

# NBH series

NBH -10 -432 -□

① ② ③ ④

- ① Model Name
- ② Rated Current
- ③ Line to ground capacitor code: Refer to table 1.1.

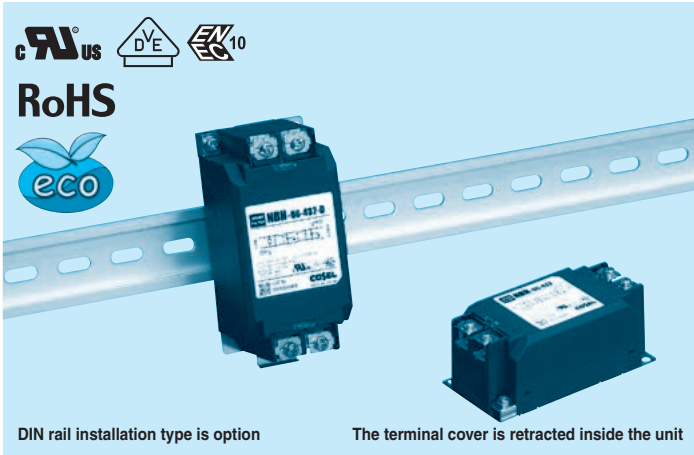
table 1.1 Line to ground capacitor code

| Code | Leakage Current<br>(Input 125/250V 60Hz) | Line to ground capacitor<br>(nominal value) |              | Test voltage<br>(Terminal- Mounting Plate) |
|------|--|---|--------------|--|
|      |  | CY1   | CY2          |  |
| 000  | 5 $\mu$ A/ 10 $\mu$ A max                | Not Provided                                | Not Provided | 4,000VAC                                   |
| 101  | 12.5 $\mu$ A/ 25 $\mu$ A max             | 100pF                                       | Not Provided |  |
| 221  | 25 $\mu$ A/ 50 $\mu$ A max               | 220pF                                       | Not Provided |  |
| 331  | 37.5 $\mu$ A/ 75 $\mu$ A max             | 330pF                                       | Not Provided |  |
| 471  | 50 $\mu$ A/100 $\mu$ A max               | 470pF                                       | Not Provided |  |
| 681  | 75.5 $\mu$ A/150 $\mu$ A max             | 680pF                                       | Not Provided | 2,500VAC                                   |
| 102  | 0.13mA/0.25mA max                        | 1000pF                                      | Not Provided |  |
| 202  | 0.25mA/0.5 mA max                        | 1000pF                                      | 1000pF       |  |
| 322  | 0.38mA/0.75mA max                        | 2200pF                                      | 1000pF       |  |
| 322  | 0.38mA/0.75mA max                        | 2200pF                                      | 1000pF       |  |
| 432  | 0.5 mA/1.0 mA max                        | 3300pF                                      | 1000pF       |  |

\* When the line to ground capacitor code is different, the attenuation characteristic is different.

- ④ Option
- D: DIN rail installation type

\* The dimensions change when the option is set. Refer to External view.



## Features of NBH series

### Ultra high-attenuation type from 9kHz to 10MHz (2-Stage filter)

- Single Phase 250VAC
- Withstand voltage 4,000 VAC (Line to ground capacitor code -000 to -471)
- Quick and easy push-down terminal

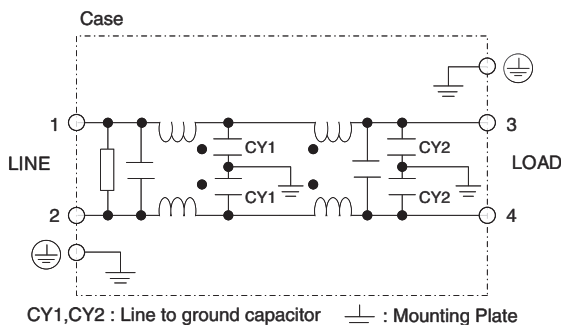
Just connect the wires, push-down and tighten the screws with a screwdriver

### Specifications

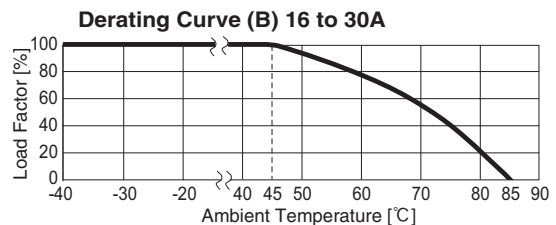
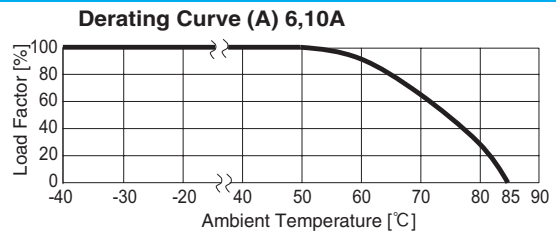
| No. | Items  | NBH-06-432  | NBH-10-432 | NBH-16-432                               | NBH-20-432 | NBH-30-432 |
|-----|--|---|------------|--|------------|------------|
| 1   | Rated Voltage[V]                               | AC 1 $\phi$ 250 / DC250   |            |  |            |            |
| 2   | Rated Current[A]                               | 6   | 10         | 16                                       | 20         | 30         |
| 3   | Test Voltage (Terminal-Mounting Plate) *1      | 2,500 VAC (Cutoff Current = 20mA), 1minute at room temperature and humidity                     |            |  |            |            |
| 4   | Isolation Resistance (Terminal-Mounting Plate) | 500 VDC 100M $\Omega$ min at room temperature and humidity                                      |            |  |            |            |
| 5   | Leakage current 125/250V 60Hz                  | 0.5mA/1.0mA max   |            |  |            |            |
| 6   | Voltage drop                                   | 1.0V max  |            |  |            |            |
| 7   | Safety agency approval temperatures            | -25 to +85°C (Refer to Derating Curve A)  |            | -25 to +85°C (Refer to Derating Curve B) |            |            |
| 8   | Operating temperature                          | -40 to +85°C (Refer to Derating Curve A)  |            | -40 to +85°C (Refer to Derating Curve B) |            |            |
| 9   | Operating humidity                             | 20 to 95%RH (Non condensing)  |            |  |            |            |
| 10  | Storage temperature/humidity                   | -40 to +85°C/20 to 95%RH (Non condensing)   |            |  |            |            |
| 11  | Vibration                                      | 10 to 55Hz, 19.6m/s <sup>2</sup> (2G), 3min. Period, 1hour each X, Y and Z axis                 |            |  |            |            |
| 12  | Impact   | 196.1m/s <sup>2</sup> (20G), 11ms Once each X, Y and Z axis                                     |            |  |            |            |
| 13  | Safety agency approvals                        | UL1283, CSA C22.2 No.8 (C-UL), DIN EN60939 VDE0565 Teil3-1, ENEC (At only AC input)             |            |  |            |            |
| 14  | Case size (without projection) /Weight         | 53X43X104 mm [2.09X1.69X4.09 inches] (W X H X D) /320g max (Option : -D refer to external view) |            |  |            |            |

\*1 When the line to ground capacitor code is different, the test voltage characteristic is different. (Refer to table 1.1)

### Circuit Diagram



### Derating Curve

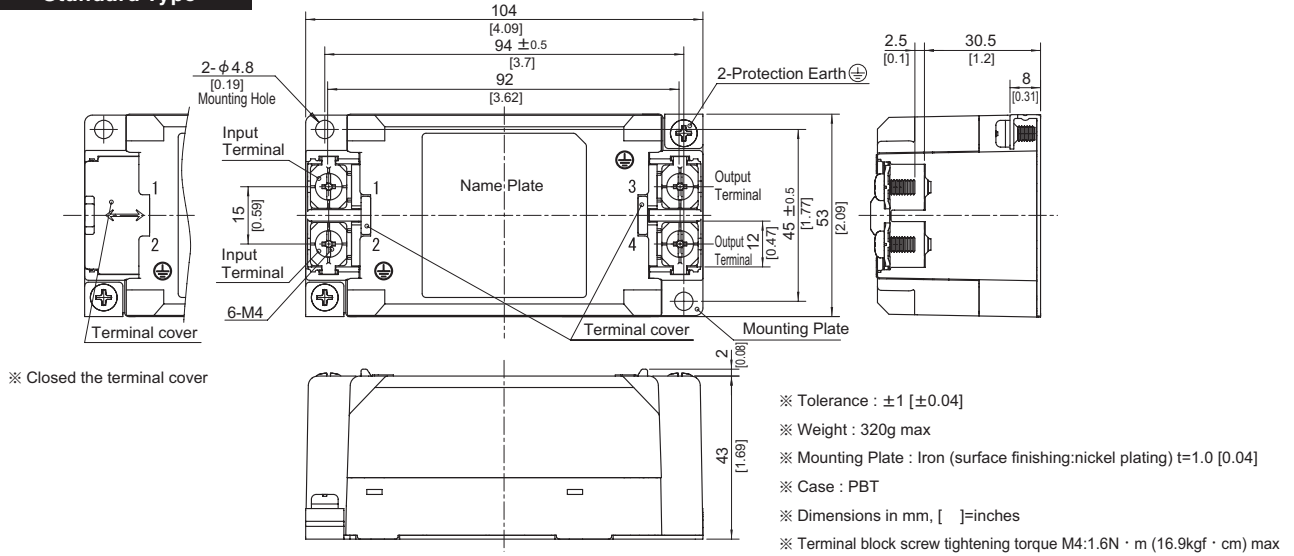


External view

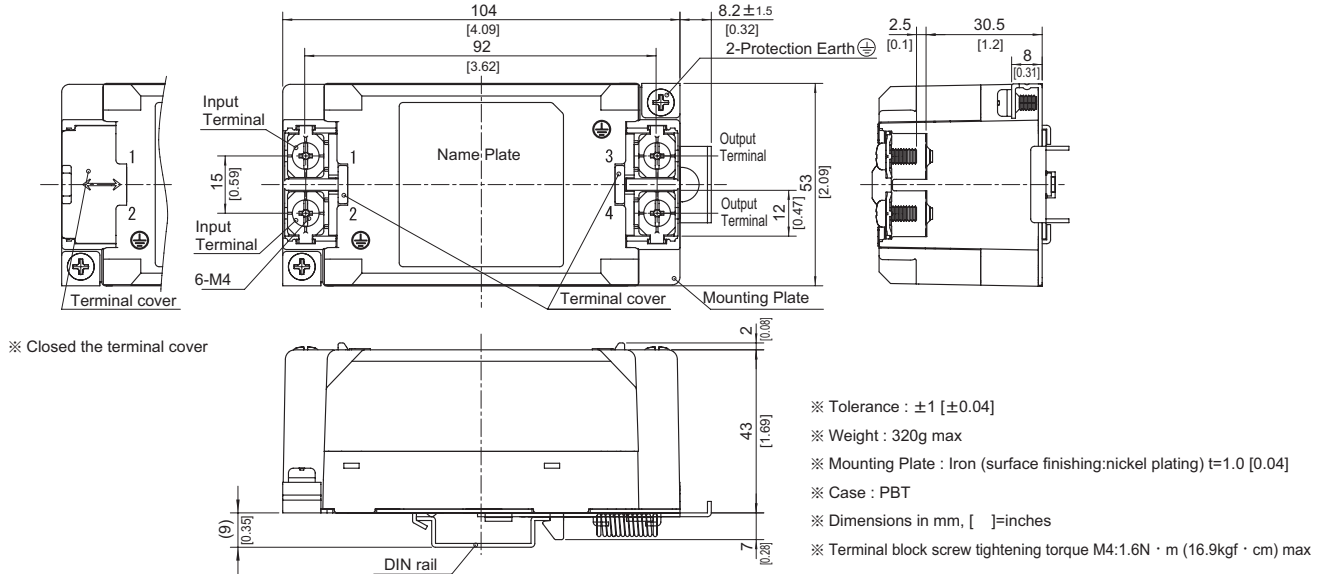
This product is shipped in the following condition, because it is equipped with push-down terminals.

- ① The terminal cover is retracted inside the unit.
- ② The screws for connecting the terminals are held in the up right position.

Standard Type



DIN rail installation Type



■ Note when installing the EMI/EMC Filter on a DIN rail.

When the EMI/EMC Filter is grounded through the DIN rail, the proper noise attenuation may not be achieved.

Be sure to connect the protection earth (PE) of the EMI/EMC Filter body to the earth. At least one PE connection is required.

