Shanghai Liangxin Electrical Co., Ltd.

NDQ2-63X
Product Specification

（IPD-ENG-DEV-T20 A2 2024-06-30）

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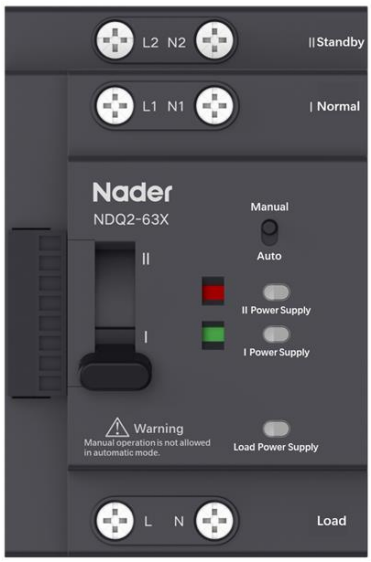
Revision History					
Version	Revision Reason/Content	Implementation Date	Prepared by	Reviewed by	Approved by
0	New	2025-05-30	Cao Xuehu	Wang Yujun/Ji Linlin	Zhang Huifeng

1 Applicable Scope and Purpose

The NDQ2-63X automatic transfer switching equipment is applicable for sites with the voltage of AC110/AC220/AC230/AC240V and the rated frequency of 50/60Hz. It complies national standards GB 14048.1 and GB/T 14048.11, as well as the Fire Protection Code for High-rise Civil Buildings, Code for Fire Protection Design of Buildings, Design Guidelines for Emergency Lighting, Code for Electrical Design of Civil Buildings etc.

This product mainly applies to the compulsory level I load, which is widely used in important places that require the continuous power supply, such as fire protection, telecommunications, hospitals, hotels, urban rail transits, high-rise buildings, industrial assembly lines and TV stations. It adopts the network source, self-starting generator set and battery set as the main and standby power supplies.

2 Product Pictures (For reference only)



Specification and Model Description

ND Q 2 -63 X /□ /□

1 2 3 4 5 6 7

SN	SN Description	NDQ2-63X
1	Enterprise code	ND
2	Product code	Q
3	Design SN	2
4	Rated current of frame	63A
5	Small volume	X
6	Rated operational current (A)	10,16,20,25,32,40,50,63
7	Number of poles	2：2 poles

3 Main Technical Parameters

3.1 Electrical Parameters

Table 2: Main electrical parameters of NDQ2-63X

Product model	NDQ2-63X
Rated current (In)	63A
Certifications	CCC、CE、CB、TUV
Number of poles	2P
Rated operating voltage (Ue)	AC110V (need special customization), AC220/230/240V
Rated frequency (f)	50Hz (60Hz needs special customization)
Rated insulation voltage (Ui)	690V
Operating power loss	≤ 2.5w
Rated impulse withstand voltage (Uimp)	8kV
Rated limited short-circuit current (Iq)	50kA (Cooperate with the fuse)
Class of equipment	Class PC
Drive mode	Excitation-type drive
Utilization category	AC-31B
Contact switching time	≤20ms
transfer action time	≤100ms
Electrical life	1500 (maintainable value)
Mechanical life	6000 (maintainable value)
Controller structure form	Integral type
Operation mode	Auto switch and auto recover
Install mode	TH35 guide rail（1mm thick）

3.2 Parameters of the terminals connected to the wire

Table 3: Parameters of terminals connected to the wire

Product model	Thread diameter (mm)	Torque (N·m)
NDQ2-63X	Wiring screw M5	3

3.3 Weight of the product

Product model	Number of poles	Rough weight (Kg)	Net weight (Kg)
NDQ2-63X	2P	0.7	0.65

3.4 Internal resistance of the product

＜900μΩ

4 Working Conditions

5.1 Ambient air temperature: -40℃ ~ +70℃

5.2 The reduction coefficient of different altitude conditions

The altitude of the installation site should not exceed 2000m.

Table 5: Table of altitude reduction coefficient

Altitude (m)	2000	3000	4000	5000
Reduction coefficient of rated operational current	1In	0.9In	0.8In	0.75In

5.3 Class of pollution

Class of pollution: III.

5.4 Product protection class

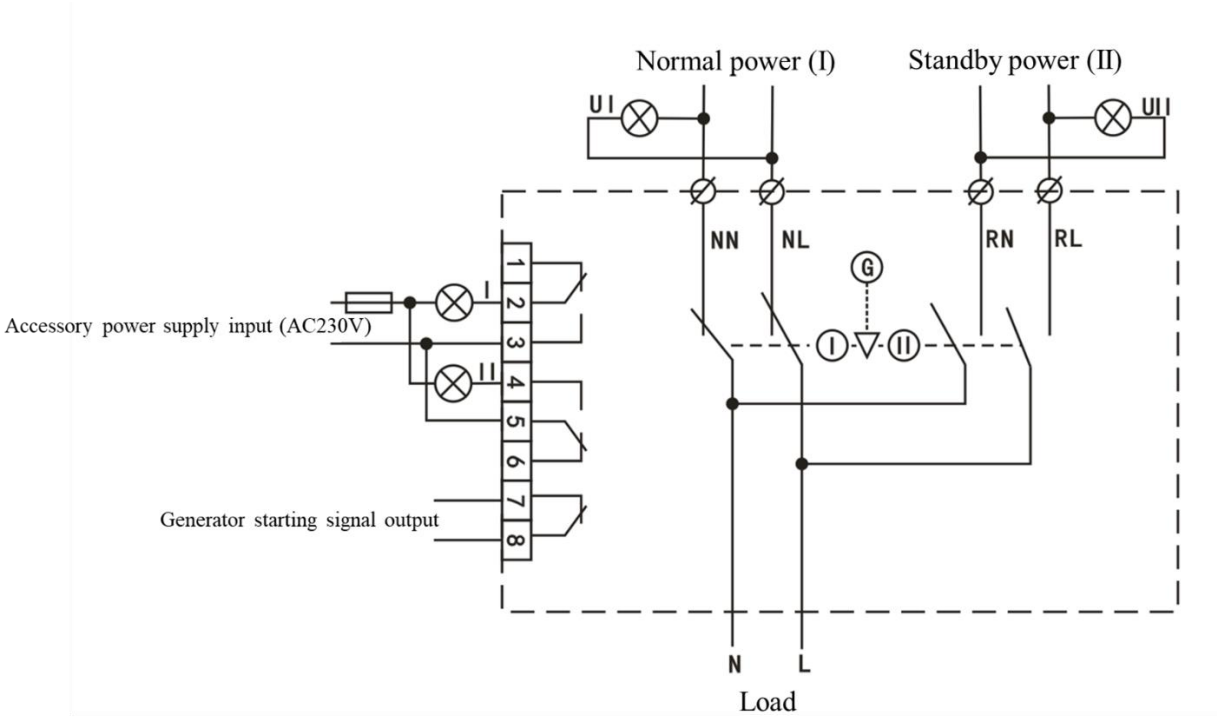
Product protection class: IP20.

6 Controller functions

Circuit scheme	Non-isolated power supply + singlechip + MOS drive coil
Display	Power supply status indicating (LED)
Switch position indicating	√
Undervoltage value	165V±5V，(when Ue is 110V：82±5V)
Auto switch and auto recover	√
Generator starting output terminal	√
Install mode of the controller	Guide rail

Notes: "√" means that the function is available; "-" indicates that the function is not available.

4 Electrical wiring diagram



4.1. Generator starting signal output terminal

- A passive, normally closed contact is provided.
- Generator starting signal output function description:

If the normal power supply is under voltage, the signal will output after a delay of 5 seconds. If the normal power supply disconnect, the generator will be started immediately without any delay.

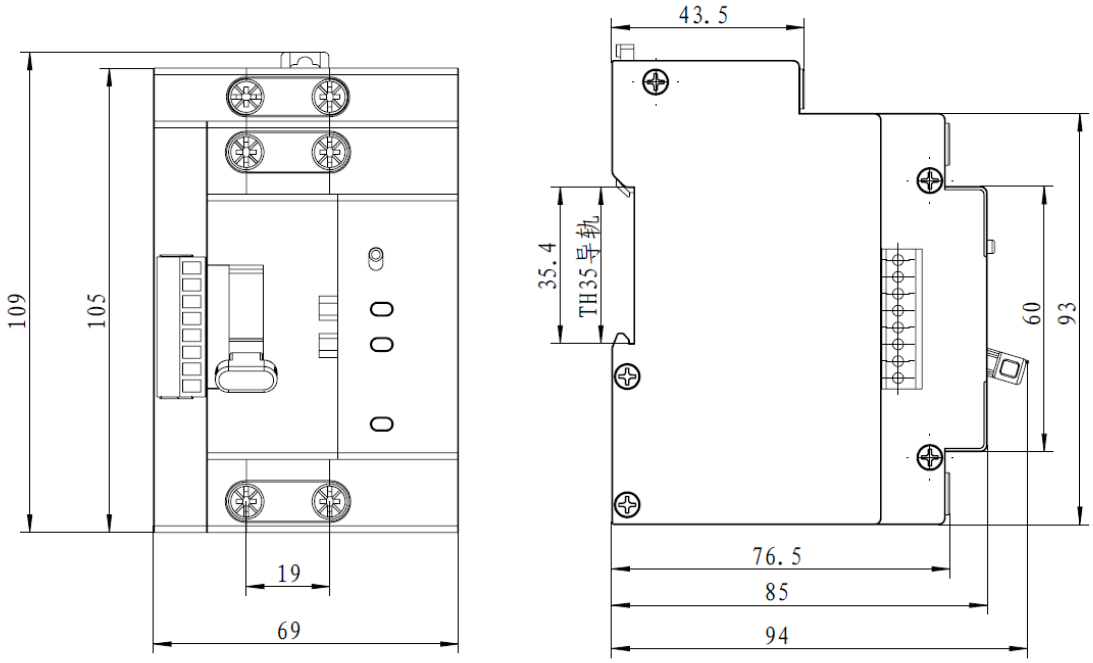
When the normal power supply has recovered and the contact has returned to the normal side, the signal will disappear after 5 seconds delay.

5 Controller panel description

- 3 LED indicator lights
- A hand shank for manual and automatic mode switching.

Panel status	Always on	Always off
I power supply indicator light	Normal	Power phase loss or undervoltage
II power supply indicator light	Normal	Power phase loss or undervoltage
Load output power indicator light	Exist power output	No power output

6 Outline and Installation Dimensions



Notes: the limit deviation of the unmarked tolerance dimension of the outline and installation size is carried out according to GB/T 1804-C.

7 Installation mode

The product can be vertically fixed in the cabinet, and the maximum inclination of the installation surface to the installation vertical surface is ±3°.

8 Packaging and Storage

1) The product is packaged in a special carton.
2) The applicable transportation and storage temperature range of the product is from -55°C to +85°C. Keep the products dry during transportation, which shall not be affected by strong turbulence, vibration and impact as well as be free from snow and rain.

9 Environmental compliance

The product meets the standard of RoHS2.0.

10 Precautions

1) The product should be installed correctly. Check whether the nameplate content is correct. Confirm the switch is in the power-off state.

2）Please carry out conversion tests regularly (recommend every three months) to confirm the normal operation of the product. Please regularly clean the dust on the surface of the casing to maintain good insulation. Pay attention to moisture and dust prevention for switches that have not been used for a long time. Before use, adjust the switch manually or automatically to ensure it operates normally before putting it into operation.

3）This product has been subject to the insulation test before the factory delivery, and wrong dielectric test will damage the control system. Dielectric test with ATS is prohibited.