

# Terminal Blocks

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For more information on this product family, visit our website.

Additional resources include:

- New and updated product information
- Downloadable software demos & upgrades
- Part configuration tool & cross reference
- Online stock check & ordering
- IDEC field sales & distributor search
- Online literature request
- Downloadable manuals & CAD drawings
- Manufacturer's suggested retail price list
- Product training schedule & locations
- Advertising & trade show schedules
- Press releases & FAQs

**[www.idec.com/terminalblock](http://www.idec.com/terminalblock)**

### Key features of IDEC terminal blocks include:

- Molded from UL94-V0 material with excellent flame- and shock-resistance
- Mount on a standard 35mm DIN rail
- Marking strips and dust covers are available
- Control circuit, power circuits, and fuse blocks, are available
- Sectional or one-piece construction

Specifications	Insulation Voltage	600V
	Dielectric Strength	2,500V AC, 1 minute
	Insulation Resistance	100MW minimum
	Operating Temperature	-25 to +55°C
	Operating Humidity	45 to 85% RH

## Selection Guide

Description	Appearance	Page	Current
<b>Modular DIN Rail Terminal Blocks</b>		861	10A to 150A
<b>Modular DIN Rail Fuse Holders</b>		863	10A maximum
<b>One-Piece DIN Rail Terminal Blocks</b>		867	15A to 40A
<b>One-Piece Power Blocks</b> (DIN rail and surface mount)		865	200A to 350A
<b>One-Piece DIN Rail Fuse Holders</b>		868	10A maximum
<b>DIN Rail Break-Out Modules</b>		877	1A maximum

BNH/BN Series



Key features of the BNH/BN series include:

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



UL Recognized  
File No. E78117



CSA Certified  
File No. LR64803



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



Specifications

Part Numbers		BNH10W	BNH15MW	BNH15LW	BNH30W
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	22 to 14 AWG	22 to 14 AWG	18 to 10 AWG
Voltage/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 (ex. BNH10W becomes BN10W).

Switches & Pilot Lights

Display Lights



Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers

**Specifications, continued**

Part Numbers		BNH50W	BN75W	BN150W	BNDH15W
<b>Appearance</b>					
	<b>Width</b>	0.610" (15.5mm)	0.787" (20mm)	1.024" (26mm)	0.315" (8mm)
<b>Approvals</b>		UL, CSA, TUV	UL, CSA, TUV	UL, CSA, TUV	UL, CSA, TUV
<b>No. of Poles</b>		1	1	1	2
<b>Wire Sizes</b>		16 to 6 AWG	16 to 4 AWG	16 to 0 AWG	22 to 14 AWG
<b>Voltage/Current</b>		600V / 50A	600V / 75A	600V / 150A	600V / 10A
<b>Terminals</b>	Size	M5	M6	M8	M3
	Type	Touch-down	Hex bolt	Hex bolt	Touch-down
<b>Mounting</b>		35mm DIN rail	35mm DIN rail	35mm DIN rail	35mm DIN rail, surface
<b>Terminal Torque</b>	(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
<b>End Plate</b>		BNE50W	BNE75W	BNE150W	BNDH15W
<b>DIN Rail Stop</b>		BNL-5	BNL-6	BNL-6	BNL-8
<b>Dust Cover</b>		BNC320	BNC420	BNC520	BNC230 (top level) BNC240 (bottom Level)
<b>Marking Strip</b>	PVC	BNM7	BNM7	BNM7	BNM7
	Fiberglass	BNM9	BNM9	BNM9	BNM9
	End clip	BNM3	BNM3	BNM3	BNM3
<b>Connecting Rods</b>		—	—	—	BNR1 10.34" (265mm) BNR2 19.69" (500mm)
<b>Connecting Nuts</b>		—	—	—	BNN1 (2 pieces)
<b>Base Mount Brackets</b>		—	—	—	BNDL2
<b>Ring Terminal Jumpers</b>		—	—	—	BNJ26
<b>Fork Terminal Jumpers</b>		—	—	—	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 (ex. BNH50W becomes BN50W).

Switches &amp; Pilot Lights

Display Lights




Relays &amp; Sockets

Timers

Terminal Blocks

Circuit Breakers

## Specifications, continued

Part Numbers		BNF10SW	BNF10NW	BNF10DW
Appearance				
	Width	0.591" (15mm)	0.591" (15mm)	0.591" (15mm)
Blown Fuse Indicator		None	Neon (100–300VAC)	LED (24V DC)
Approvals		UL, CSA	UL, CSA	UL, CSA
No. of Poles		1	1	1
Wire Sizes		18 to 10 AWG	18 to 10 AWG	18 to 10 AWG
Voltage/Current		600V/10A maximum	600V/10A maximum	600V/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**

Switches & Pilot Lights

**BNH Series**

Part No.	Diagrams	
<b>BNH10W</b> <b>BNH15MW</b>		
<b>BNH15LW</b> <b>BNH30W</b>		
<b>BNH50W</b>		

Display Lights

Relays & Sockets

Timers

**BN Series**

Part No.	Diagrams	
<b>BN75W</b> <b>BN150W</b>		

Terminal Blocks

Part No.	Diagrams	
<b>BNF10SW</b> <b>BNF10NW</b> <b>BNW10DW</b>		
<b>BNDH15W</b>		

Circuit Breakers

BN Power Block Series



Key features of the BN series include:

- Power blocks up to 350A are available for DIN rail or direct mounting on panel surfaces
- 2, 3, 4 pole models available



UL Recognized  
File No. E78117



CSA Certified  
File No. LR64803



File No. J9551516

Specifications

Part Numbers		BN200NW# (replace # with the number of poles)	BN400NW# (replace # with the number of poles)	BN200NW#K (replace # with the number of poles)	BN400NW#K (replace # with the number of poles)
Appearance					
Width		See dimension table on page 866	See dimension table on page 866	See dimension table on page 866	See dimension table on page 866
Approvals		UL, CSA, TUV	UL, CSA, TUV	UL, CSA, TUV	UL, CSA, TUV
No. of Poles		2, 3, 4	2, 3, 4	2, 3, 4	2, 3, 4
Wire Sizes		0000 AWG	400 mcm	0000 AW	400 mcm
Voltage/Current		600V / 200A	600V / 350A	600V / 200A	600V / 350A
Terminals	Size	M10 stud	M12 stud	M10 stud	M12 stud
	Type	17mm hex	19mm hex	17mm hex	19mm hex
Mounting		35mm DIN rail	35mm DIN rail	Surface	Surface
Terminal Torque	(N-m)	21 - 28	38 - 49	21 - 28	38 - 49
	(in-lbs.)	186 - 249	337 - 435	186 - 249	337 - 435
DIN Rail Stop		BNL-8	BNL-8	—	—
Dust Cover		Included	Included	Included	Included
Marking Strip		Included	Included	Included	Included



1. BNDN1000 aluminum DIN rails are available in 1 meter lengths.

**Dimensions**

Switches & Pilot Lights

Part No.	Diagram									
BN200NW BN400NW										
Part No.	No. of poles	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim H	Dim I
BN200NW	2-Pole	3.04" (78mm)	1.44" (37mm)	1.29" (33mm)	0.156" (4mm)	Terminal stud M10	1.33" (34mm)	2.59" (66.5mm)	2.56" (65mm)	3.51" (90mm)
	3-Pole	4.49" (115mm)	1.44" (37mm)	1.29" (33mm)	0.156" (4mm)	Terminal stud M10	1.33" (34mm)	2.59" (66.5mm)	2.56" (65mm)	3.51" (90mm)
	4-Pole	5.93" (152mm)	1.44" (37mm)	1.29" (33mm)	0.156" (4mm)	Terminal stud M10	1.33" (34mm)	2.59" (66.5mm)	2.56" (65mm)	3.51" (90mm)
BN400NW	2-Pole	4.41" (113mm)	2.22" (57mm)	2.03" (52mm)	0.195" (5mm)	Terminal stud M12	1.48" (38mm)	3.18" (81.5mm)	3.12" (80mm)	4.68" (120mm)
	3-Pole	6.86" (176mm)	2.22" (57mm)	2.03" (52mm)	0.195" (5mm)	Terminal stud M10	1.48" (38mm)	3.18" (81.5mm)	3.12" (80mm)	4.68" (120mm)
	4-Pole	9.09" (233mm)	2.22" (57mm)	2.03" (52mm)	0.195" (5mm)	Terminal stud M10	1.48" (38mm)	3.18" (81.5mm)	3.12" (80mm)	4.68" (120mm)

Display Lights

Relays & Sockets

Part No.	Diagram										Mounting Hold Dimension		
BN200NW#K BN400NW#K													
Part No.	No. of poles	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim H	Dim I	Dim J	Dim K	Dim L
BN200NW	2-Pole	3.04" (78mm)	3.9" (100mm)	4.52" (116mm)	3.9" (100mm)	Terminal stud M10	∅ 0.312" (8mm) 3 holes	1.33" (34mm)	1.44" (37mm)	1.29" (33mm)	0.156" (4mm)	2.59" (66.5mm)	2.54" (65mm)
	3-Pole	4.49" (115mm)	5.34" (137mm)	5.97" (153mm)	5.34" (137mm)								
	4-Pole	5.93" (152mm)	6.79" (174mm)	7.41" (190mm)	6.79" (174mm)								
BN400NW	2-Pole	4.41" (113mm)	5.54" (142mm)	6.16" (158mm)	5.54" (142mm)	Terminal stud M10	∅ 0.312" (8mm) 3 holes	1.48" (38mm)	2.22" (57mm)	2.03" (52mm)	0.195" (5mm)	3.21" (81.5mm)	3.12" (80mm)
	3-Pole	6.86" (176mm)	7.76" (199mm)	8.39" (215mm)	7.76" (199mm)								
	4-Pole	9.09" (233mm)	9.98" (256mm)	10.61" (272mm)	9.98" (256mm)								

Timers

Terminal Blocks

Circuit Breakers



## BA Series



## Key features of the BA series include:

- Self-contained: end plates are not required
- Rugged heavy-duty construction
- Current capacities up to 40A
- 3-pole units available as 1 piece (no endplates are needed)
- Fuse blocks with blown fuse indicators



UL Recognized  
File No. E78117



CSA Certified  
File No. LR64803

## Specifications

## Power Blocks




	Part Numbers	BA111T	BA211T	BA311T	BA411S
Appearance					
Width		0.984" (25mm)	1.201" (30.5mm)	1.358" (34.5mm)	0.630" (16mm)
Approvals		UL, CSA	UL, CSA	UL, CSA	UL, CSA
No. of Poles		3	3	3	1
Wire Sizes		22 to 14 AWG	22 to 12 AWG	18 to 10 AWG	16 to 6 AWG
Voltage/ Current	UL/CSA	300V / 15A	300V / 20A	150V / 30A	600V / 40A
	JIS	600V / 16A	600V / 21A	600V / 40A	600V / 70A
Terminals	Size	M3	M3.5	M4	M5
	Type	Standard screw	Standard screw	Standard screw	Standard screw
Mounting		35mm DIN rail	35mm DIN rail	35mm DIN rail	35mm DIN rail
Terminal Torque	(N-m)	0.6 - 1.0	1.0 - 1.3	1.4 - 2.0	2.6 - 3.7
	(in-lbs.)	5.3 - 8.9	8.9 - 11.5	12.4 - 17.8	23.1 - 32.8
DIN Rail Stop		BNL-5	BNL-5	BNL-5	BNL-5
Dust Cover		BNC220	BNC220	BNC230	BNC320
Marking Strip	PVC	BNM7	BNM7	BNM7	BNM7
	Fiberglass	BNM9	BNM9	BNM9	BNM9
	End clip	BNM3	BNM3	BNM3	BNM3



1. BNDN1000 aluminum DIN rails are available in 1 meter lengths.
2. Marking strips are available in 1 meter lengths.

**Specifications, continued**

**Fuse Blocks**

Part Numbers		BAF111SU	BAF111SNU	BAF111SDU
Appearance				
				
Width		0.630" (16mm)	0.630" (16mm)	0.630" (16mm)
Blown Fuse Indicator		None	Neon (100 to 300V AC)	LED (24V DC)
Approvals		UL, CSA	UL, CSA	UL, CSA
No. of Poles		1	1	1
Wire Sizes		18 to 10 AWG	18 to 10 AWG	18 to 10 AWG
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
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)

Switches & Pilot Lights

Display Lights

Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers

Dimensions

Part No.	Diagrams	
BA111T		
BA211T		
BA311T		
Part No.	Diagrams	
BA411S		
BAF111		

Switches & Pilot Lights

Display Lights

Relays & Sockets







Timers

Terminal Blocks

Circuit Breakers

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	BNE15W	
		BNH15MW		
		BNH15LW		
		BNH30W	BNE30W	
		BNF10SW	BNE20	
		BNF10NW		
		BNF10DW		
		BNH50W	BNE50W	
		BN75W	BNE75W	
		BN150W	BNE150W	
BNDH15W	BNDE15W			
DIN Rail Stops		BNH10W	BNL5 (small)	1. DIN rail stops prevent side-to-side movement. 2. The BNL-5 width is 0.375" (9mm).
		BNH15MW		
		BNH15LW		
		BNH30W		
		BNH50W		
		BNF10SW		
		BNF10NW		
		BNF10DW		
		BA111T		
		BA211T		
		BA311T		
		BA411S		
BAF111SU				
BAF111SDU				
DIN Rail Stops		BN75W BN150W	BNL6 (medium)	1. DIN rail stops prevent side-to-side movement. 2. The BNL-6 width is 0.375" (9mm). 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" (1mm))	1. For calculating the rail lengths required, see the instructions on page 876. 2. The DIN rail material is aluminum.
Dust Covers		BNDH15W	BNC230	The overall length is 39.37" (1,000mm). The material is polycarbonate (UL94-V2).
		BNH10W		
		BNH15MW		
		BNH15LW		
		BNH30W	BNC320	
		BNH50W		
		BN75W	BNC420	
		BN150W	BNC520	
BN200	BAC820			
BN400	BNC1000			

Switches & Pilot Lights

Display Lights

Relays & Sockets









Timers

Terminal Blocks

Circuit Breakers

Accessories, continued

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.
		BNH15MW	BNJ26W	
		BNH15LW	BNJ46	
		BNH30W	BNJ56	
		BNDH15W	BNJ26W	
Fork Terminal Jumpers		BNH10W	BNJ16F	Note: insulated jumpers available - add "B" to end of part number. For example, BNJ26WB.
		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. 2. Each connecting nut set includes 1 hex connecting nut and 1 round connecting nut. 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).
			BNR2 (500mm)	
Connecting Nuts		BNR1 BNR2	BNN1	
Terminal Block Removal Tool			BND2	



For accessory dimensions, see page 872.

Switches & Pilot Lights

Display Lights

Relays & Sockets

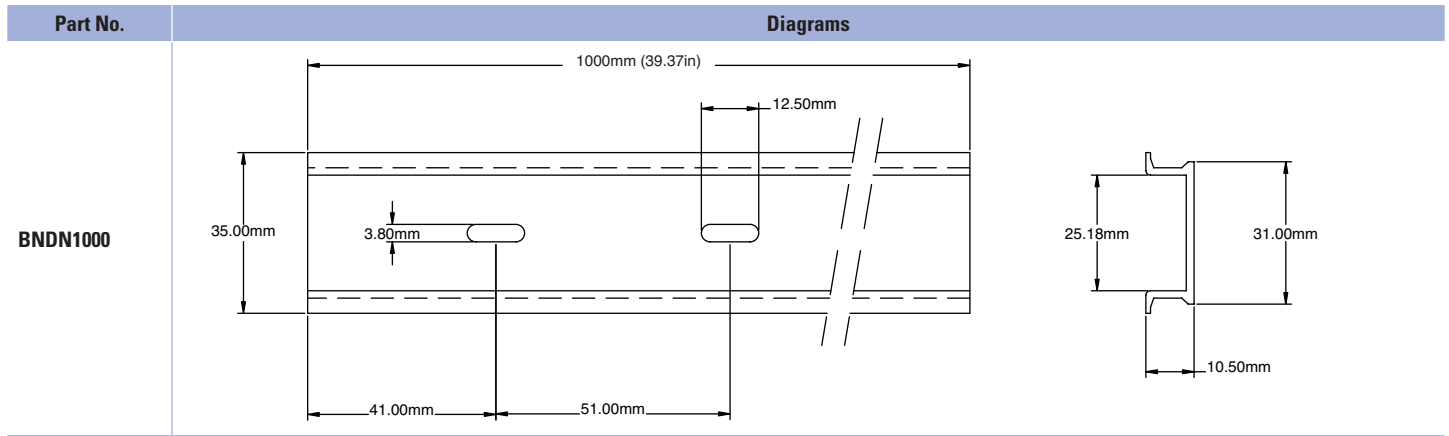
Timers

Terminal Blocks

Circuit Breakers

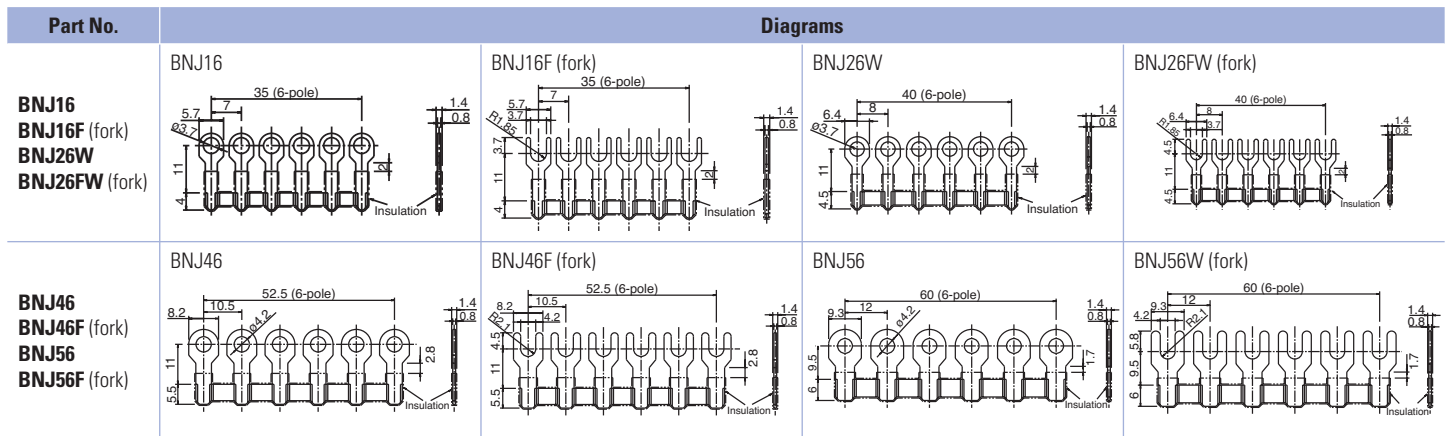
Dimensions

Dimensions: DIN Rail



Dimensions: Jumpers

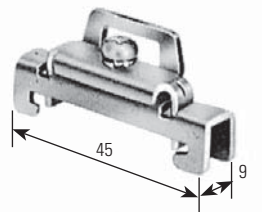
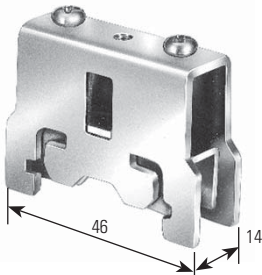
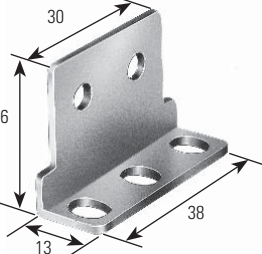
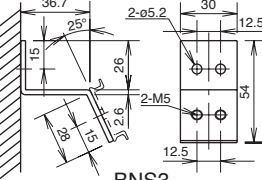
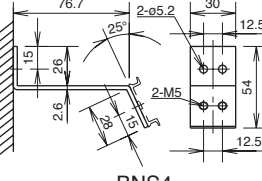
BNH Series



Thickness + 0.8mm (0.0315")

Dimensions, continued

Dimensions, DIN Rail Stops and Stand-offs

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

Switches & Pilot Lights

Display Lights

Relays & Sockets


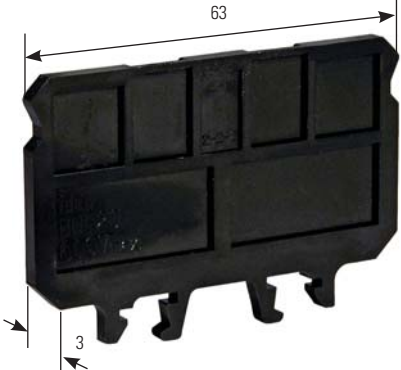

Timers

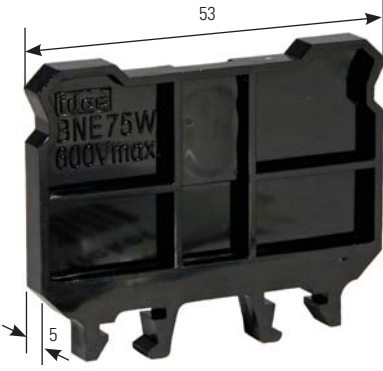
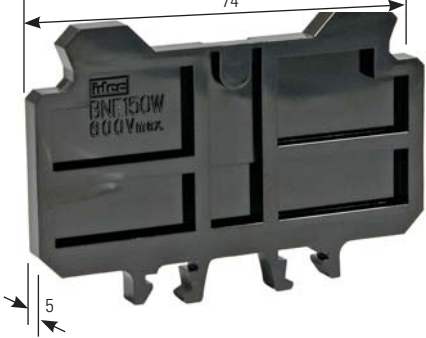

Terminal Blocks

Circuit Breakers

Dimensions, continued

Dimensions: End Plates

Part No.	Dimensions
BNE15W	
BNE20	
BNE30W	
BNE50W	

Part No.	Dimensions
BNE75W	
BNE150W	
BNDE15W	

Switches & Pilot Lights

Display Lights

Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers



Instructions

Wiring Touch-Down Terminal Blocks: BNH Series

Instructions	Step 1	Step 2	Step 3	Step 4
<p>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.)</p> <p>Step 2. Push the terminal screw down to hold the wire in place.</p> <p>Step 3. Hold the terminal screw down, and tighten with a screwdriver.</p> <p>Step 4. To remove the wire, loosen the terminal screw and pull up until wire is released.</p>				

Installation and Removal of Terminal Blocks

Instructions	Appearance
<p>Step 1. Slide the terminal blocks onto the DIN rail from one end.</p> <p>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.</p> <p>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.</p> <p>Step 4. To remove the terminal block, use the BND2 removal tool as shown on the right.</p>	<p><b>Removal Tool BND2</b></p>

Mounting Double-Deck Terminal Blocks

Instructions	Appearance
<p><b>DIN Rail Mount:</b></p> <p>Step 1. First install the end plate. Then mount the terminal blocks onto the DIN rail.</p> <p>Step 2. To prevent side-to-side movement on the DIN rail, use the BNL-8 mounting clip at both ends of the rail.</p>	
<p><b>Panel Mount:</b></p> <p>Step 1. Assemble a row of terminal blocks with end plates on exposed end(s).</p> <p>Step 2. Use BNDL2 mounting clips at both ends of a row.</p> <p>Step 3. With the two holes of the mounting clip aligned with the terminal block holes, insert a connecting rod through each hole.</p> <p>Step 4. Secure the ends of the connecting rods with the connecting nuts, as shown below.</p>	

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**Calculating DIN Rail Lengths**

Instructions	Appearance
<p>Step 1. Add widths of all terminal blocks (reference pages 864 through 869).</p> <p>Step 2. Add the endplate thickness (usually only one).</p> <p>Step 3. Add the DIN rail stop widths (usually two are used).</p> <p>Step 4. Round to the nearest 2" (50mm) increment to allow for DIN rail hole spacing.</p> <p>Step 5. Add 1" (25mm) to ensure 0.5" (12.5mm) of clearance at each end of the DIN rail.</p>	

**DIN Rail Stop Dimensions**

Part No.	Width
BNL-5	.374" (9mm)
BNL-6	.374" (9mm)
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	Applicable Wire	Rated at 60°C
22 AWG (0.3mm <sup>2</sup> )	3A	6 (14mm <sup>2</sup> )	50A
20 AWG (0.5mm <sup>2</sup> )	5A	4 (22mm <sup>2</sup> )	75A
18 AWG (0.75mm <sup>2</sup> )	7A	0 (38mm <sup>2</sup> )	100A
16 AWG (1.25mm <sup>2</sup> )	10A	00 (60mm <sup>2</sup> )	150A
14 AWG (2mm <sup>2</sup> )	15A	0000 (100mm <sup>2</sup> )	200A
12 (3.5mm <sup>2</sup> )	20A	300mcm (150mm <sup>2</sup> )	300A
10 (5.5mm <sup>2</sup> )	30A	400mcm (200mm <sup>2</sup> )	350A

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

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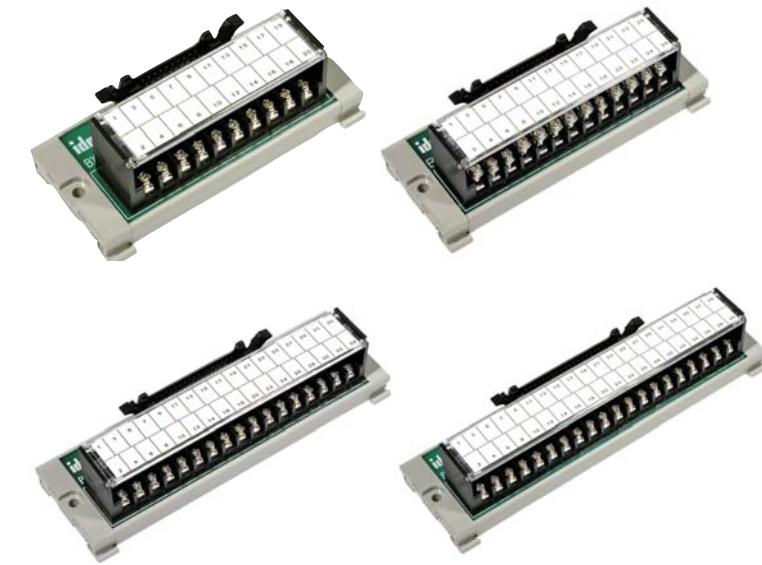
BX Series

Key features of the BX series include:

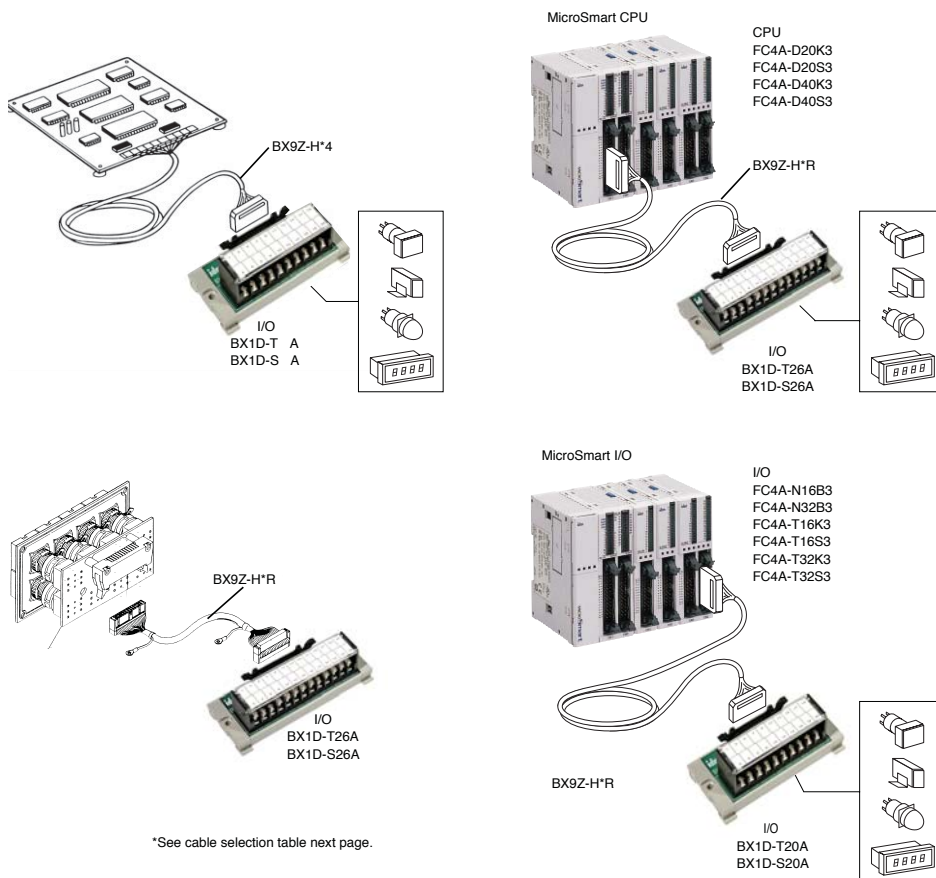
- Unique touch-down terminals
- All units are molded from UL94-V0 material with excellent flame- and shock-resistance
- Mount on DIN rail or flat surface
- Current capacity: 1A
- Available with 16, 20, 26, 34, 40, and 50 pins
- UL and CSA
- Hinged covers with built-in marking strips

Specifications

Terminal Width	7.62mm (M3 screw)
Rated Voltage	125V
Rated Current	1A
Rated Wire Size	22-14 AWG (2mm <sup>2</sup> )
Insulation Resistance	100MΩ minimum (500V DC)
Dielectric Strength	500V AC, 1 minute
Operating Temperature	-10 to 65°C
Humidity Range	45 to 85% RH
Housing Material	PPE resin (UL94-V0)
Terminals/Connector	PBT resin (UL94-V0)



BX Series Application Examples



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**Part Numbers**

**Part Numbers: Break-Out Modules and Cables**

**Accessories**

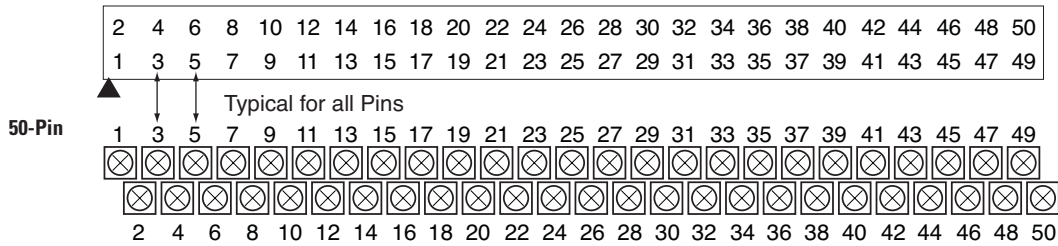
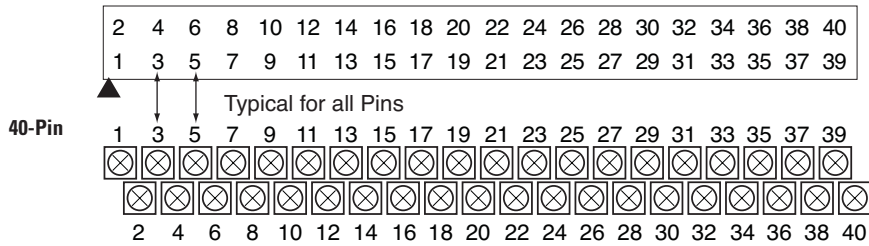
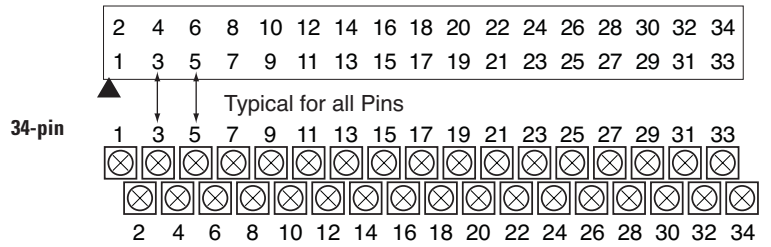
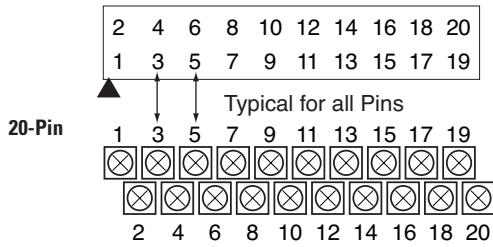
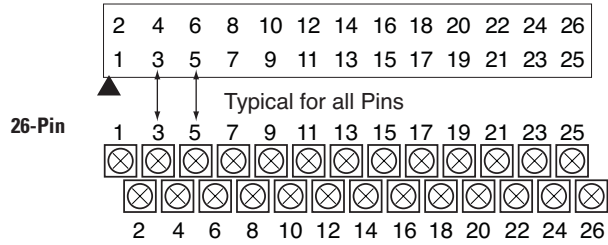
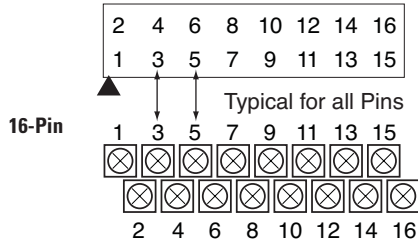
	Pins	Terminal Style	Module Part Number	Cable Part Number			Remarks	
				MIL to Single Connectors	MIL to MIL Shielded	MIL to MIL Non-shielded		
<b>Standard MIL Connector Modules</b>	16	Touch-down	BX1D-T16A	BX9Z-H#D4	-	-		
		Screw	BX1D-S16A					
	20	Touch-down	BX1D-T20A	BX9Z-H#E4	FC9Z-H100C20A or FC9Z-H#A20	FC9Z-H#B20		FC4A/FC5A 16 & 32 point I/O modules
		Screw	BX1D-S20A					
	26	Touch-down	BX1D-T26A	FC9Z-H100C26A	FC9Z-H#A26	FC9Z-H#B26		FC4A/FC5A 20 & 40 point I/O slim CPUs
		Screw	BX1D-S26A					
	34	Touch-down	BX1D-T34A	BX9Z-H#F4	-	-		
		Screw	BX1D-S34A					
	40	Touch-down	BX1D-T40A	BX9Z-H#G4	-	-		
		Screw	BX1D-S40A					
	50	Touch-down	BX1D-T50A	BX9Z-H#H4	-	-		
		Screw	BX1D-S50A					

1. For BX terminal arrangements, see page 879.  
 2. # = length codes:  
 100 = 39.4" (1 meter)  
 200 = 78.7" (2 meter)  
 300 = 118.1" (3 meter)

**Part Numbers: DIN Rail and DIN Rail Stops**

Description	Use with	Diagram	Part No.	Remarks
<b>DIN Rail</b>	All BX series		BNDN1000	1. The length is 39.37" (1,000mm). 2. For calculating the rail lengths required, see the instructions on page 876. 3. DIN rail material is aluminum.
<b>DIN Rail Stop</b>	All BX series		BNL6	1. Rail stops prevent side-to-side movement. 2. Use rail stops on BNDN1000 DIN rails.

Terminal Arrangements: BX Series



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**Dimensions: BX Series**
**Dimensions**

Part No.	Pins	Dimensions		Diagram
		L	A	
<b>BX1D-T16A</b>	16	3.66"	3.27"	
<b>BX1D-S16A</b>		(94mm)	(84mm)	
<b>BX1D-T20A</b>	20	4.29"	3.89"	
<b>BX1D-S20A</b>		(113mm)	(103mm)	
<b>BS1D-T26A</b>	26	5.20"	4.80"	
<b>BX1D-S26A</b>		(132mm)	(122mm)	
<b>BX1D-T34A</b>	34	6.38"	5.98"	
<b>BX1D-S34A</b>		(162mm)	(152mm)	
<b>BX1D-T40A</b>	40	7.28"	6.89"	
<b>BX1D-S40A</b>		(185mm)	(175mm)	
<b>BX1D-T50A</b>	50	8.78"	8.39"	
<b>BX1D-S50A</b>		(223mm)	(213mm)	

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