

Shanghai Liangxin Electrical Co., Ltd.

# Product Specification of NDG1-100 3P + NCJ1-3G1Z

Product Name: Disconnecting Switch+Transfer Operation

Accessory

Product Type: NDG1-100 3P + NCJ1-3G1Z

Date: 20201216

|         |             |      |            |
|---------|-------------|------|------------|
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| Revision information |                              |                  |               |             |           |
|----------------------|------------------------------|------------------|---------------|-------------|-----------|
| Version              | Revised contents and reasons | Date             | Prepared      | Reviewed    | Approved  |
| 1                    | First issuance               | October 15, 2012 | Zhang Mingxue | HuoZhiQiang | ZhangYang |
| 2                    | Upgrade edition              | Decmber 16.2020  | DaiFeng       | Kousuihong  | ZhangYang |
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### 1. Applicable Scope and Purpose

NDG1-100 is applicable to lines with the AC 50HZ/60HZ, the rated voltage of 400V and rated current of 100A, which is used for line facilities and industrial power distribution system in buildings and similar places as isolating circuits or infrequent make-break operation. Two sets of 3P NDG1-100s plus one set of NCJ1-3G1Zs, forming a manual transfer switch for the load transfer between two power supplies in the low-voltage circuit to guarantee safe isolation of the circuit

### 2. Picture of the Product(The picture is for reference only; the specific kind prevail)



### 3. Specification and Model Description

|       |                      |             |                  |                                                            |           |   |                              |
|-------|----------------------|-------------|------------------|------------------------------------------------------------|-----------|---|------------------------------|
| ND    | G                    | 1           | — 100            | 32                                                         | 3         | + | NCJ1-3G1Z                    |
| Nader | Disconnecting switch | Design code | Frame level 100A | Rated current (A)<br>16, 20, 25, 32<br>40, 50, 63, 80, 100 | Pole 3=3P |   | Transfer operation accessory |

### 4. Main Technical Parameters

#### • Electrical parameters

- Rated working voltage: AC400V/415V(3P);
- Rated current (Ie) : 16A,20A,32A, 40A,50A,63A, 80A,100A
- Making and breaking capacity: 3Ie (415V,  $\cos \Phi = 0.65$ )
- Rated short-time making capacity: 20Ie (415V,  $\cos \Phi = 0.9$ )
- Rated short-time withstand current: 20Ie (415V, power-on time: 1s)

#### • Utilization category

- AC-22A

- Wiring
  - Tunnel terminal blocks
  - Terminal connection area: Apply to the (2-50)mm<sup>2</sup> conductor
  - Terminal screw: M7, torque: 3.5N.m
- Transfer operation
  - Transfer operation torque: 1N.m
- Applicable standards
  - GB/T 14048.3, IEC 60947-3

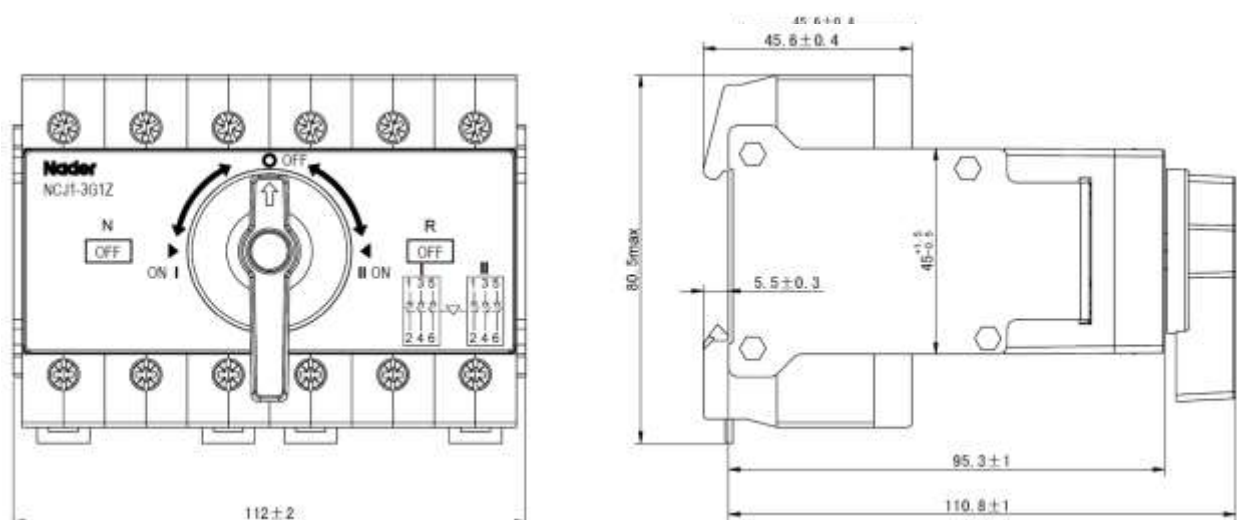
## 5. Normal Working Environment

- Elevation:  $\leq 2000\text{m}$
- Ambient temperature:  $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$
- The product can withstand the effects of wet air
- The product can withstand the effects of salt mist and oil mist
- The product can be disposed in places that are free from explosive media, media corrosive to metal, insulation damaging gas, and conductive dust
- The product should be installed free from snow and rain

## 6. Tripping Characteristics

None

## 7. Product Outline and Installation Dimensions



## 8. Use Method

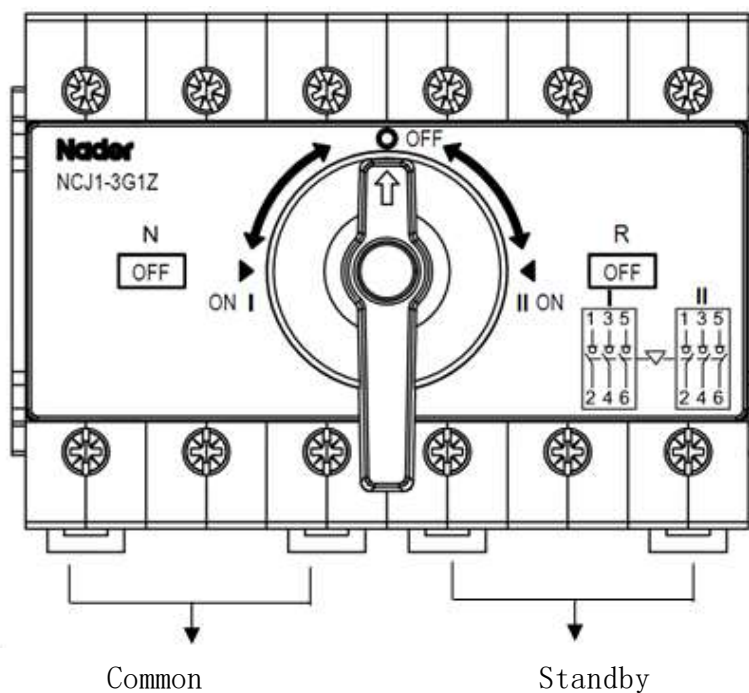


Fig 1

As shown in Fig. 1, the common power supply side is connected to the common power supply while the standby power supply side is connected to the standby power supply. When the handle arrow points to the “OFF” position (as shown in Fig. 1), the transfer switch is in the double-opening state (namely, both common power supply and standby power supply are disconnected); when the arrow points to the “ON I” position by rotating the handle (as shown in Fig. 2), the common power supply is connected; when the arrow points to the “ON II” position by rotating the handle (as shown in Fig. 3), the standby power supply is connected.

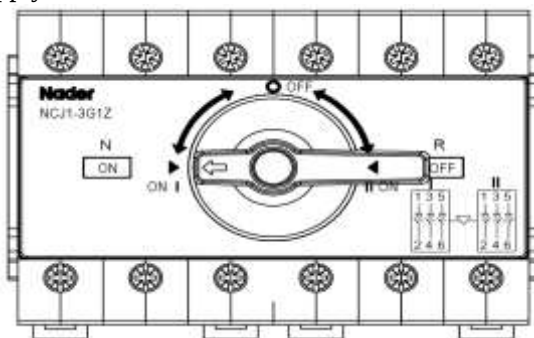


Fig 2

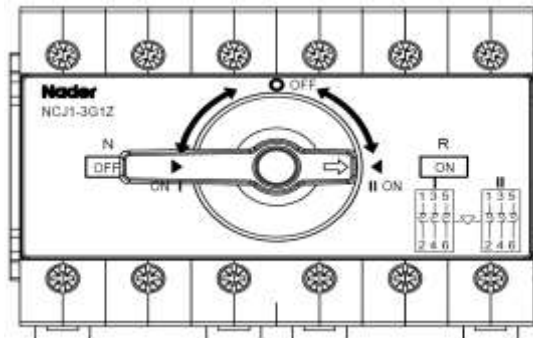


Fig 3

## 9. Installation Mode

It can be easily installed on the TH35mm×7.5 standard guide

## 10. Packaging and Storage

A single unit per box. The packaged products should be stored in a warehouse with the air ventilation and the relative humidity no more than 80% and the temperature between -40℃ and +80℃. No acidic alkaline or other corrosive gas exists in the ambient air in the warehouse. Under the conditions above, the storage period shall be no more than three years since the manufacturing date.

## 11. Precautions

- A user must be responsible for addressing a product issue that occurs because the user disassembles the product without approval;
- Under the energized operation state, do not touch the terminal on the product with bare hand.
- Do not commission the product randomly; the manufacturer shall not be responsible for any quality problem caused;
- Wiring should be reliable and solid.