

MODEL

# CNF-B

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Outstanding operability,  
maintenance performance, safety.

# CNF-B

The Mitsubishi Distribution Board Model CNF-B plays a key role in supplying power to and protecting permanently-installed equipment for buildings such as power and lighting facilities.

It provides the functions needed to implement power supply, overcurrent protection, short-circuit protection, and load switching for power and lighting facilities. Requiring modest installation space, the CNF-B is installed contiguously with a control center to enable efficient central monitoring. Various safety systems are duly provided. In addition, the distribution panel is designed with full consideration for ease of maintenance, inspections, and usability (ease of monitoring). CNF-B features state-of-the-art performance for switching power and lighting circuits and for switching main and standby power supplies.

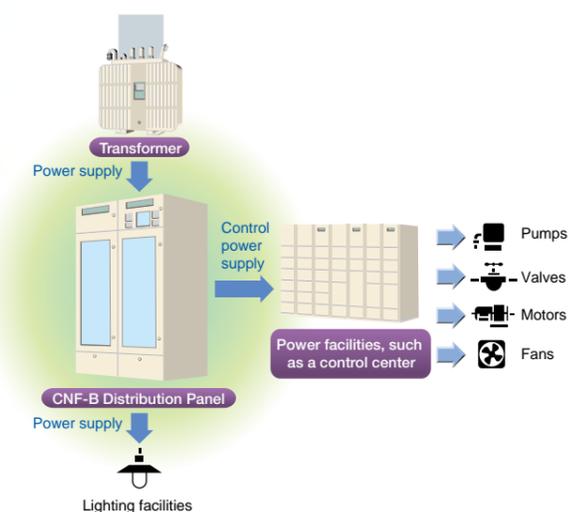
## Features

- 1 Structure is achieved by the pursuit of high capacity.**  
Accommodates units within a height of 1,800 mm, housing up to 18 units of two sets of 100 AF / 3P MCCB.
- 2 Structure assures ease of installation and wiring.**  
Constructed to the same casing depth and configured with the same busbar scheme as the Type-B Motor Control Center, this model permits contiguous installation and direct connection of busbars of both panels. With its B wiring (standard), connection to external devices is easy through the front of the panel.
- 3 Structure assures outstanding operability, maintenance performance, and safety.**  
Features double-door construction (inside door, outside door), and the inside door—i.e., unit front—is fitted with a protective cover that leaves only the MCCB operating handles exposed.  
The transparent safety cover fitted to the MCCB power supply side ensures safe execution of maintenance/inspection work even when the inside door is left open.



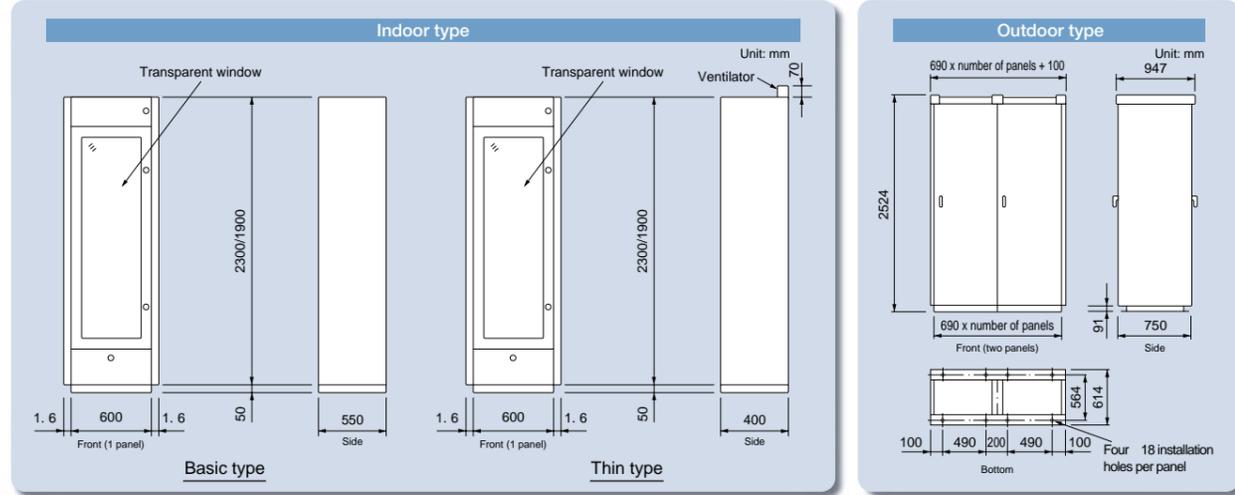
### <Ratings>

Applied Standard	IEC, NEMA, JIS, JEM
Insulation voltage	660V AC
Rated maximum current	3500A AC
Rated short time current	Standard: 50 kA, 1 sec Maximum: 75 kA, 1 sec
Maximum withstand voltage	2500V AC

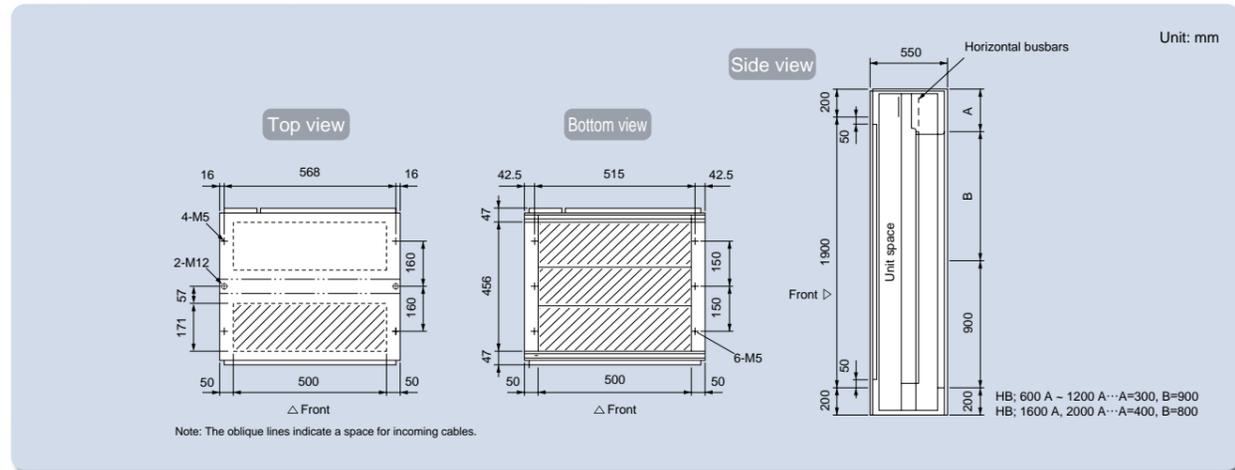


# Structure

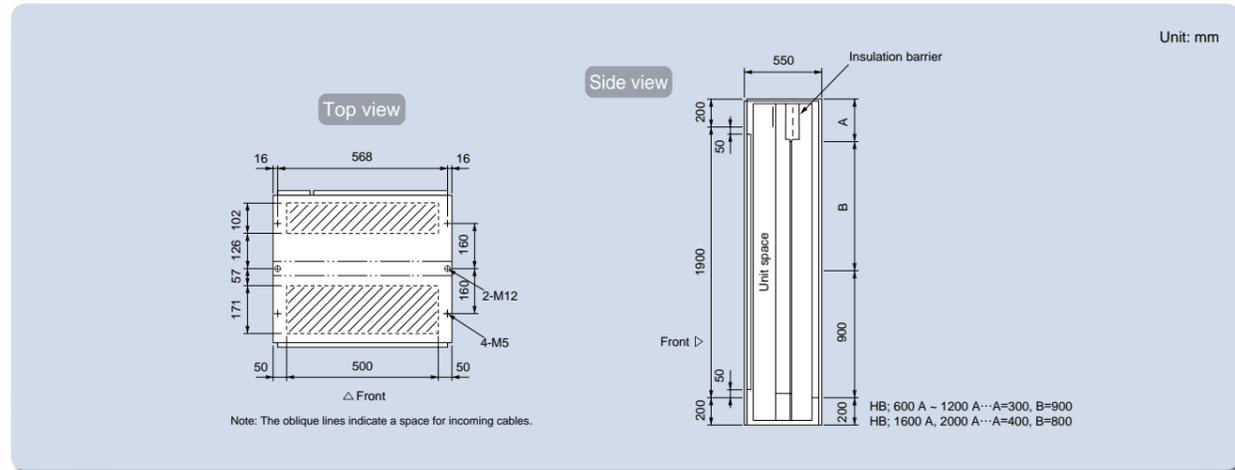
## External Dimensions



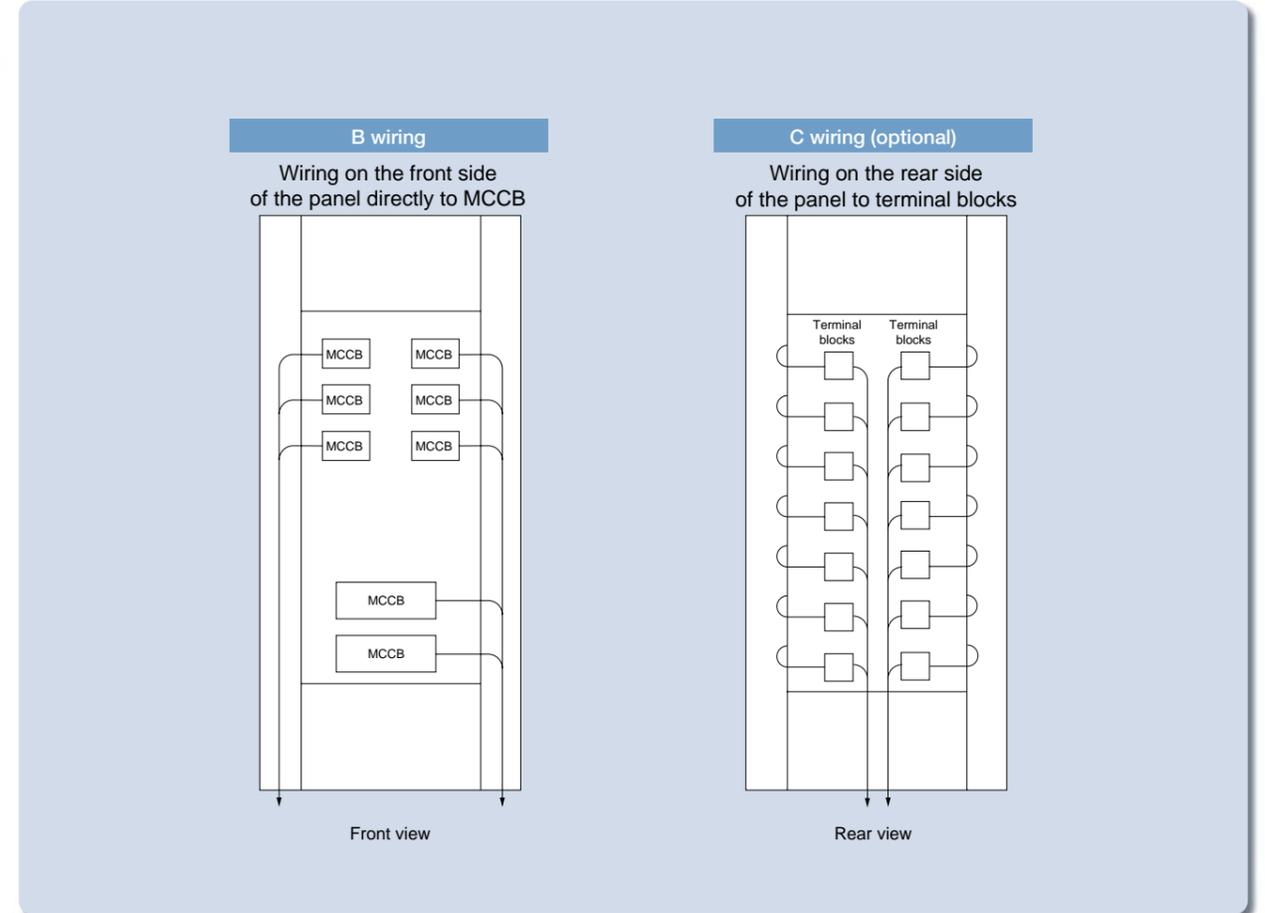
### Type: CNF-BC-652B (load cable bottom entry)



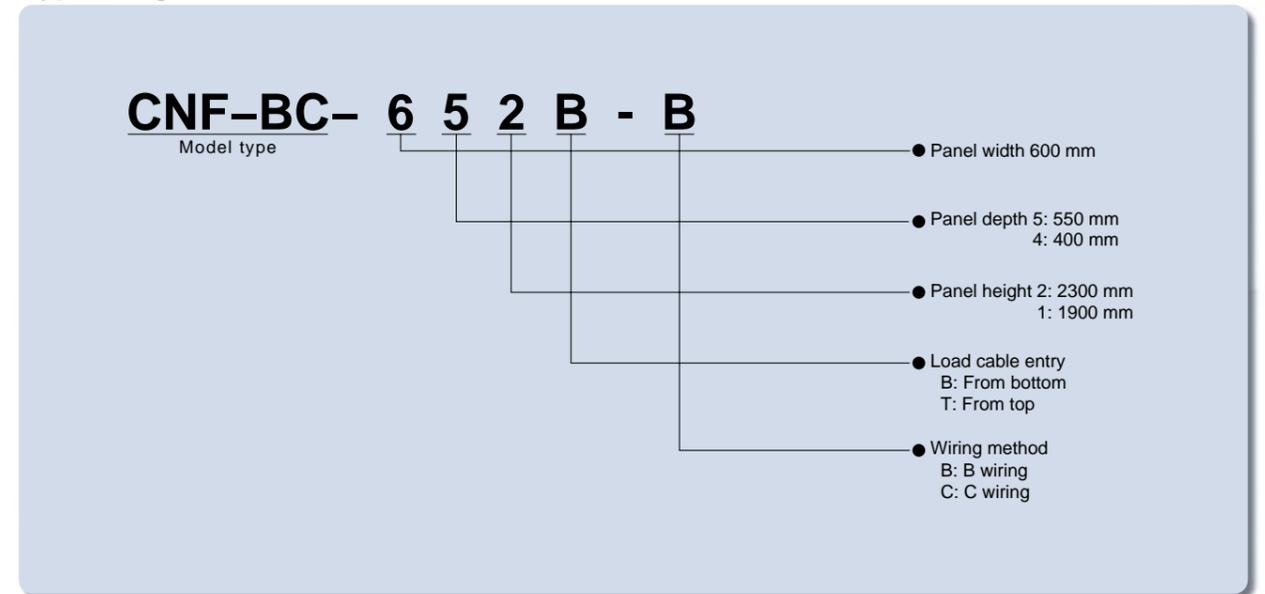
### Type: CNF-BC-652T (load cable top entry)



## Wiring method

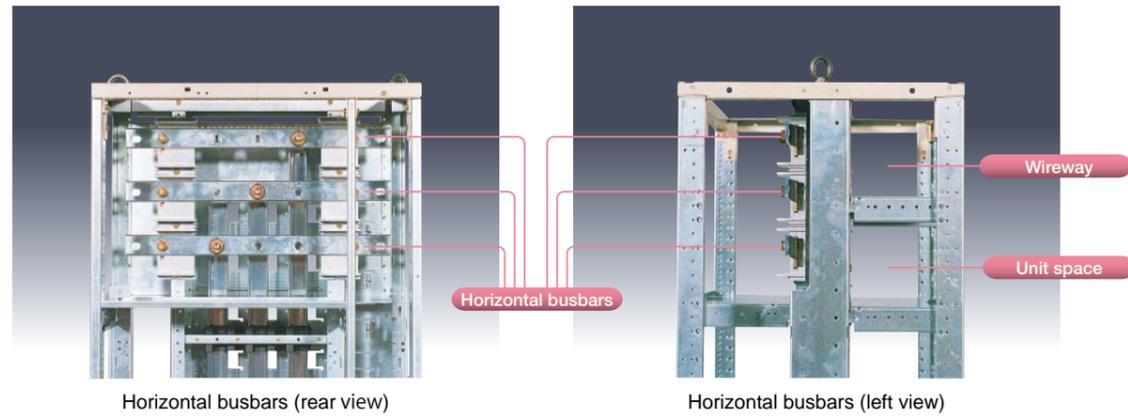


## Type Designation



## Structure

### Busbar



### Horizontal busbar (copper, tin plated)

Rated busbar current	Busbar compartment space	
	Three-phase, three-line	Three-phase, four-line
600 A 800 A 1000 A 1200 A	300 mm	500 mm
1600 A 2000 A		
2500 A 3000 A 3500 A	800 mm	1000 mm

- The horizontal busbars are configured vertically in an upper section on the rear side, so that load cables can be led in from either top or bottom.
- The upper section space on the front side can be used as wireways when configuring wiring between panels: for example, for shared circuits for a control line or an interlocking circuit.
- Size of the neutral phase of the 3-phase, 4-line horizontal busbar is 1/2 the size of the other phases as standard.

### Vertical busbar (copper, tin plated)

Rated busbar current ... 700 A 900 A (optional)

- Both front and rear side of vertical busbars are covered with steel plates.
- Maintenance works can be carried out from the front side such as connectin of horizontal busbars or tightening of connection bolts.

### Unit

**Unit designation: BC4-12SW12SW (125 AF)**

**Unit designation: BC5-25SW (250 AF)**

- The plug-in type unit is expanded from MCCB 225 AF to the 400 AF (compared with our previous model) to allow easier changes in unit capacity and configuration.

## Table of units

**Table 1 Standard feeder unit (3 3w, 1 2w)**

Unit height (mm)	Unit designation <sup>†(1)</sup>	MCCB				Maximum cable size for incoming B wiring (mm <sup>2</sup> ) - (screw size)
		Type	Ampere frame (AF)	Poles	Quantity	
75	BC3-03**03**-2	NF32-**	30	2	2	14-5
	BC3-03**-2	NF32-**	30	2	1	14-5
	BC3-06**06**-2	NF63-**	50	2	2	14-5
	BC3-06**-2	NF63-**	50	2	1	14-5
100	BC4-03**03**	NF32-**	30	3	2	14-5
	BC4-03**	NF32-**	30	3	1	14-5
	BC4-06**06**	NF63-**	50	3	2	14-5
	BC4-06**	NF63-**	50	3	1	14-5
	BC4-12**12**-2	NF125-**	100	2	2	60-8
	BC4-12**-2	NF125-**	100	2	1	60-8
	BC4-12**12**	NF125-**	100	3	2	60-8
125	BC5-25**	NF250-**	225	3	1	100-8
	BC12-40**	NF400-**	400	3	1	325-12

Note: (1) Up to six units of the 225 AF can be installed on one panel and up to two units of the 400 AF on one panel. (The maximum capacity of a vertical busbar is 900 A.)

**Table 2 Standard incoming unit (3 3w, 1 2w)**

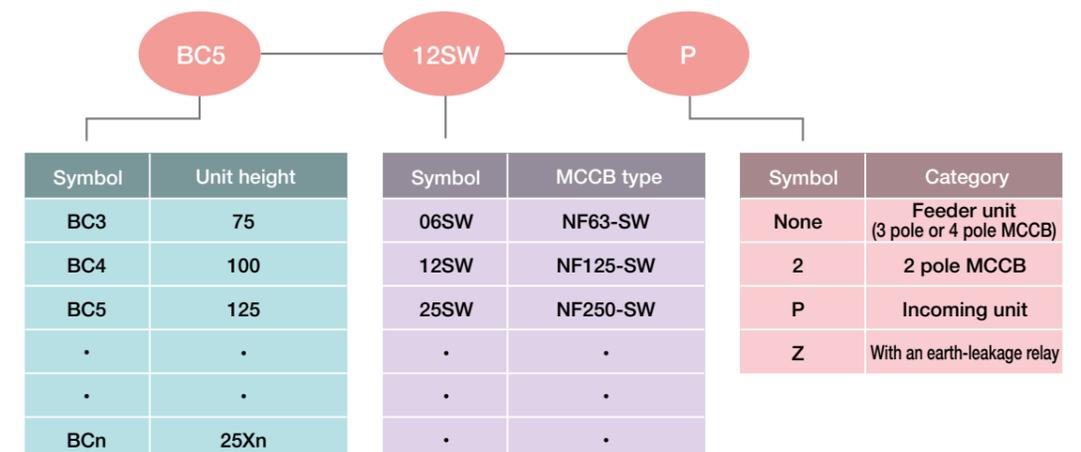
Unit height (mm)	Unit designation <sup>†(1) (2)</sup>	MCCB				Maximum cable size for incoming B wiring (mm <sup>2</sup> )-(screw size)	Accessory
		Type	Ampere frame (AF)	Poles	Quantity		
100	BC4-06**-P	NF63-**	50	3	1	14-5	1-CT
125	BC5-12**-P	NF125-**	100	3	1	60-8	1-CT
200	BC8-25**-P	NF250-**	225	3	1	100-8 <sup>†(3)</sup>	2-CT
550	BC22-40**-P	NF400-**	400	3	1	2X325-12	2-CT
	BC22-63**-P	NF630-**	600	3	1	2X325-12	2-CT
750	BC30-80**-P	NF800-**	800	3	1	2X325-12	2-CT

Note: (1) For the units 400 AF and above, the MCCB is installed vertically at the lowest position, and a power cable is led in from the MCCB secondary side. (MCCB is installed at the highest position if the power cable is led in from the top.)  
 (2) Units 600 AF and above require conductor connections.  
 (3) A terminal block is installed outside of the unit. (C wiring)

**Table 3 Feeder unit with earth-leakage relay (3 3w, 1 3w)**

Unit height (mm)	Unit designation	MCCB				Maximum cable size for incoming B wiring (mm <sup>2</sup> )-(screw size)	Accessory
		Type	Ampere frame (AF)	Poles	Quantity		
100	BC4-06**-Z	NF63-**	50	3	1	14-5	NV-ZBA, ZT15B
125	BC5-12**-Z	NF125-**	100	3	1	60-8	NV-ZBA, ZT30B
200	BC8-25**-Z	NF250-**	225	3	1	100-8	NV-ZBA, ZT40B
400	BC16-40**-Z	NF400-**	400	3	1	325-12	NV-ZBA, ZT100B

### Description of unit designation (example)







HEAD OFFICE: TOKYO BUILDING, 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN



**Safety Precautions**

Please read the instruction manual  
before using the device.