   | 50/25                     | 50/25   |
| 36/27   | 36/27                     | 50/25   | 50/25                     | 50/25   |
| 36/27   | 36/27                     | 50/25   | -                         | -   |
| 6   | 6                         | 8   | 8                         | 8   |
| AC  | AC                        | AC  | AC                        | AC  |
| Yes   | Yes                       | Yes   | Yes                       | Yes   |
| Available   | Available                 | Available   | Available                 | Available   |
| 8,000   | 8,000                     | 6,000   | 6,000                     | 6,000   |
| 4,000   | 4,000                     | 1,000   | 1,000                     | 1,000   |
| A   | A                         | A   | A                         | A   |
| 2   | 2                         | 3   | 3                         | 3   |
| A   | A                         | A   | A                         | A   |
| 105   | 105                       | 140   | 140                       | 140   |
| 165   | 165                       | 257   | 257                       | 257   |
| 68  | 68                        | 103   | 103                       | 103   |
| 92  | 92                        | 134   | 155                       | 155   |
| 1.7   | 1.7                       | 6.1   | 6.9                       | 6.9   |
| ●Screw terminal   | ●Screw terminal           | ●Busbar terminal  | ●Busbar terminal          | ●Busbar terminal  |
| -   | -                         | -   | -                         | -   |
| ●Bar stud   | ●Bar stud                 | ●Bar stud   | ●Bar stud                 | ●Bar stud   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●(*4)   | ●(*4)                     | ●(*4)   | ●(*4)                     | ●(*4)   |
| ●(*4)   | ●(*4)                     | ●(*4)   | ●(*4)                     | ●(*4)   |
| ●(*4)   | ●(*4)                     | ●(*4)   | ●(*4)                     | ●(*4)   |
| ●(*4)   | ●(*4)                     | ●   | ●                         | ●   |
| -   | -                         | -   | -                         | -   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●(*5)   | ●(*5)                     | ●(*5)   | ●(*5)                     | ●(*5)   |
| -   | -                         | -   | -                         | -   |
| -   | -                         | -   | -                         | -   |
| ●   | ●                         | ●(*6)   | ●(*6)                     | ●(*6)   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●   | ●                         | ●   | ●                         | ●   |
| ●   | ●                         | ●   | ●                         | ●   |
| -   | -                         | -   | -                         | -   |
| -   | -                         | -   | -                         | -   |
| TUV approval  | TUV approval              | Self-declaration  | Self-declaration          | Self-declaration  |
| Recognized  | Recognized                | Recognized  | Recognized                | Recognized  |
| -   | -                         | -   | -                         | -   |
| Thermal-magnetic  | Thermal-magnetic          | Thermal-magnetic  | Thermal-magnetic          | Thermal-magnetic  |
| Equipped  | Equipped                  | Equipped  | Equipped                  | Equipped  |
| 190   |                           | 194   |                           | 198   |

Remarks: 1. Products with rated current parenthesized are produced when an order is placed.  
2. Specify "P-LT" when selecting plug-in type with lead-wire terminal block.  
3. The circuit breaker has the rated short-circuit breaking capacity specified in the shaded cells.

|                              |  |                         |
|------------------------------|--|-------------------------|
| 4. Rated operational voltage | Applicable circuit voltage                   | Available voltage range |
| 100-240V                     | 100/110/200/220/230/240V                     | 85-264V                 |
| 100-440V                     | 100/110/200/220/240/254/265/380/400/415/440V | 85-484V                 |
| 200-440V                     | 200/220/240/254/265/380/400/415/440V         | 170-484V                |

## NV-S (Standard class) Harmonic Surge Ready

| Frame (A)  |  | 30                             | 32                        | 50                        | 60                        | 63                        | 100                       | 125                       | 125                                    |         |       |
|--|--|--------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|---------|-------|
| Model  |  | NV32-SV                        |                           |                           | NV63-SV                   |                           | NV125-SV                  |                           | NV125-SEV                              |         |       |
| Image  |  |                                |                           |                           |                           |                           |                           |                           |  |         |       |
| Rated current In (A)                                 |  | (5) 6 10 (15)                  | (32)                      | (5) (10) (15) 16 20       | (60)                      | 63                        | (15) 16 20 (30) 32 40 50  | 125                       | 63-81 88-106                           |         |       |
| Rated ambient temperature 40°C                       |  | 16 20 25 (30)                  |                           | (30) 32 40 50             |                           |                           | (60) 63 (75) 80 100 (*3)  |                           | 113-125(by 6A)                         |         |       |
| Number of poles                                      |  | 3                              | 3                         | 3                         | 3                         | 3                         | 3 4                       | 3 4                       | 3 4                                    |         |       |
| Phase line (*1)                                      |  | 3φ3W, 1φ3W, 1φ2W               | 3φ3W, 1φ3W, 1φ2W          | 3φ3W, 1φ3W, 1φ2W          | 3φ3W, 1φ3W, 1φ2W          | 3φ3W, 1φ3W, 1φ2W          | 3φ3W, 1φ3W, 1φ2W 3φ4W     | 3φ3W, 1φ3W, 1φ2W 3φ4W     | 3φ3W, 1φ3W, 1φ2W 3φ4W                  |         |       |
| Rated operational voltage Ue (V) (*2) AC             |  | 100-440                        | 100-440                   | 100-440                   | 100-440                   | 100-440                   | 100-440 200-440           | 100-440 200-440           | 100-440                                |         |       |
| High-speed type                                      | Rated current sensitivity (mA)         | 30,100/200/500 selectable      | 30,100/200/500 selectable | 30,100/200/500 selectable | 30,100/200/500 selectable | 30,100/200/500 selectable | 30,100/200/500 selectable | 30,100/200/500 selectable | (30),100/200/500 selectable            |         |       |
|  | Max. operating time (s)                | at IΔn 0.1<br>at 5IΔn 0.04     | 0.1<br>0.04               | 0.1<br>0.04               | 0.1<br>0.04               | 0.1<br>0.04               | 0.1<br>0.04               | 0.1<br>0.04               | 0.1<br>0.04                            |         |       |
| Time-delay type                                      | Rated current sensitivity (mA)         | -                              | -                         | -                         | -                         | -                         | (100/200/500selectable)   | (100/200/500selectable)   | (100/200/500selectable)                |         |       |
|  | Max. operating time (s) (*4)           | -                              | -                         | -                         | -                         | -                         | (0.45/1.0/2.0selectable)  | (0.45/1.0/2.0selectable)  | (0.45/1.0/2.0selectable)               |         |       |
| Internal non-operating (s) (or more)                 |  | -                              | -                         | -                         | -                         | -                         | (0.1/0.5/1.0)             | (0.1/0.5/1.0)             | (0.1/0.5/1.0)                          |         |       |
| Earth leakage protection characteristic              |  | Type AC                        |                           |                           | Type AC                   |                           | Type AC                   |                           | Type AC                                |         |       |
| Earth leakage indication system                      |  | Mechanical type (button)       |                           |                           | Mechanical type (button)  |                           | Mechanical type (button)  |                           | Mechanical type (button)               |         |       |
| Rated short-circuit breaking capacities (kA)         | IEC 60947-2<br>EN 60947-2<br>(Icu/Ics) | AC                             | 440V                      | 5/5                       | 5/5                       | 7.5/7.5                   | 7.5/7.5                   | 7.5/7.5                   | 25/25                                  | 25/25   | 36/36 |
|  |  |                                | 415V                      | 5/5                       | 5/5                       | 7.5/7.5                   | 7.5/7.5                   | 7.5/7.5                   | 30/30                                  | 30/30   | 36/36 |
|  |  |                                | 400V                      | 5/5                       | 5/5                       | 7.5/7.5                   | 7.5/7.5                   | 7.5/7.5                   | 30/30                                  | 30/30   | 36/36 |
|  |  |                                | 230V                      | 10/10                     | 10/10                     | 15/15                     | 15/15                     | 15/15                     | 50/50                                  | 50/50   | 85/85 |
|  |  |                                | 200V                      | 10/10                     | 10/10                     | 15/15                     | 15/15                     | 15/15                     | 50/50                                  | 50/50   | 85/85 |
|  |  |                                | 100V                      | 10/10                     | 10/10                     | 15/15                     | 15/15                     | 15/15                     | 50/50                                  | 50/50   | 85/85 |
| Rated impulse withstand voltage Uimp (kV)            |  | 6                              | 6                         | 6                         | 6                         | 6                         | 6                         | 6                         | 6                                      |         |       |
| Current  |  | AC                             | AC                        | AC                        | AC                        | AC                        | AC                        | AC                        | AC                                     |         |       |
| Suitability for isolation                            |  | Yes                            | Yes                       | Yes                       | Yes                       | Yes                       | Yes                       | Yes                       | Yes                                    |         |       |
| Reverse connection (below 230VAC)                    |  | Available                      | Available                 | Available                 | Available                 | Available                 | Available                 | Available                 | Available                              |         |       |
| Number of operating cycles                           | Without current                        | 10,000                         | 10,000                    | 15,000                    | 15,000                    | 15,000                    | 25,000                    | 25,000                    | 25,000                                 |         |       |
|  | With current                           | 6,000                          | 6,000                     | 8,000                     | 8,000                     | 8,000                     | 10,000                    | 10,000                    | 10,000                                 |         |       |
| Utilization category                                 |  | A                              | A                         | A                         | A                         | A                         | A                         | A                         | A                                      |         |       |
| Rated short time withstand current Icu (kA) at 0.25s |  | -                              | -                         | -                         | -                         | -                         | -                         | -                         | -                                      |         |       |
| Pollution degree                                     |  | 2                              | 2                         | 2                         | 2                         | 2                         | 2                         | 2                         | 2                                      |         |       |
| EMC environment condition (environment A or B)       |  | A                              | A                         | A                         | A                         | A                         | A                         | A                         | A                                      |         |       |
| Overall dimensions (mm)                              |  | a                              | 75                        | 75                        | 75                        | 75                        | 75                        | 90 120                    | 90 120                                 | 105 140 |       |
|  |  | b                              | 130                       | 130                       | 130                       | 130                       | 130                       | 130                       | 130                                    | 165     |       |
|  |  | c                              | 68                        | 68                        | 68                        | 68                        | 68                        | 68                        | 68                                     | 68      |       |
|  |  | ca                             | 90                        | 90                        | 90                        | 90                        | 90                        | 90                        | 90                                     | 92      |       |
| Mass of front-face type (kg)                         |  | 0.75                           | 0.75                      | 0.75                      | 0.8                       | 0.8                       | 1.1 1.4                   | 1.1 1.4                   | 1.9 2.5                                |         |       |
| Installation and connections                         | Front connection (F)                   | Page                           | ●Screw terminal           | ●Screw terminal           | ●Screw terminal           | ●Screw terminal           | ●Screw terminal           | ●Screw terminal           | ●                                      |         |       |
|  | Solderless (BOX) terminal (SL)         | -                              | -                         | -                         | -                         | -                         | -                         | -                         | -                                      |         |       |
|  | Rear (B)                               | 98                             | ●Round stud               | ●Round stud               | ●Round stud               | ●Round stud               | ●Round stud               | ●Bar stud                 | ●Bar stud                              |         |       |
|  | Plug-in (PM)                           | -                              | ●                         | ●                         | ●                         | ●                         | ●                         | ●                         | ●                                      |         |       |
| Cassette-type accessories                            | Alarm switch (AL)                      | 115                            | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                                  |         |       |
|  | Auxiliary switch (AX)                  | ●(*5)                          | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                                  |         |       |
|  | Shunt trip (SHT)                       | ●(*5)                          | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                                  |         |       |
|  | Undervoltage trip (UVT)                | ●(*5)                          | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                                  |         |       |
|  | Earth leakage alarm switch (EAL)       | -                              | -                         | -                         | -                         | -                         | -                         | -                         | -                                      |         |       |
|  | With lead-wire terminal block (SLT)    | 120                            | ●                         | ●                         | ●                         | ●                         | ●                         | ●                         | ●                                      |         |       |
| Test button module (TBM)                             | 122                                    | ●(*6)                          | ●(*6)                     | ●(*6)                     | ●(*6)                     | ●(*6)                     | ●(*6)                     | ●(*6)                     |  |         |       |
| External accessories                                 | Enclosure                              | Closed (S)                     | -                         | -                         | -                         | -                         | -                         | -                         | -                                      | ●       |       |
|  |  | Dustproof (I)                  | -                         | -                         | -                         | -                         | -                         | -                         | -                                      | ●       |       |
|  |  | Waterproof (W)                 | -                         | -                         | -                         | -                         | -                         | -                         | -                                      | ●       |       |
|  | Electrical operation device (NFM)      | 140                            | -                         | -                         | -                         | -                         | -                         | ●                         | ●                                      | ●       |       |
|  |  | Mechanical interlock (MI) (*8) | Panel mounting            | 136                       | ●                         | ●                         | ●                         | ●                         | ●                                      | ●       | ●     |
|  | Breaker mounting                       |                                | ●                         | ●                         | ●                         | ●                         | ●                         | ●                         | ●                                      | ●       |       |
|  | Handle lock device                     | LC                             | 135                       | ●                         | ●                         | ●                         | ●                         | ●                         | ●                                      | ●       |       |
|  |  | HL                             | ●                         | ●                         | ●                         | ●                         | ●                         | ●                         | ●                                      | ●       |       |
|  |  | HL-S                           | ●                         | ●                         | ●                         | ●                         | ●                         | ●                         | ●                                      | ●       |       |
|  | External operating handle              | (F)                            | 123                       | ●                         | ●                         | ●                         | ●                         | ●                         | ●                                      | ●       |       |
| (V)  |  | ●                              | ●                         | ●                         | ●                         | ●                         | ●                         | ●                         | ●                                      |         |       |
| Terminal cover (TC-L, TC-S, TTC, BTC, PTC)           | 128                                    | ●                              | ●                         | ●                         | ●                         | ●                         | ●                         | ●                         |  |         |       |
| Rear stud (B-ST)                                     | 98                                     | -                              | ●                         | ●                         | ●                         | ●                         | ●                         | ●                         |  |         |       |
| Plug-in (PM)   | 143                                    | ●                              | ●                         | ●                         | ●                         | ●                         | ●                         | ●                         |  |         |       |
| IEC 35mm rail mounting adapters                      | -                                      | -                              | -                         | -                         | -                         | -                         | -                         | -                         | -                                      |         |       |
| CE marking   |  | Self-declaration               | Self-declaration          | Self-declaration          | Self-declaration          | Self-declaration          | Self-declaration          | Self-declaration          | Self-declaration                       |         |       |
| CCC recognition                                      |  | Recognized                     | Recognized                | Recognized                | Recognized                | Recognized                | Recognized                | Recognized                | Recognized                             |         |       |
| Marine use approval (NK, LR, ABS, DNV-GL)            |  | -                              | -                         | -                         | -                         | -                         | -                         | -                         | -                                      |         |       |
| Automatic tripping device                            |  | Thermal-magnetic               | Thermal-magnetic          | Thermal-magnetic          | Thermal-magnetic          | Thermal-magnetic          | Thermal-magnetic          | Thermal-magnetic          | Electronic (effective value detection) |         |       |
| Trip button  |  | Equipped                       | Equipped                  | Equipped                  | Equipped                  | Equipped                  | Equipped                  | Equipped                  | Equipped                               |         |       |
| Page of Characteristics and dimensions               |  | 186                            |                           |                           | 186                       |                           | 188                       |                           | 192                                    |         |       |

Notes: \*1 When using 3-pole earth-leakage circuit breakers for 1-phase 2-wire system, connect cables/busbars to left and right poles, not to center pole. When using 1-phase 3-wire system, connect neutral conductor to center pole of earth leakage circuit breaker.  
 \*2 For time-delay type, the rated voltage is 200-440VAC.  
 \*3 In case of time delay type, rated current is produced with 20 amp. or more.  
 \*4 When the operating time are 0.45, 1.0 and 2.0 seconds, the Earth Leakage circuit breaker operates between 0.15 and 0.45 seconds, between 0.6 and 1.0 seconds and between 1.2 and 2.0 seconds respectively.

\*5 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.  
 \*6 Standard type is SLT equipped.  
 \*7 Place an order with circuit breaker.  
 \*8 No isolation function except 400A to 800A frame.  
 \*9 100VAC does not acquire the CCC certification.






## NV-H / NV-R (High-performance class) Harmonic Surge Ready

| Frame (A)  |                                     | 50                               | 60                        | 63                        | 100                       | 125                       | 125                                    | 225                       | 250                       | 250                                    |             |
|--|-------------------------------------|----------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|---------------------------|---------------------------|--|-------------|
| Model  |                                     | NV63-HV                          |                           |                           | NV125-HV                  |                           | NV125-HEV                              | NV250-HV                  |                           | NV250-HEV                              |             |
| Image  |                                     |                                  |                           |                           |                           |                           |  |                           |                           |  |             |
| Rated current In (A)                                 |                                     | (15) 16 20                       | (60)                      | 63                        | (15) 16 20 (30) 32 40 50  | 125                       | 63-81 88-106                           | 125 150 175               | 250                       | 125-250                                |             |
| Rated ambient temperature 40°C                       |                                     | (30) 32 40 50                    |                           |                           | (60) 63 (75) 80 100 (*3)  |                           | 113-125(by 6A)                         | 200 225                   |                           | (by 12.5A)                             |             |
| Number of poles                                      |                                     | 3                                | 3                         | 3                         | 3                         | 4                         | 3                                      | 4                         | 3                         | 4                                      |             |
| Phase line (*1)                                      |                                     | 3φ3W, 1φ3W, 1φ2W                 | 3φ3W, 1φ3W, 1φ2W          | 3φ3W, 1φ3W, 1φ2W          | 3φ3W, 1φ3W, 1φ2W          | 3φ4W                      | 3φ3W, 1φ3W, 1φ2W                       | 3φ4W                      | 3φ3W, 1φ3W, 1φ2W          | 3φ4W                                   |             |
| Rated operational voltage Ue (V) (*2) AC             |                                     | 100-440                          | 100-440                   | 100-440                   | 100-440                   | 200-440                   | 100-440                                | 100-440                   | 200-440                   | 100-440                                |             |
| High-speed type                                      | Rated current sensitivity (mA)      | 30,100/200/500 selectable        | 30,100/200/500 selectable | 30,100/200/500 selectable | 30,100/200/500 selectable | 30,100/200/500 selectable | (30),100/200/500 selectable            | 30,100/200/500 selectable | 30,100/200/500 selectable | (30),100/200/500 selectable            |             |
|  | Max. operating time (s)             | at IΔn<br>0.1<br>at 5IΔn<br>0.04 | 0.1<br>0.04               | 0.1<br>0.04               | 0.1<br>0.04               | 0.1<br>0.04               | 0.1<br>0.04                            | 0.1<br>0.04               | 0.1<br>0.04               | 0.1<br>0.04                            | 0.1<br>0.04 |
| Time-delay type                                      | Rated current sensitivity (mA)      | -                                | -                         | -                         | (100/200/500selectable)   | (100/200/500selectable)   | (100/200/500selectable)                | (100/200/500selectable)   | (100/200/500selectable)   | (100/200/500selectable)                |             |
|  | Max. operating time (s) (*4)        | -                                | -                         | -                         | (0.45/1.0/2.0selectable)  | (0.45/1.0/2.0selectable)  | (0.45/1.0/2.0selectable)               | (0.45/1.0/2.0selectable)  | (0.45/1.0/2.0selectable)  | (0.45/1.0/2.0selectable)               |             |
| Internal non-operating (s) (or more)                 |                                     | -                                | -                         | -                         | (0.1/0.5/1.0)             | (0.1/0.5/1.0)             | (0.1/0.5/1.0)                          | (0.1/0.5/1.0)             | (0.1/0.5/1.0)             | (0.1/0.5/1.0)                          |             |
| Earth leakage protection characteristic              |                                     | Type AC                          |                           |                           |                           | Type AC                   |  | Type AC                   |                           | Type AC                                |             |
| Earth leakage indication system                      |                                     | Mechanical type (button)         |                           |                           |                           | Mechanical type (button)  |  | Mechanical type (button)  |                           | Mechanical type (button)               |             |
| Rated short-circuit breaking capacities (kA)         | AC                                  | 440V                             | 10/8                      | 10/8                      | 10/8                      | 50/38                     | 50/38                                  | 65/65                     | 65/65                     | 65/65                                  | 65/65       |
|  |                                     | 415V                             | 10/8                      | 10/8                      | 10/8                      | 50/38                     | 50/38                                  | 70/70                     | 70/70                     | 70/70                                  | 70/70       |
|  |                                     | 400V                             | 10/8                      | 10/8                      | 10/8                      | 50/38                     | 50/38                                  | 75/75                     | 75/75                     | 75/75                                  | 75/75       |
|  |                                     | 230V                             | 25/19                     | 25/19                     | 25/19                     | 100/75                    | 100/75                                 | 100/100                   | 100/100                   | 100/100                                | 100/100     |
|  |                                     | 200V                             | 25/19                     | 25/19                     | 25/19                     | 100/75                    | 100/75                                 | 100/100                   | 100/100                   | 100/100                                | 100/100     |
|  |                                     | 100V                             | 25/19                     | 25/19                     | 25/19                     | 100/75                    | 100/75                                 | 100/100                   | 100/100                   | 100/100                                | 100/100     |
| Rated impulse withstand voltage Uimp (kV)            |                                     | 6                                | 6                         | 6                         | 6                         | 6                         | 6                                      | 6                         | 6                         | 6                                      |             |
| Current  |                                     | AC                               | AC                        | AC                        | AC                        | AC                        | AC                                     | AC                        | AC                        | AC                                     |             |
| Suitability for isolation                            |                                     | Yes                              | Yes                       | Yes                       | Yes                       | Yes                       | Yes                                    | Yes                       | Yes                       | Yes                                    |             |
| Reverse connection (below 230VAC)                    |                                     | -                                | -                         | -                         | -                         | -                         | -                                      | -                         | -                         | -                                      |             |
| Number of operating cycles                           | Without current                     | 15,000                           | 15,000                    | 15,000                    | 25,000                    | 25,000                    | 25,000                                 | 25,000                    | 25,000                    | 25,000                                 |             |
|  | With current                        | 8,000                            | 8,000                     | 8,000                     | 10,000                    | 10,000                    | 10,000                                 | 10,000                    | 10,000                    | 10,000                                 |             |
| Utilization category                                 |                                     | A                                | A                         | A                         | A                         | A                         | A                                      | A                         | A                         | A                                      |             |
| Rated short time withstand current Icu (kA) at 0.25s |                                     | -                                | -                         | -                         | -                         | -                         | -                                      | -                         | -                         | -                                      |             |
| Pollution degree                                     |                                     | 2                                | 2                         | 2                         | 2                         | 2                         | 2                                      | 2                         | 2                         | 2                                      |             |
| EMC environment condition (environment A or B)       |                                     | A                                | A                         | A                         | A                         | A                         | A                                      | A                         | A                         | A                                      |             |
| Overall dimensions (mm)                              |                                     | a                                | 75                        | 75                        | 75                        | 90                        | 120                                    | 105                       | 140                       | 105                                    | 140         |
|  |                                     | b                                | 130                       | 130                       | 130                       | 130                       | 130                                    | 165                       | 165                       | 165                                    | 165         |
|  |                                     | c                                | 68                        | 68                        | 68                        | 68                        | 68                                     | 68                        | 68                        | 68                                     | 68          |
|  |                                     | ca                               | 90                        | 90                        | 90                        | 90                        | 90                                     | 92                        | 92                        | 92                                     | 92          |
| Mass of front-face type (kg)                         |                                     | 0.75                             | 0.8                       | 0.8                       | 1.1                       | 1.4                       | 1.1                                    | 1.4                       | 1.8                       | 2.5                                    |             |
| Installation and connections                         | Front connection (F)                | Page                             | ●Screw terminal           | ●Screw terminal           | ●Screw terminal           | ●Screw terminal           | ●Screw terminal                        | ●Screw terminal           | ●Screw terminal           | ●Screw terminal                        |             |
|  | Solderless (BOX) terminal (SL)      | -                                | -                         | -                         | -                         | -                         | -                                      | -                         | -                         | -                                      |             |
|  | Rear (B)                            | 98                               | ●Round stud               | ●Round stud               | ●Round stud               | ●Bar stud                 | ●Bar stud                              | ●Bar stud                 | ●Bar stud                 | ●Bar stud                              |             |
|  | Plug-in (PM)                        | -                                | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         | ●                                      |             |
| Cassette-type accessories                            | Alarm switch (AL)                   | 115                              | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                                  | ●(*5)                     | ●(*5)                     | ●(*5)                                  |             |
|  | Auxiliary switch (AX)               | ●(*5)                            | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                                  | ●(*5)                     | ●(*5)                     | ●(*5)                                  |             |
|  | Shunt trip (SHT)                    | ●(*5)                            | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                                  | ●(*5)                     | ●(*5)                     | ●(*5)                                  |             |
|  | Undervoltage trip (UVT)             | ●(*5)                            | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                     | ●(*5)                                  | ●(*5)                     | ●(*5)                     | ●(*5)                                  |             |
|  | Earth leakage alarm switch (EAL)    | -                                | -                         | -                         | -                         | -                         | -                                      | -                         | -                         | -                                      |             |
|  | With lead-wire terminal block (SLT) | 120                              | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         | ●                                      |             |
| Test button module (TBM)                             | 122                                 | ●(*6)                            | ●(*6)                     | ●(*6)                     | ●(*6)                     | ●(*6)                     | ●(*6)                                  | ●(*6)                     | ●(*6)                     |  |             |
| External accessories                                 | Enclosure                           | Closed (S)                       | -                         | -                         | -                         | -                         | -                                      | -                         | -                         | -                                      |             |
|  |                                     | Dustproof (I)                    | -                         | -                         | -                         | -                         | ●                                      | -                         | -                         | -                                      |             |
|  |                                     | Waterproof (W)                   | -                         | -                         | -                         | -                         | ●                                      | -                         | -                         | -                                      |             |
|  | Electrical operation device (NFM)   | 140                              | -                         | -                         | -                         | ●                         | ●                                      | ●                         | ●                         | ●                                      |             |
|  |                                     | Mechanical interlock (MI) (*7)   | 136                       | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         | ●                                      |             |
|  | Handle lock device                  | Panel mounting                   | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         | ●                                      |             |
|  |                                     | LC                               | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         | ●                                      |             |
|  |                                     | HL                               | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         | ●                                      |             |
|  | External operating handle           | HL-S                             | 135                       | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         | ●                                      |             |
|  |                                     | (F)                              | 123                       | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         | ●                                      |             |
| Terminal cover (TC-L, TC-S, TTC, BTC, PTC)           | (V)                                 | 128                              | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         |  |             |
|  | 128                                 | ●                                | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         |  |             |
| Rear stud (B-ST)                                     | 98                                  | ●                                | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         |  |             |
| Plug-in (PM)   | 143                                 | ●                                | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         |  |             |
| IEC 35mm rail mounting adapters                      | 143                                 | ●                                | ●                         | ●                         | ●                         | ●                         | ●                                      | ●                         | ●                         |  |             |
| CE marking   |                                     | Self-declaration                 | Self-declaration          | Self-declaration          | Self-declaration          | Self-declaration          | Self-declaration                       | Self-declaration          | Self-declaration          | Self-declaration                       |             |
| CCC recognition                                      |                                     | Recognized                       | Recognized                | Recognized                | Recognized                | Recognized                | Recognized                             | Recognized                | Recognized                | Recognized                             |             |
| Marine use approval (NK, LR, ABS, DNV-GL)            |                                     | -                                | -                         | -                         | -                         | -                         | -                                      | -                         | -                         | -                                      |             |
| Automatic tripping device                            |                                     | Thermal-magnetic                 | Thermal-magnetic          | Thermal-magnetic          | Thermal-magnetic          | Thermal-magnetic          | Electronic (effective value detection) | Thermal-magnetic          | Thermal-magnetic          | Electronic (effective value detection) |             |
| Trip button  |                                     | Equipped                         | Equipped                  | Equipped                  | Equipped                  | Equipped                  | Equipped                               | Equipped                  | Equipped                  | Equipped                               |             |
| Page of Characteristics and dimensions               |                                     | 186                              |                           |                           | 188                       |                           | 192                                    |                           | 190                       |  | 192         |

Notes: \*1 When using 3-pole earth-leakage circuit breakers for 1-phase 2-wire system, connect cables/busbars to left and right poles, not to center pole. When using 1-phase 3-wire system, connect neutral conductor to center pole of earth leakage circuit breaker.  
 \*2 For time-delay type, the rated voltage is 200-440VAC.  
 \*3 In case of time delay type, rated current is produced with 20 amp. or more.  
 \*4 When the operating time are 0.45, 1.0 and 2.0 seconds, the Earth Leakage circuit breaker operates between 0.15 and 0.45 seconds, between 0.6 and 1.0 seconds and between 1.2 and 2.0 seconds respectively.

\*5 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.  
 \*6 Standard type is SLT equipped.  
 \*7 No isolation function.  
 \*8 100VAC does not acquire the CCC certification.

**NV-H / NV-R (High-performance class) Harmonic Surge Ready**

| 400<br>NV400-HEW  |  | 630<br>NV630-HEW  |  | 800<br>NV800-HEW  |  |
|---|--|---|--|---|--|
|  |  |  |  |  |  |
| Adjustable 200 225 250 300 350 400  |  | Adjustable 300 350 400 500 600 630  |  | Adjustable 400 450 500 600 700 800  |  |
| 3   |  | 3   |  | 3   |  |
| 3φ3W, 1φ3W, 1φ2W  |  | 3φ3W, 1φ3W, 1φ2W  |  | 3φ3W, 1φ3W, 1φ2W  |  |
| 100-440   |  | 100-440   |  | 100-440   |  |
| (30), 100/200/500 selectable  |  | -   |  | -   |  |
| 0.1   |  | -   |  | -   |  |
| 0.04  |  | -   |  | -   |  |
| (100/200/500 selectable)  |  | (100/200/500 selectable)  |  | (100/200/500 selectable)  |  |
| (0.45/1.0/2.0)  |  | (0.45/1.0/2.0)  |  | (0.45/1.0/2.0 selectable)   |  |
| (0.1/0.5/1.0)   |  | (0.1/0.5/1.0)   |  | (0.1/0.5/1.0)   |  |
| Type AC   |  | Type AC   |  | Type AC   |  |
| Mechanical type (button)  |  | Mechanical type (button)  |  | Mechanical type (button)  |  |
| 65/65   |  | 65/65   |  | 65/65   |  |
| 70/70   |  | 70/70   |  | 70/70   |  |
| 70/70   |  | 70/70   |  | 70/70   |  |
| 100/100   |  | 100/100   |  | 100/100   |  |
| 100/100   |  | 100/100   |  | 100/100   |  |
| 100/100   |  | 100/100   |  | 100/100   |  |
| 8   |  | 8   |  | 8   |  |
| AC  |  | AC  |  | AC  |  |
| Yes   |  | Yes   |  | Yes   |  |
| -   |  | -   |  | -   |  |
| 6,000   |  | 6,000   |  | 4,000   |  |
| 1,000   |  | 1,000   |  | 500   |  |
| B   |  | B   |  | B   |  |
| 5   |  | 7.6   |  | 9.6   |  |
| 3   |  | 3   |  | 3   |  |
| A   |  | A   |  | A   |  |
| 140   |  | 140   |  | 210   |  |
| 257   |  | 257   |  | 275   |  |
| 103   |  | 103   |  | 103   |  |
| 155   |  | 155   |  | 155   |  |
| 6.6   |  | 7.1   |  | 15.3  |  |
| 8.2   |  |   |  |   |  |
| ●Busbar terminal  |  | ●Busbar terminal  |  | ●Busbar terminal  |  |
| -   |  | -   |  | -   |  |
| ●Bar stud   |  | ●Bar stud   |  | ●Bar stud   |  |
| ●   |  | ●   |  | ●   |  |
| ● (*5)  |  | ● (*5)  |  | ● (*5)  |  |
| ● (*5)  |  | ● (*5)  |  | ● (*5)  |  |
| ● (*5)  |  | ● (*5)  |  | ● (*5)  |  |
| ●   |  | ●   |  | ●   |  |
| -   |  | -   |  | -   |  |
| ●   |  | ●   |  | ●   |  |
| ● (*6)  |  | ● (*6)  |  | ● (*6)  |  |
| -   |  | -   |  | -   |  |
| ●   |  | ●   |  | ●   |  |
| ●   |  | ●   |  | ●   |  |
| ● (*7)  |  | ● (*7)  |  | ● (*7)  |  |
| ●   |  | ●   |  | ●   |  |
| ●   |  | ●   |  | ●   |  |
| ●   |  | ●   |  | ●   |  |
| ●   |  | ●   |  | ●   |  |
| ●   |  | ●   |  | ●   |  |
| ●   |  | ●   |  | ●   |  |
| -   |  | -   |  | -   |  |
| -   |  | -   |  | -   |  |
| Self-declaration  |  | Self-declaration  |  | Self-declaration  |  |
| Recognized  |  | Recognized  |  | Recognized  |  |
| -   |  | -   |  | -   |  |
| Electronic (effective value detection)  |  | Electronic (effective value detection)  |  | Electronic (effective value detection)  |  |
| Equipped  |  | Equipped  |  | Equipped  |  |
| 196   |  | 200   |  | 202   |  |

- Remarks: 1. Products with rated current parenthesized are produced when an order is placed.  
 2. The setting is set to 500mA and delivered when not specifying the rated current sensitivity and the time of time-delay type of operation to 2.0 seconds.  
 3. Specify "FP-LT" when using a flush plate product with a lead-wire terminal block.  
 4. Specify "P-LT" when selecting plug-in type with lead-wire terminal block.  
 5. The circuit breaker has the rated short-circuit breaking capacity specified in the shaded cells.

| Rated operational voltage | Applicable circuit voltage                   | Available voltage range |
|---------------------------|--|-------------------------|
| 100-440V                  | 100/110/200/220/240/254/265/380/400/415/440V | 85-484V                 |
| 200-440V                  | 200/220/240/254/265/380/400/415/440V         | 175-484V                |

**NV32-SV**  
**NV63-CV**  
**NV63-SV**  
**NV63-HV**

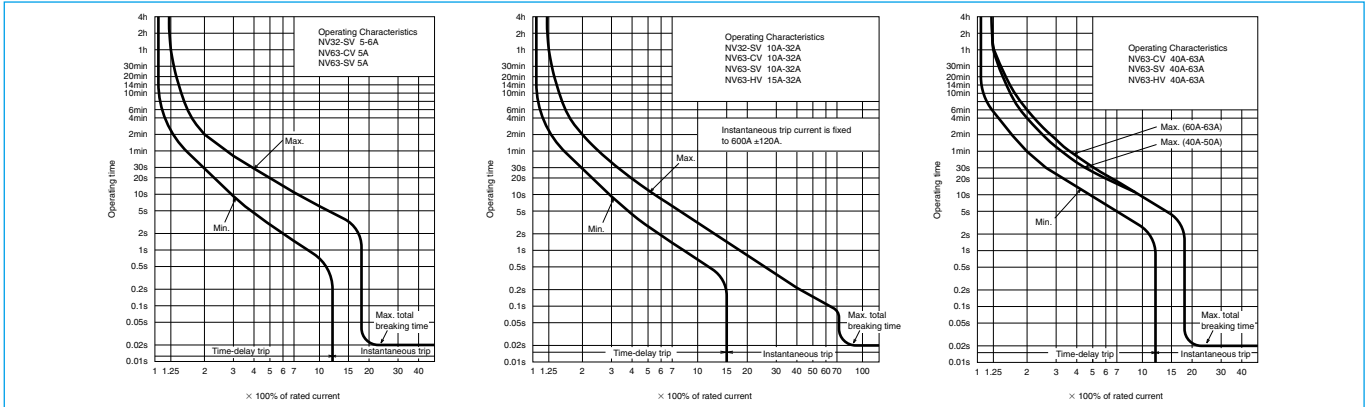


**NV63-SV**

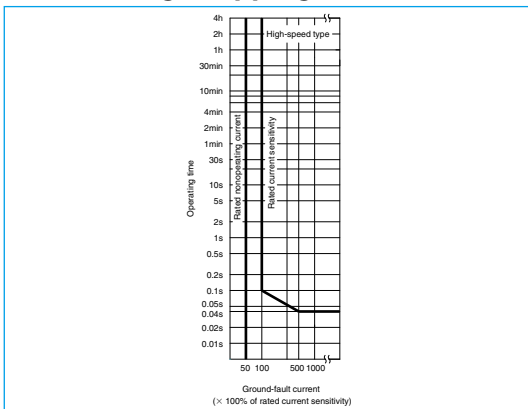
| Model  |  | NV32-SV                               |      | NV63-CV   |   | NV63-SV   |         | NV63-HV                                |  |
|--|--|---------------------------------------|------|---|---|---|---------|--|--|
| Rated current I <sub>n</sub> (A)             |  | (5) 6 10 (15) 16<br>20 25 (30) (32)   |      | (5) (10) (15) 16 20 25<br>(30) 32 40 50 (60) 63 |   | (5) (10) (15) 16 20 25<br>(30) 32 40 50 (60) 63 |         | (15) 16 20 25 (30)<br>32 40 50 (60) 63 |  |
| Number of poles                              |  | 3                                     |      | 2   |   | 3   |         | 3                                      |  |
| Phase line                                   |  | 3φ3W,<br>1φ3W,<br>1φ2W                |      | 1φ2W  |   | 3φ3W,<br>1φ3W,<br>1φ2W                          |         | 3φ3W,<br>1φ3W,<br>1φ2W                 |  |
| Rated operational voltage U <sub>e</sub> (V) |  | AC 100-440                            |      | 100-240   |   | 100-440   |         | 100-440                                |  |
| High-speed type                              | Rated current sensitivity (mA)         | 30<br>100/200/500<br>selectable       |      | 30  |   | 30<br>100/200/500<br>selectable                 |         | 30<br>100/200/500<br>selectable        |  |
|  | Max operating time (s)                 | at Δn<br>0.1<br>at 5Δn<br>0.04        |      | 0.1<br>0.04                                     |   | 0.1<br>0.04                                     |         | 0.1<br>0.04                            |  |
| Time-delay type                              | Rated current sensitivity (mA)         | -                                     |      | -   |   | -   |         | -                                      |  |
|  | Max operating time (s)                 | -                                     |      | -   |   | -   |         | -                                      |  |
| Inertial operating time (s) (or more)        |  | -                                     |      | -   |   | -   |         | -                                      |  |
| Earth-leakage indication system              |  | Mechanical type (button)              |      | Mechanical type (button)                        |   | Mechanical type (button)                        |         | Mechanical type (button)               |  |
| Rated short-circuit breaking capacity (kA)   | IEC 60947-2<br>EN 60947-2<br>(Icu/Ics) | AC                                    | 440V | 5/5   | - | 2.5/2.5   | 7.5/7.5 | 10/8                                   |  |
|  |  |                                       | 415V | 5/5   | - | 2.5/2.5   | 7.5/7.5 | 10/8                                   |  |
|  |  |                                       | 400V | 5/5   | - | 5/5   | 7.5/7.5 | 10/8                                   |  |
|  |  |                                       | 230V | 10/10   | - | 7.5/7.5   | 15/15   | 25/19                                  |  |
|  |  |                                       | 200V | 10/10   | - | 7.5/7.5   | 15/15   | 25/19                                  |  |
|  |  |                                       | 100V | 10/10   | - | 7.5/7.5   | 15/15   | 25/19                                  |  |
| Standard attached parts (Front connection)   |  | Mounting screw: M4×0.7×55 (2pcs) (*1) |      | Insulation barrier: (2P: 1pc, 3P: 2pcs)         |   |   |         |  |  |

Note \*1 Attached to NV63-SV and NV63-HV.

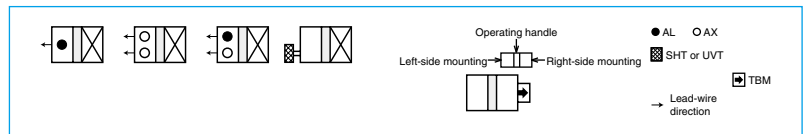
## Operating Characteristics



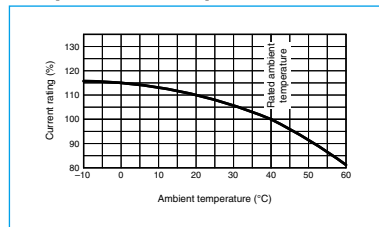
## Earth leakage Tripping Characteristics



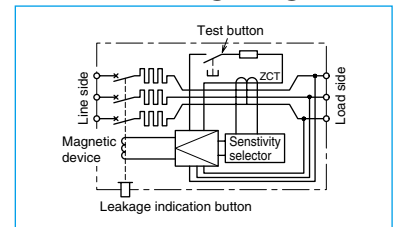
## Internal Accessories



## Temperature Compensation Curve



## Internal Wiring Diagram



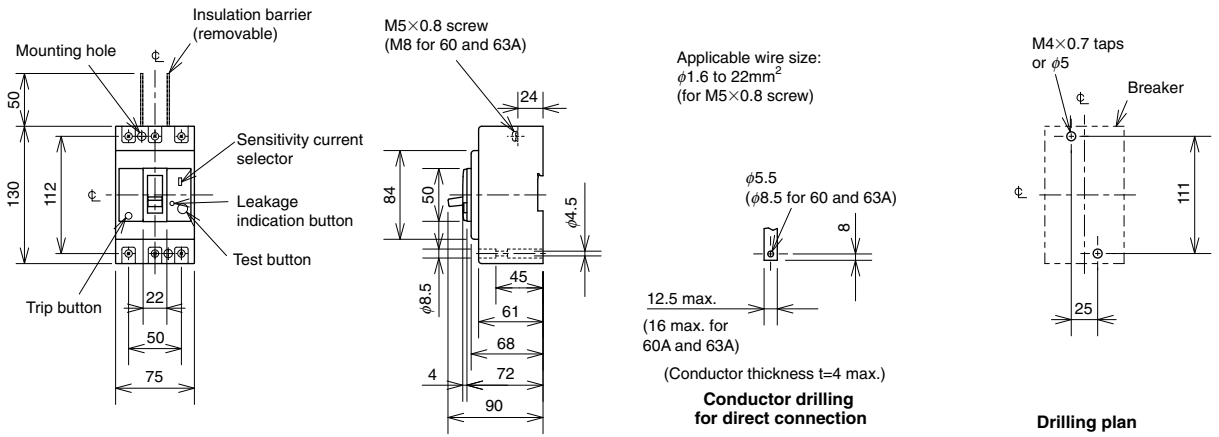
## External Accessories

| Accessories        |          | Type name | Reference page | Accessories                     |                | Type name  | Reference page |
|--------------------|----------|-----------|----------------|---------------------------------|----------------|------------|----------------|
| Operating handle   | F        | F-05SV    | 123            | Mechanical interlock            | MI             | MI-05SV3   | 136            |
|                    | V        | V-05SV    | 125            |                                 | Terminal cover | Small      | TC-S           |
| Handle lock device | LC       | LC-05SV   | 134            | Large                           |                | TC-L       | TCL-05SV3      |
|                    | HL (*1)  | HLF-05SV  |                |                                 |                | TCL-05SV3L |                |
|                    | HLN-05SV | TTC-05SV3 |                |                                 |                |            |                |
|                    | HLS-05SV | BTC-05SV3 |                |                                 |                |            |                |
|                    |          |           | Plug-in        | PTC                             |                | PTC-05SV3  |                |
|                    |          |           |                | IEC 35mm rail mounting adapters |                | DIN-05SV   | 143            |

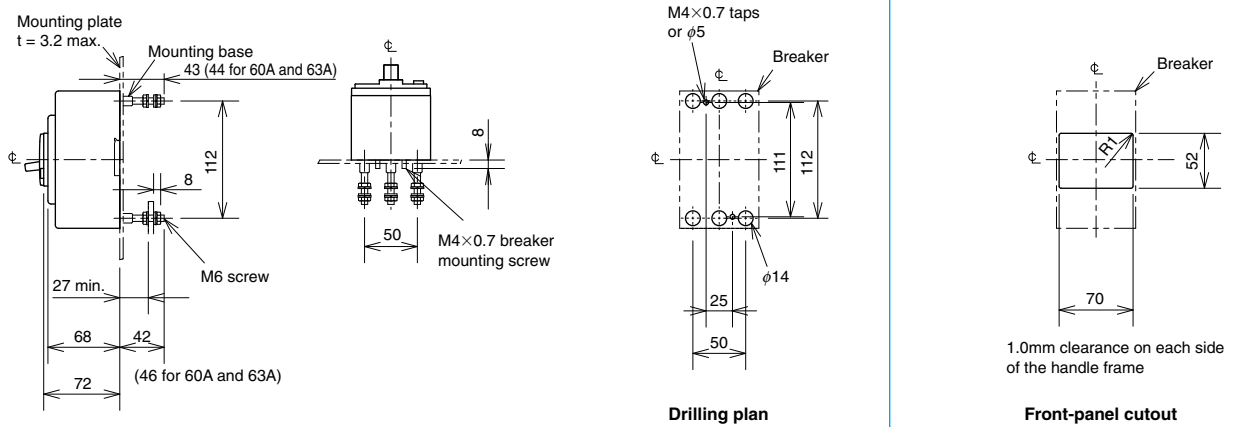
Note \*1 HLF types are used for OFF lock and HLN types for ON lock.

Outline Drawing

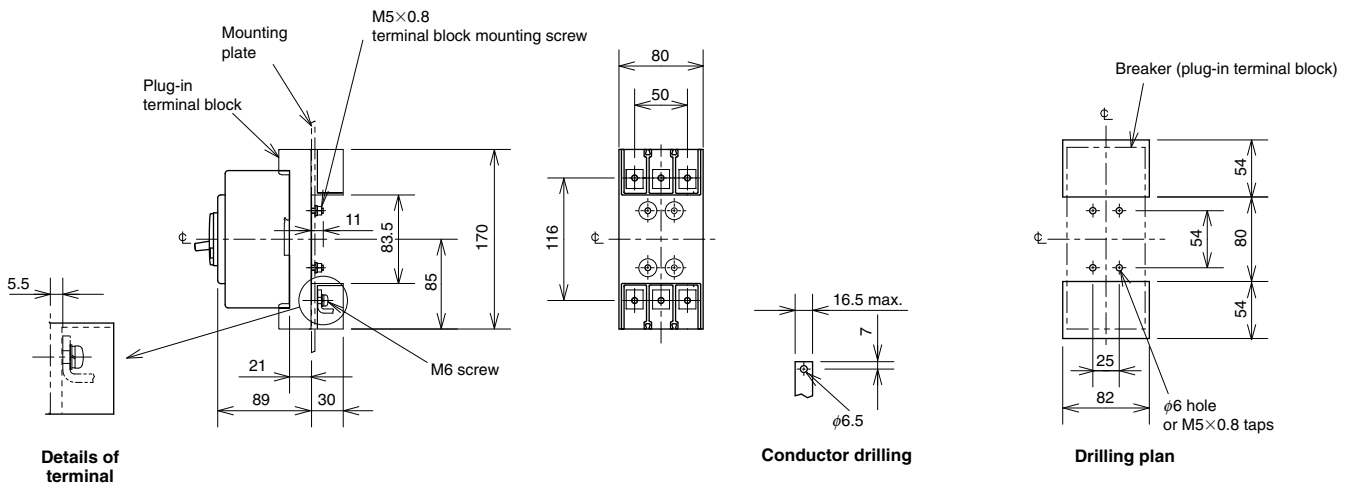
**Front connection**



**Rear connection**



**Plug-in**



Remark: 1. 2-pole models are 3-pole models with the central pole removed.



## NV125-CV NV125-SV NV125-HV

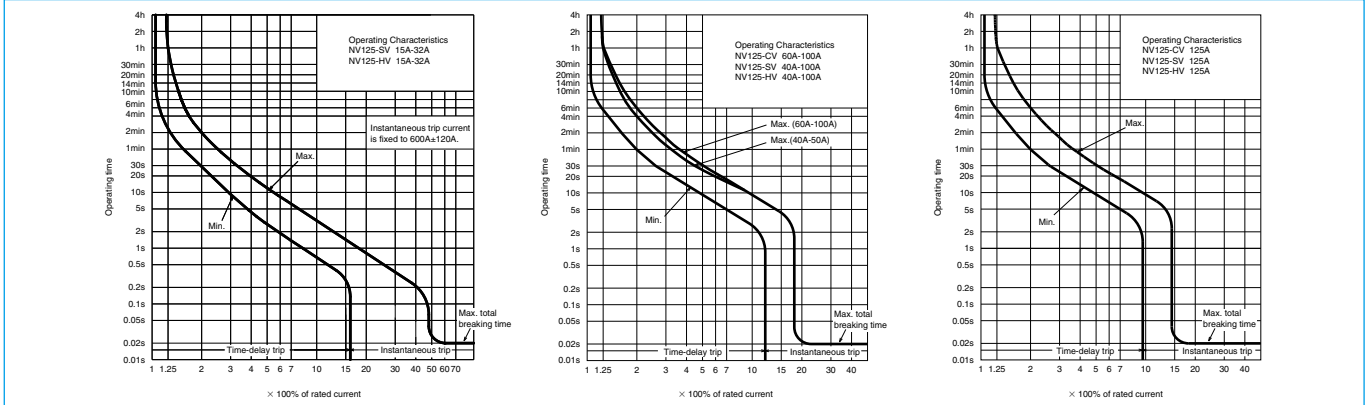


NV125-SV

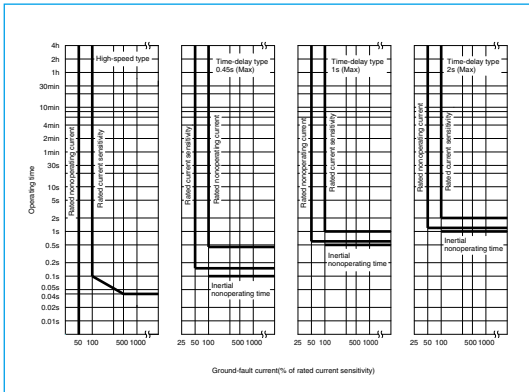
| Model  |  | NV125-CV                        |      |  | NV125-SV   |         | NV125-HV   |         |  |
|--|--|---------------------------------|------|--|--|---------|--|---------|--|
| Rated current I <sub>n</sub> (A)             |  | (60) 63 (75) 80 100 125         |      |  | (15) 16 20 30 32 40 50<br>(60) 63 (75) 80 100 125 (*2) |         | (15) 16 20 (30) 32 40 50<br>(60) 63 75 80 100 125 (*2) |         |  |
| Number of poles                              |  | 3                               |      |  | 3  | 4       | 3  | 4       |  |
| Phase line                                   |  | 3φ3W,<br>1φ3W,<br>1φ2W          |      |  | 3φ3W,<br>1φ3W,<br>1φ2W                                 | 3φ4W    | 3φ3W,<br>1φ3W,<br>1φ2W                                 | 3φ4W    |  |
| Rated operational voltage U <sub>e</sub> (V) |  | AC 100-440                      |      |  | 100-440  | 200-440 | 100-440  | 200-440 |  |
| High-speed type                              | Rated current sensitivity (mA)         | 30<br>100/200/500<br>selectable |      |  | 30<br>100/200/500<br>selectable                        |         | 30<br>100/200/500<br>selectable                        |         |  |
|  | Max operating time (s)                 | at IΔn                          | 0.1  |  |  | 0.1     |  | 0.1     |  |
|  |  | at 5IΔn                         | 0.04 |  |  | 0.04    |  | 0.04    |  |
| Time-delay type                              | Rated current sensitivity (mA)         | (100/200/500 selectable)        |      |  | (100/200/500 selectable)                               |         | (100/200/500 selectable)                               |         |  |
|  | Max operating time (s)                 | (0.45/1.0/2.0 selectable)       |      |  | (0.45/1.0/2.0 selectable)                              |         | (0.45/1.0/2.0 selectable)                              |         |  |
|  | Inertial operating time (s) (or more)  | (0.1/0.5/1.0)                   |      |  | (0.1/0.5/1.0)  |         | (0.1/0.5/1.0)  |         |  |
| Earth-leakage indication system              |  | Mechanical type (button)        |      |  | Mechanical type (button)                               |         | Mechanical type (button)                               |         |  |
| Rated short-circuit breaking capacity (kA)   | IEC 60947-2<br>EN 60947-2<br>(Icu/Ics) | AC                              | 440V | 10/5   |  | 25/25   |  | 50/38   |  |
|  |  |                                 | 415V | 10/5   |  | 30/30   |  | 50/38   |  |
|  |  |                                 | 400V | 10/5   |  | 30/30   |  | 50/38   |  |
|  |  |                                 | 230V | 30/15  |  | 50/50   |  | 100/75  |  |
|  |  |                                 | 200V | 30/15  |  | 50/50   |  | 100/75  |  |
|  |  |                                 | 100V | 30/15  |  | 50/50   |  | 100/75  |  |
| Standard attached parts (Front connection)   |  |                                 |      | Mounting screw: M4×0.7×55 (3P: 2pcs, 4P: 4pcs) (*1) Insulation barrier: (3P: 2pcs, 4P: 3pcs) |  |         |  |         |  |

Note \*1 Attached to NV125-SV and NV125-HV.  
\*2 In case of time delay type, rated current is produced with 20amp. or more.

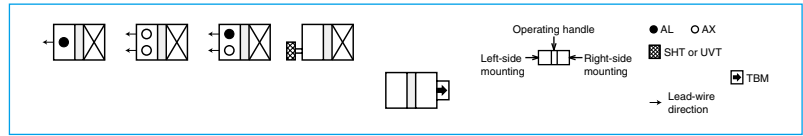
### Operating Characteristics



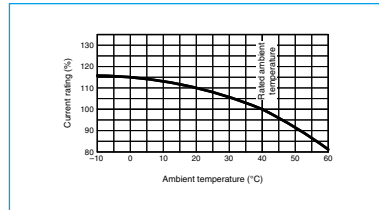
### Earth leakage Tripping Characteristics



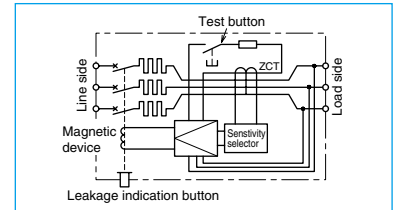
### Internal Accessories



### Temperature Compensation Curve



### Internal Wiring Diagram



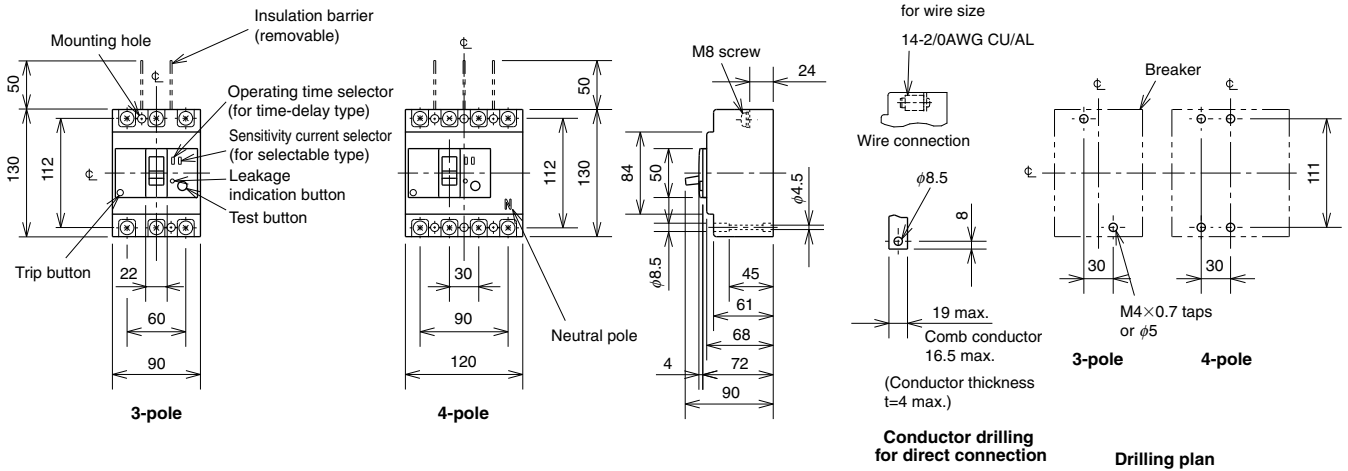
### External Accessories

| Accessories        |         | Type name | Reference page | Accessories                 |             | Type name   | Reference page |
|--------------------|---------|-----------|----------------|-----------------------------|-------------|-------------|----------------|
| Operating handle   | F       | F-1SV     | 123            | Mechanical interlock        | MI          | 3P MI-05SV3 | 136            |
|                    | V       | V-1SV     | 125            |                             | 4P MI-1SV4  |             |                |
| Handle lock device | LC      | LC-05SV   | 134            | Terminal cover              | Small       | 3P TCS-1SV3 | 128            |
|                    | HL (*1) | HLF-05SV  |                |                             |             | 4P TCS-1SV4 |                |
|                    |         | HLN-05SV  |                |                             | 3P TCL-1SV3 |             |                |
|                    |         | HLS-05SV  |                |                             | 4P TCL-1SV4 |             |                |
|                    |         |           |                | Rear                        | 3P TTC-1SV3 | 128         |                |
|                    |         |           | 4P TTC-1SV4    |                             |             |             |                |
|                    |         |           |                | Plug-in                     | 3P BTC-1SV3 | 128         |                |
|                    |         |           | 4P BTC-1SV4    |                             |             |             |                |
|                    |         |           |                | Electrical operation device |             | (*2)        | 140            |

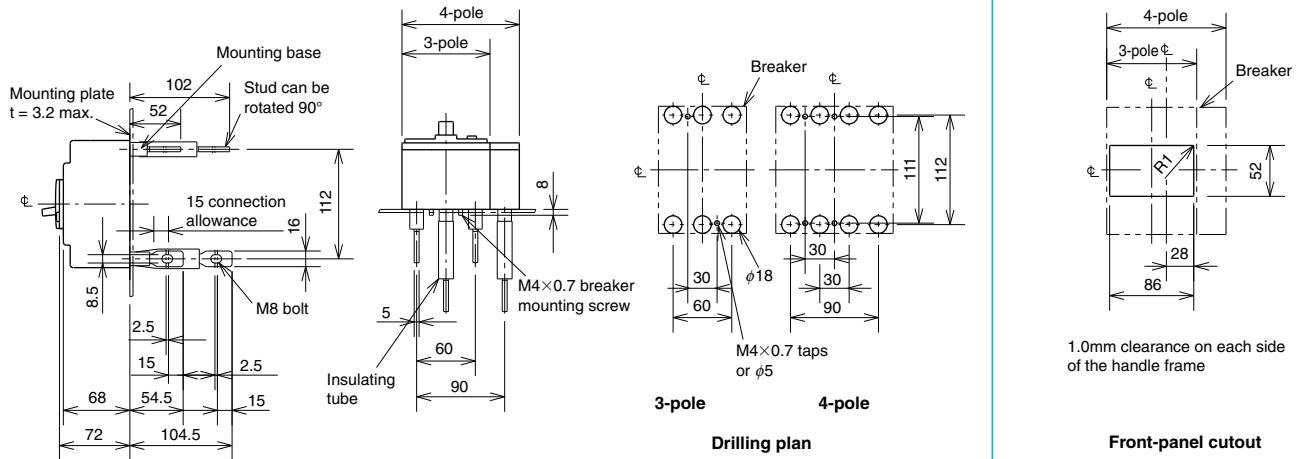
Notes \*1 HLF types are used for OFF lock and HLN types for ON lock.  
\*2 Specify the working voltage. Refer to the reference page for type name.

Outline Drawing

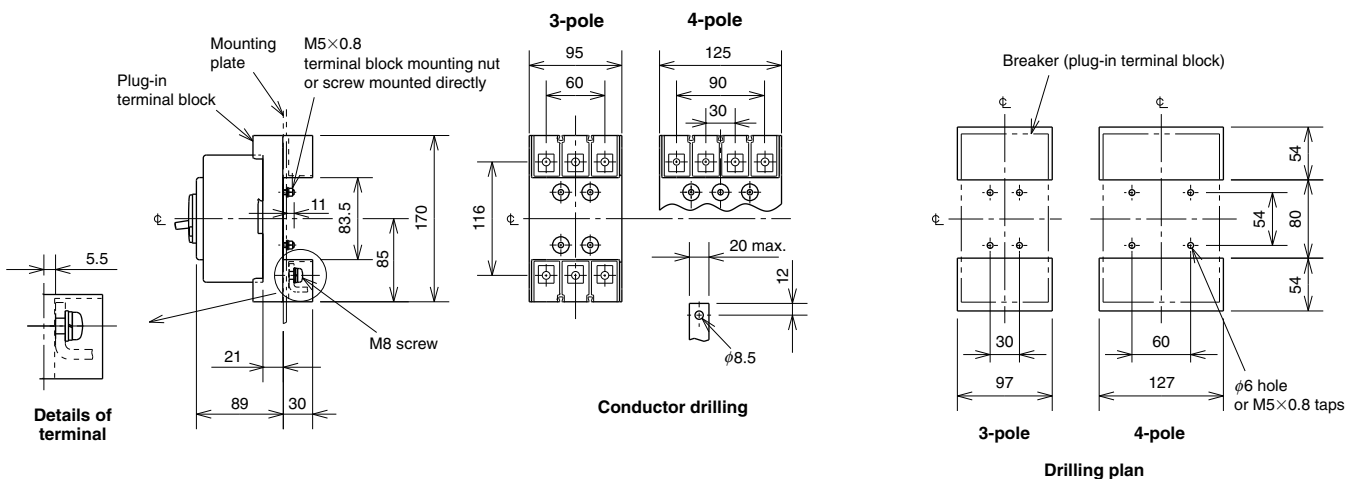
Front connection



Rear connection



Plug-in



Remark: 1. Only 3-pole models are available for NV125-CV.