

BNH/BN Series



Key features of the BNH/BN series include:

- Touch-down terminals with spring-loaded captive screws available
- Jumpers available up to 30A model
- Fuse block with or without blown-fuse indicator in neon or LED
- Mount on 35mm standard DIN rail



File No. R9551701
J9551516 (power blocks)
R9650688 (dual-deck blocks)



Specifications

		Part Numbers	BNH10W	BNH15MW	BNH15LW	BNH30W
Specifications	Appearance					
	Width		0.275" (7mm)	0.315" (8mm)	0.413" (10.5mm)	0.472" (12mm)
	Approvals		UL, CSA, TUV	UL, CSA, TUV	UL, CSA, TUV	UL, CSA, TUV
	No. of Poles		1	1	1	1
	Wire Sizes		22 to 16 AWG (2mm ²)	22 to 14 AWG (2mm ²)	22 to 14 AWG (2mm ²)	18 to 10 AWG (5.5mm ²)
	Current		600V / 10A	600V / 10A	600V / 15A	600V / 30A
	Terminals	Size	M3	M3	M3.5	M4
		Type	Touch-down	Touch-down	Touch-down	Touch-down
	Mounting		35mm DIN rail	35mm DIN rail	35mm DIN rail	35mm DIN rail
	Terminal Torque	(N-m)	0.6 - 1.0	0.6 - 1.0	1.0 - 1.3	1.4 - 2.0
		(in-lbs.)	5.3 - 8.9	5.3 - 8.9	8.9 - 11.5	12.4 - 17.8
	End Plate		BNE15W	BNE15W	BNE15W	BNE30W
	DIN Rail Stop		BNL-5	BNL-5	BNL-5	BNL-5
	Dust Cover		BNC230	BNC230	BNC230	BNC230

Marking Strip	PVC	BNM7	BNM7	BNM7	BNM7
	Fiberglass	BNM9	BNM9	BNM9	BNM9
	End clip	BNM3	BNM3	BNM3	BNM3
Ring Terminal Jumpers		BNJ16	BNJ26W	BNJ46	BNJ56
Fork Terminal Jumpers		BNJ16F	BNJ26FW	BNJ46F	BNJ56F



1. BNDN1000 aluminum DIN rails are available in 1 meter lengths.
2. Marking strips are available in 1 meter lengths.
3. Jumpers are available in groups of six.
4. Remove the "H" in the terminal block part number for standard screw type.

Specifications con't

		Part Numbers	BNH50W	BN75W	BN150W	BNDH15W
Specifications	Appearance					
	Width		0.787" (20mm)	0.787" (20mm)	1.024" (26mm)	0.315" (8mm)
	Approvals		UL, CSA, TUV	UL, CSA, TUV	UL, CSA, TUV	UL, CSA, TUV
	No. of Poles		1	1	1	2
	Wire Sizes		16 to 6 AWG (14mm ²)	16 to 4 AWG (22mm ²)	16 to 0 AWG (38mm ²)	22 to 14 AWG (2mm ²)
	Current		600V / 50A	600V / 75A	600V / 150A	600V / 10A
	Terminals	Size	M5	M6	M8	M3
		Type	Touch-down	Hex bolt	Hex bolt	Touch-down
	Mounting		35mm DIN rail	35mm DIN rail	35mm DIN rail	35mm DIN rail, surface
	Terminal Torque	(N-m)	2.6 - 3.7	3.9 - 5.4	10 - 13.5	0.6 - 1.0
		(in-lbs.)	23.1 - 32.8	34.6 - 47.9	88.8 - 119.8	5.3 - 8.9
	End Plate		BNE50W	BNE75W	BNE150W	BNDE15W
	DIN Rail Stop		BNL-5	BNL-6	BNL-6	BNL-8
	Dust Cover		BNC320	BNC420	BNC520	BNC230 (top level) BNC240 (bottom Level)
	Marking Strip	PVC	BNM7	BNM7	BNM7	BNM7
		Fiberglass	BNM9	BNM9	BNM9	BNM9
		End clip	BNM3	BNM3	BNM3	BNM3
	Connecting Rods		—	—	—	BNR1 10.34" (265mm) BNR2 19.69" (500mm)
	Connecting Nuts		—	—	—	BNN1 (2 pieces)
	Base Mount Brackets		—	—	—	BNDL2
	Ring Terminal Jumpers		—	—	—	BNJ26
	Fork Terminal Jumpers		—	—	—	BNJ26FW



1. BNDN1000 aluminum DIN rails are available in 1 meter lengths.
2. Marking strips are available in 1 meter lengths.
3. Jumpers are available in groups of six.
4. Remove the "H" in the terminal block part number for standard screw type.

Specifications con't

		Part Numbers	BNF10SW	BNF10NW	BNF10DW
Specifications	Appearance				
	Width		0.591" (15mm)	0.591" (15mm)	0.591" (15mm)
	Blown Fuse Indicator		None	Neon (100–300VAC)	LED (24V DC)
	Approvals		UL, CSA, Voltage 600V	UL, CSA, Voltage 600V	UL, CSA, Voltage 600V
	No. of Poles		1	1	1
	Wire Sizes		18 to 10 AWG (5.5mm ²)	18 to 10 AWG (5.5mm ²)	18 to 10 AWG (5.5mm ²)
	Current		10A maximum	10A maximum	10A maximum
	Terminals	Size	M4	M4	M4
		Type	Standard screw	Standard screw	Standard screw
	Mounting		35mm DIN rail	35mm DIN rail	35mm DIN rail
	Terminal Torque	(N-m)	1.4 - 2.0	1.4 - 2.0	1.4 - 2.0
		(in-lbs.)	12.4 - 17.8	12.4 - 17.8	12.4 - 17.8
	End Plate		BNE20	BNE20	BNE20
	DIN Rail Stop		BNL-5	BNL-5	BNL-5
	Dust Cover		—	—	—
	Marking Strip		BNM7	BNM7	BNM7
	Applicable Fuse Size		1/4" x 1-1/4" (6.35 x 31.8mm)	1/4" x 1-1/4" (6.35 x 31.8mm)	1/4" x 1-1/4" (6.35 x 31.8mm)



1. BNDN1000 aluminum DIN rails are available in 1 meter lengths.
2. Fuses not included.

Dimensions

BNH Series

Part No.	Diagrams		
BNH10W BNH15MW BNH15LW	BNH10W	BNH15MW	BNH15LW
	When using 35-mm DIN Rai: 35 When using C Rail: 41	When using 35-mm DIN Rai: 35 When using C Rail: 41	When using 35-mm DIN Rai: 35 When using C Rail: 41
BNH30W BNH50W	BNH30W	BNH50W	
	When using 35-mm DIN Rai: 38 When using C Rail: 44	When using 35-mm DIN Rai: 44 When using C Rail: 50	

BN Series

Part No.	Diagrams	
BN75W BN150W	BN75W	BN150W
	When using 35-mm DIN Rai: 44 When using C Rail: 50	When using 35-mm DIN Rai: 52 When using C Rail: 58

Part No.	Diagrams
BNF10SW BNF10NW BNF10DW	When using 35-mm DIN Rai: 53.5 When using C Rail: 59.5
BNDH15W	When using 35-mm DIN Rai: 61 When using C Rail: 67

Accessories

Part Numbers: End Plates, DIN Rail Stops, Stand-Offs, DIN Rail and Dust Covers

Description	Appearance	Use with	Part No.	Remarks
End Plates		BNH10W BNH15MW BNH15LW	BNE15W	
		BNH30W	BNE30W	
		BNF10SW BNF10NW BNF10DW	BNE20	
		BNH50W	BNE50W	
		BN75W	BNE75W	
		BN150W	BNE150W	
		BNDH15W	BNDE15W	
DIN Rail Stops		BNH10W BNH15MW BNH15LW BNH30W BNH50W BNF10SW BNF10NW BNF10DW BA111T BA211T BA311T BA411S BAF111SU BAF111SDU	BNL5 (small)	1. DIN rail stops prevent side-to-side movement. 2. The BNL-5 width is 0.375" (9.5mm).
		BN75W BN150W	BNL6 (medium)	1. DIN rail stops prevent side-to-side movement. 2. The BNL-6 width is 0.375" (9.5mm). 3. To firmly stabilize these higher profile terminal blocks, the BNL-6 has a higher profile than the BNL-5.
		BNDH15W BN200NW# BN400NW#	BNL8 (large)	1. DIN rail stops prevent side-to-side movement. 2. The BNL-8 width is 0.571" (14.5mm). 3. # = number of poles.
DIN Rail Stand-Offs		All series	BNS3	1.46" (37mm) height
			BNS4	3.03" (77mm) height
DIN Rail		All series	BNDN1000 (length 39.37" (1m))	1. For calculating the rail lengths required, see the instructions on page P-18. 2. The DIN rail material is aluminum.
Dust Covers		BNDH15W BNH10W BNH15MW BNH15LW BNH30W	BNC230	The overall length is 39.37" (1,000mm). The material is polycarbonate.
		BNH50W	BNC320	
		BN75W	BNC420	
		BN150W	BNC520	
		BN200	BAC820	
		BN400	BNC1000	

Accessories con't

Part Numbers: Rods, Nuts, Marking Strips, Dust Covers, and Jumpers

Description	Appearance	Use with	Part No.	Remarks
Marking Strips		All series	BNM7	Material: polyvinyl chloride (PVC) Strip dimensions are 0.37"x39" (9.5 x 1,000mm).
			BNM9	Material: fiberglass Strip dimensions are 0.37"x39" (9.5 x 1,000mm).
Marking Strip Fastener		All series	BNM3	Used to prevent marking strips from sliding out.
Ring Terminal Jumpers		BNH10W	BNJ16	Jumpers come standard with 6 points. Note: insulated jumpers available - add "B" to end of part number. For example, BNJ26WB.
		BNH15MW	BNJ26W	
		BNH15LW	BNJ46	
		BNH30W	BNJ56	
		BNDH15W	BNJ26W	
Fork Terminal Jumpers		BNH10W	BNJ16F	
		BNH15MW	BNJ26FW	
		BNH15LW	BNJ46F	
		BNH30W	BNJ56F	
		BNDH15W	BNJ26FW	
Surface Mount Bracket		BNDH15W (dual-deck)	BNDL2	Used to surface mount dual-deck terminal blocks. (BNDL2).
M4 Thread Rod		BNDH15W	BNR1 (265mm)	1. Rod and connecting nuts are used to mount dual-decks collectively.
			BNR2 (500mm)	2. Each connecting nut set includes 1 hex connecting nut and 1 round connecting nut.
Connecting Nuts		BNR1 BNR2	BNN1	3. The BNR1 rod dimensions are 0.027" x 10.43" (0.7 x 265mm). 4. The BNR2 rod dimensions are 0.027" x 19.69" (0.7 x 500mm).



For accessory dimensions, see page P-14.

P

Terminal Blocks

Dimensions

Dimensions: DIN Rail

Part No.	Diagram
BNDN1000	1.365" ±0.012 (35mm ±0.3) 0.413" +0.020, -0 (10.5mm +0.5, -0) 3.59" (92mm) 1.99" (51mm) 1.99" (51mm) 39.37" (1m) Ø 0.148" x 0.488" Slot, 3 Places (Ø 3.8 x 12.5mm)

Dimensions: Jumpers

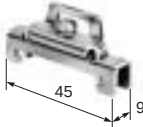
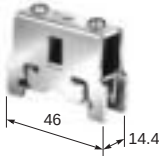
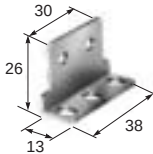
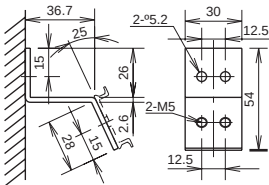
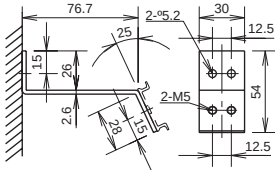
		Dimensions						
Part No.	Diagram	A	B	C	D	E*	F	G
BNJ16	Part No. with "F" = Fork	0.156" (4mm)	0.433" (11mm)	0.224" (6mm)	0.146" (4mm)	0.276" (7mm)	1.365" (35mm)	—
BNJ16F (fork)		0.433" (11mm)	0.144" (3.7mm)	0.224" (6mm)	0.146" (4mm)	0.276" (7mm)	1.365" (35mm)	0.156" (4mm)
BNJ26W		0.175" (4.5mm)	0.429" (11mm)	0.25" (6.4mm)	Ø 0.144" (3.7mm)	0.312" (8mm)	1.56" (40mm)	—
BNJ26FW (fork)		0.429" (11mm)	0.175" (4.5mm)	0.25" (6.4mm)	Ø 0.144" (3.7mm)	0.312" (8mm)	1.56" (40mm)	0.175" (4.5mm)
BNJ46	Part No. with "F" = Fork	0.215" (5.5mm)	0.429" (11mm)	0.32" (8.2mm)	Ø 0.165" (4.2mm)	0.41" (10.5mm)	2.048" (52.5mm)	—
BNJ46F (fork)		0.429" (11mm)	0.175" (4.5mm)	0.32" (8.2mm)	Ø 0.165" (4.2mm)	0.41" (10.5mm)	2.048" (52.5mm)	0.215" (5.5mm)
BNJ56		0.234" (6mm)	0.371" (9.5mm)	0.363" (9.3mm)	Ø 0.164" (4.2mm)	0.468" (12mm)	2.34" (60mm)	—
BNJ56F (fork)		0.371" (9.5mm)	0.228" (5.8mm)	0.363" (9.3mm)	Ø 0.164" (4.2mm)	0.468" (12mm)	2.34" (60mm)	0.234" (6mm)



- 1.* Dimension E on center.
2.Thickness + 0.8mm (0.0315").

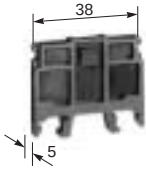
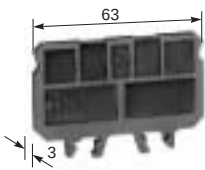
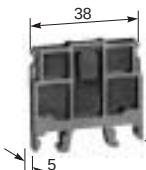
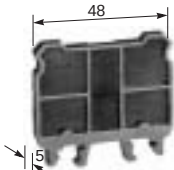
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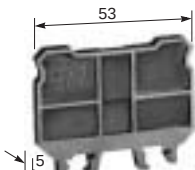
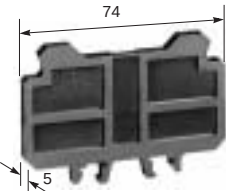
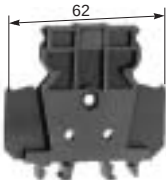
Dimensions: DIN Rail Stops and Stand-Offs

Part No.	Dimensions
BNL-5	 BNL-6 shown, BNL-5 same except without back crossbar
BNL-6	
BNL-8	
BNDL2	
BNS3	
BNS4	

Dimensions (con't)

Dimensions: End Plates

Part No.	Dimensions
BNE15W	
BNE20	
BNE30W	
BNE50W	

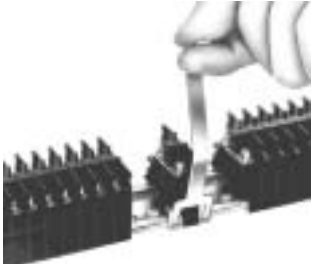
Part No.	Dimensions
BNE75W	
BNE150W	
BNDE15W	

Instructions

Wiring Touch-Down Terminal Blocks: BNH Series

Instructions	Step 1	Step 2	Step 3	Step 4
Step 1. Insert the wire (or crimping terminal) into the terminal block with the terminal screws in the open position. (Use of crimping terminals is optional.)				
Step 2. Push the terminal screw down to hold the wire in place.				
Step 3. Hold the terminal screw down, and tighten with a screwdriver.				
Step 4. To remove the wire, loosen the terminal screw and pull up until wire is released.				

Installation and Removal of Terminal Blocks

Instructions	Appearance
Step 1. Slide the terminal blocks onto the DIN rail from one end. Step 2. Use BNL5 or BNL6 end clips to secure the terminal block row and to prevent side-to-side movement. BNH10W, BNH15MW, BNH15LW, and BNH30W can be installed from the middle of a DIN rail. Step 3. To install, place the terminal block on top of the DIN rail and push down until both edges of the terminal block snap onto the DIN rail. Step 4. To remove the terminal block, use the BND2 removal tool as shown on the right.	 Removal Tool BND2 

Mounting Double-Deck Terminal Blocks

Instructions	Appearance
DIN Rail Mount: Step 1. First install the end plate. Then mount the terminal blocks onto the DIN rail. Step 2. To prevent side-to-side movement on the DIN rail, use the BNL-8 mounting clip at both ends of the rail.	Diagram illustrating the DIN Rail Mounting process. The components shown are: Terminal Block, End Plate, Connecting Nut (hex), Mounting Clip, Connecting Rod, and Connecting Nut (round).
Panel Mount: Step 1. Assemble a row of terminal blocks with end plates on exposed end(s). Step 2. Use BNDL2 mounting clips at both ends of a row. Step 3. With the two holes of the mounting clip aligned with the terminal block holes, insert a connecting rod through each hole. Step 4. Secure the ends of the connecting rods with the connecting nuts, as shown below.	

Calculating DIN Rail Lengths

Instructions	Appearance
Step 1. Add widths of all terminal blocks (reference pages K-4 through K-9). Step 2. Add the endplate thickness (usually only one). Step 3. Add the DIN rail stop widths (usually two are used). Step 4. Round to the nearest 2" (50mm) increment to allow for DIN rail hole spacing. Step 5. Add 1" (25mm) to ensure 0.5" (12.5mm) of clearance at each end of the DIN rail.	

DIN Rail Stop Dimensions

Part No.	Width
BNL-5	.374" (9.5mm)
BNL-6	.374" (9.5mm)
BNL-8	.571" (14.5mm)

Torque Specifications

Screw Size	M3	M3.5	M4	M5	M6	M8	M10	M12	Diagram
Torque (N-m)	0.6 to 1.0	1.0 to 1.3	1.4 to 2.0	2.6 to 3.7	3.9 to 5.4	10 to 13.5	21 to 28	38 to 49	
(kgf-cm)	6.1 to 10.2	10.2 to 13.3	14.3 to 20.4	26.5 to 37.7	39.8 to 55.1	102 to 138	214 to 286	388 to 500	
Dimension A	0.257" (6.6mm)	0.332" (8.5mm)	0.371" (9.5mm)	0.499" (12.8mm)	0.655" (16.8mm)	0.890" (22.8mm)	1.279" (32.8mm)	1.981" (50.8mm)	
Dimension B	0.129" (3.3mm)	0.156" (4mm)	0.176" (4.5mm)	0.176" (4.5mm)	0.234" (6mm)	0.312" (8mm)	0.429" (11mm)	0.546" (14mm)	
Dimension C	0.195" (5mm)	0.195" (5mm)	0.234" (6mm)	0.254" (6.5mm)	0.332" (8.5mm)	0.429" (11mm)	0.624" (16mm)	1.014" (26mm)	
Dimension D	Ø 0.125" (3.2mm)	Ø 0.140" (3.6mm)	Ø 0.164" (4.2mm)	Ø 0.203" (5.2mm)	Ø 0.242" (6.2mm)	Ø 0.332" (8.5mm)	Ø 0.410" (10.5mm)	Ø 0.488" (12.5mm)	

Rated Current

Applicable Wire	Rated at 60°C
22 AWG (0.3mm ²)	3A
20 AWG (0.5mm ²)	5A
18 AWG (0.75mm ²)	7A
16 AWG (1.25mm ²)	10A
14 AWG (2mm ²)	15A
12 (3.5mm ²)	20A
10 (5.5mm ²)	30A
6 (14mm ²)	50A
4 (22mm ²)	75A
0 (38mm ²)	100A
00 (60mm ²)	150A
0000 (100mm ²)	200A
300mcm (150mm ²)	300A
400mcm (200mm ²)	350A

UL/CSA ratings are specified. The current carrying capacity depends on the rating of the wire used, as shown.

