**Terminal Blocks** 

# BN-W BNH-W Series



UL recognized, CSA certified, and TÜV compliant.

Self-lifting 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.
- $\bullet$  Additional mounting and removal of terminals is easy. (BN $\square$ 10W to BN $\square$ 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 2811.

# **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

natings/16iiii		t No.	UL/CSA	Ratings	EN Ro	atings (*1)	JIS Ra	tinas		Tightening
Style	Self-Lifting		Voltage/ Current	Wire Size (AWG)	Voltage/ Current	Wire Size [mm²/(AWG)]	Voltage/ Current	Wire Size (mm²)	Terminal Screw	Torque (N·m)
	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
Standard	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
	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 10 13.5
	BN150NW		600V/150A	16-1/0	660V/175A	60/(1/0)	630V/175A	60	M8	10 to 13.5
Large Capacity	BN200BW□, BN200NW□		600V/200A	4/0	660V/240A	100/(4/0)	800V/240A	100	M10	01 to 00
	BN300BW□, BN300NW□		600V/310A	300MCM	660V/310A	150/(300MCM)	800V/310A	150	M10	21 to 28
	BN400BW□, B	N400NW□	600V/350A	400MCM	660V/370A	200/(400MCM)	800V/370A	200	M12	38 to 49
	BN500BW□, B	N500NW□	600V/500A	500MCM	660V/430A	240/(500MCM)	800V/430A	250	M16	83 to 116
	BN600NW□K		600V/600A	600MCM	660V/520A	300/(600MCM)	800V/520A	325	M16	03 10 110
With Disconnecting Switch	BNT20	_	_	_	_	_	600V/20A	5.5	M4	1.4 to 2.0
With Free	BNF10S	_	_	_	_	_	600V/10A	5.5	M4	1 4 4 0 0 0
With Fuse	BNF10N	_	_	_	_		600V/10A	5.5	M4	1.4 to 2.0
	BND15W	BNDH15W	600V/10A	22-14	660V/22A	2/(22-14)	800V/16A	1.25 (2) *2	M3	0.6 to 1.0
Double-Deck	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.

Specify the number of poles in place of  $\square$ .

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<sup>\*2:</sup> The rated applicable wire size is 1.25 mm², but 2 mm² wires can also be connected.

<sup>\*3:</sup> Part No. with ★ is UL recognized for field wiring (FW2).

APEM
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# **Terminal Blocks**

Term	ninal Style		Part No.	Ordering No.	Applicable Wire (mm²)	Terminal Screw	Width (mm)	Package Quantity	Page
Standard									
		16A	BN10W	BN10WPN50	1.25	M3	7	50	
		IUA	BN15MW	BN15MWPN50	1.25 (2) (Note)	М3	8	50	G-012
		21A	BN15LW	BN15LWPN50	2	M3.5	10.5	50	
Self-Lifting	1-pole	ZIA	BN15MWT	BN15MWTPN50	2	M3.5	8	50	
		30A	BN15LWT	BN15LWTPN50	3.5	M4	10.5	50	G-013
		40A	BN30W	BN30WPN50	5.5	M4	12	50	
		70A	BN50W	BN50WPN20	14	M5	15.5	20	G-014
		104	BNH10W	BNH10WPN50	1.25	M3	7	50	
		16A	BNH15MW	BNH15MWPN50	1.25 (2) (Note)	M3	8	50	G-012
		014	BNH15LW	BNH15LWPN50	2	M3.5	10.5	50	1
Touch-Down	1-pole	21A	BNH15MWT	BNH15MWTPN50	2	M3.5	8	50	
		30A	BNH15LWT	BNH15LWTPN50	3.5	M4	10.5	50	G-013
		40A	BNH30W	BNH30WPN50	5.5	M4	12	50	1
		70A	BNH50W	BNH50WPN20	14	M5	15.5	20	G-014
Large Capacity (	Rail Mount)		•	'	,		,		•
		94A	BN75W	BN75WPN10	22	M6	20	10	0.045
	1-pole	132A	BN100W	BN100WPN05	38	M8	26	5	G-015
		4754	BN150W	BN150WPN05	60	M8	26	5	0.040
		175A	BN150NW	BN150NWPN05	60	M8	26	5	G-016
			BN200BW2	BN200BW2					
	3-pole	240A	BN200BW3	BN200BW3	100	M10	37	1	G-017
Screw	4-pole		BN200BW4	BN200BW4					
	2-pole		BN300BW2	BN300BW2					
	3-pole	310A	BN300BW3	BN300BW3	150	M10	44	1	G-018
	4-pole		BN300BW4	BN300BW4					
	2-pole		BN400BW2	BN400BW2					
	3-pole	370A	BN400BW3	BN400BW3	200	M12	57	1	G-019
	4-pole		BN400BW4	BN400BW4					
	2-pole		BN200NW2	BN200NW2					
	3-pole	240A	BN200NW3	BN200NW3	100	M10	37	1	G-017
	4-pole		BN200NW4	BN200NW4					
	2-pole		BN300NW2	BN300NW2					
Stud	3-pole	310A	BN300NW3	BN300NW3	150	M10	44	1	G-018
	4-pole		BN300NW4	BN300NW4				•	
	2-pole		BN400NW2	BN400NW2					
	3-pole	370A	BN400NW3	BN400NW3	200	M12	57	1	G-019
	4-pole	0,0,1	BN400NW4	BN400NW4				1	0.0
	T Polo		PINTOURNE	DITTOUTIVE					

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

# **Terminal Blocks**

Teri	minal Style		Part No.	Ordering No.	Applicable Wire (mm²)	Terminal Screw	Width (mm)	Package Quantity	Page
Large Capacity	(Surface Mou	ınt)							
	2-pole		BN200BW2K	BN200BW2K					
	3-pole	240A	BN200BW3K	BN200BW3K	100	M10	37	1	G-017
	4-pole		BN200BW4K	BN200BW4K					
	2-pole		BN300BW2K	BN300BW2K					
Screw	3-pole	310A	BN300BW3K	BN300BW3K	150	M10	44	1	G-018
	4-pole		BN300BW4K	BN300BW4K					
	2-pole		BN400BW2K	BN400BW2K					
	3-pole	370A	BN400BW3K	BN400BW3K	200	M12	57	1	G-019
	4-pole		BN400BW4K	BN400BW4K					
	2-pole		BN500BW2K	BN500BW2K					
	3-pole	430A	BN500BW3K	BN500BW3K	250	M16	57	1	G-020
	4-pole		BN500BW4K	BN500BW4K					
	2-pole		BN200NW2K	BN200NW2K	100				
	3-pole	240A	BN200NW3K	BN200NW3K		M10	37	1	G-017
	4-pole		BN200NW4K	BN200NW4K					
	2-pole		BN300NW2K	BN300NW2K					
	3-pole	310A	BN300NW3K	BN300NW3K	150	M10	44	1	G-018
	4-pole		BN300NW4K	BN300NW4K					
	2-pole		BN400NW2K	BN400NW2K					
Stud	3-pole	370A	BN400NW3K	BN400NW3K	200	M12	57	1	G-019
	4-pole		BN400NW4K	BN400NW4K					
	2-pole		BN500NW2K	BN500NW2K					
	3-pole	430A	BN500NW3K	BN500NW3K	250	M16	57	1	
	4-pole		BN500NW4K	BN500NW4K					0.000
	2-pole		BN600NW2K	BN600NW2K					G-020
	3-pole	520A	BN600NW3K	BN600NW3K	325	M16	57	1	
-	4-pole		BN600NW4K	BN600NW4K					

Terminal \$	Style		Part No.	Ordering No.	Applicable Wire (mm²)	Terminal Screw	Width (mm)	Package Quantity	Page
With Disconnecting S	witch, F	use							
Disconnecting Switch	20A	1-pole	BNT20	BNT20PN20	5.5	M4	15	20	
With Fuse	10A	1 nole	BNF10S-□	BNF10S-□APN20	5.5	M4	15	20	G-021
Willi Fuse	TUA	1-pole	BNF10N-□	BNF10N-□APN20	5.5	IVI4	15	20	
Double-Deck Termina	l Block								
Self-Lifiting	16A	1 nole	BND15W	BND15WPN25	1.05 (0)	M3	8	25	
Touch-Down	IOA	1-pole	BNDH15W	BNDH15WPN25	1.25 (2)*	IVIO	0	20	G-022
Self-Lifting	01.4	1	BND15LW	BND15LWPN25	0	МОГ	0	0.5	G-022
Touch-Down	21A	1-pole	BNDH15LW	BNDH15LWPN25	2	M3.5	8	25	
Self-Lifting	01.4	1	BND15WT	BND15WTPN25	0	МОГ	10	25	0.000
Touch-Down	21A	1-pole	BNDH15WT	BNDH15WTPN25	2	M3.5	12	25	G-023
Common Terminal									
0.1(1.1(); T. 404	4-p		BN15MC4	BN15MC4PN10					
Self-Lifting Type 16A (Common Current)		8-pole	BN15MC8	BN15MC8PN10		M3	8	10	G-024
(Common Current)		10-pole	BN15MC10	BN15MC10PN10					

<sup>\*</sup> The rated applicable wire size is 1.25 mm², but 2 mm² wires can also be connected. Specify the fuse rating in place of  $\Box$ . 1A: 1, 3A: 3, 5A: 5.

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

BN

minal Blocks	When	n ordering accessore table. Necessary Optional
APEM	Terr	minal
Switches & Pilot Lights		16A to 40A
Control Boxes	Standard	Self-Lifting Touch-Down
Emergency Stop Switches	Stan	70A
Enabling Switches		Self-Lifting Touch-Down
Safety Products	ty	Rail Mount 1-Pole 94A to 175A
Explosion Proof	arge Capaci	Rail Mount
erminal Blocks	Je C	240A to 370A
elays & Sockets	Larç	Surface Mount 240A to 520A
Circuit Protectors	Witl	n Disconnecting S
Power Supplies	Witl	n Fuse

LED Illumination Controllers Operator Interfaces Sensors

to ×:	hen ordering accessories, c the table. : Necessary : Optional	heck if the accessories are necessary by referring	d Plate	-	End Clip	Rail Mounting Clip	Oust Cover	Marking Strip	Marking Strip Fastener	Sliding Marking Strip	Jumper	Removal Tool	Surface Mount Clip	Connecting Rod	Connecting Nut
T	erminal	Part No.	End	Rail	ᇤ	RE .	2	ğ	Ĕ	S	루	Re	ns	ဒ	පි
	16A to 40A Self-Lifting	BN10W, BN15MW, BN15LW, BN15MWT, BN15LWT, BN30W	×	×	×	0	0	0	0	0	0	0	_		_
C+ondard	Touch-Down	BNH10W, BNH15MW, BNH15LW, BNH15MWT, BNH15LWT, BNH30W	×	×	×	0	0	0	0	_	0	0	_	_	_
Ď	70A Self-Lifting Touch-Down	BN50W, BNH50W	×	×	×	0	0	0	0	_	0	_	_	_	_
į	Rail Mount 1-Pole 94A to 175A	BN75W, BN100W, BN150W, BN150NW	×	×	×	0	0	0	0	_	_	_	_	_	_
1000	Rail Mount 240A to 370A Surface Mount	BN200BW□, BN300BW□, BN400BW□ BN200NW□, BN300NW□, BN400NW□	_	×	×	_	pa	pa	_	_	_	_	_	_	_
Corc	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	_	_	_	_	_	_	_
V	Vith Disconnecting Switch	BNT20	×	×	×	0	0	0	0	_	-	_	_	_	_
W	Vith Fuse	BNF10S-□A, BNF10N-□A	×	×	×	0	_	0	0	_	_	_	_	_	_
D	Oouble-Deck	×	× *1	× *1	0	0	0	0	_	0		× *2	×	×	
С	Common Terminal	BN15MC□	_	×	×	-	0	0	0	0	_	_	_	_	_
	: Accessory not necessary	G-025 G-026 G-027 G-028 G-029													
	<ol> <li>Accessory not necessary pecify the number of poles i</li> </ol>	•							Page						

Accessories (x: Necessary)

AUTO-ID

21A

BN15LWPN50

50

10g

21A

☆ BNH15LW

€M3.5

☆ BN15LW

			35(When using 23.5(When using 23.5(When using 23.5)	38		35(When using 1			35(When using C 23.5(When usin			
		Ordering No.		BNH10WPN50			3NH15MWPN5	0		BNH15LWPN50		
		Package Quantity	50			50				50		
		Weight (Approx.)		7.5g			8.2g			11.2g		
Sta	ndaro	ds	UL/CSA	EN	JIS	UL/CSA	EN	JIS	UL/CSA	EN	JIS	
	Insu	ılation Voltage	600V	660V	800V	600V	660V	800V	600V	660V	630V	
Ratings	Wire	e Size	22-16 AWG	1.25 mm <sup>2</sup> (22-16 AWG)	1.25 mm <sup>2</sup>	22-14 AWG	2 mm <sup>2</sup> (22-14 AWG)	1.25 mm <sup>2</sup> (*1) (2mm <sup>2</sup> max)	22-14 AWG	2 mm <sup>2</sup> (22-14 AWG)	2 mm²	
Rati	Rate	ed Current *2	15A	16A	16A	15A	22A	16A	20A	22A	21A	
_	Terr	minal screw		М3			M3			M3.5		
cati	Crin	nping Terminal		1.25-3 1.25-3 (2-3) 2-3.5			1.25-3 (2-3)		2-3.5			
Specification	Max	. No. of Crimping Terminals	2			2			2			
Sp	Tigh	ntening Torque		0.6 to 1.0 N·m			0.6 to 1.0 N·m			1.0 to 1.3 N·m		
		g Terminal ons (mm) *3	5.8 ma	<b>-</b>	nin. 3 min.	6.6 m		nin. 3 min.	8.5 m -		nin.	
	End	Plate					BNE15W					
*4	Dus	t Cover					BNC230					
	Mar	king Strip			PVC 1	m/BNM7, Fiber	glass 1m/BNM	9, PVC 25m/BN	IM725			
sori	Mar	king Strip Fastner					BNM3					
Accessories	DIN	Rail/End Clip				Aluminur	n: BAA1000, St	eel: BNL6				
⋖	C R	ail/End Clip				Aluminum	: BNCA1000, S	teel: BNL7				
	DIN	+ C Rail/End Clip				Aluminum: B	NJA1000, Stee	: 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											

- \*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.

☆ BN10W

Part No.

Dimensions

Ordering No.

Part No.

Dimensions

Package Quantity

Weight (Approx.)

Self-Lifting Terminal

Standard

Touch-Down Terminal

16A

BN10WPN50

50

6.5g

16A

☆ BNH10W

€ M3

€ M3

☆ BN15MW

16A

BN15MWPN50

50

7.3g

16A

☆ BNH15MW

€ M3

€ M3

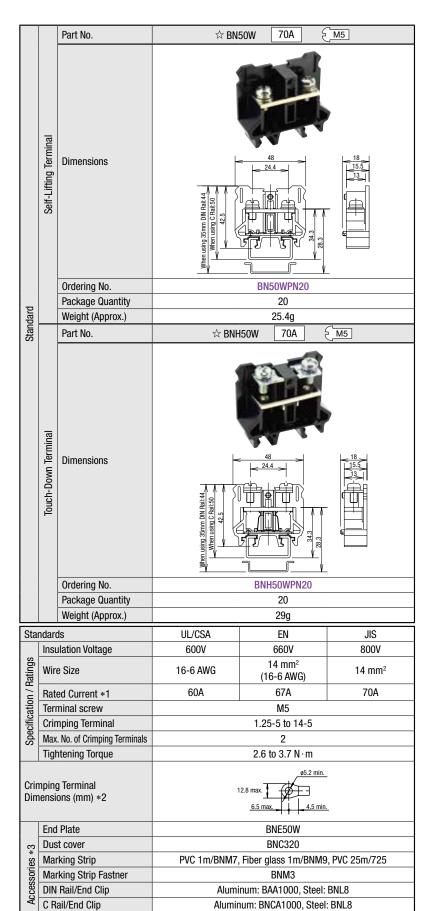
- \*4: See G-025 for details on accessories.
- $\bullet$  Part No. with  $\leftrightarrows$  is UL recognized for field wiring (FW2).

BN

		Part No.	☆ BN15M	WT 21A	M3.5	☆ BN15L\	VT 30A	€M4	☆ BN30V	V 40A	€M4	
	Self-Lifting Terminal	Dimensions	35(When using C Rair 41)	33 17.5		35 When using C Pair 41)	38 17.5	143 105 1	38/When using C Rair 44)	38 19.4	15.8 12 9.6 1.0	
		Ordering No.	E	3N15MWTPN	50		BN15LWTPN50			BN30WPN50		
		Package Quantity		50			50			50		
darc		Weight (Approx.)		7g			10g			15.6g		
Standard		Part No.	☆ BNH15N	IWT 21A	M3.5	☆ BNH15L	WT 30A	€ M4	☆ BNH30	W 40A	€ M4	
	Touch-Down Terminal	Dimensions	35(When using C Rall 41)	38 17.5 17.5	11.3 8 67	3.5f.When using C Pall 41) 2.5.5f.When using C Pall 25.5	38 17.5	143	380When using C Rail/44) ZS.4When using C Rail/44)	38 19.4	15.8	
		Ordering No.	В	NH15MWTPN	50	E	BNH15LWTPN50	)	BNH30WPN50			
		Package Quantity		50			50			50		
_		Weight (Approx.)		8g			11g			16.8g		
Star	ndard	ulation Voltage	UL/CSA 600V	EN 660V	JIS 800V	UL/CSA 600V	EN 660V	JIS 630V	UL/CSA 600V	EN 660V	JIS 630V	
sbı		e Size	22-14 AWG	2 mm <sup>2</sup> (22-14 AWG)	02	22-14 AWG	3.5 mm <sup>2</sup> (22-14 AWG)	3.5 mm <sup>2</sup>	18-10 AWG	5.5 mm <sup>2</sup> (18-10 AWG)	5.5 mm <sup>2</sup>	
Rati	Rate	ed Current *1	15A	22A	21A	30A	22A	30A	35A	38A	40A	
Specification / Ratings	Terr	minal screw		M3.5			M4			M4		
ficati		nping Terminal	1	.25-3.5 to 2-3	3.5		1.25-4 to 3.5-4			1.25-4 to 5.5-4	1	
oecif		. No. of Crimping Terminals		2			2			2		
S	Tigh	ntening Torque		1.0 to 1.3 N·r	n		1.4 to 2.0 N·m			1.4 to 2.0 N·m	1	
	ensi	g Terminal ons (mm) *2	93.6 min. 6.6 max. 4.7 max. 3.6 min.				<u> </u>	nin. 3 min.	9.5 m	6 max. 4.	min. 5 min.	
	End	Plate			BNE	BNE15W BNE30W						
*3	Dus	t Cover				230				BNC230		
es *	Mar	king Strip			PVC	1m/BNM7, Fib	er glass 1m/BN	M9, PVC 25m	/725			
Accessories	Mar	king Strip Fastner					BNM3					
Society		Rail/End Clip				Aluminun	n: BAA1000, Ste	eel: BNL6				
A	C Ra	ail/End Clip		Aluminum: BNCA1000, Steel: BNL7								
	DIN	+ C Rail/End Clip				Aluminum: B	NJA1000, Steel	: BNL6/BNL7				
	DIN + C Rail/End Clip Aluminum: BNJA1000, Steel: BNL6/BNL7  The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.											

- \*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.
- $\bullet$  Part No. with  $\leftrightarrows$  is UL recognized for field wiring (FW2).





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

Aluminum: BNJA1000, Steel: BNL8

- \*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.

DIN + C Rail/End Clip

• Part No. with \$\sigma\$ is UL recognized for field wiring (FW2).

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	Part No.	☆ BN75W 94A €_M6	BN100W 132A M8
scity ninal	Dimensions		
Large Capacity Screw Terminal	Dimensions	Dust Cover (BNC420)  22.5  20  17  17  17  17  17  17  17  17  17  1	29.8 26 23 33 26 23 29 20 20 20 20 20 20 20 20 20 20 20 20 20
	Ordering No.	BN75WPN10	BN100WPN05
	Package Quantity Weight (Approx.)	10 45g	5 86g
	- J ( 'FF)	19	9

Sta	ndards	UL/CSA	EN	JIS	UL/CSA	EN	JIS		
Otta	Insulation Voltage	600V	660V	1000V	600V	660V	1000V		
Specification / Ratings	Wire Size	16-4 AWG	22 mm <sup>2</sup> (8-4 AWG)	22 mm <sup>2</sup>	16-2 AWG	38 mm <sup>2</sup> (2AWG)	38 mm <sup>2</sup>		
Rat	Rated Current *1	80A	94A	94A	100A	132A	132A		
io.	Terminal screw *2		M6			M8			
icat	Crimping Terminal		2-6 to 22-6			2-8 to 38-8			
ecif	Max. No. of Crimping Terminals		2			2			
્રિ	Socket Wrench	12.7 mm squ	are drive hexagonal s	socket 10 (*4)	12.7 mm squ	are drive hexagonal s	ocket 13 (*2)		
	Tightening Torque		3.9 to 5.4 N·m	,	10 to 13.5 N⋅m				
	mping Terminal nensions (mm) *3		16.8 max. 6 min	_		22.8 max. 10 m	_		
	End Plate		BNE75W			BNE100W			
*5	Dust Cover		BNC420			BNC520			
	Marking Strip		PVC 1r	m/BNM9, PVC 25m/B	NM725				
Sori	Marking Strip Fastner			BN	M3				
Accessories	DIN Rail/End Clip	Aluminum: BAA1000, Steel: BNL8							
۱¥	Type C Rail/End Clip	Aluminum: BNCA1000, Steel: BNL8							
	DIN+Type C Rail/End Clip			Aluminum: BNJA	1000, 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 \$\times\$ is UL recognized for field wiring (FW2).



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		Part No.	BN150	W 175A	€ M8	BN150I	NW 175A	€ M8		
Large Capacity	Screw Terminal	Dimensions	When using 35mm DM Ratis2	74 63 33 33	29.8 26 23 28 28 28	When using 35mm DN Rali 52 When using 55mm DN Rali 52 6 21.5	74 63 33	29.8 26 23 23 23 21		
		Ordering No.		BN150WPN05	5		BN150NWPN05	)		
		Packaging Quantity Weight (Approx.)		88g			5 95g			
Cto	ndard		UL/CSA	EN	JIS			JIS		
old		lation Voltage	600V	660V	1000V	_		630V		
sbı		e Size	16-1/0 AWG	60 mm <sup>2</sup> (1/0 AWG)	60 mm <sup>2</sup>	_	_	60 mm <sup>2</sup>		
Ratir	Rate	ed Current *1	150A	175A	175A	_	_	175A		
/ uo		ninal screw *2		M8	'		M8			
icati		nping Terminal		2-8 to 60-8			2-8 to 60-8			
Specification / Ratings		. No. of Crimping Terminals		2			2			
\ <u>\\</u>	Soci	ket Wrench	12.7 mm squ	are drive hexagoi	nal socket 13 (*4)	12.7 mm s	quare drive hexago	onal socket 13		
	Tigh	tening Torque		10 to 13.5 N·ı			10 to 13.5 N·m	ı		
Crimping Terminal Dimensions (mm) *3		Terminal ons (mm) *3			22.8 max	98.5 min. 10 min.				
	End	Plate			BN	E150W				
	D		DUOCOO							

- \*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.

BNC520
PVC 1m/BNM7, Fiber glass 1m/BNM9

PVC 25m/BNM725

BNM3

Aluminum BAA1000, Steel: BNL8

Aluminum: BNCA1000, Steel: BNL8

Aluminum: BNJA1000, Steel: BNL8

- \*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.

**Dust Cover** 

Marking Strip

Marking Strip Fastner

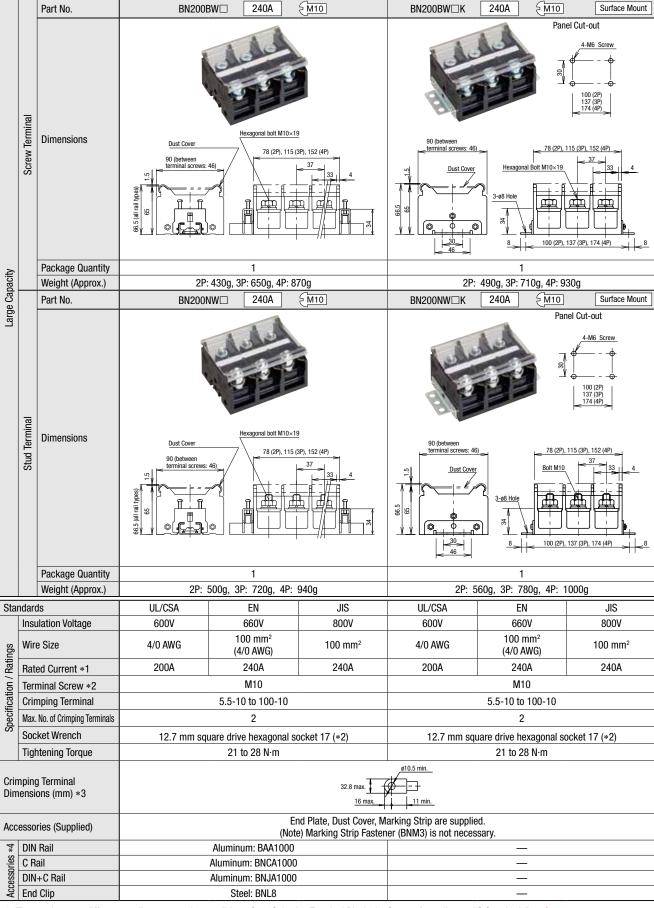
DIN Rail/End Clip

Type C Rail/End Clip

DIN+Type C Rail/End Clip

Accessories

BNI



- \*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  $\square$ . 2-pole: 2, 3-pole: 3, 4-pole: 4.

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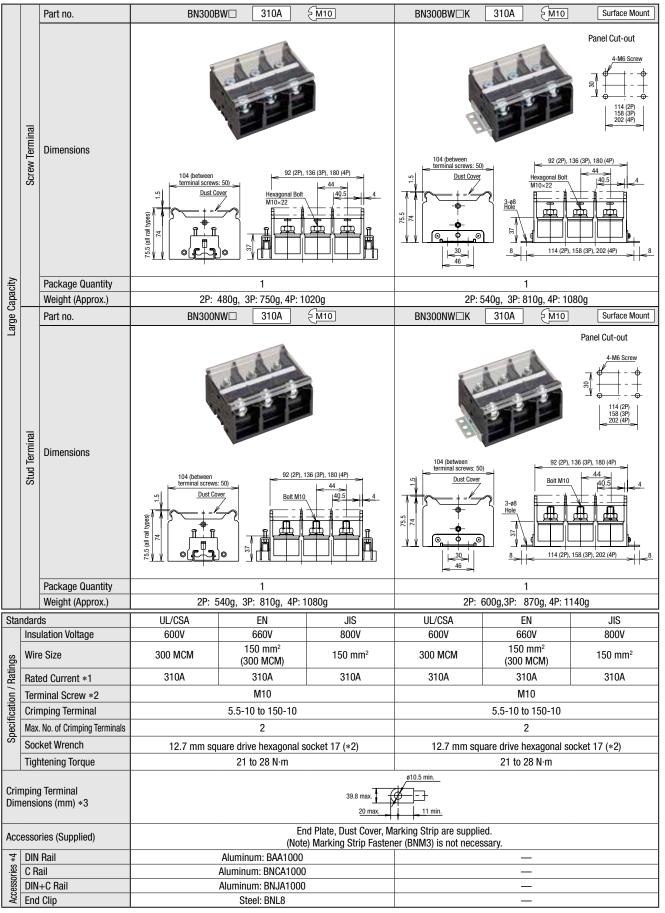
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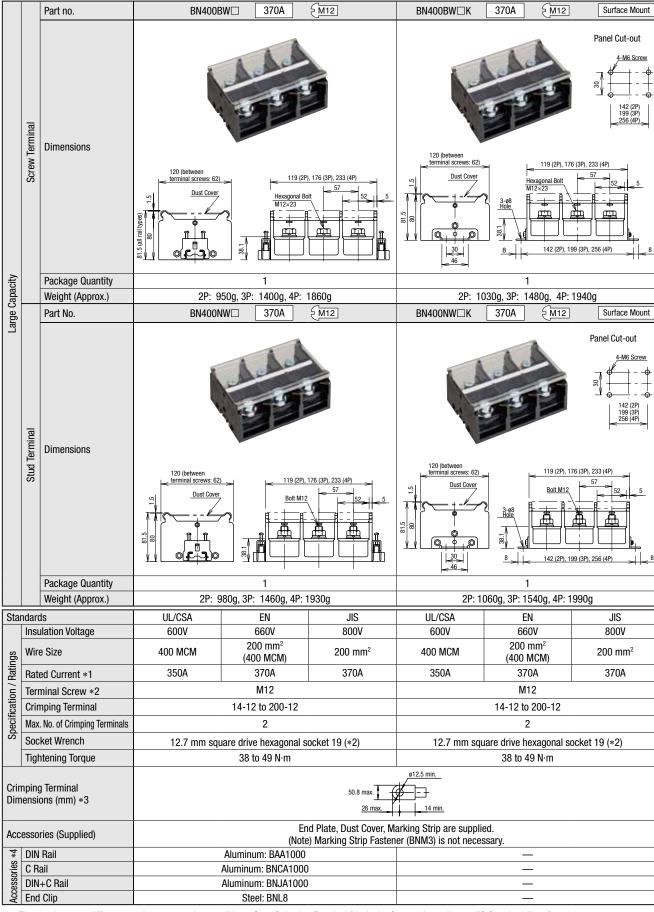
- \*1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006
- \*2: The grooves on the head of the hex bolt are for temporary tightening. For proper tightening, use an applicable socket wrench and tighten within the 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  $\square$ . 2-pole: 2, 3-pole: 3, 4-pole: 4.

IDEC

RN

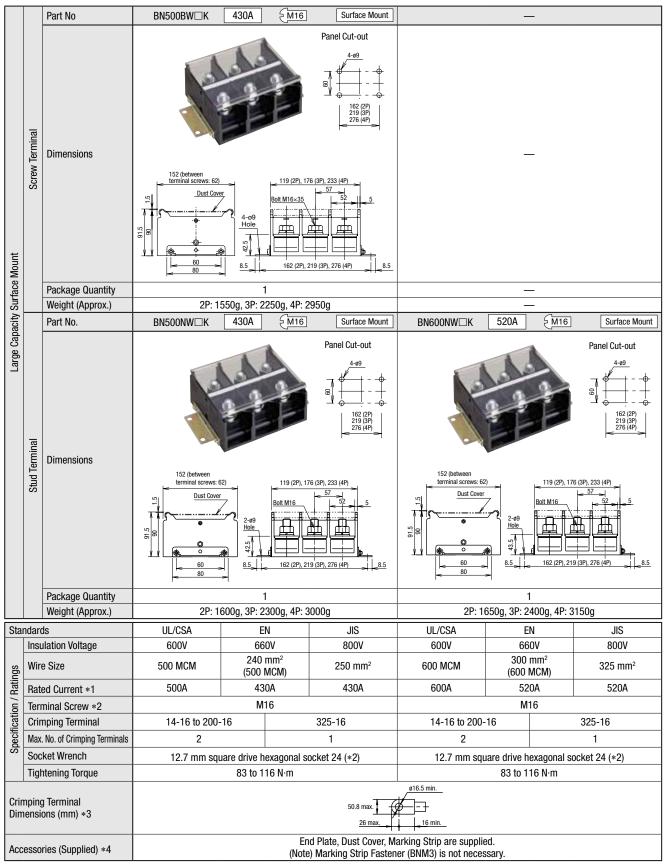
AUTO-ID



- \*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  $\square$ . 2-pole: 2, 3-pole: 3, 4-pole: 4.

AUTO-ID



- \*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  $\square$ . 2-pole: 2, 3-pole: 3, 4-pole: 4.

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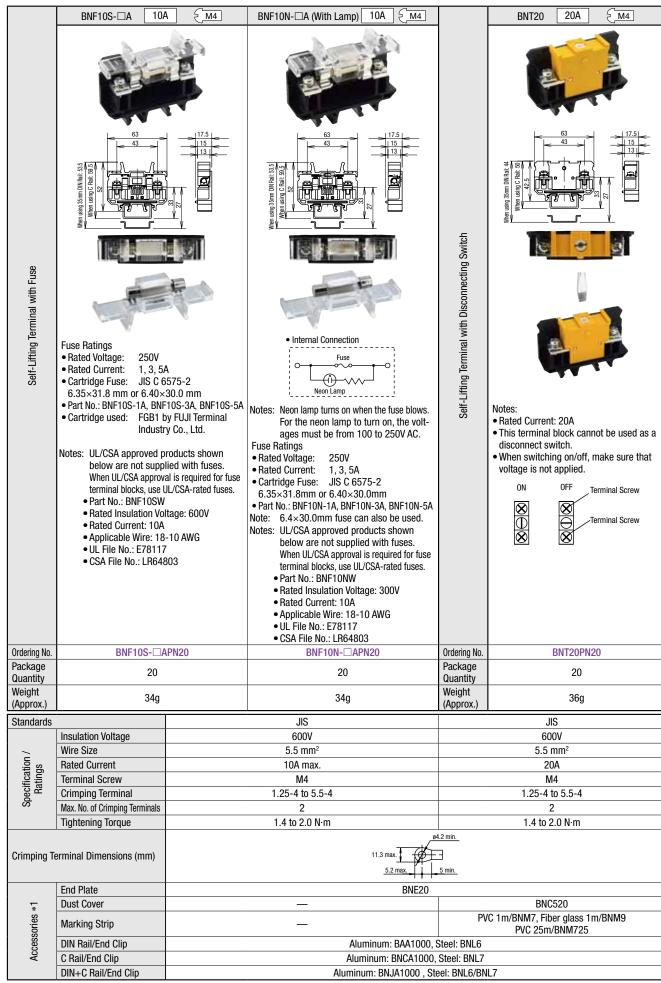
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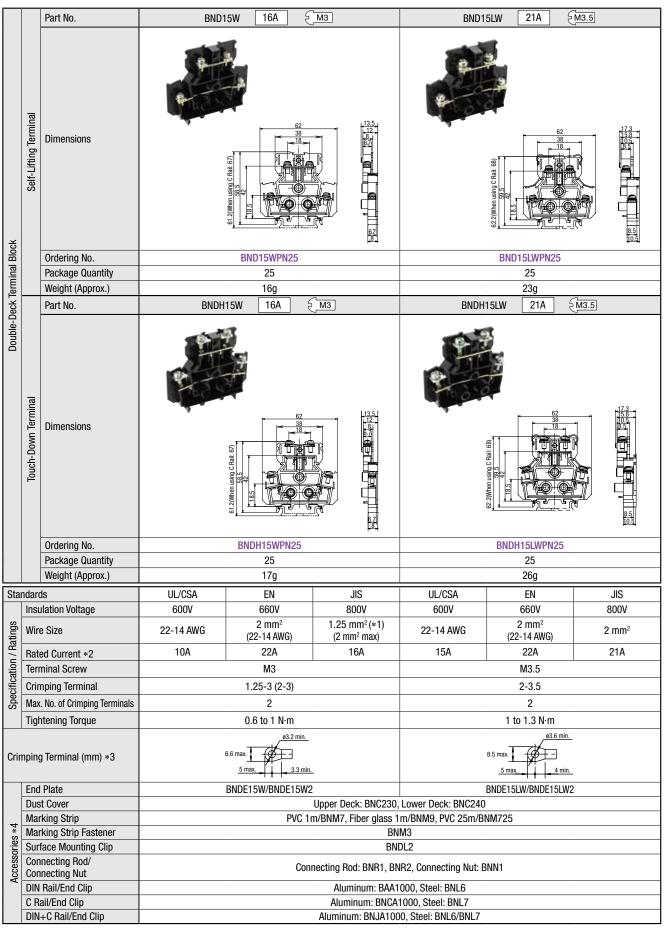


\*1: See G-025 for details on accessories.



BN

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- \*1: The rated applicable wire size is 1.25 mm<sup>2</sup>, but 2 mm<sup>2</sup> 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.

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BN

		Part No.	BN	D15WT	21A	€М3	3.5
X	Self-Lifting Terminal	Dimensions		. 61 2(When using C Rait 67)	58.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5	62 33.5 17.5 1 E	13.5 -12 -12 -13.5 -12 -13.5 -12 -13.5 -13
Bloc		Ordering No.		BND	15WTPN2	25	
inal		Package Quantity			25		
Term		Weight (Approx.)			17g		
eck .		Part No.	BND	H15WT	21A	€M:	3.5
Double-Deck Terminal Block	Touch-Down Terminal	Dimensions	When using DIN Pail: 61  When using DIN Pail: 61				
		Ordering No.	BNDH15WTPN25				
		Package Quantity			25		
		Weight (Approx.)			17g		
Star	ndaro	ds	UL/CSA		EN		JIS
	Insu	ulation Voltage	600V		660V		800V
Specification / Ratings	Wire	e Size	22-14 AWG	(22	2mm <sup>2</sup> 2-14 AWG)		2 mm <sup>2</sup>
n/F		ed Current *1	15A		22A		21A
atio	Terr	minal Screw			М3		
cific	Crin	nping Terminal		1.25-	-3.5 to 2-3	3.5	
Spe	Max	. No. of Crimping Terminals			2		
	Tigh	ntening Torque	1.0 to 1.3 N·m				
Crin		g Terminal (mm) *2		6.6 max. 4.7 max	3	6 min. .6 min.	
		Plate	BNDE15W/BNDE15W2				
		st Cover		eck: BNC2			
3		rking Strip	PVC 1m/BNM7	, Fiber glas		M9, PVC	25m/BNM725
* Sé		rking Strip Fastener			BNM3		
ssories *3		face Mounting Clip			BNDL2		
77	Con	nacting Pod/	i				

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

Connecting Rod: BNR1, BNR2, Connecting Nut: BNN

Aluminum: BAA1000, Steel: BNL6

Aluminum: BNCA1000, Steel: BNL7

Aluminum: BNJA1000, Steel: BNL6/BNL7

- \*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.



Connecting Rod/

Connecting Nut DIN Rail/End Clip

C Rail/End Clip

DIN+C Rail/End Clip

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		Part No.	BN15MC4 16A (common current) M3	BN15MC8 16A (common current) M3	BN15MC10 16A (common current) M3
		No. of Poles	4	8	10
		Shape			
erminal	Ferminal	3	Terminal Common	Terminal Common	Terminal Common
Common Terminal	Self-Lifting Terminal	Dimensions	When using 35mm DIN Rail: 35  When using C Rail: 41  22.5	37 (4P), 69 (8P),85 (10P)  8	38 19 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
		Ordering No.	BN15MC4PN10	BN15MC8PN10	BN15MC10PN10
		Package Quantity	10	10	10
		Weight (Approx.)	30g	57g	70g
		Color	Light Gray	Light Gray	Light Gray
Sta	ndar			JIS	
		ulation Voltage		600V	
ings		e Size		1.25 mm² (2 mm² max.)	
Rat		ed Current		16A/Common Current	
on /		minal Screw		M3	
icati		mping Terminal		1.25-3 (2-3)	
Specification / Ratings	Teri	x. No. of Crimping minals		2	
	Tigl	htening Torque		0.6-1.0 N·m	
Crimping Terminal 6.6 max. 6.6 max.					

- \*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**

Dimensions (mm)

End Plate

**Dust Cover** 

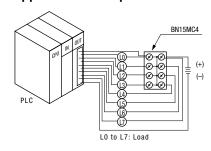
Marking Strip

C Rail / End Clip

Marking Strip Fastener
DIN Rail / End Clip

DIN+C Rail / End Clip

Accessories \*5



#### **Features**

- All terminals are short-circuted by a built-in common jumper. External jumpers are not required.
- Accessories (marking strip, cover, and rails) are compatible with standard types.

Supplied BNC230

PVC 1m/BNM7, Fiber glass 1m/BNM9, PVC 25m/BNM725

BNM3

Aluminum: BAA1000, Steel: BNL6

Aluminum: BNCA1000, Steel: BNL7

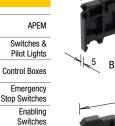
Aluminum: BNJA1000, Steel: BNL6/BNL7

- 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.



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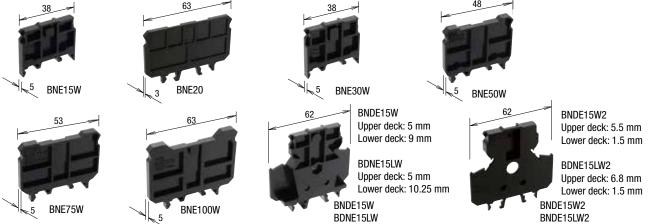
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Note: BNDE15W2 and BNDE15LW2 are end plates used for securing marking strips at the end of double deck terminal blocks.

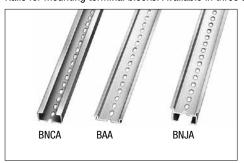
#### Rails

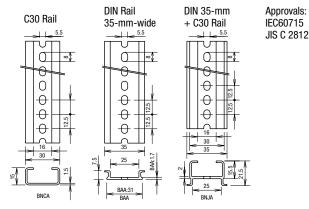
end plate

BNE150W

Securing a marking strip with the

Rails for mounting terminal blocks. Available in three styles.





Length	Part No.	Ordering No.	Material	Weight (Approx.)	Package Quantity
	BNCA1000	BNCA1000PN10	Aluminum	260g	10
1000 mm	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

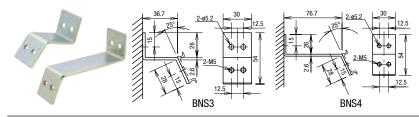
• Plating: Trivalent zinc chromate

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, BAP, BNCA, BNCP, BNJA	— (*1)	×	×	56g	10

- \*1: Do not use BNL8 because the insulation distance will be insufficcient 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

<b>Dust Cover</b>	Material: Polyca	rbonate				
BNC230 BNC320	BNC420	BNC520	BAC820	BNC1000	BNC930	BNC240

Length	Width (mm)	Part No.	Ordering No.	Terminal Blocks (□: No. of Poles)	Weight (Approx.)	Package Quantity
	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
1m	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,	56g	10
	1m	Lower Deck BNC240	BNC240PN10	BND15LW, BNDH15LW, BND15WT, BNDH15WT	15g	10

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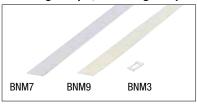
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# Accessories (Marking Strips / Marking Strip Fastener / Slide Marking Strip)

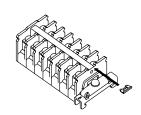
# Marking Strips, Marking Strip Fastener



Item	Part No.	Ordering No.	Weight (approx.)	Package Quantity	Specification
	BNM7	BNM7PN10	7.2g	10	PVC (glossy surface) 1000 mm $\times$ 9.5 mm $\times$ 0.5 mm
Marking Strip	BNM9	BNM9PN10	6.4g	10	Fiber glass (matte surface) 1000 mm $\times$ 9.5 mm $\times$ 0.5 mm
	BNM725	BNM725	_	1	PVC (matte surface) 25 m $\times$ 9.5 mm $\times$ 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.

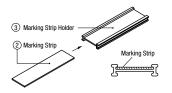
End plate (Thickness 5 r BNES15W BNES30W	nm)
	Terminal Block BN10W to BN15LWT BN30W

	Item	Part No.	Ordering No.	Terminal Blocks	Specification	Package Quantity
П		BNES15W	BNES15WPN10	BN10W to BN15LWT	For sliding marking strip	10
-	① End Plate	BNES30W	BNES30WPN10	BN30W	For sliding marking strip	10
	② Marking Strip BNM5		BNM5PN10	DNI4 OW to DNI4 FLINT	PVC (Note)	10
	③ Marking Strip Holder	BNMH1	BNMH1PN10	BN10W to BN15LWT BN30W	1m	10
	Dust Cover	BNCS230	BNCS230PN10	BNSOW	1m	10

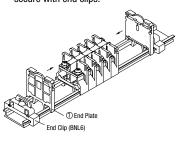
Note: Length 1000 mm  $\times$  Width 9.5 mm  $\times$  Thickness 0.5 mm

# Installing the Sliding Marking Strip

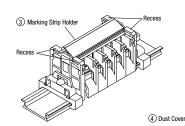
1. Insert the marking strip into the groove of the top of the marking strip holder.



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

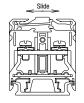


3. Insert the marking strip holder into the recess of the end plate.



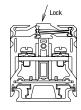
#### Movement

• Sliding movement of the marking strip holder

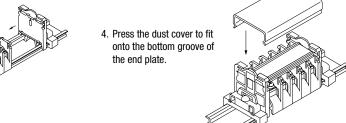


When sliding the marking strip holder, slide by holding both edges of the holder.

• To lock the marking strip holder



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



# 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		Without	Ring Terminal			2.8g	10
BNJ16B	BNJ16BPN10	- 7 mm	With	= Insulation	10A	BN10W BNH10W		10
BNJ16F	BNJ16FPN10	, , , , , ,	Without	Fork Terminal 35 (6-pole) 14 14 18 18 18 18 18 18 18 18 18 18 18 18 18	TOA		2.7g	10
BNJ16FB	BNJ16FBPN10		With	- Insulation			2.1Y =	10
BNJ26W	BNJ26WPN10		Without	Ring Terminal		BN15MW BNH15MWT BN15MWT BNH15MWT BND15W BNDH15W BNDH15WT BNDH15WT	3.1g	10
BNJ26WB	BNJ26WBPN10	- 8 mm	With		20A		3.1y =	10
BNJ26FW	BNJ26FWPN10		Without	Fork Terminal 40 (6-pole) 14 (8-pole) 14 (	ZUA		3.1g -	10
BNJ26FWB	BNJ26FWBPN10		With	insulation				10
BNJ46	BNJ46PN10		Without	Ring Terminal 52.5 (6-pole) 1.4 0.8		BN15LW BNH15LW BN15LWT BNH15LWT BND15LW BNDH15LW	4.6g -	10
BNJ46B	BNJ46BPN10	10.5 mm	With	E TENEROR PROBLEMS	20A			10
BNJ46F	BNJ46FPN10	10.0 11111	Without	Fork Terminal 52.5 (6-pole) 10.5 14.2 14.2 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3	2071			10
BNJ46FB	BNJ46FBPN10		With	Leg Line Line Line Line Line Line Line Line			0.09	10
BNJ56	BNJ56PN10		Without	Ring Terminal 60 (6-pole) 1.4 0.8 1.4		BN30W BNH30W	3.2g	10
BNJ56B	BNJ56BPN10	- 12 mm	With	- Insulation	30A		0.2y	10
BNJ56F	BNJ56FPN10	12 111111	Without	Fork Terminal 60 (6-pole) 142 93 12 12 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15			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	004	BN50W	10
BNJ62B	BNJ62BPN10	14.5 mm	With	206	80A	BNH50W	10

• 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.

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# **Accessories (Removal Tool)**

23 20 13 6 92

A tool for removing terminal blocks from the DIN rail.

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

Material: SteelPlating: 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: SteelPlating: Zinc

# **Connecting Rods**



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

Material: SteelPlating: 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: SteelPlating: Zinc

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# **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.

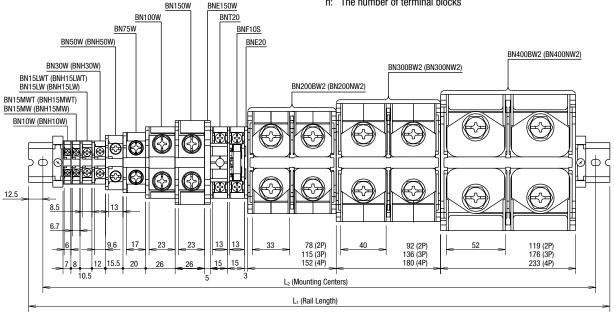
N: Rounded up numerical number from the calculated value of M. (Example: N for 19.1 is 20)

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

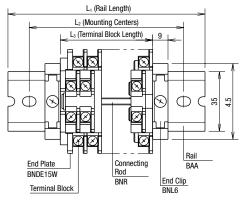
- A: Thickness of each terminal block
- B: Thickness of end plate
- C: Thickness of end clip when using 2 pieces of:

BNL6 = 56.0 mmBNL7 = 62.5 mm

 $\begin{aligned} & \text{BNL8} = 67.0 \text{ mm} \\ \text{n:} & \text{The number of terminal blocks} \end{aligned}$ 



# Rail Length (Double-Deck)



#### Calculating the length (mm)

Part No.	BND15W BNDH15W BND15WT	BND15LW BNDH15LW	
L1 (*1)	12.5 × N		
L2 (*1)	L <sub>1</sub> – 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	

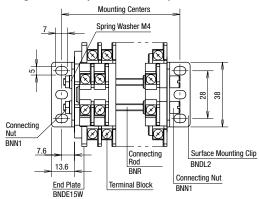
N: Rounded up numerical number from the calculated value of M. (Example: N for 19.1 is 20)

For BND15W, BNDH15W, BND15WT

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

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

# **Mounting Centers (Double-Deck)**



Calculating the length (mm)

Part No.	BND15W BNDH15W BND15WT	BND15LW BND15HLW
Mounting Centers (*1, *2)	$8 \times n + 24.2$	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

<sup>\*1:</sup> 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, particluarly when many terminal blocks are combined.

<sup>\*2:</sup> The length will be 1.5 mm longer when end plates BNDE15W2 and BNDE15LW2 are used.

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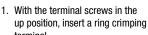
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#### Instructions

#### **How to Use Touch-Down Terminals**







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



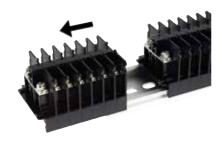
3. When the wiring is in position, tighten all the screws simultaneously.



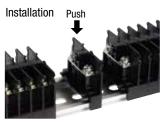
4. To remove the wiring, loosen the screw and lightly push up.

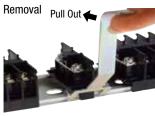
# terminal.

# Installation and Removal on Rails



# Additional Installation and Removal (on DIN Rail)

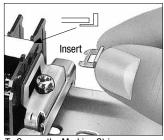


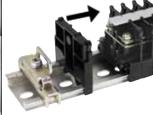


The following terminal blocks can be added or removed: BN10W, BNH10W, BN15MW, BNH15MW, BN15LW, BNH15LW, BN30W, BNH30W, BN15MWT, BNH15MWT, BN15LWT, BNH15LWT

### Securing the Ends of the Marking Strip

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





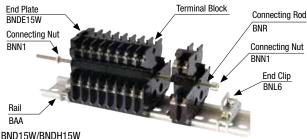
To Secure the Marking Strip

Installing End Plate

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

## Installation of Double-Deck Terminal Blocks (BND)

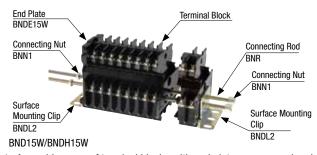
Rail Mount (photo: when using BND15W, BNDH15W, BNDE15W2)



BND15W/BNDH15W

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

#### **Surface Mount**

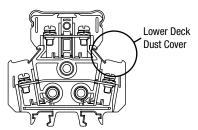


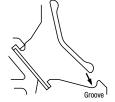
- 1. Assemble a row of terminal blocks with end plates on exposed ends.
- 2. Use BNDL2 mounting clips at both ends of a row.
- 3. With the two holes of the mounting clip (BNDL2) aligned with the terminal block holes, insert a connecting rod (BNR) through each
- 4. Secure the ends of the connecting rods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

#### Instructions

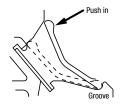
## **Dust Covers on the Lower Deck Terminal of Double-Deck Terminal Blocks**

**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.

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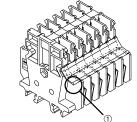
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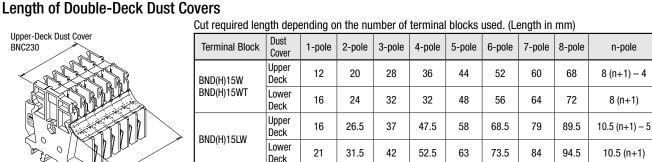
#### **Removing Dust Covers from Lower Deck Terminals**

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.
- 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.

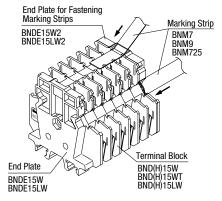


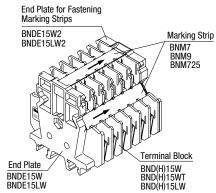
Lower-Deck Dust Cover BNC240

# 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.

Upper-Deck Dust Cover BNC230





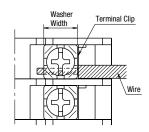
# **Notes on Wiring**

### **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.



SAPEN01A\_G TB July 2022



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