

上海良信电器股份有限公司

Shanghai Liangxin Electrical Co., Ltd.

(NDG3V-50 (H) 隔离开关)

(NDG3V-50 (H) Switch-disconnectors)

产品说明书

Product Manual

(IPD-ENG-DEV-T32 A0 2019-11-05)

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1. 型号说明 Model Description

ND G 3 V — 50 H/ □ □ □ □ □										
1	2	3	4	5	6	7	8	9	10	11
序号 SN	序号名称 SN name				代号 Code					
1	企业代号 Enterprise code				ND: Nader 牌低压电器 ND: "Nader" brand					
2	产品代码 Product code				G: 隔离开关 G: Switch-disconnectors					
3	设计代号 Design code				3					
4	派生代号 Derived code				V: 宽电压 V: Wide voltage					
5	壳架电流 Frame current				50: 50A					
6	分类号 Class. No.				H: 高电压型, 无: 普通型 H: High-voltage type, otherwise is normal					
7	机械层 Mechanical layer				2、3、4、6、8、9					
8	接线方式 Wiring mode				1: 两层串联 1: Serial cabling across two layers 4: 交流联接 4: AC connection 5: 两正共负 5: Two positive share one negative					
9	短接方式 Short connected method				02: 不带短接排 02: Without short busbar					
10	安装方式 Installation mode				M-柜门安装 M: on cabinet door					
11	产品号 Product No.				编号对应产品参数, 具体见技术参数表 The number corresponds to the product parameters; for details, see the Table of Technical Parameters					

2. 工作环境 Operating Environment

2.1 正常工作的周围空气温度范围为 $-40^{\circ}\text{C}\sim+75^{\circ}\text{C}$; 周围空气温度超过 $+75^{\circ}\text{C}$, 或低于 -40°C 时, 用户应与制造厂双方协商。

The ambient air temperature for normal operation ranges in $-40^{\circ}\text{C}\sim+75^{\circ}\text{C}$; when the ambient air temperature is above $+75^{\circ}\text{C}$, or below -40°C , the user should negotiate with the manufacturer.

2.2 正常安装地点的海拔高度不超过 3000m, 超过 3000m 使用时降容情况见下表:

Normal installation altitude shall not exceed 3000m, Refer to the following table for capacity reduction when using higher than 3000m:

海拔降容系数 Altitude derating coefficient				
海拔 Altitude /m	3000	3500	4000	4500
工作电流修正系数 Correction factor of working current	1	0.95	0.93	0.9
工作电压修正系数 Correction factor of working voltage	1	0.9	0.83	0.8

2.3 大气相对湿度在周围空气温度为 $+40^{\circ}\text{C}$ 时不超过 50%, 在较低的温度下可以允许有较高的相对湿度, 例如 20°C 时达 90%。对由于温度变化偶尔产生的凝露应采取特殊的措施。
The relative humidity at an ambient temperature of $+40^{\circ}\text{C}$ should not exceed 50%. A higher relative humidity is allowed at a lower temperature. For example, it can be 90% at 20°C . Special measures should be taken to address occasional condensing due to temperature fluctuation.

2.4 在无爆炸危险的介质中, 且介质无足以腐蚀金属和破坏绝缘的气体与导电尘埃的地方; 在没有雨雪侵袭的地方。

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 avoided from snow and rain.

2.5 适合在污染等级 3 的环境条件下安装使用。

The product is applicable in an environment with pollution class III.

2.6 安装类别为 III 和 IV。

The installation types III and IV are applicable to the product.

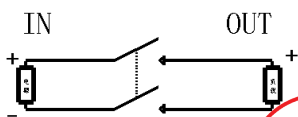
2.7 防护等级 Protection class:

整机 Complete appliance: IP20;

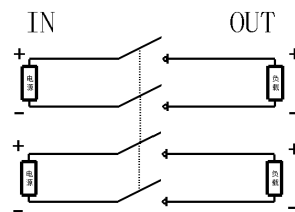
手柄 Handle: IP66。

3. 接线方式 Wiring Mode

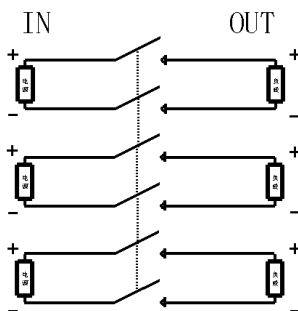
3.1 直流产品两层串联接线图 Series Connection Diagram Cabling Across for Two Layers of the Product with a DC Power Supply



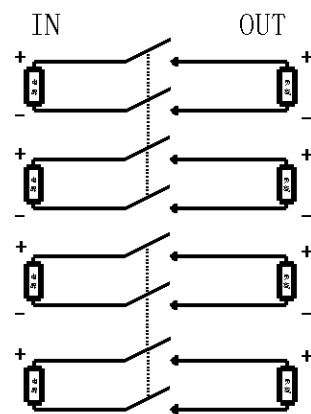
两层串联 2 层外形
Cabling across two layers



两层串联 4 层外形
Cabling across four layers

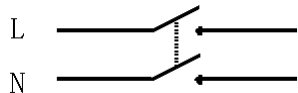


两层串联 6 层外形
Cabling across six layers

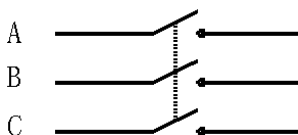


两层串联 8 层外形
Cabling across eight layers

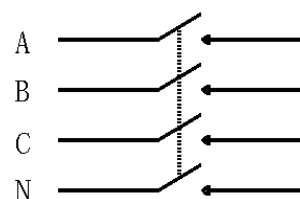
3.2 交流产品接线图 Cabling for the AC Power Supply



交流联接 2 层外形
Cabling across two layers



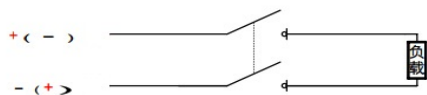
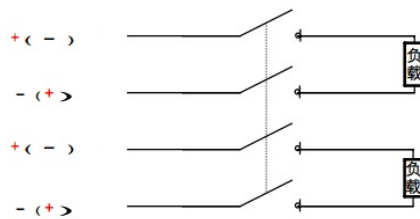
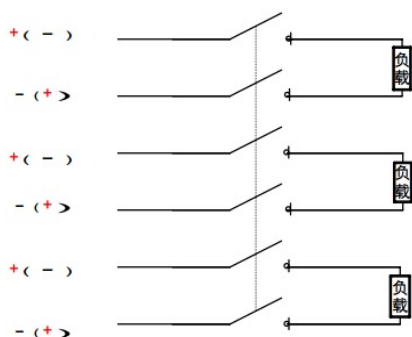
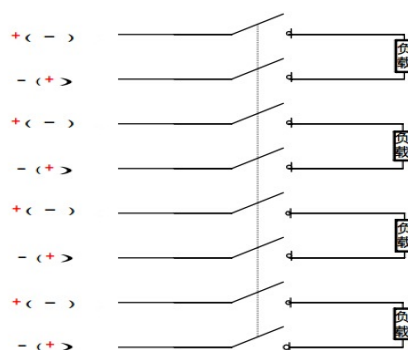
交流联接 3 层外形
Cabling across three layers



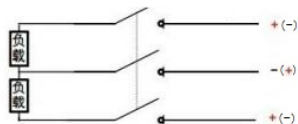
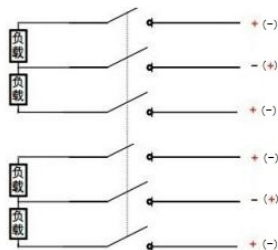
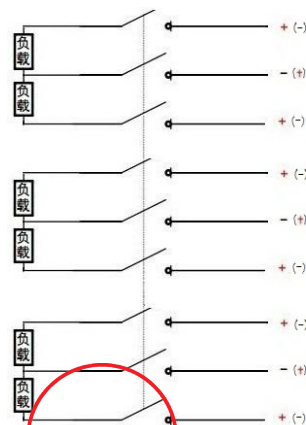
交流联接 4 层外形
Cabling across four layers

3.3 NDG3V-50H/.../9 产品接线图 Cabling for the NDG3V-50H/.../9

3.3.1 直流产品两层串联接线图 Series Connection Diagram Cabling Across for Two Layers of the Product with a DC Power Supply

直流两层串联 2 层外形
Cabling across two layers直流两层串联 4 层外形
Cabling across four layers直流两层串联 6 层外形
Cabling across six layers直流两层串联 8 层外形
Cabling across eight layers

3.3.2 直流产品两正共负接线图 Series Connection Diagram Cabling Across for Two positive share one negative of the Product with a DC Power Supply

直流两正共负 3 层外形
Cabling across three layers直流两正共负 6 层外形
Cabling across six layers直流两正共负 9 层外形
Cabling across nine layers

4. 外形尺寸和安装尺寸 Outline and installation dimensions

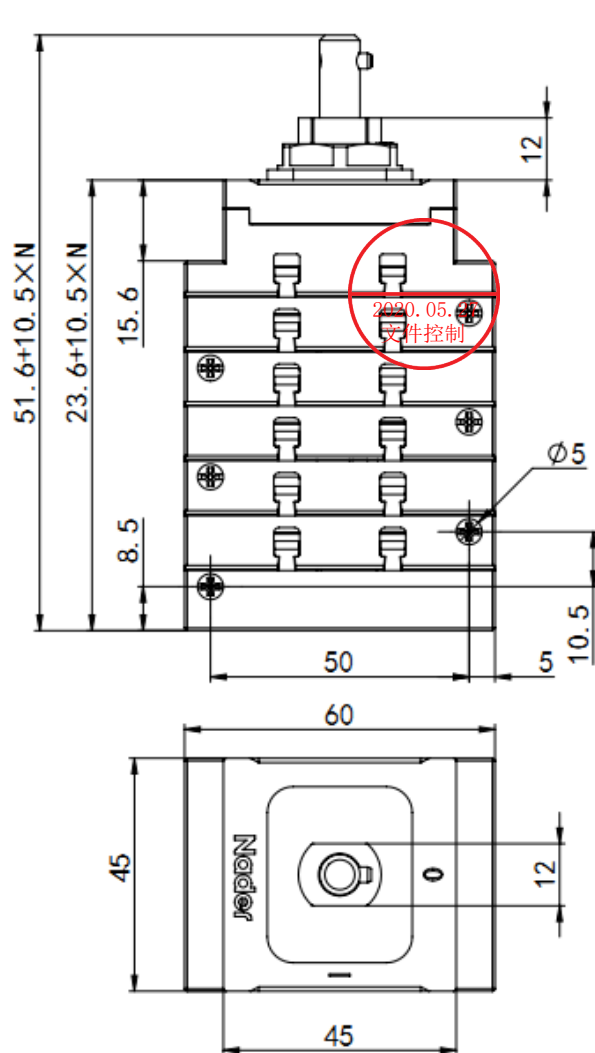


Fig. 1

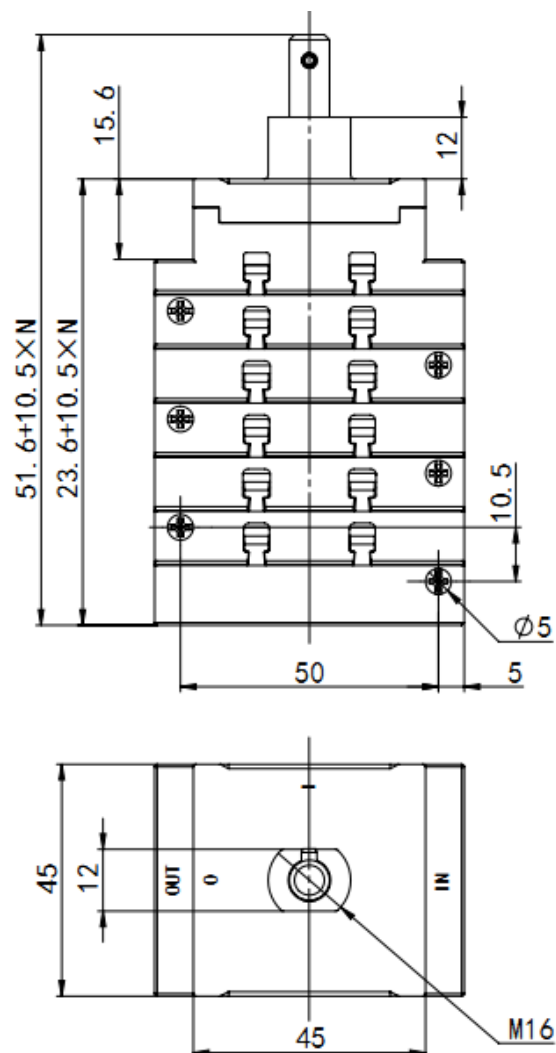


Fig. 2

图 1 为 NDG3V-50H 09 号产品, 图 2 为其余产品。

Fig. 1 shows the NDG3V-50H No. 9 product; Fig. 2 shows the others.

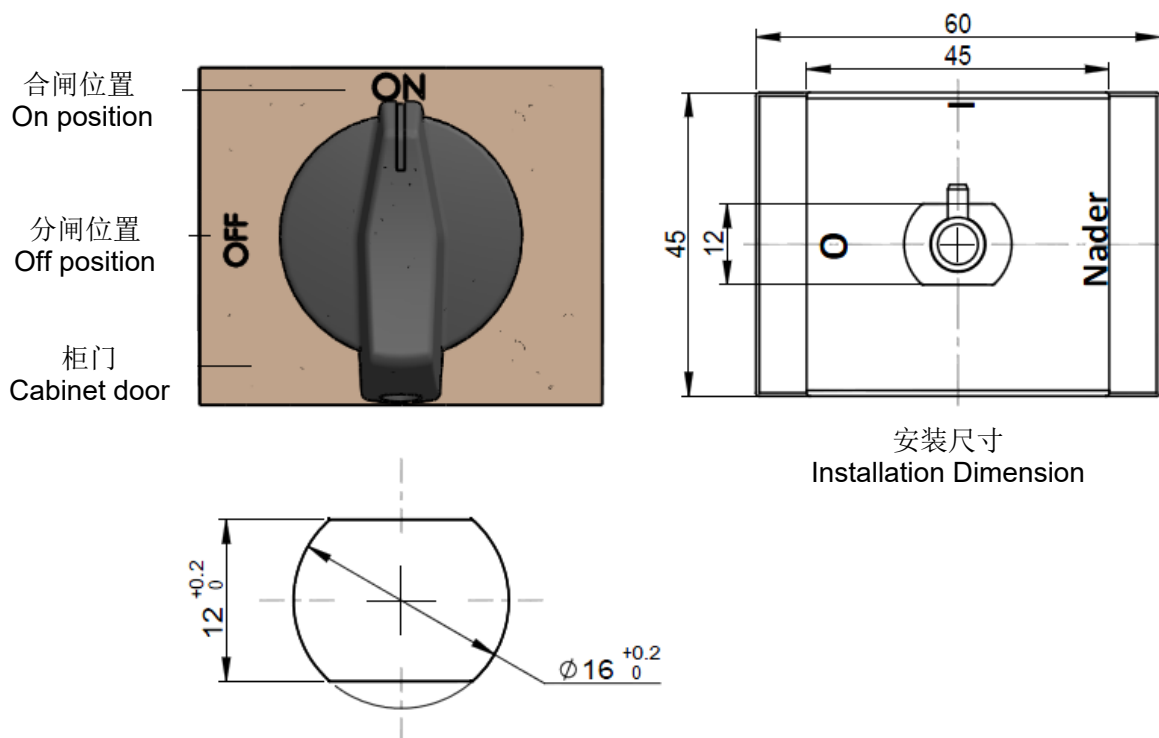
注: H 为产品的极数。

Note: H indicates the number of poles of the product.

5. 安装方式 Installation Mode

安装方式: 手柄柜门安装;

Installation mode: Install it on the cabinet door by using the handle.

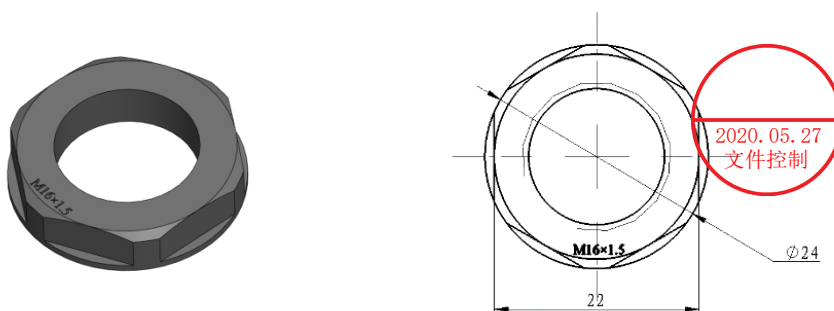


状态位置: 本产品有二个位置状态, 即合闸位置“I/ON”和分断位置“O/OFF”, 如上图所示, IN 侧接电源端, OUT 侧接负载端。

Positions: The product has two switch positions, which are the I/ON position and O/OFF position as shown in the above figure. The IN side connects to the power supply side while the OUT side connects to the load side.

产品固定螺母:

Fixing nut:



6. 使用和维护 Use and Maintenance

用户在产品正常安装、使用及检验条件下, 产品由于制造质量造成的原因发生损坏或不能正常工作的情况, 制造厂进行售后处理。

If the product is damaged or fails to work properly caused by the product quality during normal installation, use and tests, the manufacturer provides the after-sale service to address the issue.

7. 注意事项 Notices



7.1 因私自拆开产品而引起的质量问题, 责任自负;

Any quality problem due to disassembly without permission will be the liability of the user;

7.2 在工作通电状态下, 手请勿触及隔离开关非绝缘件裸露部分;

Do not touch the non-insulated exposed parts of the disconnecting switch when it is connected to a power supply;

7.3 接线必须可靠, 防止因接线端出现异常发热引起隔离开关造成接线端烧损;

Reliable cabling is required to prevent the terminals from being burnt out due to abnormal heat at the terminals;

7.4 直流产品 IN 侧接电源端, OUT 侧接负载端 (NDG3V-50H 09 号产品无此接线要求)。

For DC products, the IN side connects to the power supply side while the OUT side connects to the load side (this wiring requirements is not necessary for the NDG3V-50H No. 9 product).