

**Nader**

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As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.

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**NDP3**  
Modular Consumer Unit



## NDP3 Modular Consumer Unit

### Contents

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Application Scope	03
Standards and Certificates	03
Application	03
Model and Implication	03
Specification and Allocation	04
Technical Parameters	05
Parts Introduction	06
Installation Instruction	06
Dimension	08
Ordering Notice	08



## NDP3 Series Modular Consumer Unit

### Application

> Indoor application, AC50Hz/60Hz, 440V, normally under 35°C (occasionally up to 60°C). Protection circuit breaker, switch, socket and similar inside electrical components from outside impact and invasion.

### Standards and Certificates

> GB 17466.1-2008, GB 17466.24-2008 ; CCC.

### Application

> Can be widely used as enclosure of fixed electrical equipment for household and construction installation.

### Model and Implication



No.	Implication	NDP3
1	Brand Code	ND <b>Nader</b>
2	Product Code	P Consumer Unit
3	Design Code	3
4	Number of Ways	8, 12, 15, 18, 20, 24, 30, 36
5	Transparent Door	/
	Non-transparent Door	B

## Specification and Allocation

Specification	Number of Ways (18mm/Way)	Hole Number of Neutral Line Terminal Block	Hole Number of Grounding Terminal Block	Knock-off Holes	Ground Poles	Consumer Unit Type	
NDP3-8(B)	8	8	8	-	-	Standard Case	
NDP3-12(B)	12	12	12				
NDP3-15(B)	15	8+8	16				
NDP3-18(B)	18	12+8	16				
NDP3-20(B)	20						
NDP3-24(B)	24						
NDP3-30(B)	30	15+15	30				
NDP3-36(B)	36						
NDP3-8(B) (Ground poles )	8	8	8	-	■		Standard Form
NDP3-12(B)(Ground poles )	12	12	12				
NDP3-15(B)(Ground poles )	15	8+8	16				
NDP3-18(B)(Ground poles )	18	12+8	16				
NDP3-20(B)(Ground poles )	20						
NDP3-24(B)(Ground poles )	24						
NDP3-30(B)(Ground poles )	30	15+15	30				
NDP3-36(B)(Ground poles )	36						
NDP3-8(B) (Knock-off holes+Ground Poles )	8	8	8	■	■	Standard Form	
NDP3-12(B)(Knock-off holes+Ground Poles )	12	12	12				
NDP3-15(B)(Knock-off holes+Ground Poles )	15	8+8	16				
NDP3-18(B)(Knock-off holes+Ground Poles )	18	12+8	16				
NDP3-20(B)(Knock-off holes+Ground Poles )	20						
NDP3-24(B)(Knock-off holes+Ground Poles )	24						
NDP3-30(B)(Knock-off holes+Ground Poles )	30	15+15	30				
NDP3-36(B)(Knock-off holes+Ground Poles )	36						
NDP3-8(B) (Knock-off Holes )	8	8	8	-	-		Standard Form
NDP3-12(B)(Knock-off Holes )	12	12	12				
NDP3-15(B)(Knock-off Holes )	15	8+8	16				
NDP3-18(B)(Knock-off Holes )	18	12+8	16				
NDP3-20(B)(Knock-off Holes )	20						
NDP3-24(B)(Knock-off Holes )	24						
NDP3-30(B)(Knock-off Holes )	30	15+15	30				
NDP3-36(B)(Knock-off Holes )	36						



## Technical Parameters

> Single layer : 8ways、12ways、15ways、18ways、20ways

Double layer : 24ways、30ways、36ways

> Bottom case

Metal bottom case is made of 1.2mm cold rolled steel plate with electrostatic spraying on surface, long service life and good corrosion resistance. It is suitable for flush mounting. Various bottom case designs (w/knock-off hole, w/o knock-off hole, w/ground poles, w/o ground poles) can meet different customer's requirements.

> Neutral line terminal block and grounding terminal block

There are two neutral line terminal blocks in each 15 ways, 18 ways, 20ways, 24ways, 30ways and 36 ways consumer units.

## Parameters of Neutral Line Terminal Block

Number of Ways	Holes Number and Diameter	Length (mm)	Width (mm)	Height (mm)
8	8=2×Φ6+6×Φ5	66	6.5	9
12	12=2×Φ6+10×Φ5	180	6.5	9
15	8+8= ( 2×Φ6+6×Φ5 ) + ( 2×Φ6+6×Φ5 )	180	6.5	9
18、20、24	12+8= ( 2×Φ6+10×Φ5 ) + ( 2×Φ6+6×Φ5 )	180	6.5	9
30、36	15+15= ( 2×Φ6+13×Φ5 ) + ( 2×Φ6+13×Φ5 )	270	6.5	9

## Parameters of Grounding Terminal Block

Number of Ways	Holes Number and Diameter	Length (mm)	Width (mm)	Height (mm)
8	8=2×Φ6+6×Φ5	74	6.5	9
12	12=2×Φ6+10×Φ5	106	6.5	9
18、20、24	16=2×Φ6+14×Φ5	146	6.5	9
30、36	30=4×Φ6+26×Φ5	260	6.5	9

> Ground poles

Standard case standard form type is without ground poles. Ground poles can be supplied upon request with stainless steel nails.

> Door

Type : Transparent door, non-transparent door

Plastic door : Insulating material with flame retardant function

IP CODE : IP40

Standards : GB 17466 .1-2008 GB 17466 .24-2008

## Parts Introduction

> Separately package of bottom case, door and accessories can effectively reduce damages or loss in construction.

> Separately package of bottom case, door and accessories is convenient to construction management. It is particularly suited to big real estate developer, contractors, etc.



## Cover kit

⑥



Introduction :

① Installation DIN rail

② Cover

③ Bracket

④ Neutral line terminal block

⑤ Grounding terminal block

⑥ Bottom case

## Installation Instruction

> Flush-mounted consumer unit: Place bottom case inside wall. Locate electrical components on DIN rail, put them in the bottom case and connect the wires. And then adjust cover to right position by adjusting the bracket. Then fix up them.

> Installed by licensed person, the neutral line (N) and ground line (⊥) should not be connected wrongly.

> Installed steps

First step : Prepare to install bottom case into wall

a. Prepare to opening for incoming lines and outgoing lines.

b. Deliver bottom cases to the construction site.

c. Install bottom case in to wall



Warning : The bottom case should be at the same horizontal level as the wall and parallel to the wall. The edges of bottom case should be 5mm~6mm apart from the wall.

Suggestion: It should be installed in dry and well-ventilated place without any obstruction.

Note: Standard case standard form type consumer unit is without knock-off holes. Customer can open holes according to actual conditions.

Second step : Connect neutral line (N) and grounding line (PE)

- a. Open the package of neutral line terminal block and grounding terminal block.
- b. Install neutral line terminal block and grounding terminal block into the bottom case which has already been flush mounted into the wall.
- c. Fix neutral line (N) and grounding line (PE) onto neutral line terminal block and grounding terminal block respectively



Suggestion : Neutral line and grounding line should be regular.  
Warning : Connection screws should be fastened.

Note : Hole number and diameter of neutral line terminal block and grounding terminal block can be customized upon special ordering.

Third step : Assemble components (such as breaker, disconnect switch, etc) and prepare to put them into the bottom case

- a. Locate electrical components (such as breaker, disconnect switch, etc) on DIN rail.
- b. Connect circuits by cables or busbar as possible.
- c. Check the circuits.



Attention : Electrical components should be installed according to wiring sequence.  
Warning : Connection screws should be fastened.

Fourth step : Install components into the bottom case

- a. Fix assembled components in the bottom case which has been already flush mounted into the wall.
- b. Connect circuits.
- c. Check the circuits.



Attention : Check whether wirings are correct with multimeter after installing finished.  
Warning : Connection screws should be fastened.

Fifth step : Install the cover

Install the cover onto above mentioned bottom case.



- Suggestion :
1. Check whether circuits are correct.
  2. Check whether all screws are fastened.
  3. Clean residues in the consumer unit
  4. Mark name for each circuit.

## Dimension

The dimension of NDP3 please refer to Form 2, Diagram 1 and Diagram 2

Form 2: Dimension of NDP3

Unit : mm

Model	A	B	C	D	Note
NDP3-8 ( B )	222	185	212	178	8 ways modular consumer unit
NDP3-12 ( B )	222	200	300	251	12 ways modular consumer unit
NDP3-15 ( B )	222	200	356	303	15 ways modular consumer unit
NDP3-18 ( B )	252	230	407	360	18 ways modular consumer unit
NDP3-20 ( B )	252	230	447	396	20 ways modular consumer unit
NDP3-24 ( B )	348	318	300	251	24 ways modular consumer unit
NDP3-30 ( B )	348	318	356	304	30 ways modular consumer unit
NDP3-36 ( B )	378	348	412	360	36 ways modular consumer unit

Diagram1 NDP1A-8 ( B ) ~ 20 ( B )

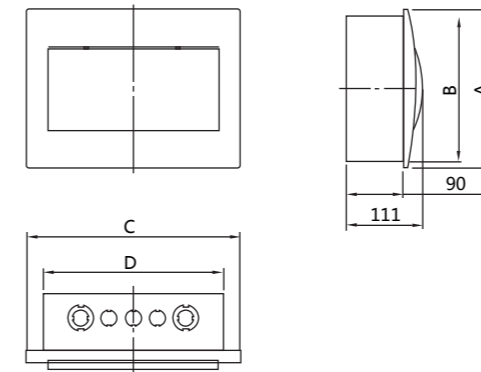
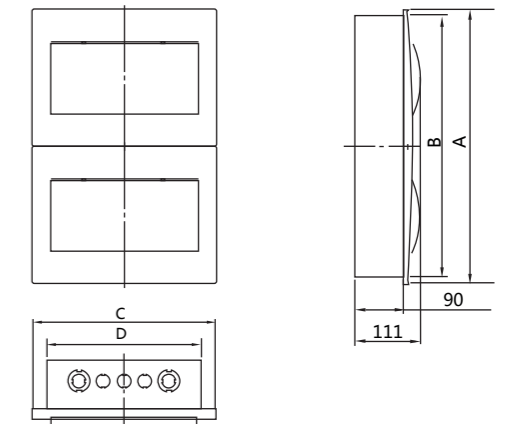


Diagram2 NDP1A-24(B) ~ 36(B)



## Ordering Notice

Take 8 ways consumer unit with transparent door as an example:

- > Standard case standard form consumer unit is without knock-off holes and ground poles. Standard model should be NDP3-8.
- > If knock-off holes are needed, mark knock-off holes after the standard model, just like NDP3-8 (Knock-off holes).
- > If ground poles are needed, mark ground poles after the standard model, just like NDP3-8 (Group poles).
- > If knock-off holes and ground poles are needed, mark knock-off holes and ground poles after the standard model, just like NDP3-8 (Knock-off holes + Ground poles).
- > Depth of bottom case can be customized upon request. Order model just like NDP3-8 (Depth of bottom case is 100mm)
- > Cover kit can be ordered separately. Order model just like NDP3-8 (Cover kit)

Note: Non-standard consumer unit may need more lead time.

