

Shanghai Liangxin Electrical Co., Ltd

Product Specification of NDG2-200/4 series Switch-disconnectors

(IPD-SPT-T11 A0 2016-11-15)

Product Name: Switch-disconnectors

Product type: NDG2-200/4

Date: 20161115

Prepared	<u>Wei Yao</u>	Date	<u>2016-11-15</u>
Reviewed	<u>Qing lu Liu</u>	Date	<u>2016-11-15</u>
Approved	<u>Bo Zhou</u>	Date	<u>2016-11-15</u>

Revision information					
Version	Revised contents and reasons	Date	Prepared	Reviewed	Approved
0	First edition publication	20161115	Wei Yao	Qing lu Liu	Bo Zhou

1. Application Scope and Purpose

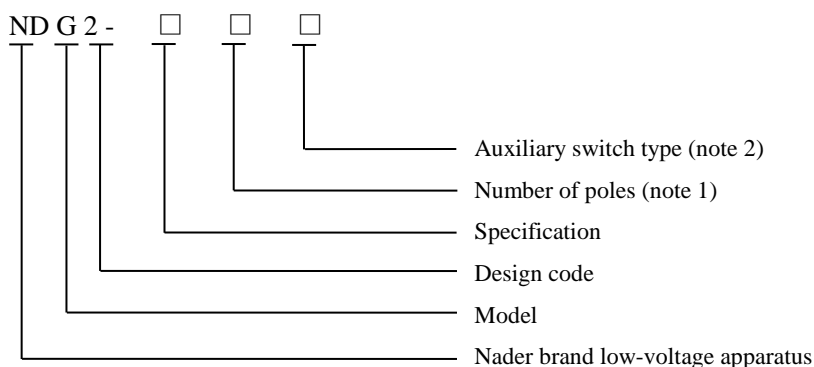
NDG2-200/4 Switch-Disconnecter is applicable to the low-voltage distribution or motor network under AC 50Hz, rated working voltage of AC400V and AC690V and rated working current of 200A for disconnection of infrequent connection and breaking circuits and lines.

The product is widely applied in the power transmission and distribution and automation system of building, electric power and chemical industries.

2. Pictures of the Product



3. Speciation and Model



Note1: .Number of poles: 3-tripolar, 4-quadrupole;

2: No code-no auxiliary switch, F1-with one auxiliary switch (One normally open; one normally closed), F2-with two auxiliary switches (two normally open; two normally closed);

4. Key Technical Parameters

(1) Electrical characteristics

- ▲ Rated insulation voltage U_i : AC1000V
- ▲ Rated working voltage U_e : AC400V、AC690V
- ▲ Rated surge voltage U_{imp} : 12kV
- ▲ Rated working current I_e (A)/power AC

400V AC-23B A/kW	200/110
690V AC-23B A/kW	160/150
690V AC-22B A/kW	200
- ▲ Rated make-break capacity

Rated making capacity	690V AC-23B 1600A
Rated breaking capacity	690V AC-23B 1280A

Rated make-break capacitive load capacity 400V 131kVAr

▲ Rated short-circuit making capacity 690V 20kA

▲ Rated short-time withstand current 690V 4kA/1s

▲ Allowable load

200A under the ambient temperature of 40℃

180A under the ambient temperature of 45℃

160A under the ambient temperature of 50℃

140A under the ambient temperature of 55℃

▲ Auxiliary switch 380V AC-15 4A

▲ Auxiliary switch 220V DC-13 0.4A

(2) Operating performance

▲ Electrical endurance: 1000 times

▲ Mechanical life: 12000 times

▲ Operating torque: 7.5Nm

(3) Connection capacity

Rated current A	200
Minimum copper cable cross section mm ²	150
Maximum copper cable cross section mm ²	40×16
Maximum copper cable width mm	20
Terminal tightening torque Nm	15-22

5. Normal Working Environment

▲ Elevation: ≤2000m;

▲ Ambient temperature: -25℃~+55℃; the mean value in 24h do not exceed +35℃, and the capacity reduction should be considered when ambient temperature is higher than 40℃;

▲ Class of pollution 3;

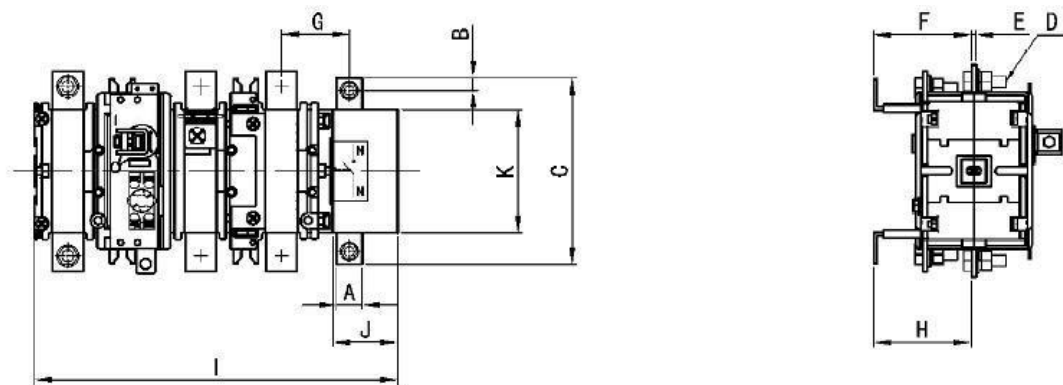
▲ When the highest temperature is +40℃, the relative humidity of air should not exceed 50%; a high relative humidity is allowed under a low temperature, e.g. 90% under +20℃. Special measures should be taken to process the condensation sometimes produced by change of temperature;

▲ Installation category III and IV:

▲ It should be installed at a place where there is no significant shake, impact or invasion of rain, snow and media with the risk of explosion, and the media there should have no gas and dust that can corrode metal and damage insulation.

6. Product's Appearance and Installation Size

NDG2-200/4P pole outline and installation dimension



型号	A	B	C	D	E	F	G	H	I	J	K
NDG2-200/4	20	10	115	M8	4.5	61	35	63.5	200	45	73

7. Installation Way and Position

Vertical installation with the wire either entering on top and leaving at bottom or entering at bottom and leaving on top.

8. Packaging and Storage

The products packed in carton should be stored under -500C~+800C and be rained on in the process of transportation.

9. Accessories List and Installation

List of accessories for H-type handle

No.	Name	Unit	Quantity	Remark
1	Shaft	Piece	1	
2	Couping (including bolts)	Set	1	
3	Handle	Set	1	
4	Tapping screw for fixing handle	Piece	4	
5	Handle pad	Piece	1	
6	Adjustable sample	Piece	1	
7	Certificate of inspection	Piece	1	
8	Operating manual	Piece	1	
9	Operating manual of H series handle	Piece	1	

List of accessories for B-type handle

No.	Name	Unit	Quantity	Remark
1	Shaft	Piece	1	
2	Handle	Set	1	
3	Tapping screw for fixing handle	Piece	2	
4	Certificate of inspection	Piece	1	
5	Operating manual	Piece	1	

柜内操作附件清单

List of accessories for in-cabinet operation

No.	Name	Unit	Quantity	Remark
1	Handle	Set	1	
2	Certificate of inspection	Piece	1	
3	Operating manual	Piece	1	

10. Matters need attention

- ▲ The handle of the product includes H series, B series and in-cabinet handle. Please note that the H series and B series handle can be padlocked while the in-cabinet handle cannot.
- ▲ Protective cover accessories should be selected in case of in-cabinet operation. If it is high enough inside the cabinet, they will be optional but this should be confirmed before order.
- ▲ If the necessary installation depth exceeds the normal specified scope, the required installation depth should be indicated.