

Terminal Blocks

BN-W BNH-W Series



UL recognized, CSA certified, and TÜV compliant.
Screw-in and touch-down terminals available.



• See website for details on approvals and standards.

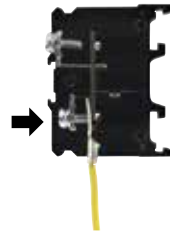
Touch-down terminal blocks reduce wiring time. (BNH-W/BNDH-W Series)

1. Insert the Crimping Terminal



Terminal screw is always in the open position. No need to loosen the screw.

2. Push the Screw Down



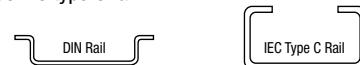
Push the screw down to temporarily hold the wire in place.

3. Tighten the Screw



The screws can be tightened easily with a pneumatic screwdriver.

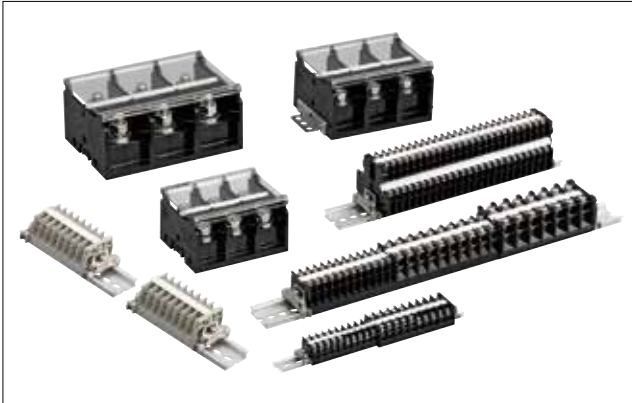
- Molded from UL94V-0 material with excellent flame and shock resistance.
- Terminal blocks can be mounted on a 35-mm-wide DIN rail and 30-mm-wide IEC type C rail.



- 9.5-mm-wide marking strips can be used on all models. 17-mm-wide sliding type marking strips also available. (BN10W to BN30W)
- Terminal blocks of different shapes and capacities can be installed without using an end plate. (BN/BNH10W to BN/BNH30W)
- Screw and stud terminals available for large capacity terminal blocks.
- Additional mounting and removal of terminals is easy. (BN□10W to BN□150W)
- Complies with JIS C 8201-7-1 and NECA C 2811.
- UL recognized, CSA certified, and EN compliant (TÜV approved). (Except common terminal)
- UL recognized for field wiring (FW2).

BN-W / BNH-W Series Terminal Blocks

UL recognized, CSA certified, and TÜV compliant.
Touch-down terminals reduce wiring time.



- Complies with JIS C 8201-7-1 and NECA C 281.1.

General Ratings

| | |
|-----------------------|--------------------------------|
| Dielectric Strength | 2500V AC, 1 minute |
| Insulation Resistance | 100 MΩ minimum |
| Operating Temperature | -25 to +55°C (no freezing) |
| Storage Temperature | -25 to +70°C (no freezing) |
| Operating Humidity | 45 to 85% RH (no condensation) |

Material

| Parts Name | Material |
|----------------|--|
| Housing | Modified PPE |
| Bus Bars | Brass (Nickel-plated) |
| Terminal Screw | Steel (Zinc chrome-plated) |
| Spring | Stainless steel (touch-down type only) |

Ratings/Terminal Screw Tightening Torque

| Style | Part No. | | UL/CSA Ratings | | EN Ratings (*1) | | JIS Ratings | | Terminal Screw | Tightening Torque (N·m) |
|---------------------------|--------------------|------------|-----------------|-----------------|-----------------|------------------------------------|----------------------------|------------------------------|----------------|-------------------------|
| | Screw-in | Touch-Down | Voltage/Current | Wire Size (AWG) | Voltage/Current | Wire Size [mm ² /(AWG)] | Voltage/Current | Wire Size (mm ²) | | |
| Standard | BN10W ★ | BNH10W ★ | 600V/15A | 22-16 | 660V/16A | 1.25/(22-16) | 800V/16A | 1.25 | M3 | 0.6 to 1.0 |
| | BN15MW ★ | BNH15MW ★ | 600V/15A | 22-14 | 660V/22A | 2/(22-14) | 800V/16A | 1.25 (2) *2 | M3 | 0.6 to 1.0 |
| | BN15LW ★ | BNH15LW ★ | 600V/20A | 22-14 | 660V/22A | 2/(22-14) | 630V/21A | 2 | M3.5 | 1.0 to 1.3 |
| | BN15MWT ★ | BNH15MWT ★ | 600V/15A | 22-14 | 660V/22A | 2/(22-14) | 800V/21A | 2 | M3.5 | 1.0 to 1.3 |
| | BN15LWT ★ | BNH15LWT ★ | 600V/30A | 22-14 | 660V/22A | 3.5/(22-14) | 630V/30A | 3.5 | M4 | 1.4 to 2.0 |
| | BN30W ★ | BNH30W ★ | 600V/35A | 18-10 | 660V/38A | 5.5/(18-10) | 630V/40A | 5.5 | M4 | 1.4 to 2.0 |
| Large Capacity | BN50W | BNH50W | 600V/60A | 16-6 | 660V/67A | 14/(16-6) | 800V/70A | 14 | M5 | 2.6 to 3.7 |
| | BN75W ★ | | 600V/80A | 16-4 | 660V/94A | 22/(8-4) | 1000V/94A | 22 | M6 | 3.9 to 5.4 |
| | BN100W | | 600V/100A | 16-2 | 660V/132A | 38/(2) | 1000V/132A | 38 | M8 | 10 to 13.5 |
| | BN150W | | 600V/150A | 16-1/0 | 660V/175A | 60/(1/0) | 1000V/175A | 60 | M8 | 10 to 13.5 |
| | BN150NW | | 600V/150A | 16-1/0 | 660V/175A | 60/(1/0) | 630V/175A | 60 | M8 | 10 to 13.5 |
| | BN200BW□, BN200NW□ | | 600V/200A | 4/0 | 660V/240A | 100/(4/0) | 800V/240A | 100 | M10 | 21 to 28 |
| | BN300BW□, BN300NW□ | | 600V/310A | 300MCM | 660V/310A | 150/(300MCM) | 800V/310A | 150 | M10 | 38 to 49 |
| | BN400BW□, BN400NW□ | | 600V/350A | 400MCM | 660V/370A | 200/(400MCM) | 800V/370A | 200 | M12 | 83 to 116 |
| BN500BW□, BN500NW□ | | 600V/500A | 500MCM | 660V/430A | 240/(500MCM) | 800V/430A | 250 | M16 | | |
| BN600NW□K | | 600V/600A | 600MCM | 660V/520A | 300/(600MCM) | 800V/520A | 325 | M16 | | |
| With Disconnecting Switch | BNT20 | — | — | — | — | — | 600V/20A | 5.5 | M4 | 1.4 to 2.0 |
| With Fuse | BNF10S | — | — | — | — | — | 600V/10A | 5.5 | M4 | 1.4 to 2.0 |
| | BNF10N | — | — | — | — | — | 600V/10A | 5.5 | M4 | |
| Double-Deck | BND15W | BNDH15W | 600V/10A | 22-14 | 660V/22A | 2/(22-14) | 800V/16A | 1.25 (2) *2 | M3 | 0.6 to 1.0 |
| | BND15LW | BNDH15LW | 600V/15A | 22-14 | 660V/22A | 2/(22-14) | 800V/21A | 2 | M3.5 | 1.0 to 1.3 |
| | BND15WT | BNDH15WT | 600V/15A | 22-14 | 660V/22A | 2/(22-14) | 800V/21A | 2 | M3.5 | 1.0 to 1.3 |
| Common Terminal | BN15MC□ | — | — | — | — | — | 600V/16A Common Current | 1.25 (2) *2 | M3 | 0.6 to 1.0 |

*1: Ratings approved by TÜV based on EN60947-7-1.

*2: The rated applicable wire size is 1.25 mm², but 2 mm² wires can also be connected.

*3: Part No. with ★ is UL recognized for field wiring (FW2).

Specify the number of poles in place of □.

APEM

Switches &
Pilot Lights

Control Boxes

Emergency
Stop SwitchesEnabling
Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit
Protectors

Power Supplies

LED Illumination

Controllers

Operator
Interfaces

Sensors

AUTO-ID

BN

BN-W / BNH-W Series Terminal Blocks

Terminal Blocks

| Terminal Style | | Part No. | Ordering No. | Applicable Wire (mm ²) | Terminal Screw | Width (mm) | Package Quantity | Page | |
|-----------------------------|----------|------------|--------------|------------------------------------|-----------------|------------|------------------|------|-------|
| Standard | | | | | | | | | |
| Screw-in | 1-pole | 16A | BN10W | BN10WPN50 | 1.25 | M3 | 7 | 50 | |
| | | | BN15MW | BN15MWP50 | 1.25 (2) (Note) | M3 | 8 | 50 | G-012 |
| | | 21A | BN15LW | BN15LWPN50 | 2 | M3.5 | 10.5 | 50 | G-013 |
| | | | BN15MWT | BN15MWTPN50 | 2 | M3.5 | 8 | 50 | |
| | | | BN15LWT | BN15LWTPN50 | 3.5 | M4 | 10.5 | 50 | |
| | | | BN30W | BN30WPN50 | 5.5 | M4 | 12 | 50 | |
| 70A | BN50W | BN50WPN20 | 14 | M5 | 15.5 | 20 | G-014 | | |
| Touch-Down | 1-pole | 16A | BNH10W | BNH10WPN50 | 1.25 | M3 | 7 | 50 | |
| | | | BNH15MW | BNH15MWP50 | 1.25 (2) (Note) | M3 | 8 | 50 | G-012 |
| | | 21A | BNH15LW | BNH15LWPN50 | 2 | M3.5 | 10.5 | 50 | G-013 |
| | | | BNH15MWT | BNH15MWTPN50 | 2 | M3.5 | 8 | 50 | |
| | | | BNH15LWT | BNH15LWTPN50 | 3.5 | M4 | 10.5 | 50 | |
| | | | BNH30W | BNH30WPN50 | 5.5 | M4 | 12 | 50 | |
| 70A | BNH50W | BNH50WPN20 | 14 | M5 | 15.5 | 20 | G-014 | | |
| Large Capacity (Rail Mount) | | | | | | | | | |
| Screw | 1-pole | 94A | BN75W | BN75WPN10 | 22 | M6 | 20 | 10 | G-015 |
| | | 132A | BN100W | BN100WPN05 | 38 | M8 | 26 | 5 | |
| | | 175A | BN150W | BN150WPN05 | 60 | M8 | 26 | 5 | G-016 |
| | | | BN150NW | BN150NWPN05 | 60 | M8 | 26 | 5 | |
| | 2-pole | 240A | BN200BW2 | BN200BW2 | 100 | M10 | 37 | 1 | G-017 |
| | 3-pole | | BN200BW3 | BN200BW3 | | | | | |
| | 4-pole | | BN200BW4 | BN200BW4 | | | | | |
| | 2-pole | 310A | BN300BW2 | BN300BW2 | 150 | M10 | 44 | 1 | G-018 |
| | 3-pole | | BN300BW3 | BN300BW3 | | | | | |
| | 4-pole | | BN300BW4 | BN300BW4 | | | | | |
| | 2-pole | 370A | BN400BW2 | BN400BW2 | 200 | M12 | 57 | 1 | G-019 |
| | 3-pole | | BN400BW3 | BN400BW3 | | | | | |
| 4-pole | BN400BW4 | | BN400BW4 | | | | | | |
| Stud | 2-pole | 240A | BN200NW2 | BN200NW2 | 100 | M10 | 37 | 1 | G-017 |
| | 3-pole | | BN200NW3 | BN200NW3 | | | | | |
| | 4-pole | | BN200NW4 | BN200NW4 | | | | | |
| | 2-pole | 310A | BN300NW2 | BN300NW2 | 150 | M10 | 44 | 1 | G-018 |
| | 3-pole | | BN300NW3 | BN300NW3 | | | | | |
| | 4-pole | | BN300NW4 | BN300NW4 | | | | | |
| | 2-pole | 370A | BN400NW2 | BN400NW2 | 200 | M12 | 57 | 1 | G-019 |
| | 3-pole | | BN400NW3 | BN400NW3 | | | | | |
| 4-pole | BN400NW4 | | BN400NW4 | | | | | | |

Note The rated applicable wire size is 1.25 mm², but 2 mm² wires can also be connected.

Terminal Blocks

| Terminal Style | | Part No. | Ordering No. | Applicable Wire (mm ²) | Terminal Screw | Width (mm) | Package Quantity | Page | |
|---------------------------------------|--------|----------|--------------|------------------------------------|----------------|------------|------------------|------|-------|
| Large Capacity (Surface Mount) | | | | | | | | | |
| Screw | 2-pole | 240A | BN200BW2K | BN200BW2K | 100 | M10 | 37 | 1 | G-017 |
| | 3-pole | | BN200BW3K | BN200BW3K | | | | | |
| | 4-pole | | BN200BW4K | BN200BW4K | | | | | |
| | 2-pole | 310A | BN300BW2K | BN300BW2K | 150 | M10 | 44 | 1 | G-018 |
| | 3-pole | | BN300BW3K | BN300BW3K | | | | | |
| | 4-pole | | BN300BW4K | BN300BW4K | | | | | |
| | 2-pole | 370A | BN400BW2K | BN400BW2K | 200 | M12 | 57 | 1 | G-019 |
| | 3-pole | | BN400BW3K | BN400BW3K | | | | | |
| | 4-pole | | BN400BW4K | BN400BW4K | | | | | |
| | 2-pole | 430A | BN500BW2K | BN500BW2K | 250 | M16 | 57 | 1 | G-020 |
| | 3-pole | | BN500BW3K | BN500BW3K | | | | | |
| | 4-pole | | BN500BW4K | BN500BW4K | | | | | |
| Stud | 2-pole | 240A | BN200NW2K | BN200NW2K | 100 | M10 | 37 | 1 | G-017 |
| | 3-pole | | BN200NW3K | BN200NW3K | | | | | |
| | 4-pole | | BN200NW4K | BN200NW4K | | | | | |
| | 2-pole | 310A | BN300NW2K | BN300NW2K | 150 | M10 | 44 | 1 | G-018 |
| | 3-pole | | BN300NW3K | BN300NW3K | | | | | |
| | 4-pole | | BN300NW4K | BN300NW4K | | | | | |
| | 2-pole | 370A | BN400NW2K | BN400NW2K | 200 | M12 | 57 | 1 | G-019 |
| | 3-pole | | BN400NW3K | BN400NW3K | | | | | |
| | 4-pole | | BN400NW4K | BN400NW4K | | | | | |
| | 2-pole | 430A | BN500NW2K | BN500NW2K | 250 | M16 | 57 | 1 | G-020 |
| | 3-pole | | BN500NW3K | BN500NW3K | | | | | |
| | 4-pole | | BN500NW4K | BN500NW4K | | | | | |
| | 2-pole | 520A | BN600NW2K | BN600NW2K | 325 | M16 | 57 | 1 | G-020 |
| | 3-pole | | BN600NW3K | BN600NW3K | | | | | |
| | 4-pole | | BN600NW4K | BN600NW4K | | | | | |

| Terminal Style | | Part No. | Ordering No. | Applicable Wire (mm ²) | Terminal Screw | Width (mm) | Package Quantity | Page | |
|--|---------|----------|--------------|------------------------------------|----------------|------------|------------------|-------|-------|
| With Disconnecting Switch, Fuse | | | | | | | | | |
| Disconnecting Switch | 20A | 1-pole | BNT20 | BNT20PN20 | 5.5 | M4 | 15 | 20 | G-021 |
| With Fuse | 10A | 1-pole | BNF10S-□ | BNF10S-□APN20 | 5.5 | M4 | 15 | 20 | |
| Double-Deck Terminal Block | | | | | | | | | |
| Screw-in | 16A | 1-pole | BND15W | BND15WPN25 | 1.25 (2)* | M3 | 8 | 25 | G-022 |
| Touch-Down | | | BNDH15W | BNDH15WPN25 | | | | | |
| Screw-in | 21A | 1-pole | BND15LW | BND15LWPN25 | 2 | M3.5 | 8 | 25 | G-023 |
| Touch-Down | | | BNDH15LW | BNDH15LWPN25 | | | | | |
| Screw-in | 21A | 1-pole | BND15WT | BND15WTPN25 | 2 | M3.5 | 12 | 25 | G-023 |
| Touch-Down | | | BNDH15WT | BNDH15WTPN25 | | | | | |
| Common Terminal | | | | | | | | | |
| Screw-in 16A (Common Current) | 4-pole | BN15MC4 | BN15MC4PN10 | 1.25 (2)* | M3 | 8 | 10 | G-024 | |
| | 8-pole | BN15MC8 | BN15MC8PN10 | | | | | | |
| | 10-pole | BN15MC10 | BN15MC10PN10 | | | | | | |

* The rated applicable wire size is 1.25 mm², but 2 mm² wires can also be connected. Specify the fuse rating in place of □. 1A: 1, 3A: 3, 5A: 5.

BN-W / BNH-W Series Terminal Blocks

Accessories

When ordering accessories, check if the accessories are necessary by referring to the table.

X: Necessary

O: Optional

| | | Accessories (X: Necessary) | | | | | | | | | | | | | | |
|-------------------------|---------------------------|---|---|---|--------------------|------------|---------------|------------------------|-----------------------|--------|--------------|--------------------|----------------|----------------|---|--|
| | | End Plate | Rail | End Clip | Rail Mounting Clip | Dust Cover | Marking Strip | Marking Strip Fastener | Sliding Marking Strip | Jumper | Removal Tool | Surface Mount Clip | Connecting Rod | Connecting Nut | | |
| APEM | Terminal | Part No. | | | | | | | | | | | | | | |
| Switches & Pilot Lights | Standard | 16A to 40A Screw-in Touch-Down | BN10W, BN15MW, BN15LW, BN15MWT, BN15LWT, BN30W | X | X | X | O | O | O | O | O | O | — | — | — | |
| Control Boxes | | 70A Screw-in Touch-Down | BNH10W, BNH15MW, BNH15LW, BNH15MWT, BNH15LWT, BNH30W | X | X | X | O | O | O | O | — | O | — | — | — | |
| Emergency Stop Switches | | 70A Screw-in Touch-Down | BN50W, BNH50W | X | X | X | O | O | O | — | O | — | — | — | — | |
| Enabling Switches | Large Capacity | Rail Mount 1-Pole 94A to 175A | BN75W, BN100W, BN150W, BN150NW | X | X | X | O | O | O | — | — | — | — | — | — | |
| Safety Products | | Rail Mount 240A to 370A | BN200BW□, BN300BW□, BN400BW□ BN200NW□, BN300NW□, BN400NW□ | — | X | X | — | Supplied | Supplied | — | — | — | — | — | — | |
| Explosion Proof | | Surface Mount 240A to 520A | BN200BW□K, BN300BW□K, BN400BW□K BN200NW□K, BN300NW□K, BN400NW□K BN500BW□K, BN500NW□K, BN600NW□K | — | — | — | — | Supplied | Supplied | — | — | — | — | — | — | |
| Terminal Blocks | With Disconnecting Switch | BNT20 | | X | X | X | O | O | O | — | — | — | — | — | — | |
| Relays & Sockets | With Fuse | BNF10S-□A, BNF10N-□A | | X | X | X | O | — | O | O | — | — | — | — | — | |
| Circuit Protectors | Double-Deck | BND15W, BND15LW, BNDH15W, BNDH15LW, BND15WT, BNDH15WT | | X | X *1 | X *1 | O | O | O | — | O | — | X *2 | X | X | |
| Power Supplies | Common Terminal | BN15MC□ | | — | X | X | — | O | O | O | — | — | — | — | — | |
| LED Illumination | | | | G-025 | | G-026 | | G-027 | | G-028 | G-029 | | | | | |
| Controllers | | | | Page | | | | | | | | | | | | |
| Operator Interfaces | | | | *1: Accessory not necessary for surface mounting. | | | | | | | | | | | | |
| Sensors | | | | *2: Accessory not necessary for rail mounting. | | | | | | | | | | | | |
| AUTO-ID | | | | Specify the number of poles in place of □. | | | | | | | | | | | | |


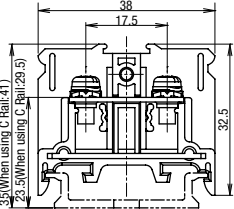
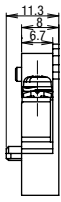

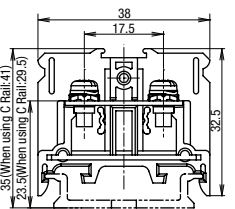
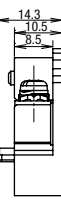

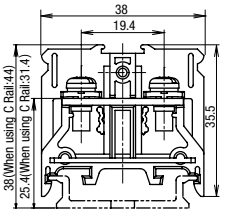

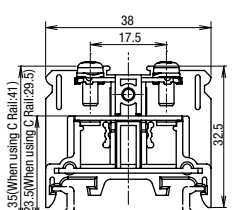
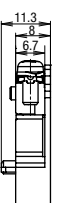

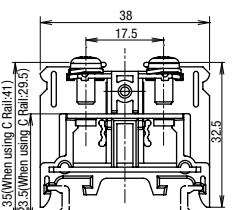
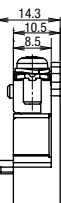

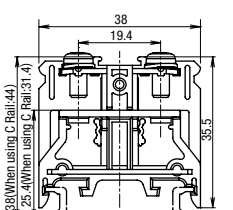
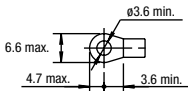
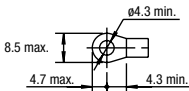
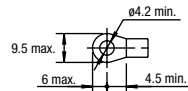
| | | ☆ BN10W | 16A | M3 | ☆ BN15MW | 16A | M3 | ☆ BN15LW | 21A | M3.5 | |
|-------------------------|--------------------------------------|--|----------------|-------------------------------------|----------------------|----------------|----------------------------------|---|----------------|----------------------------------|-------------------|
| Standard | Screw-in Terminal | Dimensions | | | | | | | | | |
| | | Ordering No. | BN10WPN50 | | | BN15MWPN50 | | | BN15LWPN50 | | |
| | | Package Quantity | 50 | | | 50 | | | 50 | | |
| | | Weight (Approx.) | 5.5g | | | 6.5g | | | 6.5g | | |
| | | Part No. | ☆ BNH10W | 16A | M3 | ☆ BNH15MW | 16A | M3 | ☆ BNH15LW | 21A | M3.5 |
| | Touch-Down Terminal | Dimensions | | | | | | | | | |
| | | Ordering No. | BNH10WPN50 | | | BNH15MWPN50 | | | BNH15LWPN50 | | |
| | | Package Quantity | 50 | | | 50 | | | 50 | | |
| | | Weight (Approx.) | 6.5g | | | 7g | | | 7.5g | | |
| | | Part No. | ☆ BNH10W | 16A | M3 | ☆ BNH15MW | 16A | M3 | ☆ BNH15LW | 21A | M3.5 |
| Specification / Ratings | Standards | | UL/CSA | EN | JIS | UL/CSA | EN | JIS | UL/CSA | EN | JIS |
| | Insulation Voltage | | 600V | 660V | 800V | 600V | 660V | 800V | 600V | 660V | 630V |
| | Wire Size | | 22-16 AWG | 1.25 mm ² (22-16 AWG) | 1.25 mm ² | 22-14 AWG | 2 mm ² (22-14 AWG) | 1.25 mm ² (*1) (2mm ² max) | 22-14 AWG | 2 mm ² (22-14 AWG) | 2 mm ² |
| | Rated Current *2 | | 15A | 16A | 16A | 15A | 22A | 16A | 20A | 22A | 21A |
| | Terminal screw | | M3 | | | M3 | | | M3.5 | | |
| | Crimping Terminal | | 1.25-3 | | | 1.25-3 (2-3) | | | 2-3.5 | | |
| | Max. No. of Crimping Terminals | | 2 | | | 2 | | | 2 | | |
| | Tightening Torque | | 0.6 to 1.0 N·m | | | 0.6 to 1.0 N·m | | | 1.0 to 1.3 N·m | | |
| | Crimping Terminal Dimensions (mm) *3 | | | | | | | | | | |
| | Accessories *4 | End Plate | | BNE15W | | | | | | | |
| Dust Cover | | BNC230 | | | | | | | | | |
| Marking Strip | | PVC 1m/BNM7, Fiber glass 1m/BNM9, PVC 25m/BNM725 | | | | | | | | | |
| Marking Strip Fastner | | BNM3 | | | | | | | | | |
| DIN Rail/End Clip | | Aluminum: BAA1000, Steel: BNL6 | | | | | | | | | |
| C Rail/End Clip | | Aluminum: BNCA1000, Steel: BNL7 | | | | | | | | | |
| DIN + C Rail/End Clip | | Aluminum: BNJA1000, Steel: BNL6/BNL7 | | | | | | | | | |

*1: The rated applicable wire size is 1.25 mm², but 2 mm² wires can also be connected.
 *2: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.
 *3: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.
 *4: See G-025 for details on accessories.
 • Part No. with ☆ is UL recognized for field wiring (FW2).

- APEM
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- Control Boxes
- Emergency Stop Switches
- Enabling Switches
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- Relays & Sockets
- Circuit Protectors
- Power Supplies
- LED Illumination
- Controllers
- Operator Interfaces
- Sensors
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BN

BN-W / BNH-W Series Terminal Blocks

| Standard | Part No. | ☆ BN15MWT | 21A | M3.5 | ☆ BN15LWT | 30A | M4 | ☆ BN30W | 40A | M4 |
|--------------------------------------|---|--|---|---|---|---|--|---|--|---|
| | | Dimensions |  |  |  |  |  |  |  |  |
| Ordering No. | | BN15MWTPN50 | | | BN15LWTPN50 | | | BN30WPN50 | | |
| Package Quantity | | 50 | | | 50 | | | 50 | | |
| Weight (Approx.) | | 9g | | | 9.5g | | | 13g | | |
| Standard | Part No. | ☆ BNH15MWT | 21A | M3.5 | ☆ BNH15LWT | 30A | M4 | ☆ BNH30W | 40A | M4 |
| | | Dimensions |  |  |  |  |  |  |  |  |
| Ordering No. | | BNH15MWTPN50 | | | BNH15LWTPN50 | | | BNH30WPN50 | | |
| Package Quantity | | 50 | | | 50 | | | 50 | | |
| Weight (Approx.) | | 10g | | | 10g | | | 14g | | |
| Specification / Ratings | Standards | UL/CSA | EN | JIS | UL/CSA | EN | JIS | UL/CSA | EN | JIS |
| | Insulation Voltage | 600V | 660V | 800V | 600V | 660V | 630V | 600V | 660V | 630V |
| | Wire Size | 22-14 AWG | 2 mm ² (22-14 AWG) | 2 mm ² | 22-14 AWG | 3.5 mm ² (22-14 AWG) | 3.5 mm ² | 18-10 AWG | 5.5 mm ² (18-10 AWG) | 5.5 mm ² |
| | Rated Current *1 | 15A | 22A | 21A | 30A | 22A | 30A | 35A | 38A | 40A |
| | Terminal screw | M3.5 | | | M4 | | | M4 | | |
| | Crimping Terminal | 1.25-3.5 to 2-3.5 | | | 1.25-4 to 3.5-4 | | | 1.25-4 to 5.5-4 | | |
| | Max. No. of Crimping Terminals | 2 | | | 2 | | | 2 | | |
| Tightening Torque | 1.0 to 1.3 N·m | | | 1.4 to 2.0 N·m | | | 1.4 to 2.0 N·m | | | |
| Crimping Terminal Dimensions (mm) *2 |  |  |  | | | | | | | |
| | 6.6 max. | 8.5 max. | 9.5 max. | | | | | | | |
| | 4.7 max. | 4.7 max. | 6 max. | | | | | | | |
| Accessories *3 | End Plate | BNE15W | | | | | BNE30W | | | |
| | Dust Cover | BNC230 | | | | | BNC230 | | | |
| | Marking Strip | PVC 1m/BNM7, Fiber glass 1m/BNM9, PVC 25m/725 | | | | | | | | |
| | Marking Strip Fastner | BNM3 | | | | | | | | |
| | DIN Rail/End Clip | Aluminum: BAA1000, Steel: BNL6 | | | | | | | | |
| | C Rail/End Clip | Aluminum: BNCA1000, Steel: BNL7 | | | | | | | | |
| | DIN + C Rail/End Clip | Aluminum: BNJA1000, Steel: BNL6/BNL7 | | | | | | | | |

*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.

*2: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.

*3: See G-025 for details on accessories.

• Part No. with ☆ is UL recognized for field wiring (FW2).

| | | | | | |
|--------------------------------------|--------------------------------|---|----------------------------------|--------------------|--|
| Standard | Screw-in Terminal | Part No. | ☆ BN50W 70A M5 | | |
| | | Dimensions | | | |
| | | Ordering No. | BN50WPN20 | | |
| | | Package Quantity | 20 | | |
| | | Weight (Approx.) | 25.4g | | |
| | Touch-Down Terminal | Part No. | ☆ BNH50W 70A M5 | | |
| | | Dimensions | | | |
| | | Ordering No. | BNH50WPN20 | | |
| | | Package Quantity | 20 | | |
| | | Weight (Approx.) | 29g | | |
| Standards | | UL/CSA | EN | JIS | |
| Specification / Ratings | Insulation Voltage | 600V | 660V | 800V | |
| | Wire Size | 16-6 AWG | 14 mm ² (16-6 AWG) | 14 mm ² | |
| | Rated Current *1 | 60A | 67A | 70A | |
| | Terminal screw | M5 | | | |
| | Crimping Terminal | 1.25-5 to 14-5 | | | |
| | Max. No. of Crimping Terminals | 2 | | | |
| | Tightening Torque | 2.6 to 3.7 N·m | | | |
| Crimping Terminal Dimensions (mm) *2 | | | | | |
| Accessories *3 | End Plate | BNE50W | | | |
| | Dust cover | BNC320 | | | |
| | Marking Strip | PVC 1m/BNM7, Fiber glass 1m/BNM9, PVC 25m/725 | | | |
| | Marking Strip Fastner | BNM3 | | | |
| | DIN Rail/End Clip | Aluminum: BAA1000, Steel: BNL8 | | | |
| | C Rail/End Clip | Aluminum: BNCA1000, Steel: BNL8 | | | |
| | DIN + C Rail/End Clip | Aluminum: BNJA1000, Steel: BNL8 | | | |

*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.

*2: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.

*3: See G-025 for details on accessories.

• Part No. with ☆ is UL recognized for field wiring (FW2).

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Controllers

 Operator
Interfaces

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BN

BN-W / BNH-W Series Terminal Blocks

| Part No. | ☆ BN75W | 94A | M6 | BN100W | 132A | M8 |
|------------------|------------|-----|----|------------|------|----|
| | Dimensions | | | | | |
| Ordering No. | BN75WPN10 | | | BN100WPN05 | | |
| Package Quantity | 10 | | | 5 | | |
| Weight (Approx.) | 45g | | | 86g | | |

| Standards | UL/CSA | EN | JIS | UL/CSA | EN | JIS | |
|--------------------------------------|---|--|--------------------|---|------------------------------|--------------------|--|
| Insulation Voltage | 600V | 660V | 1000V | 600V | 660V | 1000V | |
| Wire Size | 16-4 AWG | 22 mm ² (8-4 AWG) | 22 mm ² | 16-2 AWG | 38 mm ² (2AWG) | 38 mm ² | |
| Rated Current *1 | 80A | 94A | 94A | 100A | 132A | 132A | |
| Terminal screw *2 | M6 | | | M8 | | | |
| Crimping Terminal | 2-6 to 22-6 | | | 2-8 to 38-8 | | | |
| Max. No. of Crimping Terminals | 2 | | | 2 | | | |
| Socket Wrench | 12.7 mm square drive hexagonal socket 10 (*4) | | | 12.7 mm square drive hexagonal socket 13 (*2) | | | |
| Tightening Torque | 3.9 to 5.4 N·m | | | 10 to 13.5 N·m | | | |
| Crimping Terminal Dimensions (mm) *3 | | | | | | | |
| Accessories *5 | End Plate | BNE75W | | | BNE100W | | |
| | Dust Cover | BNC420 | | | BNC520 | | |
| | Marking Strip | PVC 1m/BNM7, Fiber glass 1m/BNM9, PVC 25m/BNM725 | | | | | |
| | Marking Strip Fastner | BNM3 | | | | | |
| | DIN Rail/End Clip | Aluminum: BAA1000, Steel: BNL8 | | | | | |
| Type C Rail/End Clip | Aluminum: BNCA1000, Steel: BNL8 | | | | | | |
| DIN+Type C Rail/End Clip | Aluminum: BNJA1000, Steel: BNL8 | | | | | | |

*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.



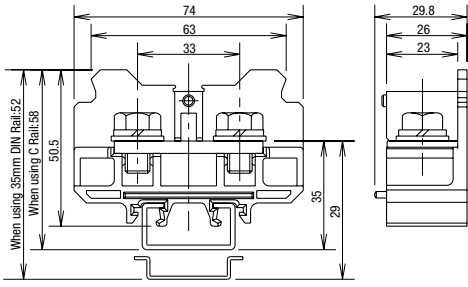
*2: The grooves on the head of the hex bolt are for temporary tightening. For proper tightening, use an applicable socket wrench and tighten within the range of the recommended tightening torque.

*3: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.

*4: Applicable wrench or screwdriver can be used to tighten screws.

*5: See G-025 for details on accessories.

• Part No. with ☆ is UL recognized for field wiring (FW2).

| Part No. | | BN150W 175A M8 | | | BN150NW 175A M8 | | |
|--------------------------------------|--|---|---------------------------------|--------------------|--|-----|--------------------|
| Large Capacity Screw Terminal | Dimensions |  | | |  | | |
| | Ordering No. | BN150WPN05 | | | BN150NWP05 | | |
| | Packaging Quantity | 5 | | | 5 | | |
| | Weight (Approx.) | 88g | | | 95g | | |
| Standards | UL/CSA | EN | JIS | — | — | JIS | |
| Specification / Ratings | Insulation Voltage | 600V | 660V | 1000V | — | — | 630V |
| | Wire Size | 16-1/0 AWG | 60 mm ² (1/0 AWG) | 60 mm ² | — | — | 60 mm ² |
| | Rated Current *1 | 150A | 175A | 175A | — | — | 175A |
| | Terminal screw *2 | M8 | | | M8 | | |
| | Crimping Terminal | 2-8 to 60-8 | | | 2-8 to 60-8 | | |
| | Max. No. of Crimping Terminals | 2 | | | 2 | | |
| | Socket Wrench | 12.7 mm square drive hexagonal socket 13 (*4) | | | 12.7 mm square drive hexagonal socket 13 | | |
| | Tightening Torque | 10 to 13.5 N·m | | | 10 to 13.5 N·m | | |
| Crimping Terminal Dimensions (mm) *3 |  | | | | | | |
| Accessories *5 | End Plate | BNE150W | | | | | |
| | Dust Cover | BNC520 | | | | | |
| | Marking Strip | PVC 1m/BNM7, Fiber glass 1m/BNM9 PVC 25m/BNM725 | | | | | |
| | Marking Strip Fastner | BNM3 | | | | | |
| | DIN Rail/End Clip | Aluminum BAA1000, Steel: BNL8 | | | | | |
| | Type C Rail/End Clip | Aluminum: BNCA1000, Steel: BNL8 | | | | | |
| | DIN+Type C Rail/End Clip | Aluminum: BNJA1000, Steel: BNL8 | | | | | |

*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.

*2: The grooves on the head of the hex bolt are for temporary tightening. For proper tightening, use an applicable socket wrench and tighten within the range of the recommended tightening torque.

*3: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.

*4: Applicable wrench or screwdriver can be used for tightening screws.

*5: See G-025 for details on accessories.

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BN-W / BNH-W Series Terminal Blocks

| Part No. | BN200BW□ 240A M10 | | | BN200BW□K 240A M10 Surface Mount | | | |
|--------------------------------------|--|---|-------------------------------|----------------------------------|---|-------------------------------|---------------------|
| | Dimensions | | | | | | |
| Package Quantity | 1 | | | 1 | | | |
| Weight (Approx.) | 2P: 430g, 3P: 650g, 4P: 870g | | | 2P: 490g, 3P: 710g, 4P: 930g | | | |
| Part No. | BN200NW□ 240A M10 | | | BN200NW□K 240A M10 Surface Mount | | | |
| | Dimensions | | | | | | |
| Package Quantity | 1 | | | 1 | | | |
| Weight (Approx.) | 2P: 500g, 3P: 720g, 4P: 940g | | | 2P: 560g, 3P: 780g, 4P: 1000g | | | |
| Standards | UL/CSA | EN | JIS | UL/CSA | EN | JIS | |
| Specification / Ratings | Insulation Voltage | 600V | 660V | 800V | 600V | 660V | 800V |
| | Wire Size | 4/0 AWG | 100 mm ² (4/0 AWG) | 100 mm ² | 4/0 AWG | 100 mm ² (4/0 AWG) | 100 mm ² |
| | Rated Current *1 | 200A | 240A | 240A | 200A | 240A | 240A |
| | Terminal Screw *2 | M10 | | | M10 | | |
| | Crimping Terminal | 5.5-10 to 100-10 | | | 5.5-10 to 100-10 | | |
| | Max. No. of Crimping Terminals | 2 | | | 2 | | |
| | Socket Wrench | 12.7 mm square drive hexagonal socket 17 (*2) | | | 12.7 mm square drive hexagonal socket 17 (*2) | | |
| Tightening Torque | 21 to 28 N·m | | | 21 to 28 N·m | | | |
| Crimping Terminal Dimensions (mm) *3 | | | | | | | |
| Accessories (Supplied) | End Plate, Dust Cover, Marking Strip are supplied. (Note) Marking Strip Fastener (BNM3) is not necessary. | | | | | | |
| Accessories *4 | DIN Rail | Aluminum: BAA1000 | | | — | | |
| | C Rail | Aluminum: BNCA1000 | | | — | | |
| | DIN+C Rail | Aluminum: BNJA1000 | | | — | | |
| | End Clip | Steel: BNL8 | | | — | | |

*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.
 *2: The grooves on the head of the hex bolt are for temporary tightening. For proper tightening, use an applicable socket wrench and tighten within the range of the recommended tightening torque.
 *3: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.
 *4: See G-025 for details on accessories.
 Specify the number of poles in place of □. 2-pole: 2, 3-pole: 3, 4-pole: 4.

| | | | | | | | | | | |
|--------------------------------------|--|---|----------------------------------|---------------------|--------------|---|---------------------|------|---------------|--|
| Large Capacity | Screw Terminal | Part no. | BN300BW□ | 310A | M10 | BN300BW□K | 310A | M10 | Surface Mount | |
| | | Dimensions | | | | | | | | |
| | | Package Quantity | 1 | | | | 1 | | | |
| | Weight (Approx.) | 2P: 480g, 3P: 750g, 4P: 1020g | | | | 2P: 540g, 3P: 810g, 4P: 1080g | | | | |
| | Stud Terminal | Part no. | BN300NW□ | 310A | M10 | BN300NW□K | 310A | M10 | Surface Mount | |
| | | Dimensions | | | | | | | | |
| | | Package Quantity | 1 | | | | 1 | | | |
| | Weight (Approx.) | 2P: 540g, 3P: 810g, 4P: 1080g | | | | 2P: 600g, 3P: 870g, 4P: 1140g | | | | |
| | Specification / Ratings | Standards | UL/CSA | EN | JIS | UL/CSA | EN | JIS | | |
| | | Insulation Voltage | 600V | 660V | 800V | 600V | 660V | 800V | | |
| Wire Size | | 300 MCM | 150 mm ² (300 MCM) | 150 mm ² | 300 MCM | 150 mm ² (300 MCM) | 150 mm ² | | | |
| Rated Current *1 | | 310A | 310A | 310A | 310A | 310A | 310A | | | |
| Terminal Screw *2 | | M10 | | | | M10 | | | | |
| Crimping Terminal | | 5.5-10 to 150-10 | | | | 5.5-10 to 150-10 | | | | |
| Max. No. of Crimping Terminals | | 2 | | | | 2 | | | | |
| Socket Wrench | | 12.7 mm square drive hexagonal socket 17 (*2) | | | | 12.7 mm square drive hexagonal socket 17 (*2) | | | | |
| Tightening Torque | 21 to 28 N-m | | | | 21 to 28 N-m | | | | | |
| Crimping Terminal Dimensions (mm) *3 | | | | | | | | | | |
| Accessories (Supplied) | End Plate, Dust Cover, Marking Strip are supplied. (Note) Marking Strip Fastener (BNM3) is not necessary. | | | | | | | | | |
| Accessories *4 | DIN Rail | Aluminum: BAA1000 | | | | — | | | | |
| | C Rail | Aluminum: BNCA1000 | | | | — | | | | |
| | DIN+C Rail | Aluminum: BNJA1000 | | | | — | | | | |
| | End Clip | Steel: BNL8 | | | | — | | | | |

*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.
 *2: The grooves on the head of the hex bolt are for temporary tightening. For proper tightening, use an applicable socket wrench and tighten within the range of the recommended tightening torque.
 *3: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.
 *4: See G-025 for details on accessories.
 Specify the number of poles in place of □. 2-pole: 2, 3-pole: 3, 4-pole: 4.

- APEM
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BN-W / BNH-W Series Terminal Blocks


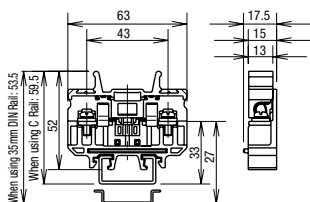



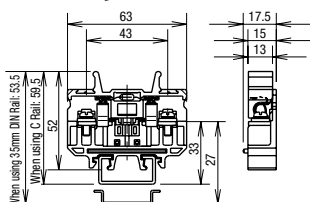


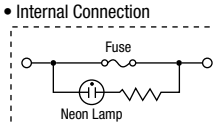

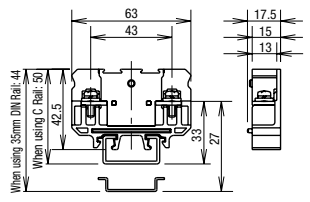


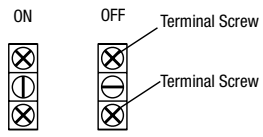
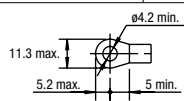
| Terminal Type | Part no. | BN400BW□ 370A M12 | BN400BW□K 370A M12 Surface Mount | | | | |
|--------------------------------------|---|---|----------------------------------|---------------------|---|-------------------------------|---------------------|
| | Screw Terminal | Dimensions | | | | | |
| Package Quantity | | 1 | 1 | | | | |
| Weight (Approx.) | | 2P: 950g, 3P: 1400g, 4P: 1860g | 2P: 1030g, 3P: 1480g, 4P: 1940g | | | | |
| Stud Terminal | Part No. | BN400NW□ 370A M12 | BN400NW□K 370A M12 Surface Mount | | | | |
| | Dimensions | | | | | | |
| | Package Quantity | 1 | 1 | | | | |
| Weight (Approx.) | 2P: 980g, 3P: 1460g, 4P: 1930g | 2P: 1060g, 3P: 1540g, 4P: 1990g | | | | | |
| Specification / Ratings | Standards | UL/CSA | EN | JIS | UL/CSA | EN | JIS |
| | Insulation Voltage | 600V | 660V | 800V | 600V | 660V | 800V |
| | Wire Size | 400 MCM | 200 mm ² (400 MCM) | 200 mm ² | 400 MCM | 200 mm ² (400 MCM) | 200 mm ² |
| | Rated Current *1 | 350A | 370A | 370A | 350A | 370A | 370A |
| | Terminal Screw *2 | M12 | | | M12 | | |
| | Crimping Terminal | 14-12 to 200-12 | | | 14-12 to 200-12 | | |
| | Max. No. of Crimping Terminals | 2 | | | 2 | | |
| | Socket Wrench | 12.7 mm square drive hexagonal socket 19 (*2) | | | 12.7 mm square drive hexagonal socket 19 (*2) | | |
| Tightening Torque | 38 to 49 N·m | | | 38 to 49 N·m | | | |
| Crimping Terminal Dimensions (mm) *3 | | | | | | | |
| Accessories (Supplied) | End Plate, Dust Cover, Marking Strip are supplied. (Note) Marking Strip Fastener (BNM3) is not necessary. | | | | | | |
| Accessories *4 | DIN Rail | Aluminum: BAA1000 | | | — | | |
| | C Rail | Aluminum: BNCA1000 | | | — | | |
| | DIN+C Rail | Aluminum: BNJA1000 | | | — | | |
| | End Clip | Steel: BNL8 | | | — | | |

*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.
 *2: The grooves on the head of the hex bolt are for temporary tightening. For proper tightening, use an applicable socket wrench and tighten within the range of the recommended tightening torque.
 *3: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.
 *4: See G-025 for details on accessories.
 Specify the number of poles in place of □. 2-pole: 2, 3-pole: 3, 4-pole: 4.

| | | | | | | | | | |
|--------------------------------------|--|---|----------------------------------|---------------------|---|----------------------------------|---------------------|------|-----|
| Large Capacity Surface Mount | Screw Terminal | Part No | BN500BW□K | 430A | M16 | Surface Mount | — | | |
| | | Dimensions | | | | | | | |
| | | Package Quantity | 1 | | | | | | |
| | | Weight (Approx.) | 2P: 1550g, 3P: 2250g, 4P: 2950g | | | | | | |
| | | Part No. | BN500NW□K | 430A | M16 | Surface Mount | BN600NW□K | 520A | M16 |
| | Stud Terminal | Dimensions | | | | | | | |
| | | Package Quantity | 1 | | | | | | |
| | | Weight (Approx.) | 2P: 1600g, 3P: 2300g, 4P: 3000g | | | | | | |
| | | Package Quantity | 1 | | | | | | |
| | | Weight (Approx.) | 2P: 1650g, 3P: 2400g, 4P: 3150g | | | | | | |
| Standards | UL/CSA | EN | JIS | UL/CSA | EN | JIS | | | |
| Specification / Ratings | Insulation Voltage | 600V | 660V | 800V | 600V | 660V | 800V | | |
| | Wire Size | 500 MCM | 240 mm ² (500 MCM) | 250 mm ² | 600 MCM | 300 mm ² (600 MCM) | 325 mm ² | | |
| | Rated Current *1 | 500A | 430A | 430A | 600A | 520A | 520A | | |
| | Terminal Screw *2 | M16 | | | M16 | | | | |
| | Crimping Terminal | 14-16 to 200-16 | | 325-16 | 14-16 to 200-16 | | 325-16 | | |
| | Max. No. of Crimping Terminals | 2 | | 1 | 2 | | 1 | | |
| | Socket Wrench | 12.7 mm square drive hexagonal socket 24 (*2) | | | 12.7 mm square drive hexagonal socket 24 (*2) | | | | |
| | Tightening Torque | 83 to 116 N·m | | | 83 to 116 N·m | | | | |
| Crimping Terminal Dimensions (mm) *3 | | | | | | | | | |
| Accessories (Supplied) *4 | End Plate, Dust Cover, Marking Strip are supplied. (Note) Marking Strip Fastener (BNM3) is not necessary. | | | | | | | | |

*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.
 *2: The grooves on the head of the hex bolt are for temporary tightening. For proper tightening, use an applicable socket wrench and tighten within the range of the recommended tightening torque.
 *3: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.
 *4: See G-025 for details on accessories.
 Specify the number of poles in place of □. 2-pole: 2, 3-pole: 3, 4-pole: 4.

BN-W / BNH-W Series Terminal Blocks

| | BNF10S-□A 10A M4 | BNF10N-□A (With Lamp) 10A M4 | BNT20 20A M4 |
|-----------------------------------|---|---|---|
| Screw-in Terminal with Fuse |     <p>Fuse Ratings</p> <ul style="list-style-type: none"> Rated Voltage: 250V Rated Current: 1, 3, 5A Cartridge Fuse: JIS C 6575-2 6.35×31.8 mm or 6.40×30.0 mm Part No.: BNF10S-1A, BNF10S-3A, BNF10S-5A Cartridge used: FGB1 by FUJI Terminal Industry Co., Ltd. <p>Notes: UL/CSA approved products shown below are not supplied with fuses. When UL/CSA approval is required for fuse terminal blocks, use UL/CSA-rated fuses.</p> <ul style="list-style-type: none"> Part No.: BNF10SW Rated Insulation Voltage: 600V Rated Current: 10A Applicable Wire: 18-10 AWG UL File No.: E78117 CSA File No.: LR64803 |     <p>• Internal Connection</p>  <p>Notes: Neon lamp turns on when the fuse blows. For the neon lamp to turn on, the voltages must be from 100 to 250V AC.</p> <p>Fuse Ratings</p> <ul style="list-style-type: none"> Rated Voltage: 250V Rated Current: 1, 3, 5A Cartridge Fuse: JIS C 6575-2 6.35×31.8 mm or 6.40×30.0 mm Part No.: BNF10N-1A, BNF10N-3A, BNF10N-5A <p>Note: 6.4×30.0mm fuse can also be used.</p> <p>Notes: UL/CSA approved products shown below are not supplied with fuses. When UL/CSA approval is required for fuse terminal blocks, use UL/CSA-rated fuses.</p> <ul style="list-style-type: none"> Part No.: BNF10NW Rated Insulation Voltage: 300V Rated Current: 10A Applicable Wire: 18-10 AWG UL File No.: E78117 CSA File No.: LR64803 |     <p>Notes:</p> <ul style="list-style-type: none"> Rated Current: 20A This terminal block cannot be used as a disconnect switch. When switching on/off, make sure that voltage is not applied. <p>ON OFF Terminal Screw</p>  |
| | Screw-in Terminal with Disconnecting Switch | | |
| Ordering No. | BNF10S-□APN20 | BNF10N-□APN20 | BNT20PN20 |
| Package Quantity | 20 | 20 | 20 |
| Weight (Approx.) | 34g | 34g | 36g |
| Standards | JIS | | JIS |
| Specification / Ratings | Insulation Voltage | 600V | |
| | Wire Size | 5.5 mm ² | |
| | Rated Current | 10A max. | 20A |
| | Terminal Screw | M4 | |
| | Crimping Terminal | 1.25-4 to 5.5-4 | |
| | Max. No. of Crimping Terminals | 2 | |
| | Tightening Torque | 1.4 to 2.0 N·m | |
| Crimping Terminal Dimensions (mm) |  | | |
| Accessories *1 | End Plate | BNE20 | |
| | Dust Cover | — | |
| | Marking Strip | — | |
| | DIN Rail/End Clip | Aluminum: BAA1000, Steel: BNL6 | |
| | C Rail/End Clip | Aluminum: BNCA1000, Steel: BNL7 | |
| DIN+C Rail/End Clip | Aluminum: BNJA1000, Steel: BNL6/BNL7 | | |


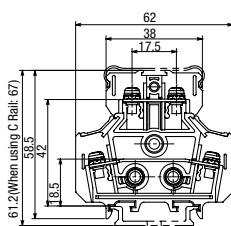
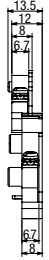

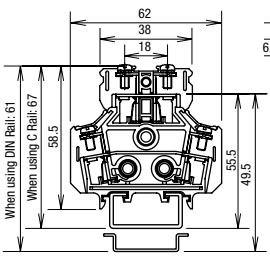
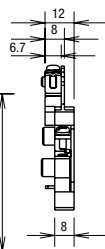
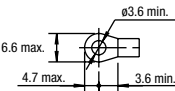
*1: See G-025 for details on accessories.

| | | | | | | | | |
|----------------------------|--------------------------------------|--|-------------------------------|---|--------------------|-------------------------------|-------------------|--|
| Double-Deck Terminal Block | Screw-in Terminal | Part No. | BND15W 16A M3 | | | BND15LW 21A M3.5 | | |
| | | Dimensions | | | | | | |
| | | Ordering No. | BND15WPN25 | | | BND15LWPN25 | | |
| | | Package Quantity | 25 | | | 25 | | |
| | | Weight (Approx.) | 16g | | | 23g | | |
| | Touch-Down Terminal | Part No. | BNDH15W 16A M3 | | | BNDH15LW 21A M3.5 | | |
| | | Dimensions | | | | | | |
| | | Ordering No. | BNDH15WPN25 | | | BNDH15LWPN25 | | |
| | | Package Quantity | 25 | | | 25 | | |
| | | Weight (Approx.) | 17g | | | 26g | | |
| Specification / Ratings | Standards | UL/CSA | EN | JIS | UL/CSA | EN | JIS | |
| | Insulation Voltage | 600V | 660V | 800V | 600V | 660V | 800V | |
| | Wire Size | 22-14 AWG | 2 mm ² (22-14 AWG) | 1.25 mm ² (*1) (2 mm ² max) | 22-14 AWG | 2 mm ² (22-14 AWG) | 2 mm ² | |
| | Rated Current *2 | 10A | 22A | 16A | 15A | 22A | 21A | |
| | Terminal Screw | M3 | | | M3.5 | | | |
| | Crimping Terminal | 1.25-3 (2-3) | | | 2-3.5 | | | |
| | Max. No. of Crimping Terminals | 2 | | | 2 | | | |
| | Tightening Torque | 0.6 to 1 N·m | | | 1 to 1.3 N·m | | | |
| Crimping Terminal (mm) *3 | | | | | | | | |
| | | | | | | | | |
| Accessories *4 | End Plate | BNDE15W/BNDE15W2 | | | BNDE15LW/BNDE15LW2 | | | |
| | Dust Cover | Upper Deck: BNC230, Lower Deck: BNC240 | | | | | | |
| | Marking Strip | PVC 1m/BNM7, Fiber glass 1m/BNM9, PVC 25m/BNM725 | | | | | | |
| | Marking Strip Fastener | BNM3 | | | | | | |
| | Surface Mounting Clip | BNDL2 | | | | | | |
| | Connecting Rod/Connecting Nut | Connecting Rod: BNR1, BNR2, Connecting Nut: BNN1 | | | | | | |
| | DIN Rail/End Clip | Aluminum: BAA1000, Steel: BNL6 | | | | | | |
| | C Rail/End Clip | Aluminum: BNCA1000, Steel: BNL7 | | | | | | |
| DIN+C Rail/End Clip | Aluminum: BNJA1000, Steel: BNL6/BNL7 | | | | | | | |

*1: The rated applicable wire size is 1.25 mm², but 2 mm² wires can also be connected.
 *2: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.
 *3: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.
 *4: See G-025 for details on accessories.

- APEM
- Switches & Pilot Lights
- Control Boxes
- Emergency Stop Switches
- Enabling Switches
- Safety Products
- Explosion Proof
- Terminal Blocks
- Relays & Sockets
- Circuit Protectors
- Power Supplies
- LED Illumination
- Controllers
- Operator Interfaces
- Sensors
- AUTO-ID
- BN

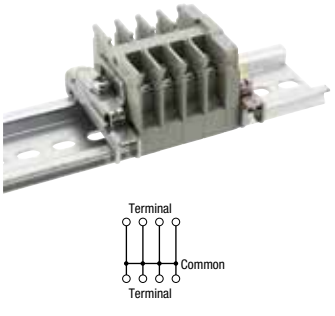
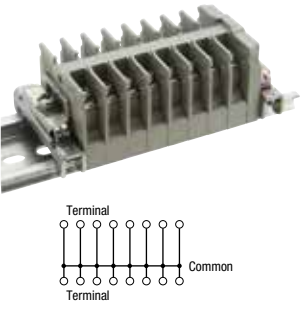
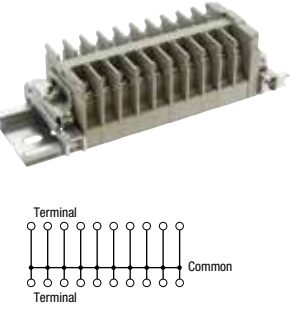
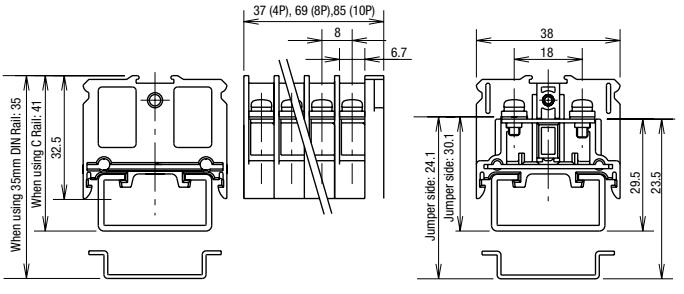
BN-W / BNH-W Series Terminal Blocks

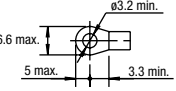
| | | Part No. | BND15WT | 21A | M3.5 | | |
|---------------------|--------------------------------------|--|---|-----|---------------------------------|-----|-------------------|
| Screw-in Terminal | Dimensions |    | | | | | |
| | | Ordering No. | BND15WTPN25 | | | | |
| | | Package Quantity | 25 | | | | |
| | | Weight (Approx.) | 17g | | | | |
| Touch-Down Terminal | Dimensions |    | | | | | |
| | | Ordering No. | BNDH15WTPN25 | | | | |
| | | Package Quantity | 25 | | | | |
| | | Weight (Approx.) | 17g | | | | |
| Standards | Insulation Voltage | UL/CSA | 600V | EN | 660V | JIS | 800V |
| | Wire Size | | 22-14 AWG | | 2mm ² (22-14 AWG) | | 2 mm ² |
| | Rated Current *1 | | 15A | | 22A | | 21A |
| | Terminal Screw | | M3 | | | | |
| | Crimping Terminal | | 1.25-3.5 to 2-3.5 | | | | |
| | Max. No. of Crimping Terminals | | 2 | | | | |
| | Tightening Torque | | 1.0 to 1.3 N·m | | | | |
| | Crimping Terminal (mm) *2 | |  | | | | |
| Accessories *3 | End Plate | BNDE15W/BNDE15W2 | | | | | |
| | Dust Cover | Upper Deck: BNC230, Lower Deck: BNC240 | | | | | |
| | Marking Strip | PVC 1m/BNM7, Fiber glass 1m/BNM9, PVC 25m/BNM725 | | | | | |
| | Marking Strip Fastener | BNM3 | | | | | |
| | Surface Mounting Clip | BNDL2 | | | | | |
| | Connecting Rod/ Connecting Nut | Connecting Rod: BNR1, BNR2, Connecting Nut: BNN | | | | | |
| | DIN Rail/End Clip | Aluminum: BAA1000, Steel: BNL6 | | | | | |
| | C Rail/End Clip | Aluminum: BNCA1000, Steel: BNL7 | | | | | |
| DIN+C Rail/End Clip | Aluminum: BNJA1000, Steel: BNL6/BNL7 | | | | | | |

*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.

*2: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.

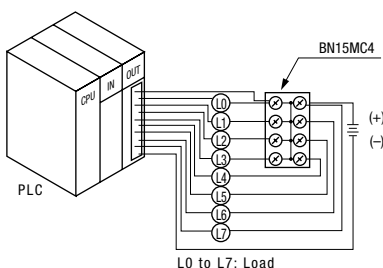
*3: See G-025 for details on accessories.

| | | | | |
|--------------------------------------|------------------|--|--|---|
| Common Terminal Screw-in Terminal | Part No. | BN15MC4 16A (common current) M3 | BN15MC8 16A (common current) M3 | BN15MC10 16A (common current) M3 |
| | No. of Poles | 4 | 8 | 10 |
| | Shape |  |  |  |
| | Dimensions |  | | |
| | Ordering No. | BN15MC4PN10 | BN15MC8PN10 | BN15MC10PN10 |
| | Package Quantity | 10 | 10 | 10 |
| | Weight (Approx.) | 30g | 57g | 70g |
| Color | Light Gray | Light Gray | Light Gray | |

| | | |
|-----------------------------------|--|--|
| Standards | JIS | |
| Insulation Voltage | 600V | |
| Wire Size | 1.25 mm ² (2 mm ² max.) | |
| Rated Current | 16A/Common Current | |
| Terminal Screw | M3 | |
| Crimping Terminal | 1.25-3 (2-3) | |
| Max. No. of Crimping Terminals | 2 | |
| Tightening Torque | 0.6-1.0 N·m | |
| Crimping Terminal Dimensions (mm) |  | |
| Accessories #5 | End Plate | Supplied |
| | Dust Cover | BNC230 |
| | Marking Strip | PVC 1m/BNM7, Fiber glass 1m/BNM9, PVC 25m/BNM725 |
| | Marking Strip Fastener | BNM3 |
| | DIN Rail / End Clip | Aluminum: BAA1000, Steel: BNL6 |
| | C Rail / End Clip | Aluminum: BNCA1000, Steel: BNL7 |
| DIN+C Rail / End Clip | Aluminum: BNJA1000, Steel: BNL6/BNL7 | |

- *1: The rated applicable wire size is 1.25 mm², but 2 mm² wires can also be connected.
- *2: Do not remove the built-in common jumper. Common terminal type terminal blocks cannot be disassembled.
- *3: Make sure that all terminal screws are tightened to an appropriate tightening torque before power is applied.
- *4: Specifications are in compliance with JIS C 8201-7-1.
- *5: See G-025 for details on accessories.

Application Example



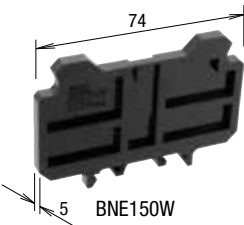
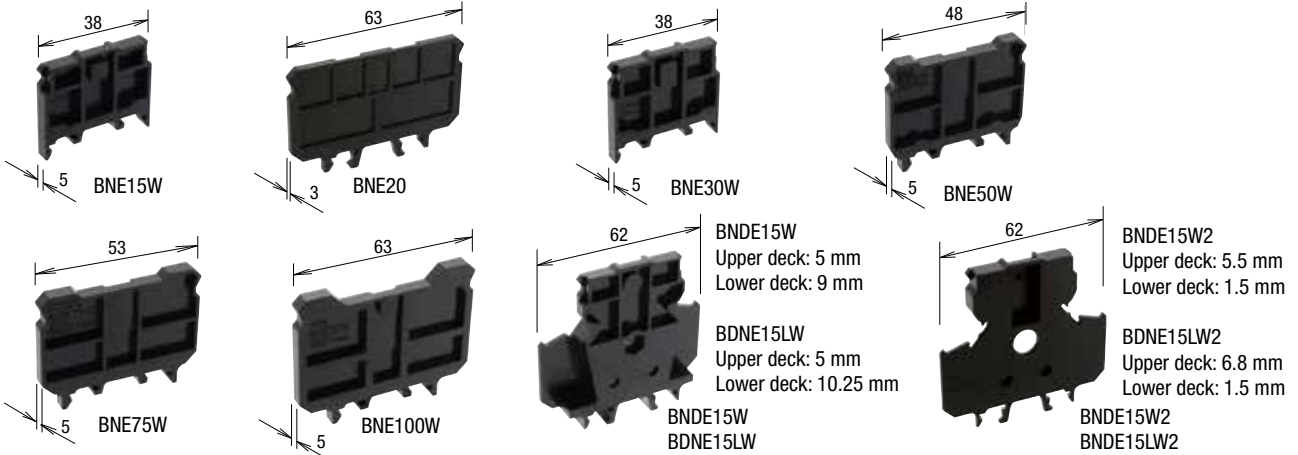
Features

- All terminals are short-circuited by a built-in common jumper. External jumpers are not required.
- Accessories (marking strip, cover, and rails) are compatible with standard types.
- Common terminal type terminal blocks can be combined with other standard types as they are identical in shape and in size as BN15MW.
- Color: Light Gray

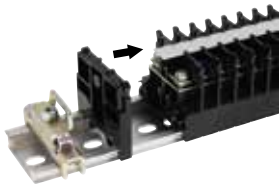
Accessories (End Plate / Rail)

End Plates

Used for ends of terminal blocks. Also used to hold the marking strips in place.



Securing a marking strip with the end plate

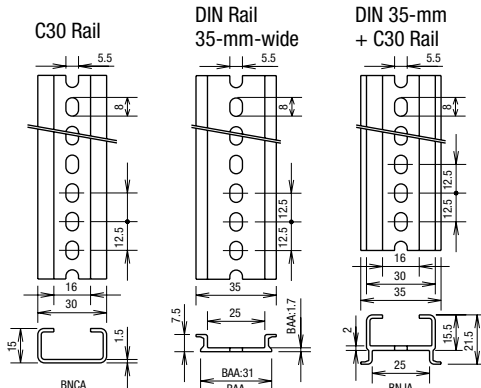
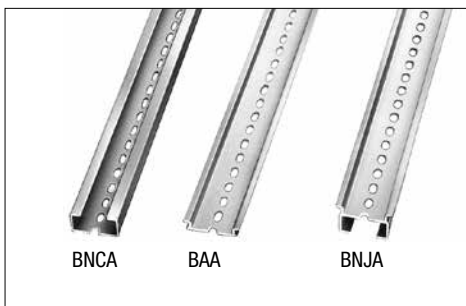


| | Part No. | Ordering No. | Applicable Terminal Blocks | Thickness (mm) | Weight (Approx.) | Package Quantity |
|-----------|----------------------------------|---------------|---|---------------------------------------|------------------------------------|------------------|
| End Plate | BNE15W | BNE15WPN10 | BN10W, BNH10W BN15MW, BNH15MW BN15LW, BNH15LW BN15MWT, BNH15MWT BN15LWT, BNH15LWT | 5.0 | 4g | 10 |
| | BNE20 | BNE20PN10 | BNT20, BNF10S, BNF10N | 3.0 | 8g | |
| | BNE30W | BNE30WPN10 | BN30W, BNH30W | 5.0 | 4g | |
| | BNE50W | BNE50WPN10 | BN50W, BNH50W | 5.0 | 6g | |
| | BNE75W | BNE75WPN10 | BN75W | 5.0 | 6g | |
| | BNE100W | BNE100WPN10 | BN100W | 5.0 | 9g | |
| | BNE150W | BNE150WPN10 | BN150W, BN150NW | 5.0 | 10g | |
| | BNDE15W | BNDE15WPN10 | BND15W, BND15WT, BNDH15W, BNDH15WT | Upper deck: 5.0 Lower deck: 9.0 | 5.5g | |
| | BNDE15LW | BNDE15LWPN10 | BND15LW, BNDH15LW | Upper deck: 5.0 Lower deck: 10.25 | 6g | |
| | End Plate for Securing End Plate | BNDE15W2 | BNDE15W2PN10 | BND15W, BND15WT, BNDH15W, BNDH15WT | Upper deck: 5.5 Lower deck: 1.5 | |
| BNDE15LW2 | | BNDE15LW2PN10 | BND15LW, BNDH15LW | Upper deck: 6.8 Lower deck: 1.5 | 6g | |

Note: BNDE15W2 and BNDE15LW2 are end plates used for securing marking strips at the end of double deck terminal blocks.

Rails

Rails for mounting terminal blocks. Available in three styles.



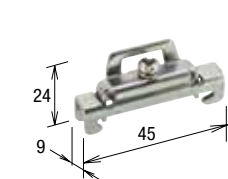
Approvals:
IEC60715
JIS C 2812

| Length | Part No. | Ordering No. | Material | Weight (Approx.) | Package Quantity |
|---------|----------|--------------|----------|------------------|------------------|
| 1000 mm | BNCA1000 | BNCA1000PN10 | Aluminum | 260g | 10 |
| | BAA1000 | BAA1000PN10 | Aluminum | 200g | 10 |
| | BNJA1000 | BNJA1000PN10 | Aluminum | 340g | 10 |

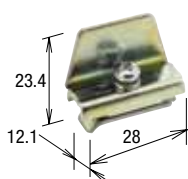
Accessories (End Clip / Rail Mounting Clip / Dust Cover)

End Clips

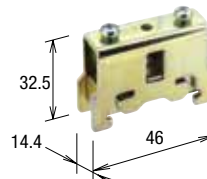
Used to secure the ends of the terminal blocks assembled on the rail.



BNL6 (M4 Screw)
Tightening torque: 1.1 N-m



BNL7 (M4 Screw)



BNL8 (M4 Screw) (*3)

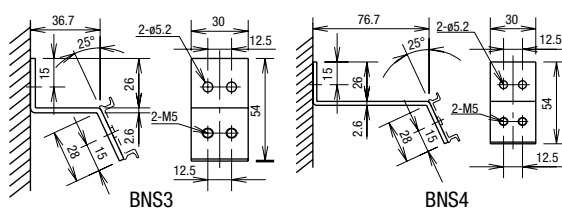
- Material: Steel
- Plating: Trivalent zinc chromate

| Part No. | Ordering No. | Rails | For Terminal Blocks up to BND and BN□40 | For BN□50 and BN□75 | For Terminal Blocks BN□100 and larger | Weight (Approx.) | Package Quantity |
|----------|--------------|-----------------------|---|---------------------|---------------------------------------|------------------|------------------|
| BNL6 | BNL6PN10 | BAA | × | × (*2) | — | 15.2g | 10 |
| BNL7 | BNL7PN10 | BNCA, BNCP, BNJA | × | × (*2) | — | 16g | 10 |
| BNL8 | BNL8PN10 | BAA, BNCA, BNCP, BNJA | — (*1) | × | × | 56g | 10 |

- *1: Do not use BNL8 because the insulation distance will be insufficient if used.
- *2: We recommend you to use BNL8 for secure hold.
- *3: Slide the end clip onto the DIN rail.

Rail Mounting Clips

Used to raise the DIN rail from the panel surface.

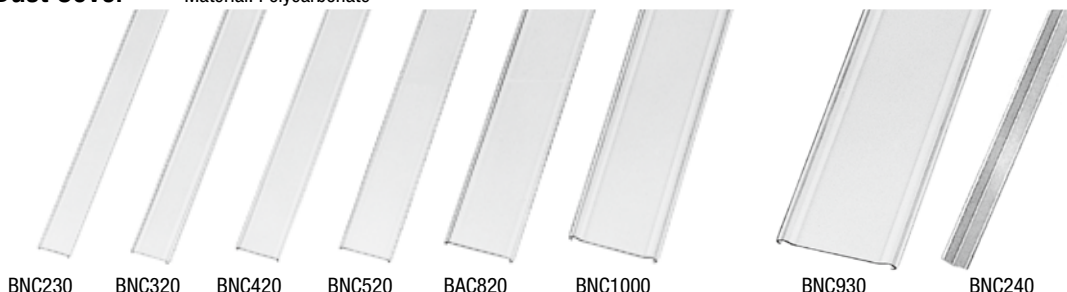


| Part No. | Ordering No. | Weight (Approx.) | Package Quantity |
|----------|--------------|------------------|------------------|
| BNS3 | BNS3PN10 | 51.3g | 10 |
| BNS4 | BNS4PN10 | 76.2g | 10 |

- Material: Steel
- Plating: Trivalent zinc chromate

Dust Cover

Material: Polycarbonate



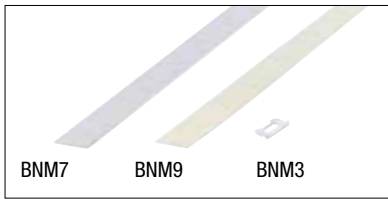
| Length | Width (mm) | Part No. | Ordering No. | Terminal Blocks (□: No. of Poles) | Weight (Approx.) | Package Quantity |
|--------|------------|----------|--------------|--|------------------|------------------|
| 1m | 39.6 | BNC230 | BNC230PN10 | BN10W, BNH10W, BN15MW, BNH15MW, BN15LW, BNH15LW, BN30W, BNH30W, BN15MWT, BNH15MWT, BN15LWT, BNH15LWT | 56g | 10 |
| | 49.6 | BNC320 | BNC320PN10 | BN50W, BNH50W | 64g | 10 |
| | 54.6 | BNC420 | BNC420PN10 | BN75W | 72g | 10 |
| | 65 | BNC520 | BNC520PN10 | BN150W, BN150NW, BNT20, BN100W | 96g | 10 |
| | 82 | BAC820 | BAC820PN10 | BN200BW□(K), BN200NW□(K) | 204g | 10 |
| | 96 | BNC910 | BNC910PN10 | BN300BW□(K), BN300NW□(K) | 222g | 10 |
| | 110 | BNC1000 | BNC1000PN10 | BN400BW□(K), BN400NW□(K) | 256g | 10 |
| | 145 | BNC930 | BNC930PN10 | BN500BW□(K), BN500NW□(K), BN600NW□(K) | 310g | 10 |

Dust Covers for Double Deck Terminal Blocks

| Length | Part No. | Ordering No. | Terminal Block | Weight (Approx.) | Package Quantity |
|--------|-------------------|--------------|---|------------------|------------------|
| 1m | Upper Deck BNC230 | BNC230PN10 | BND15W, BNDH15W, BND15LW, BNDH15LW, BND15WT, BNDH15WT | 56g | 10 |
| | Lower Deck BNC240 | BNC240PN10 | BND15W, BNDH15W, BND15LW, BNDH15LW, BND15WT, BNDH15WT | 15g | 10 |

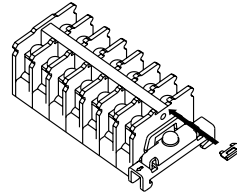
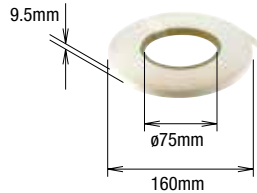
Accessories (Marking Strips / Marking Strip Fastener / Slide Marking Strip)

Marking Strips, Marking Strip Fastener

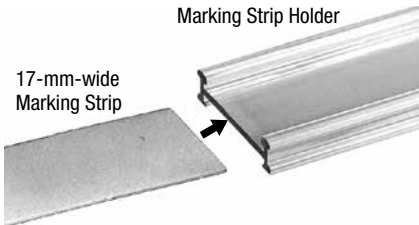


| Item | Part No. | Ordering No. | Weight (approx.) | Package Quantity | Specification |
|------------------------|----------|--------------|------------------|------------------|--|
| Marking Strip | BNM7 | BNM7PN10 | 7.2g | 10 | PVC (glossy surface) 1000 mm × 9.5 mm × 0.5 mm |
| | BNM9 | BNM9PN10 | 6.4g | 10 | Fiber glass (matte surface) 1000 mm × 9.5 mm × 0.5 mm |
| | BNM725 | BNM725 | — | 1 | PVC (matte surface) 25 m × 9.5 mm × 0.5 mm |
| Marking Strip Fastener | BNM3 | BNM3PN50 | 0.1g | 50 | |

- To install the marking strip fastener



Sliding Marking Strip (BN10W to BN30W)



17-mm-wide marking strip

- Both top and bottom sides of the marking strip holder can be used.

End plate (Thickness 5 mm)
BNES15W
BNES30W



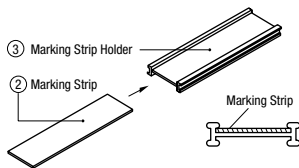
Terminal Block
BN10W to BN15LWT
BN30W

| Item | Part No. | Ordering No. | Terminal Blocks | Specification | Package Quantity |
|------------------------|----------|--------------|---------------------------|---------------------------|------------------|
| ① End Plate | BNES15W | BNES15WPN10 | BN10W to BN15LWT | For sliding marking strip | 10 |
| | BNES30W | BNES30WPN10 | BN30W | For sliding marking strip | 10 |
| ② Marking Strip | BNM5 | BNM5PN10 | BN10W to BN15LWT BN30W | PVC (Note) | 10 |
| ③ Marking Strip Holder | BNMH1 | BNMH1PN10 | | 1m | 10 |
| ④ Dust Cover | BNCS230 | BNCS230PN10 | | 1m | 10 |

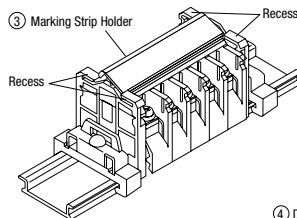
Note: Length 1000 mm × Width 9.5 mm × Thickness 0.5 mm

Installing the Sliding Marking Strip

1. Insert the marking strip into the groove of the top of the marking strip holder.

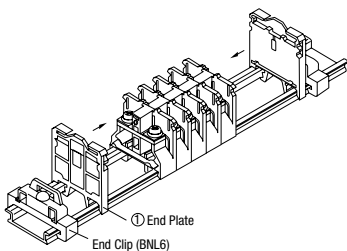


3. Insert the marking strip holder into the recess of the end plate.

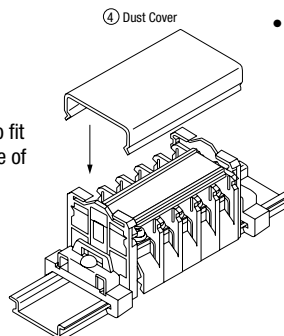


2. Installing the end plate

Attach the end plates to the terminal blocks and secure with end clips.

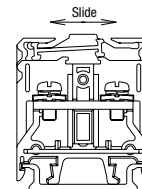


4. Press the dust cover to fit onto the bottom groove of the end plate.



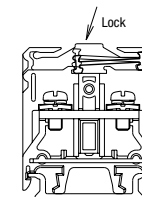
Movement

- Sliding movement of the marking strip holder



When sliding the marking strip holder, slide by holding both edges of the holder.

- To lock the marking strip holder



To lock the marking strip holder, lock by holding both edges of the holder.

- APEM
- Switches & Pilot Lights
- Control Boxes
- Emergency Stop Switches
- Enabling Switches
- Safety Products
- Explosion Proof
- Terminal Blocks
- Relays & Sockets
- Circuit Protectors
- Power Supplies
- LED Illumination
- Controllers
- Operator Interfaces
- Sensors
- AUTO-ID

BN

Accessories (Jumper)

Jumpers for 6 Poles (Material: Brass, Plating: Nickel-plated, Insulation: PVC)

| Part No. | Ordering No. | Terminal Centers | Insulation | Dimensions | Current (Note 1, 2) | Applicable Terminal Block | Weight (Approx.) | Package Quantity | |
|----------|--------------|------------------|------------|-------------------|---------------------|---------------------------|--|------------------|----|
| BNJ16 | BNJ16PN10 | 7 mm | Without | Ring Terminal | 10A | BN10W BNH10W | 2.8g | 10 | |
| BNJ16B | BNJ16BPN10 | | With | Fork Terminal | | | | 10 | |
| BNJ16F | BNJ16FPN10 | | Without | | | | | 2.7g | 10 |
| BNJ16FB | BNJ16FBPN10 | | With | | | | | | 10 |
| BNJ26W | BNJ26WPN10 | 8 mm | Without | | Ring Terminal | 20A | BN15MW BNH15MW BN15MWT BNH15MWT BND15W BNDH15W BND15WT BNDH15WT | 3.1g | 10 |
| BNJ26WB | BNJ26WBPN10 | | With | Fork Terminal | 10 | | | | |
| BNJ26FW | BNJ26FWPN10 | | Without | | 3.1g | | | | 10 |
| BNJ26FWB | BNJ26FWBPN10 | | With | | | | | | 10 |
| BNJ46 | BNJ46PN10 | 10.5 mm | Without | | Ring Terminal | 20A | BN15LW BNH15LW BN15LWT BNH15LWT BND15LW BNDH15LW | 4.6g | 10 |
| BNJ46B | BNJ46BPN10 | | With | Fork Terminal | 10 | | | | |
| BNJ46F | BNJ46FPN10 | | Without | | 3.0g | | | | 10 |
| BNJ46FB | BNJ46FBPN10 | | With | | | | | | 10 |
| BNJ56 | BNJ56PN10 | 12 mm | Without | | Ring Terminal | 30A | BN30W BNH30W | 3.2g | 10 |
| BNJ56B | BNJ56BPN10 | | With | Fork Terminal | 10 | | | | |
| BNJ56F | BNJ56FPN10 | | Without | | 4.5g | | | | 10 |
| BNJ56FB | BNJ56FBPN10 | | With | | | | | | 10 |

• Insulation color: Black, Insulation material: PVC

Note 1: Ensure that the total current to the jumper does not exceed the maximum current.

Note 2: Ensure that the current does not exceed the rated current of the terminal block to be used.

Jumper for 2 poles

| Part No. | Ordering No. | Terminal Centers | Insulation | Dimensions | Current (Note 1, 2) | Applicable Terminal Block | Package Quantity |
|----------|--------------|------------------|------------|-------------------|---------------------|---------------------------|------------------|
| BNJ62 | BNJ62PN10 | 14.5 mm | Without | Ring Terminal | 80A | BN50W BNH50W | 10 |
| BNJ62B | BNJ62BPN10 | | With | | | | |

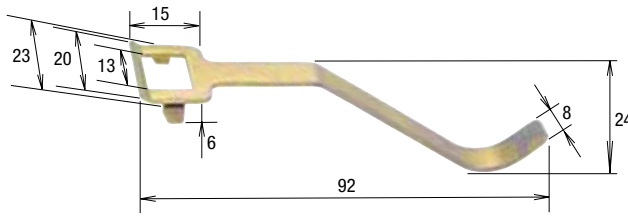
• Material: nickel-coated brass

• Sheath: PVC

Note 1: Ensure that the total current to the jumper does not exceed the maximum current.

Note 2: Ensure that the current does not exceed the rated current of the terminal block to be used.

Accessories (Removal Tool)



A tool for removing terminal blocks from the DIN rail.

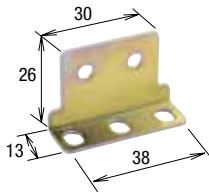
| Part No. | Weight (Approx.) | Package Quantity |
|-------------|------------------|------------------|
| BND2 | 8.6g | 1 |

- Material: Steel
- Plating: Zinc

Note: Cannot be used for terminal blocks other than BN10W, BNH10W, BN15MW, BNH15MWT, BN15LW, BNH15LW, BN15LWT, BNH15LWT, BN30W, and BNH30W.

Accessories for BND Double-Deck Terminal Blocks

Surface Mounting Clip



| Part No. | Ordering No. | Applicable Terminal Block | Weight (Approx.) | Package Quantity |
|--------------|------------------|---|------------------|------------------|
| BNDL2 | BNDL2PN10 | BND15W, BNDH15W BND15WT, BNDH15WT BND15LW, BNDH15LW | 14.3g | 10 |

- Material: Steel
- Plating: Zinc

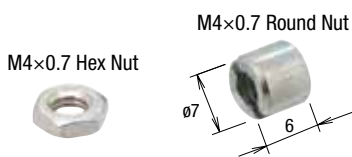
Connecting Rods



| Part No. | Ordering No. | Applicable Terminal Block | Weight (Approx.) | Dimensions (mm) | Package Quantity |
|-------------|-----------------|--------------------------------------|------------------|-----------------|------------------|
| BNR1 | BNR1PN10 | BND15W, BNDH15W BND15WT, BNDH15WT | 21g | 265 mm (M4×0.7) | 10 |
| BNR2 | BNR2PN10 | BND15LW, BNDH15LW | 43g | 500 mm (M4×0.7) | 10 |

- Material: Steel
- Plating: Zinc

Connecting Nuts



| Part No. | Ordering No. | Applicable Terminal Block | Weight (Approx.) | Package Quantity |
|-------------|-----------------|---|------------------|-----------------------------|
| BNN1 | BNN1PN1H | BND15W, BNDH15W BND15WT, BNDH15WT BND15LW, BNDH15LW | 14g | 100 (pairs of both nuts) |

- Material: Steel
- Plating: Zinc

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- AUTO-ID

Calculating Rail Lengths and Mounting Centers

• BNCA, BAA, and BNJA Rails

$$L_1 = 12.5 \times N$$

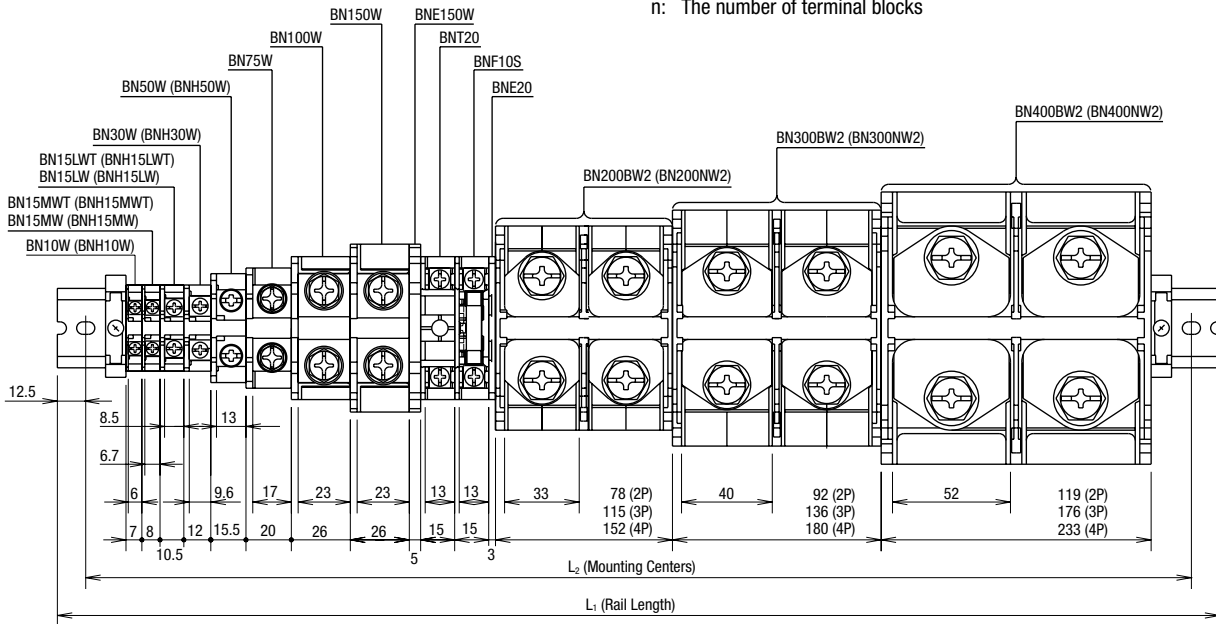
$$L_2 = L_1 - 25$$

Note: This formula is for calculating the maximum rail length including tolerance. Depending on the combination of terminal blocks, the required rail length may be shorter than the calculated value, particularly when many terminal blocks are combined.

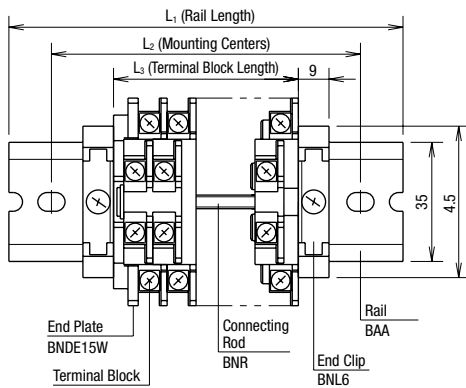
N: Rounded up numerical number from the calculated value of M. (Example: N for 19.1 is 20)

$$M = \frac{(A + 0.1)n + B + C}{12.5}$$

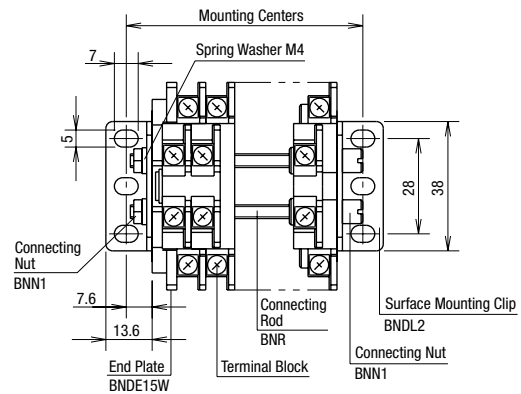
- A: Thickness of each terminal block
- B: Thickness of end plate
- C: Thickness of end clip when using 2 pieces of:
 - BNL6 = 56.0 mm
 - BNL7 = 62.5 mm
 - BNL8 = 67.0 mm
- n: The number of terminal blocks



Rail Length (Double-Deck)



Mounting Centers (Double-Deck)



Calculating the length (mm)

| Part No. | BND15W BNDH15W BND15WT | BND15LW BNDH15LW |
|--------------------------------|------------------------------|---------------------|
| L1 (*1) | 12.5 × N | |
| L2 (*1) | L ₁ - 25 | |
| L3 (*1, *2) | 8 × n + 9 | 10.5 × n + 10.3 |
| Connecting Rod Length (*1, *2) | 8 × n + 8.7 | 10.5 × n + 10 |

N: Rounded up numerical number from the calculated value of M. (Example: N for 19.1 is 20)

For BND15W, BNDH15W, BND15WT

For BND15LW, BNDH15LW

$$M = \frac{8 \times n + 9 + 62.5}{12.5}$$

$$M = \frac{10.5 \times n + 10.3 + 62.5}{12.5}$$

Calculating the length (mm)

| Part No. | BND15W BNDH15W BND15WT | BND15LW BNDH15LW |
|--------------------------------|------------------------------|---------------------|
| Mounting Centers (*1, *2) | 8 × n + 24.2 | 10.5 × n + 25.5 |
| Connecting Rod Length (*1, *2) | 8 × n + 20.2 | 10.5 × n + 21.5 |

n: The number of terminal blocks

*1: This formula is for calculating the maximum rail length including tolerance. Depending on the combination of terminal blocks, the required rail length may be shorter than the calculated value, particularly when many terminal blocks are combined.

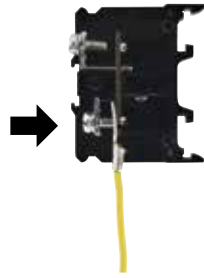
*2: The length will be 1.5 mm longer when end plates BNDE15W2 and BNDE15LW2 are used.

Instructions

How to Use Touch-Down Terminals



1. With the terminal screws in the up position, insert a ring crimping terminal.



2. Push down the head of the screw lightly to hold the crimping terminal.

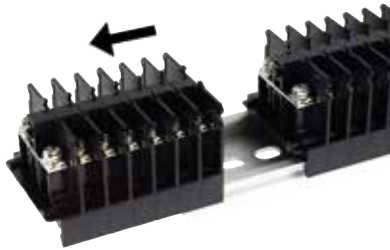


3. When the wiring is in position, tighten all the screws simultaneously.

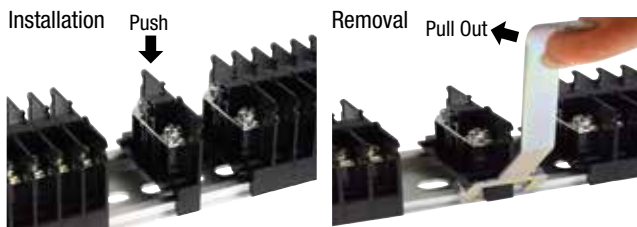


4. To remove the wiring, loosen the screw and lightly push up.

Installation and Removal on Rails



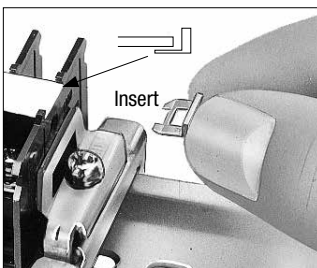
Additional Installation and Removal (on DIN Rail)



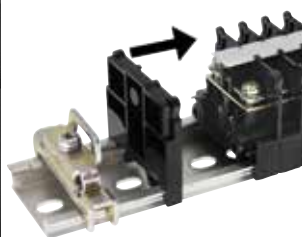
Notes: The following terminal blocks can be added or removed:
BN10W, BNH10W, BN15MW, BNH15MW, BN15LW, BNH15LW, BN30W,
BNH30W, BN15MWT, BNH15MWT, BN15LWT, BNH15LWT

Securing the Ends of the Marking Strip

The ends of the marking strip can be secured with a marking strip fastener (or end plate).



To Secure the Marking Strip

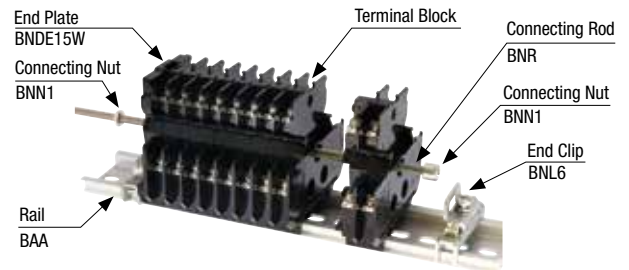


Installing End Plate

For double-deck, use an end plate to secure marking strips (BNDE15W2, BNDE15LW2).

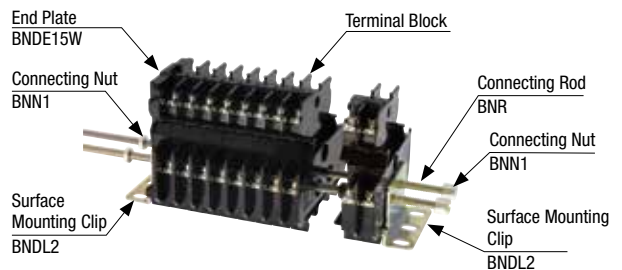
Installation of Double-Deck Terminal Blocks (BND)

Rail Mount (photo: when using BND15W, BNDH15W, BNDE15W)



1. Install end plate. Then mount the terminal blocks onto the DIN rail.
2. Insert connecting rod (BNR) through each hole of the terminal blocks.
3. Secure the ends of the connecting rods with connecting nuts (BNN1).
4. To prevent side-to-side movement on the DIN rail, use the BNL6 end clips at both ends of the rail.

Surface Mount (photo: when using BND15W, BNDH15W, BNDE15W)



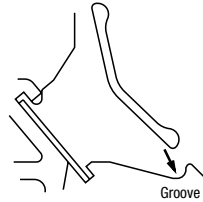
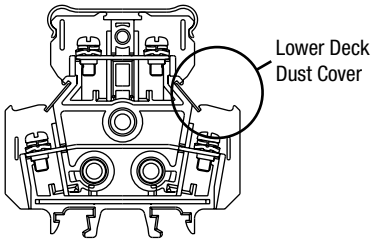
1. Assemble a row of terminal blocks with end plates on exposed ends.
2. Use BNDL2 mounting clips at both ends of a row.
3. With the two holes of the mounting clip (BNDL2) aligned with the terminal block holes, insert a connecting rod (BNR) through each hole.
4. Secure the ends of the connecting rods with the connecting nuts (BNN1).

- APEM
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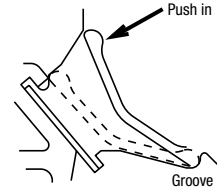
Instructions

Dust Covers on the Lower Deck Terminal of Double-Deck Terminal Blocks

Installing Dust Covers on Lower Deck Terminals



1. Press the lower end of the dust cover into the groove.

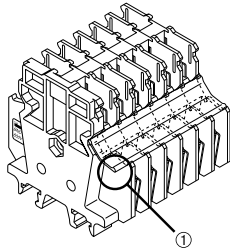


2. With the lower end of the dust cover pressed into the groove, push in the top end in the direction of the arrow.

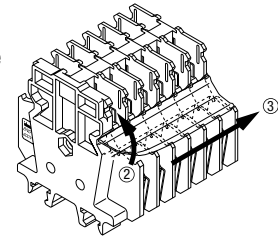
Removing Dust Covers from Lower Deck Terminals

Turn the power off before removing the dust cover.

1. Hold the end of the dust cover which is extruding from the end plate.

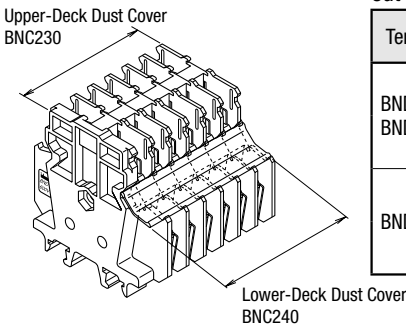


2. Lift up in the direction of the arrow.
3. If the dust cover cannot be removed all at once, place fingers between the terminal block and dust cover, and slowly remove the dust cover.



Length of Double-Deck Dust Covers

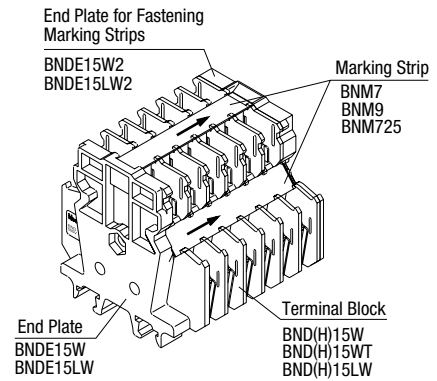
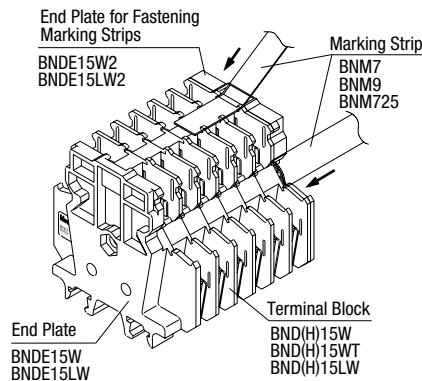
Cut required length depending on the number of terminal blocks used. (Length in mm)



| Terminal Block | Dust Cover | 1-pole | 2-pole | 3-pole | 4-pole | 5-pole | 6-pole | 7-pole | 8-pole | n-pole |
|-------------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|----------------|
| BND(H)15W BND(H)15WT | Upper Deck | 12 | 20 | 28 | 36 | 44 | 52 | 60 | 68 | 8 (n+1) - 4 |
| | Lower Deck | 16 | 24 | 32 | 32 | 48 | 56 | 64 | 72 | 8 (n+1) |
| BND(H)15LW | Upper Deck | 16 | 26.5 | 37 | 47.5 | 58 | 68.5 | 79 | 89.5 | 10.5 (n+1) - 5 |
| | Lower Deck | 21 | 31.5 | 42 | 52.5 | 63 | 73.5 | 84 | 94.5 | 10.5 (n+1) |

Securing Marking Strip with Marking Strip Fasteners for Double-Deck Terminal Blocks

Because marking strips can be secured without using marking strip fasteners, installation time can be shortened. Also, marking strips can be inserted and removed after installation.



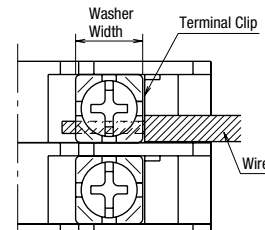
Notes on Wiring

Crimping Terminals

• When using crimping terminals, be sure to use insulated terminals to prevent electric shocks.

Without Crimping Terminals

- Insert the wire until the insulation comes into contact with the terminal metal part.
- Strip the insulation so that the wire is longer than the width of the wire clamp.
- When connecting two wires, use wires of the same size.



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- (1) Rated values, performance values, and specification values of IDEC products listed in this Catalog are values acquired under respective conditions in independent testing, and do not guarantee values gained in combined conditions.
Also, durability varies depending on the usage environment and usage conditions.
- (2) Reference data and reference values listed in Catalogs are for reference purposes only, and do not guarantee that the product will always operate appropriately in that range.
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 - iii. Wiring and installation that ensures the IDEC product used in your system, machine, device, or the like can perform and function according to its specifications
- (4) Continuing to use an IDEC product even after the performance has deteriorated can result in abnormal heat, smoke, fires, and the like due to insulation deterioration or the like. Perform periodic maintenance for IDEC products and the systems, machines, devices, and the like in which they are used.
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 - ii. Use in applications that require a high degree of reliability, such as provision systems for gas / waterworks / electricity, etc., systems that operate continuously for 24 hours, and settlement systems
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3. Inspections

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The warranty period for IDEC products shall be one (1) year after purchase or delivery to the specified location. However, this shall not apply in cases where there is a different specification in the Catalogs or there is another agreement in place between you and IDEC.
- (2) Warranty scope
Should a failure occur in an IDEC product during the above warranty period for reasons attributable to IDEC, then IDEC shall replace or repair that product, free of charge, at the purchase location / delivery location of the product, or an IDEC service base. However, failures caused by the following reasons shall be deemed outside the scope of this warranty.
 - i. The product was handled or used deviating from the conditions / environment listed in the Catalogs
 - ii. The failure was caused by reasons other than an IDEC product
 - iii. Modification or repair was performed by a party other than IDEC
 - iv. The failure was caused by a software program of a party other than IDEC
 - v. The product was used outside of its original purpose
 - vi. Replacement of maintenance parts, installation of accessories, or the like was not performed properly in accordance with the user's manual and Catalogs
 - vii. The failure could not have been predicted with the scientific and technical standards at the time when the product was shipped from IDEC
 - viii. The failure was due to other causes not attributable to IDEC (including cases of force majeure such as natural disasters and other disasters)Furthermore, the warranty described here refers to a warranty on the IDEC product as a unit, and damages induced by the failure of an IDEC product are excluded from this warranty.

5. Limitation of liability

The warranty listed in this Agreement is the full and complete warranty for IDEC products, and IDEC shall bear no liability whatsoever regarding special damages, indirect damages, incidental damages, or passive damages that occurred due to an IDEC product.

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The prices of IDEC products do not include the cost of services, such as dispatching technicians. Therefore, separate fees are required in the following cases.

- (1) Instructions for installation / adjustment and accompaniment at test operation (including creating application software and testing operation, etc.)
- (2) Maintenance inspections, adjustments, and repairs
- (3) Technical instructions and technical training
- (4) Product tests or inspections specified by you

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IDEC CORPORATION

Head Office 6-64, Nishi-Miyahara-2-Chome, Yodogawa-ku, Osaka 532-0004, Japan

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