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

naunys/ remi										
	Par	t No.	UL/CSA	Ratings	EN Ra	tings (*1)	JIS Ra		Terminal	Tightening
Style	Self-Lifting	Touch-Down	Voltage/ Current	Wire Size (AWG)	Voltage/ Current	Wire Size [mm²/(AWG)]	Voltage/ Current	Wire Size (mm²)	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 13.3
	BN150NW		600V/150A	16-1/0	660V/175A	60/(1/0)	630V/175A	60	M8	10 to 13.5
Large Capacity	BN200BW□, E	,		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	21 10 20
	BN400BW□, BN400NW□		600V/350A	400MCM	660V/370A	200/(400MCM)	800V/370A	200	M12	38 to 49
	BN500BW□, E	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 Fuse	BNF10S	_	_	_	_	_	600V/10A	5.5	M4	1.4 to 2.0
Willi Fuse	BNF10N	_	_	_	_		600V/10A	5.5	M4	1.4 10 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.

*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 \square .

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

Sensors

AUTO-ID

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

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)	M3	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
		16A	BNH10W	BNH10WPN50	1.25	M3	7	50	
		IOA	BNH15MW	BNH15MWPN50	1.25 (2) (Note)	M3	8	50	G-012
		01.4	BNH15LW	BNH15LWPN50	2	M3.5	10.5	50	
Touch-Down	1-pole	21A	BNH15MWT	BNH15MWTPN50	2	M3.5	8	50	
Touch-bown T-pole		30A	BNH15LWT	BNH15LWTPN50	3.5	M4	10.5	50	G-013
		40A	BNH30W	BNH30WPN50	5.5	M4	12	50]
		70A	BNH50W	BNH50WPN20	14	M5	15.5	20	G-014
Large Capacity (Rail Mount)								
Large outputty (rial Mount)		94A	BN75W	BN75WPN10	22	M6	20	10	G-015
	1 mala	132A	BN100W	BN100WPN05	38	M8	26	5	G-015
	1-pole	1751	BN150W	BN150WPN05	60	M8	26	5	G-016
		175A	BN150NW	BN150NWPN05	60	M8	26	5	G-016
	2-pole		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	7			'	u-010
	2-pole		BN400NW2	BN400NW2					
	3-pole	370A	BN400NW3	BN400NW3	200	M12	57	1	G-019
	4-pole		BN400NW4	BN400NW4					

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					
	3-pole	310A	BN300BW3K	BN300BW3K	150	M10	44	1	G-018
Screw	4-pole		BN300BW4K	BN300BW4K					
Sciew	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	240A	BN200NW2K	BN200NW2K	100			1	
	3-pole		BN200NW3K	BN200NW3K		M10	37		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 Sv	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	3.5	IVI 4	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	2.5	G-022
Self-Lifting	21.4	1A 1-pole	BND15LW	BND15LWPN25	2	M3.5	8	O.E.	G-022
Touch-Down	ZIA		BNDH15LW	BNDH15LWPN25		C.CIVI	8	25	
Self-Lifting	21A	1 nole	BND15WT	BND15WTPN25	- 2	140.5	12	0.5	G-023
Touch-Down	ZIA	1-pole	BNDH15WT	BNDH15WTPN25] 4	M3.5	12	25	G-023
Common Terminal									
0 10 1 m T 40 A		4-pole	BN15MC4	BN15MC4PN10					
Self-Lifting Type 16A (Common Current)		8-pole	BN15MC8	BN15MC8PN10	1.25 (2)*	M3	8	10	G-024
(Johnmon Gunent)		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 \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

Accessories

S	Wito X
APEM	Т
Switches & Pilot Lights	
Control Boxes	7
Emergency Stop Switches	0+0
Enabling Switches	
Safety Products	Ι.
Explosion Proof	41000
erminal Blocks	0
elays & Sockets	-
Circuit Protectors	V
Power Supplies	V

Marking Strip Fastener Sliding Marking Strip hen ordering accessories, check if the accessories are necessary by referring Rail Mounting Clip the table. Marking Strip Necessary **Dust Cover** Optional End Plate End Clip Rail erminal Part No. BN10W, BN15MW, BN15LW, BN15MWT, BN15LWT, 0 0 0 0 0 × × × 16A to 40A BN30W Self-Lifting BNH10W, BNH15MW, BNH15LW, BNH15MWT, Touch-Down 0 0 0 0 × × × BNH15LWT, BNH30W 70A 0 Self-Lifting BN50W, BNH50W 0 0 0 X X X Touch-Down Rail Mount 1-Pole BN75W, BN100W, BN150W, BN150NW 0 0 0 0 × × X 94A to 175A Rail Mount $BN200BW\square$, $BN300BW\square$, $BN400BW\square$ X × Supplied 240A to 370A $BN200NW \square$, $BN300NW \square$, $BN400NW \square$ Supplied $BN200BW \square K$, $BN300BW \square K$, $BN400BW \square K$ Surface Mount BN200NW□K, BN300NW□K, BN400NW□K 240A to 520A BN500BW□K, BN500NW□K, BN600NW□K Vith Disconnecting Switch BNT20 0 0 0 0 X × X With Fuse BNF10S-□A, BNF10N-□A 0 0 0 X X X BND15W, BND15LW, BNDH15W, BNDH15LW, LED Illumination X 0 0 0 0 Double-Deck × BND15WT, BNDH15WT *1 *1 Controllers 0 0 0 0

X ×

G-026

G-025

Accessories (x: Necessary)

Surface Mount Clip

Removal Tool

0 0

0 0

0

0

G-028

G-027

Page

Connecting Rod Connecting Nut

X

× *2

G-029

Operator

Interfaces

Sensors

AUTO-ID

Common Terminal

BN15MC□

*1: Accessory not necessary for surface mounting.

*2: Accessory not necessary for rail mounting.

Specify the number of poles in place of \square .

		Part No.	☆ BN10W	16A	₹ <u>M3</u>	☆ BN15M	W 16A	€_M3	☆ BN15LW	/ 21A	M3.5	
	Self-Lifting Terminal	Dimensions	air/1)	38 18	10.3	mist)	38 18	11.3	38 18 14.3 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5			
	3,	Orderin N	35 (When using C Rail/41) 23.5 (When using C Rail/29.5		325	35 (When using C Rail:41)		32.5	225 5When using C Rail:29.5)			
		Ordering No. BN10WPN50				BN15MWPN50)		BN15LWPN50			
ırd		Package Quantity Weight (Approx.)		50 6.5g			7.3g			50 10g		
Standard		Part No.	☆ BNH10V		€ M3	☆ BNH15N		€ M3	☆ BNH15LV		€M3.5	
25		raitivo.	M DIVIDION	V IUA	C IVIO	MCI IIVID M	IVV	IVIO	M DINITION	ZIA	C.013.5	
	Touch-Down Terminal	Dimensions					9. 4					
			23.5(When using C Rall 41)			35/When using C Rail-41)	38 18	11.3 8 6.7	25 When using C Rai 41)	14.3		
		Ordering No.		BNH10WPN50)	BNH15MWPN50			BNH15LWPN50			
		Package Quantity		50			50			50		
		Weight (Approx.)		7.5g		8.2g			11.2g			
Star	ndard		UL/CSA	EN	JIS	UL/CSA	EN	JIS	UL/CSA	EN	JIS	
		ulation Voltage	600V	660V 1.25 mm ²	800V	600V	660V 2 mm ²	800V	600V	660V 2 mm ²	630V	
sgu	Wire	e Size	22-16 AWG	(22-16 AWG)	1.25 mm ²	22-14 AWG	(22-14 AWG)	1.25 mm ² (*1) (2mm ² max)	22-14 AWG	(22-14 AWG)	2 mm ²	
Specification / Ratings	Rate	ed Current *2	15A	16A	16A	15A	22A	16A	20A	22A	21A	
/ noi:		minal screw		M3			M3			M3.5		
ifica	Crimping Terminal			1.25-3			1.25-3 (2-3)			2-3.5		
Spec		x. No. of Crimping Terminals		2 0.6 to 1.0 N·m	<u> </u>		0.6 to 1.0 N.m			2 1.0 to 1.2 N.m.		
0,	rigr	nennig forque					0.6 to 1.0 N·m			1.0 to 1.3 N·m	nin.	
	ensi	g Terminal ons (mm) *3	5.8 ma		.3 min.	6.6 m		<u>3 min.</u>	8.5 max. 4 min.			
		l Plate					BNE15W					
*4		st Cover					BNC230					
ries		rking Strip			PVC 1	m/BNM7, Fiber		19, PVC 25m/Bi	NM725			
Accessories *4		rking Strip Fastner				A1 1	BNM3	nel DAU C				
Accı		Rail/End Clip					n: BAA1000, St					
		ail/End Clip + C Rail/End Clip					:: BNCA1000, S NJA1000, Stee					
	אווע	, o nan/End onp				Aluminium. D	110/1/000, 3166	I. DINLU/DINL/				

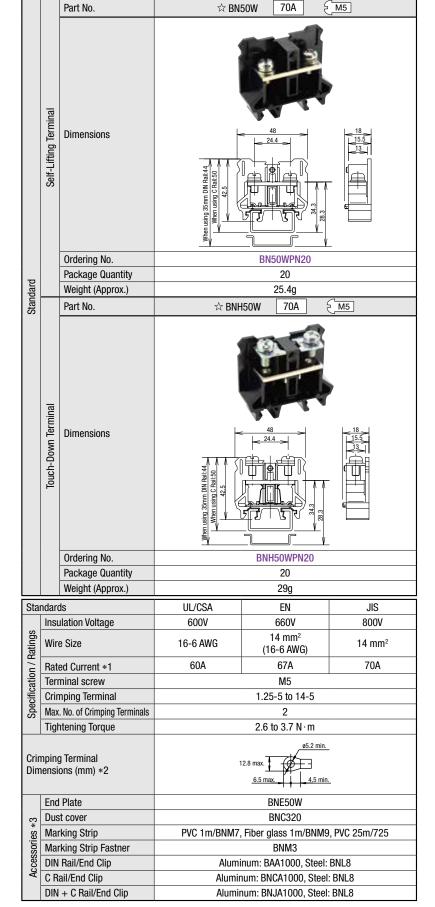
- *1: The rated applicable wire size is 1.25 mm², but 2 mm² wires can also be connected.
- *2: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.
- *3: Use a CSA certified crimping terminal when using the terminal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

BN

		Part No.	☆ BN15M	WT 21A	€M3.5	☆ BN15LV	VT 30A	€ M4	☆ BN30\	N 40A	₹M4	
	Self-Lifting Terminal	Dimensions	35/When using C Rail 41)	38 17.5	11.3	35 When using C Rait 41)	35.When using C Rail: 41) 22.5 S(When using C Rail: 41) 22.5 S(When using C Rail: 41) 22.5 S(When using C Rail: 41)			38 When using C Raid 4) 25.4 When using C Pali 31 4) 38.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3		
		Ordering No.	E	BN15MWTPN50)		BN15LWTPN50			BN30WPN50		
		Package Quantity		50			50			50		
dard		Weight (Approx.)		7g			10g			15.6g		
Standard		Part No.	☆ BNH15N	WT 21A	€M3.5	☆ BNH15L	WT 30A	€ M4	☆ BNH30	W 40A	€ M4	
	Touch-Down Terminal	Dimensions	38 (17.5) (27.3) (Milen using C Rail(41)) (Milen using C Rail			38. 17.5 19.5. 19.			38 When using C Rail 44) 38 136 When using C Rail 44) 38 15 40 He last 13 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
		Ordering No.	В	NH15MWTPN5	0	BNH15LWTPN50			BNH30WPN50			
		Package Quantity		50		50			50			
		Weight (Approx.)		8g		11g			16.8g			
Star	ndard	ds	UL/CSA	EN	JIS	UL/CSA	EN	JIS	UL/CSA	EN	JIS	
	Insu	ılation Voltage	600V	660V	800V	600V	660V	630V	600V	660V	630V	
Specification / Ratings		e Size	22-14 AWG	2 mm ² (22-14 AWG)	2 mm²	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	
/ Ra	Rated Current *1		15A	22A	21A	30A	22A	30A	35A 38A 40A			
tion		minal screw		M3.5			M4			M4		
ifica	Crimping Terminal Max. No. of Crimping Terminals Tightening Torque		ļ	.25-3.5 to 2-3.	5		1.25-4 to 3.5-4			1.25-4 to 5.5-4 2		
Spec							2					
	rigi	itening forque		1.0 to 1.3 N·m			1.4 to 2.0 N·m			1.4 to 2.0 N⋅m		
		g Terminal ons (mm) *2	6.6 ma <u>4.</u>		min.	8.5 ma <u>4.</u>	<u> </u>	<u>nin.</u> 3 min.	9.5 m	<u> </u>	min.	
	End	Plate				15W				BNE30W		
*3	Dus	t Cover				230				BNC230		
es *	Mar	king Strip			PVC	1m/BNM7, Fib	er glass 1m/BN	IM9, PVC 25m	/725			
Accessories	Mar	king Strip Fastner					BNM3					
Secon		Rail/End Clip	Aluminum: BAA1000, Steel: BNL6									
Α .	C R	ail/End Clip					: BNCA1000, S1					
	DIN	+ C Rail/End Clip				Aluminum: B	NJA1000, Steel	: BNL6/BNL7				
*1·]	Γhe r	ated current differs acco	rding to operat	ing conditions	See "Selecting	Terminal Bloc	ks by Current A	ccording to .IIS	S Standards" or	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.

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

^{*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 \$\sigma\$ is UL recognized for field wiring (FW2).

		Part No.	☆ BN75W 94A € M6	BN100W 132A M8
scity	inal	Dimensions		
Large Capacity	Screw Terminal	Dimensions	Dust Cover (BNC420) 22.5 20 17 17 18 28 BAA1000	29.8 26 23 33 26 20 20 20 20 20 20 20 20 20 20 20 20 20
		Ordering No.	BN75WPN10	BN100WPN05
		Package Quantity	10	5
		Weight (Approx.)	45g	86g

Sta	ndards	UL/CSA	EN	JIS	UL/CSA	EN	JIS	
	Insulation Voltage	600V	660V	1000V	600V	660V	1000V	
Specification / Ratings	Wire Size	16-4 AWG	22 mm ² (8-4 AWG)	22 mm²	16-2 AWG	38 mm ² (2AWG)	38 mm²	
'Rat	Rated Current *1	80A	94A	94A	100A	132A	132A	
ie /	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		
S	Socket Wrench	12.7 mm squ	are drive hexagonal s	ocket 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		
	mping Terminal nensions (mm) *3		6.2 mi 16.8 max. 6 mir	_	22.8 max. 11 max. 10 min.			
	End Plate		BNE75W		BNE100W			
*5	Dust Cover		BNC420			BNC520		
	Marking Strip		PVC 1r	n/BNM7, Fiber glass 1	m/BNM9, PVC 25m/B	NM725		
sori	Marking Strip Fastner			BN	M3			
Accessories	DIN Rail/End Clip			Aluminum: BAA1	11000, Steel: BNL8			
ĕ	Type C Rail/End Clip			Aluminum: BNCA	A1000, 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 \(\sigma \) is UL recognized for field wiring (FW2).

Sensors
AUTO-ID

APEM
Switches & Pilot Lights
Control Boxes
Emergency
Stop Switches
Enabling
Switches
Safety Products
Explosion Proof

		Part No.	BN150	DW 175A	€ <u>M8</u>	BN150	NW 175A	€_M8		
Large Capacity			When using 35mm DIN Rail 52 When thing CRail 58 50.5	74 63 33 33	29.8 26 26 23 23	When using Samp DN Rail:52 (When using C Rail:58) 50.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6	74 63 33	29.8 26 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25		
		Ordering No.		BN150WPN05			BN150NWPN05			
		Packaging Quantity		5			5			
		Weight (Approx.)		88g		95g				
Stan			UL/CSA	EN	JIS	_	_	JIS		
	Insu	lation Voltage	600V	660V	1000V	_	_	630V		
Specification / Ratings	Wire	e Size	16-1/0 AWG	60 mm ² (1/0 AWG)	60 mm ²	_	_	60 mm ²		
Rat	Rate	ed Current *1	150A	175A	175A	_	_	175A		
ion ,		ninal screw *2		M8			M8			
ficat	Socket wrench			2-8 to 60-8			2-8 to 60-8			
peci				2			2			
S			12.7 mm squ	are drive hexagona		12.7 mm s	quare drive hexagon	al socket 13		
	Tigh	tening Torque		10 to 13.5 N·m			10 to 13.5 N·m			
Crim	nping	r Terminal ons (mm) *3			22.8 max	ø8.5 min.				
	End	Plate		BNE150W						
	Dus	t Cover			BNO	C520				
es *5	Mar	king Strip			PVC 1m/BNM7, Fit PVC 25m	per glass 1m/BNM9 n/BNM725				
8										

- *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.

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.

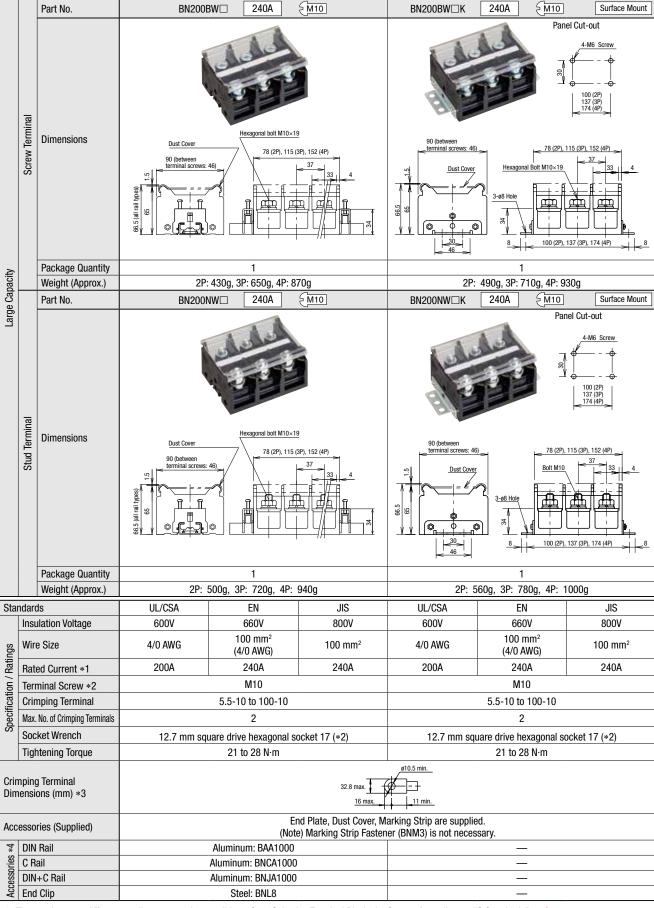
Marking Strip Fastner

DIN Rail/End Clip

Type C Rail/End Clip

DIN+Type C Rail/End Clip

RN



- *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.

Switches &

Pilot Lights

Control Boxes

Emergency Stop Switches Enabling

Switches
Safety Products

Explosion Proof

Relays & Sockets

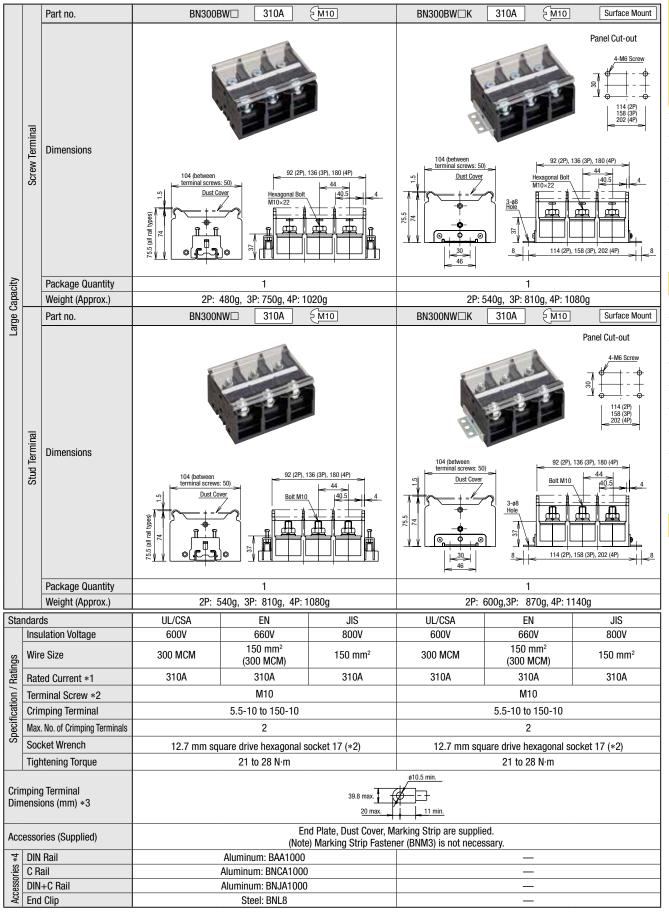
Power Supplies

LED Illumination

Controllers

Operator
Interfaces

Circuit Protectors



- *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.

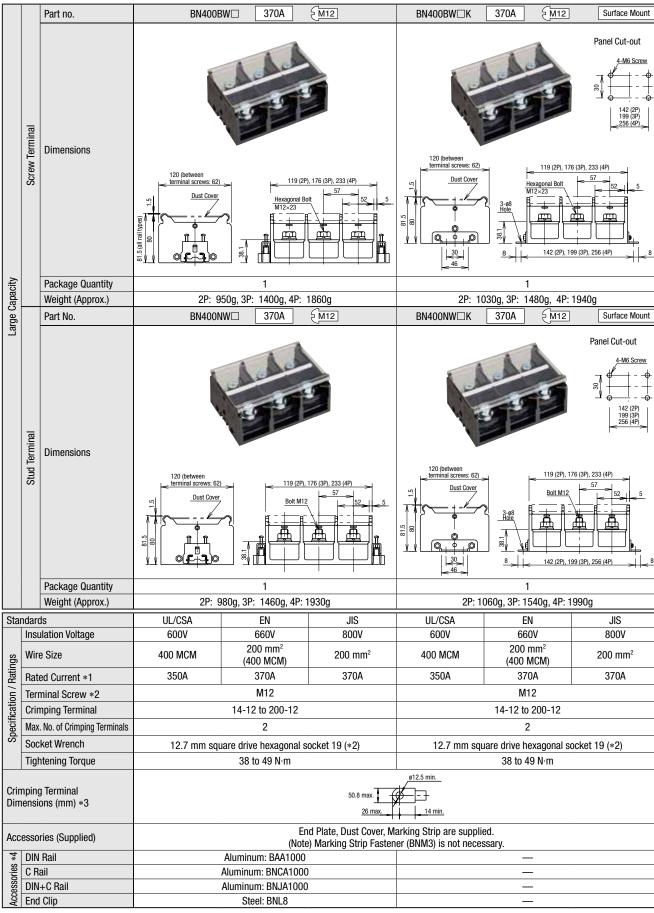
IDEC

Sensors

AUTO-ID

RN

AUTO-ID



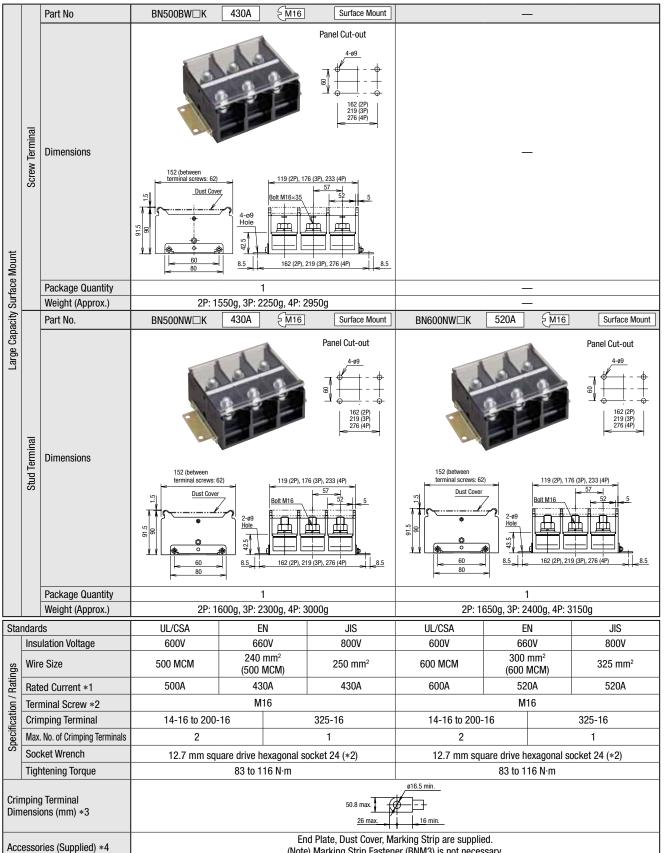
- *1: The rated current differs according to operating conditions. See "Selecting Terminal Blocks by Current According to JIS Standards" on G-006.
- *2: The grooves on the head of the hex bolt are for temporary tightening. For proper tightening, use an applicable socket wrench and tighten within the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

Power Supplies LED Illumination Controllers

Operator Interfaces Sensors

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.

(Note) Marking Strip Fastener (BNM3) is not necessary

- *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.

Switches & Pilot Lights

Control Boxes

Emergency Stop Switches Enabling

Switches

Safety Products

Explosion Proof

Terminal Block

Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination

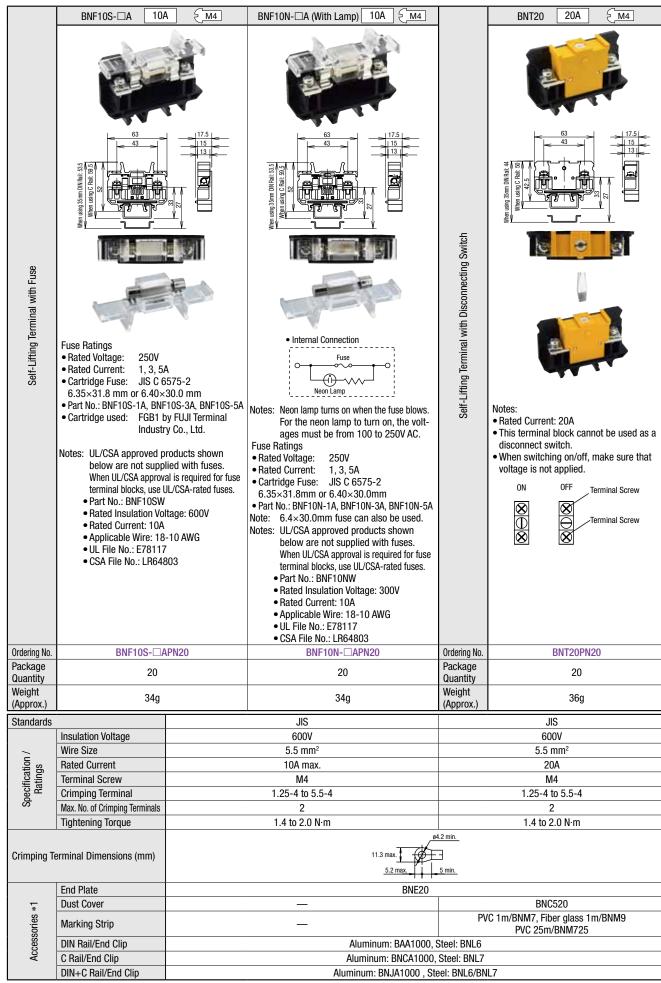
Controllers

Operator

Interfaces

Sensors AUTO-ID

BN



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



Switches & Pilot Lights Control Boxes

Emergency Stop Switches Enabling Switches Safety Products

Explosion Proof

Relays & Sockets

Circuit
Protectors

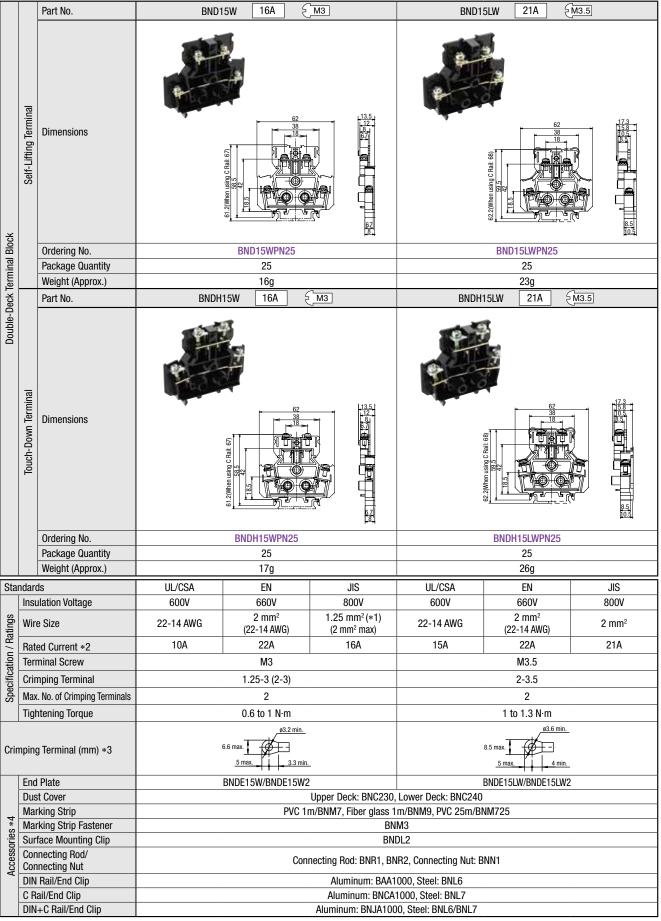
Power Supplies

LED Illumination

Controllers

Operator

Sensors
AUTO-ID



- *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.
- st3: Use a CSA certified crimping terminal when using the terminal block as a CSA certified product.
- *4: See G-025 for details on accessories.

IDEC

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

Sensors

AUTO-ID

BN

		Part No.	BN	D15WT 21A (M3	3.5		
×	Self-Lifting Terminal	Dimensions		61.2When using C Rait 677	13.5 13.5 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7		
B		Ordering No.		BND15WTPN25			
inal		Package Quantity		25			
Term		Weight (Approx.)		17g			
eck		Part No.	BND	DH15WT 21A SM	3.5		
Double-Deck Terminal Block	Touch-Down Terminal	Dimensions		When using DIN Pall: 61 When using DIN Pall: 61 When using Din Pall: 61 When using Din Pall: 61 When using Din Pall: 61	12 6.7 12 5.9 5.9 8 8		
		Ordering No.		BNDH15WTPN25			
		Package Quantity		25			
		Weight (Approx.)		17g			
Sta	ndard		UL/CSA	EN	JIS		
	Insu	ılation Voltage	600V	660V	800V		
Specification / Ratings		e Size	22-14 AWG	2mm² (22-14 AWG)	2 mm ²		
n / F		ed Current *1	15A	22A	21A		
ätio		minal Screw		M3			
ecific		nping Terminal		1.25-3.5 to 2-3.5			
Š		. No. of Crimping Terminals		2			
	Tigh	ntening Torque		1.0 to 1.3 N·m			
Crir		g Terminal (mm) *2	6.6 max. 3.6 min. 3.6 min.				
	_	Plate		BNDE15W/BNDE15W2	DNO040		
		t Cover		Deck: BNC230, Lower Deck: I			
က္	_	king Strip	PVC 1m/BNM/	, Fiber glass 1m/BNM9, PVC	Z3III/BININ/25		
ssories *3		king Strip Fastener		BNM3			
SSOF		face Mounting Clip	BNDL2				

*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

BN

		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	[erminal		Terminal Common	Terminal Common	Terminal Common			
Common Terminal	Self-Lifting Terminal	Dimensions	When using 35mm DNN Rail: 35 When using 6 Rail: 41	37 (4P), 69 (8P),85 (10P) 10 (10P)	38 18 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9			
		Ordering No.	BN15MC4PN10	BN15MC8PN10	BN15MC10PN10			
		Package Quantity	10	10	10			
		Weight (Approx.)	30g	57g	70g			
		Color	Light Gray	Light Gray	Light Gray			
Sta	ndaro	ds		JIS	_			
	Insulation Voltage			600V				
ings				1.25 mm² (2 mm² max.)				
Rat		ed Current		16A/Common Current				
lon /		minal Screw		M3				
icati		mping Terminal		1.25-3 (2-3)				
Specification / Ratings	Terr	x. No. of Crimping minals		2				
	Tigh	ntening Torque	0.6-1.0 N·m					

- *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

Crimping Terminal Dimensions (mm)

End Plate

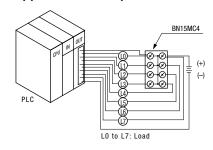
Dust Cover

Marking Strip

C Rail / End Clip

Marking Strip Fastener
DIN Rail / End Clip

Accessories *5



Features

• All terminals are short-circuted by a built-in common jumper. External jumpers are not required.

ø3.2 min.

Supplied BNC230

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

BNM3

Aluminum: BAA1000, Steel: BNL6

Aluminum: BNCA1000, Steel: BNL7

- 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.

63

BNE20

BNE100W



Switches
Safety Products

Explosion Proof

Relays & Sockets

Circuit
Protectors

Power Supplies

LED Illumination

Operator Interfaces

> Sensors AUTO-ID

5 BNE75W

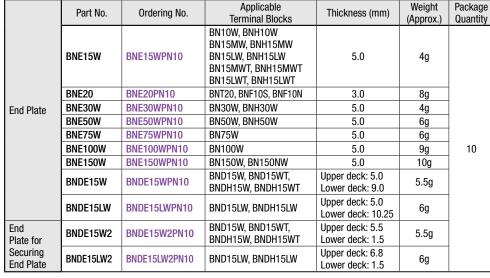
74

5 BNE150W

Securing a marking strip with the

BNE15W

53



BNE30W

BNDE15W

BDNE15LW

62

BNDE15W

BDNE15LW

Upper deck: 5 mm

Lower deck: 9 mm

Upper deck: 5 mm

Lower deck: 10.25 mm

BNE50W

BNDE15W2

BDNE15LW2

BNDE15W2

BNDE15LW2

Upper deck: 5.5 mm

Lower deck: 1.5 mm

Upper deck: 6.8 mm

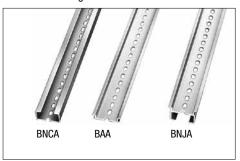
Lower deck: 1.5 mm

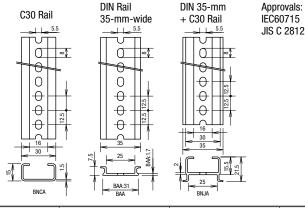
Note: BNDE15W2 and BNDE15LW2 are end plates used for securing marking strips at the end of double deck terminal blocks.

Rails

end plate

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

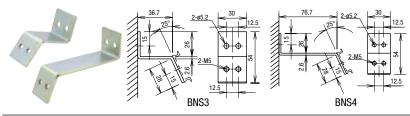
• Plating: Trivalent zinc chromate

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

Trivalent zinc chromate

Dust Cov	ver M	laterial: Polyc	arbonate				
	///		///	7/	///		
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			BND15LW, BNDH15LW, BND15WT, BNDH15WT	15g	10

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

Switches & Pilot Lights Control Boxes Emergency Stop Switches

Enabling

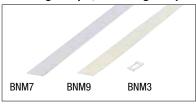
Switches Safety Products **Explosion Proof**

Relays & Sockets Circuit Protectors

> Sensors AUTO-ID

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

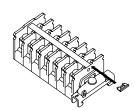
Marking Strips, Marking Strip Fastener



Item	Part No.	Ordering No.	Weight (approx.)	Package Quantity	Specification
	BNM7	BNM7PN10	7.2g	10	PVC (glossy surface) 1000 mm × 9.5 mm × 0.5 mm
Marking Strip	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.

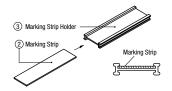
End plate (Thickness 5 i BNES15W BNES30W	mm)
A FEE	Terminal Block BN10W to BN15LWT BN30W

	Item	Part No.	Ordering No.	Terminal Blocks	Specification	Package Quantity
	① End Plate	BNES15W BNES15WPN10		BN10W to BN15LWT	For sliding marking strip	10
-	(1) Ella Plate	BNES30W BNES30WPN10		BN30W	For sliding marking strip	10
	② Marking Strip	BNM5	BNM5PN10	DNI4 OW to DNI4 FLWT	PVC (Note)	10
	③ Marking Strip Holder	BNMH1	BNMH1PN10	BN10W to BN15LWT BN30W	1m	10
	④ Dust Cover	BNCS230	BNCS230PN10	DNOOW	1m	10

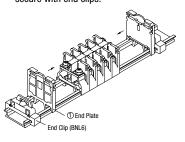
Note: Length 1000 mm \times Width 9.5 mm \times Thickness 0.5 mm

Installing the Sliding Marking Strip

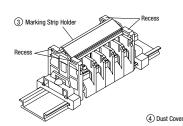
1. Insert the marking strip into the groove of the top of the marking strip holder.



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



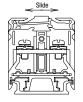
3. Insert the marking strip holder into the recess of the end plate.



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

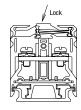


• Sliding movement of the marking strip holder

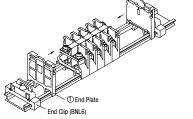


When sliding the marking strip holder, slide by holding both edges of the holder.

• 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	2.oy	10
BNJ16F	BNJ16FPN10	7 111111	Without	Fork Terminal 35 (6-pole) 1.4 1.4 1.5 1.5 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	TUA		0.70	10
BNJ16FB	BNJ16FBPN10		With	The state of the s			2.7g	10
BNJ26W	BNJ26WPN10	- 8 mm	Without	Ring Terminal		BN15MW	2.10	10
BNJ26WB	BNJ26WBPN10		With		- 20A	BNH15MW BN15MWT BNH15MWT BND15W BNDH15W BNDH15WT BNDH15WT	3.1g	10
BNJ26FW	BNJ26FWPN10	0 111111	Without	Fork Terminal 40 (6-pole)			3.1g -	10
BNJ26FWB	BNJ26FWBPN10		With	Insulation				10
BNJ46	BNJ46PN10		Without	Ring Terminal 82 10.5 (6-pole) 1.4 0.8	- 20A	BN15LW BNH15LW BN15LWT BNH15LWT BND15LW BNDH15LW	4.6g	10
BNJ46B	BNJ46BPN10	10.5 mm	With					10
BNJ46F	BNJ46FPN10	10.5 mm	Without	Fork Terminal 52.5 (6-pole)			2.00	10
BNJ46FB	BNJ46FBPN10		With	=			3.0g	10
BNJ56	BNJ56PN10		Without	Ring Terminal 60 (6-pole) 1.4 0.8			2.20	10
BNJ56B	BNJ56BPN10	- 12 mm	With		- 30A	BN30W BNH30W	3.2g	10
BNJ56F	BNJ56FPN10	12 111111	Without	Fork Terminal 60 (6-pole)				10
BNJ56FB	BNJ56FBPN10		With				4.5g	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

duliper 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	10	
BNJ62B	BNJ62BPN10	14.5 111111	With	206	OUA	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.

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 Sensors

BN

AUTO-ID

Switches &

Pilot Lights

Switches

Safety Products

Explosion Proof

Relays & Sockets
Circuit

Power Supplies

LED Illumination

Controllers

Operator

Protectors

Sensors
AUTO-ID

Control Boxes

Emergency
Stop Switches

Enabling

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)	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

Switches &

Pilot Lights

Emergency

Enabling

Switches

Control Boxes

Stop Switches

Safety Products

Explosion Proof

Relays & Sockets

Circuit
Protectors

Power Supplies

LED Illumination

Operator Interfaces

Sensors

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)

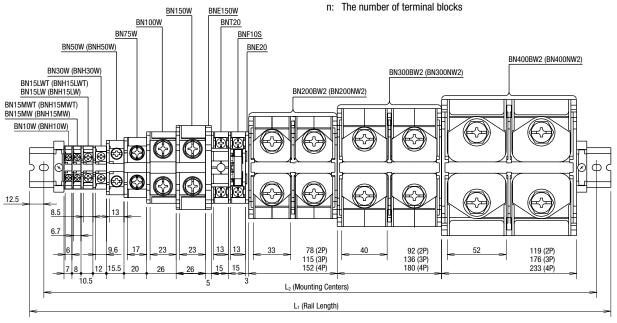
$$M = \frac{(A + 0.1) n + B + C}{12.5}$$

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

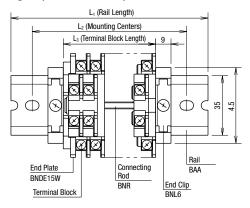
BNL6 = 56.0 mm BNL7 = 62.5 mm

BNL8 = 67.0 mm

The number of terminal blocks



Rail Length (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		

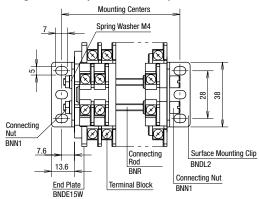
N: Rounded up numerical number from the calculated value of M. (Example: N for 19.1 is 20)

For BND15W, BNDH15W, BND15WT

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

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

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

^{*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, particluarly when many terminal blocks are combined.

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

APEM Switches & Pilot Lights Control Boxes Emergency Stop Switches

Enabling

Switches

Safety Products **Explosion Proof**

Relays & Sockets Circuit

LED Illumination

Controllers

Operator Interfaces

Sensors

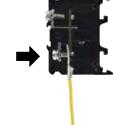
AUTO-ID

Protectors **Power Supplies**

Instructions

How to Use Touch-Down Terminals







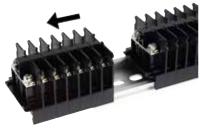


With the terminal screws in the up position, insert a ring crimping 2. Push down the head of the screw lightly to hold the crimping terminal.

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

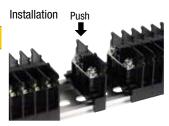
4. To remove the wiring, loosen the screw and lightly push up.

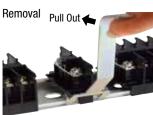
terminal.



Installation and Removal on Rails

Additional Installation and Removal (on DIN Rail)

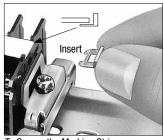


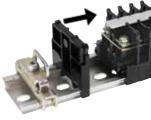


The following terminal blocks can be added or removed: BN10W, BNH10W, BN15MW, BNH15MW, BN15LW, BNH15LW, BN30W, BNH30W, BN15MWT, BNH15MWT, BN15LWT, BNH15LWT

Securing the Ends of the Marking Strip

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





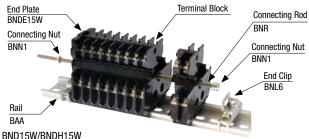
To Secure the Marking Strip

Installing End Plate

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

Installation of Double-Deck Terminal Blocks (BND)

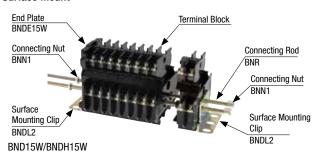
Rail Mount (photo: when using BND15W, BNDH15W, BNDE15W2)



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

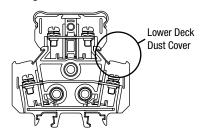


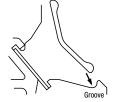
- 1. Assemble a row of terminal blocks with end plates on exposed ends.
- 2. Use BNDL2 mounting clips at both ends of a row.
- 3. With the two holes of the mounting clip (BNDL2) aligned with the terminal block holes, insert a connecting rod (BNR) through each
- 4. Secure the ends of the connecting rods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

Instructions

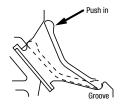
Dust Covers on the Lower Deck Terminal of Double-Deck Terminal Blocks

Installing Dust Covers on Lower Deck Terminals





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



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

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

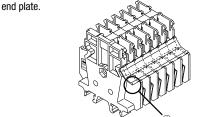
Sensors

AUTO-ID

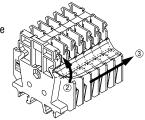
Removing Dust Covers from Lower Deck Terminals

Turn the power off before removing the dust cover.

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

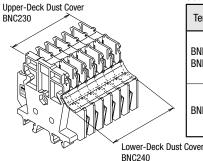


- 2. Lift up in the direction of the arrow.
- If the dust cover cannot be removed all at once, place fingers between the terminal block and dust cover, and slowly remove the dust cover.



Length of Double-Deck Dust Covers

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

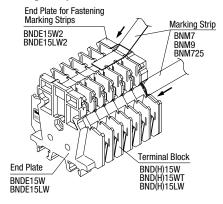


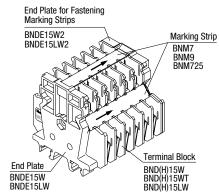
Terminal Block	Dust Cover	1-pole	2-pole	3-pole	4-pole	5-pole	6-pole	7-pole	8-pole	n-pole
BND(H)15W	Upper Deck	12	20	28	36	44	52	60	68	8 (n+1) – 4
BND(H)15WT	Lower Deck	16	24	32	32	48	56	64	72	8 (n+1)
BND(H)15LW	Upper Deck	16	26.5	37	47.5	58	68.5	79	89.5	10.5 (n+1) – 5
מאס(ח) ואטניט	Lower Deck	21	31.5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





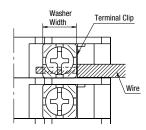
Notes on Wiring

Crimping Terminals

 \bullet 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



Ordering Terms and Conditions

Thank you for using IDEC Products.

By purchasing products listed in our catalogs, datasheets, and the like (hereinafter referred to as "Catalogs") you agree to be bound by these terms and conditions. Please read and agree to the terms and conditions before placing your order.

1. Notes on contents of Catalogs

- (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.
- (3) The specifications / appearance and accessories of IDEC products listed in Catalogs are subject to change or termination of sales without notice, for improvement or other reasons.
- (4) The content of Catalogs is subject to change without notice.

2. Note on applications

- (1) If using IDEC products in combination with other products, confirm the applicable laws / regulations and standards.
 - Also, confirm that IDEC products are compatible with your systems, machines, devices, and the like by using under the actual conditions. IDEC shall bear no liability whatsoever regarding the compatibility with IDEC products.
- (2) The usage examples and application examples listed in Catalogs are for reference purposes only. Therefore, when introducing a product, confirm the performance and safety of the instruments, devices, and the like before use. Furthermore, regarding these examples, IDEC does not grant license to use IDEC products to you, and IDEC offers no warranties regarding the ownership of intellectual property rights or non-infringement upon the intellectual property rights of third parties.
- (3) When using IDEC products, be cautious when implementing the following.
 - i. Use of IDEC products with sufficient allowance for rating and performance
 - Safety design, including redundant design and malfunction prevention design that prevents other danger and damage even in the event that an IDEC product fails
 - 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.
- (5) IDEC products are developed and manufactured as general-purpose products for general industrial products. They are not intended for use in the following applications, and in the event that you use an IDEC product for these applications, unless otherwise agreed upon between you and IDEC, IDEC shall provide no guarantees whatsoever regarding IDEC products.
 - i. Use in applications that require a high degree of safety, including nuclear power control equipment, transportation equipment (railroads / airplanes / ships / vehicles / vehicle instruments, etc.), equipment for use in outer space, elevating equipment, medical instruments, safety devices, or any other equipment, instruments, or the like that could endanger life or human health
 - 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
 - iiii. Use in applications where the product may be handled or used deviating from the specifications or conditions / environment listed in the Catalogs, such as equipment used outdoors or applications in environments subject to chemical pollution or electromagnetic interference If you would like to use IDEC products in the above applications, be sure to consult with an IDEC sales representative.

3. Inspections

We ask that you implement inspections for IDEC products you purchase without delay, as well as thoroughly keep in mind management/maintenance regarding handling of the product before and during the inspection.

4. Warranty

(1) Warranty period

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 $\ensuremath{\mathsf{IDEC}}$
- v. The product was used outside of its original purpose
- 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.

6. Service scope

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

The above content assumes transactions and usage within your region. Please consult with an IDEC sales representative regarding transactions and usage outside of your region. Also, IDEC provides no guarantees whatsoever regarding IDEC products sold outside your region.

IDEC CORPORATION

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

Singapore

Thailand

IDEC Izumi Asia Pte 1 td

IDEC Asia (Thailand) Co., Ltd.

www.idec.com

India IDEC Controls India Private Ltd.

IDEC Izumi (H.K.) Co., Ltd. **Taiwan** IDEC Taiwan Corporation

IDEC (Shanghai) Corporation

China

TIDEC

IDEC Corporation

IDFC Corporation

APEM SAS

IISΔ

EMEA

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

IDEC:

BN200BW3 BN200BW3K BN200BW4 BN30W BN30W-ZT2 BN400BW3 BN400BW3K BN400BW4 BN500BW2K BN500BW3K BN500BW4K BN500NW2K BN500NW3K BN500NW4K BN50W BN600NW2K BN600NW3K BN600NW4K BN75W BND15LW BND15W BND2 BNDE15LW2 BNDE15W BNDE15W2 BNDH15LW BNDL2 BNE100W BN200BW2 BN300BW2 BN300BW2K BN300BW3K BN300BW3K BN300BW4K BN300BW4K BN300NW2 BN300NW2K BN300NW3K BN300NW4K BN300