

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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2	增加新产品规格参数, 增加分闸位置锁手柄外形	20201201	郑 蕾	杨子坤	王继理
3	修改尺寸信息, 修改降容表达方式	20211207	陈桢桢	郑 蕾	王继理

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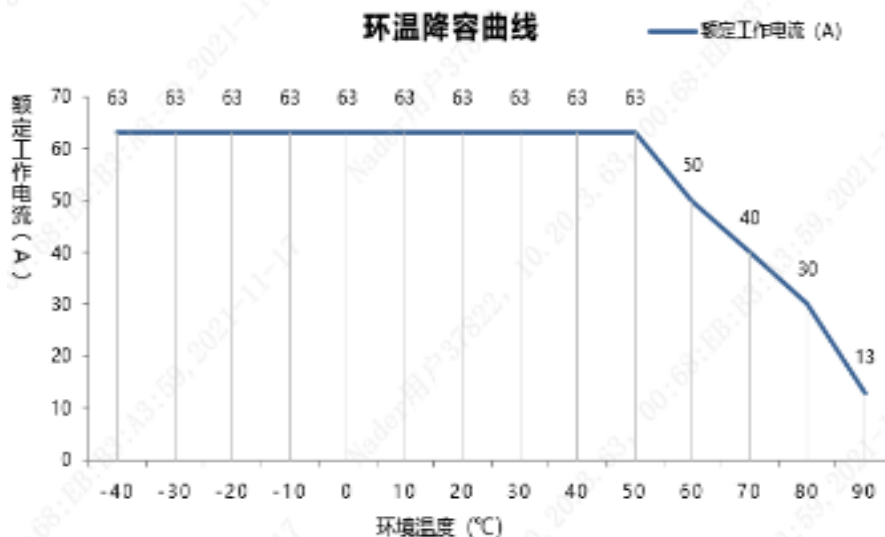
1. 型号说明 Model Description

ND G 3V — 50 □ / □ / □ / □ / □ / □									
1	2	3	4	5	6	7	8	9	10
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		3V						
4	壳架代码 Frame code		50						
5	分类号 Class. No.		H: 高电压型,无: 普通型 H: High-voltage type, otherwise is normal						
6	机械层 Mechanical layer		2, 3, 4, 6, 8						
7	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 6: 单层接线 6: Single layer wiring						
8	手柄形式 Handle form		01: 分闸位置锁手柄 01: Opening position lock handle 02: 常规手柄 02: Conventional handle						
9	安装方式 Installation mode		M: 柜门安装 M: on cabinet door						
10	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

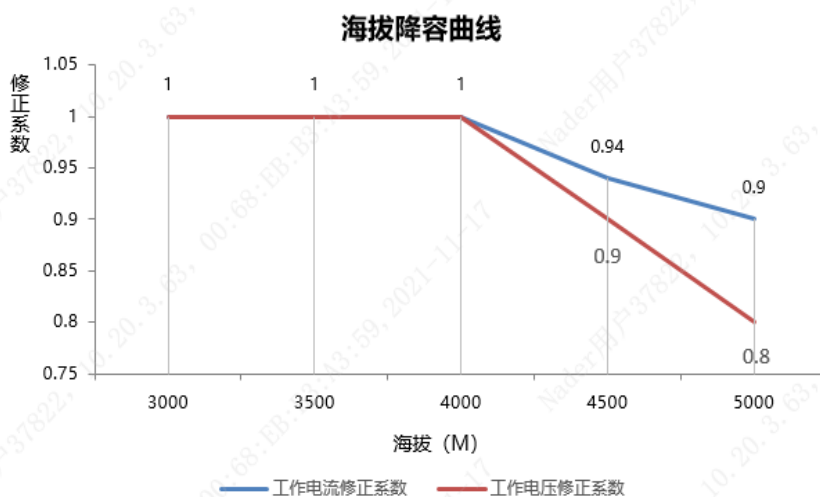
2.1 正常工作温度: $-40^{\circ}\text{C}\sim+50^{\circ}\text{C}$, 环境温度降容曲线如下 (电压不降容):

The ambient air temperature for normal operation ranges in $-40^{\circ}\text{C}\sim+50^{\circ}\text{C}$, refer to the following figure for capacity reduction (The voltage is constant):



2.2 正常安装地点的海拔高度不超过 4000m, 超过 4000m 使用时降容情况如下:

Normal installation altitude shall not exceed 4000m, Refer to the following figure for capacity reduction when using higher than 4000m:



2.3 大气相对湿度在环境温度为 $+40^{\circ}\text{C}$ 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:

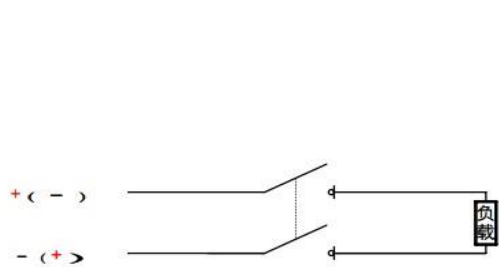
整机 Complete appliance: IP20;

手柄 Handle: IP66。

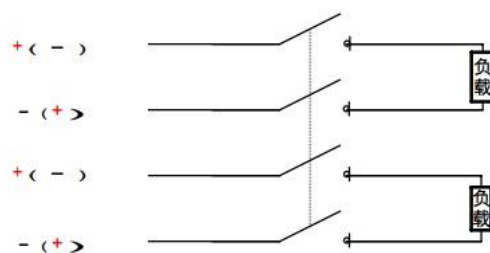
3. 接线方式 Wiring Mode

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

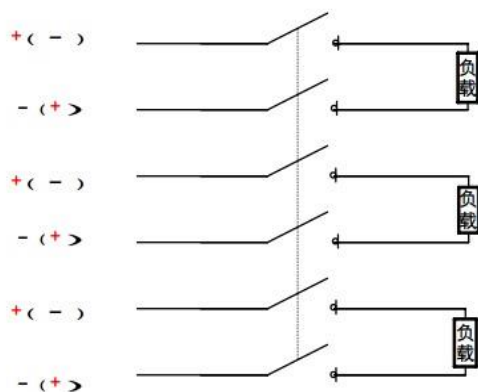


两层串联 2 层外形



两层串联 4 层外形

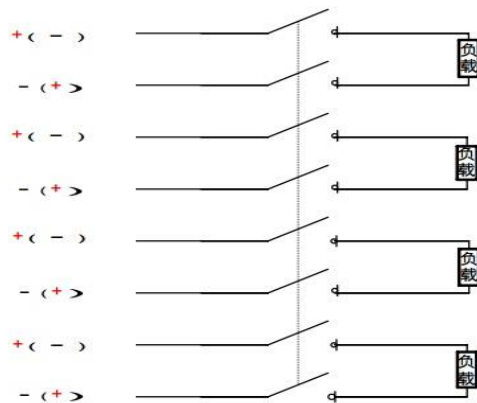
Cabling across two layers



两层串联 6 层外形

Cabling across six layers

Cabling across four layers

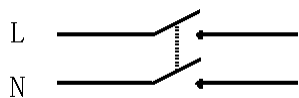


两层串联 8 层外形

Cabling across eight layers

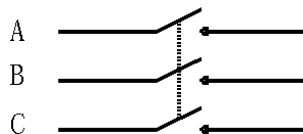
3.2 交流产品接线图

Cabling for the AC Power Supply



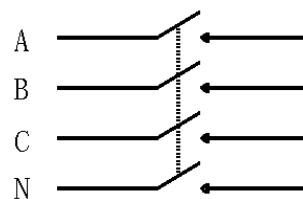
交流联接 2 层外形

Cabling across two layers



交流联接 3 层外形

Cabling across three layers

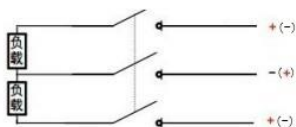


交流联接 4 层外形

Cabling across four layers

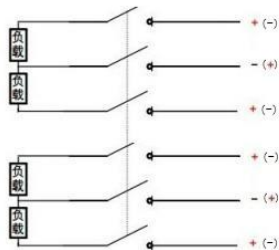
3.3 直流产品两正共负接线图

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

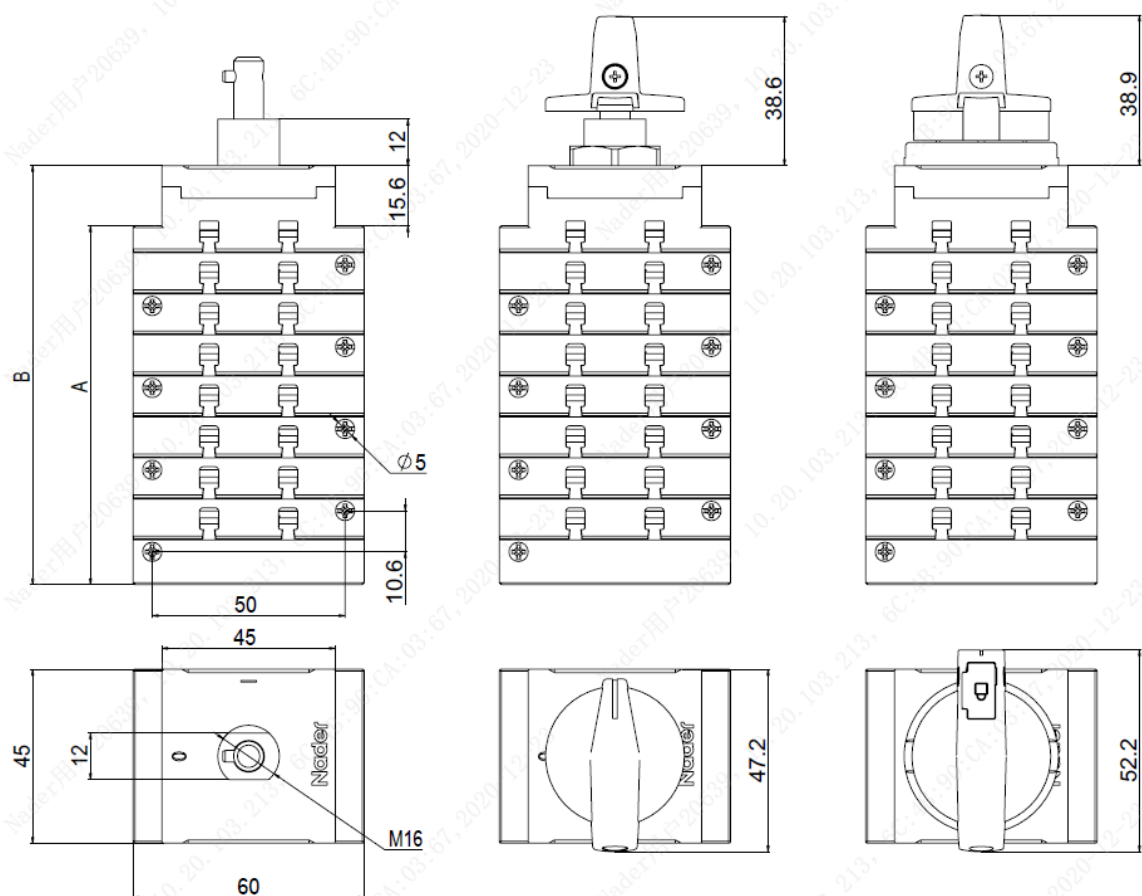
Cabling across six layers

3.4 直流单层接线产品接线图

Diagram Cabling Across for single layer of the Product with a DC Power Supply



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



开关本体尺寸(不含手柄)

Size of switch body
(excluding handle)

常规手柄尺寸

Conventional handle size

分闸位置锁手柄尺寸

Opening position lock
handle size

NDG3V-50/50H 产品外形及安装尺寸

NDG3V-50/50H outline and installation dimensions

	A	B	weight(g)
2 层开关本体 Switch body of 2P	44.6 ± 0.5	72.6 ± 0.5	137
3 层开关本体 Switch body of 3P	55.1 ± 0.5	83.1 ± 0.5	173
4 层开关本体 Switch body of 4P	65.6 ± 0.5	93.6 ± 0.5	207
6 层开关本体 Switch body of 6P	86.6 ± 0.5	114.6 ± 0.5	273
8 层开关本体 Switch body of 8P	107.6 ± 0.5	135.6 ± 0.5	342
常规手柄 Conventional handle	/	/	12
分闸位置锁手柄 Opening position lock handle	/	/	21

5. 安装方式 Installation Mode

5.1 状态位置: 本产品有二个位置状态, 即分断位置“O/OFF”和合闸位置“I/ON”, 如下图。

Status position: This product has two status positions, breaking position "O/OFF" and making position "I/ON", as shown in the figure below.



分闸位置

Breaking position



合闸位置

Making position

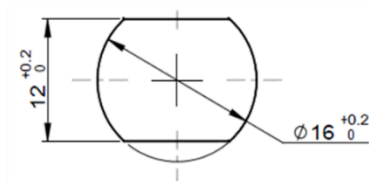
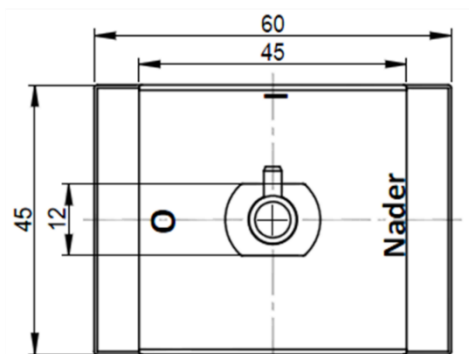
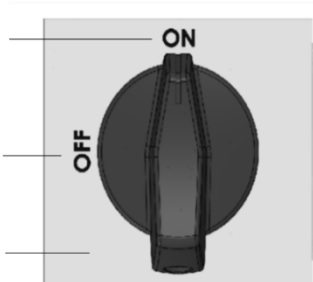
5.2 安装尺寸:

Installation dimension:

合闸位置
Making position

分闸位置
Breaking position

柜门
Cabinet door

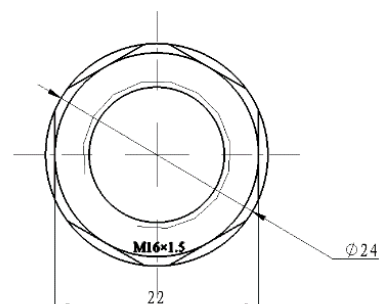


柜门开孔尺寸

Opening size on door

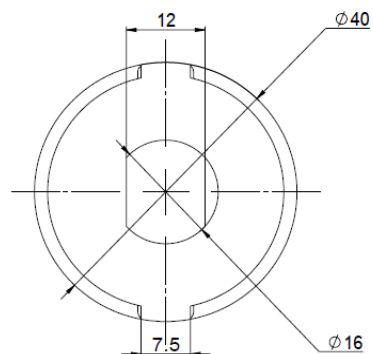
5.3 产品固定螺母:

Fixing nut:



5.4 分闸位置锁手柄止动件:

Handle stop of opening position lock handle:

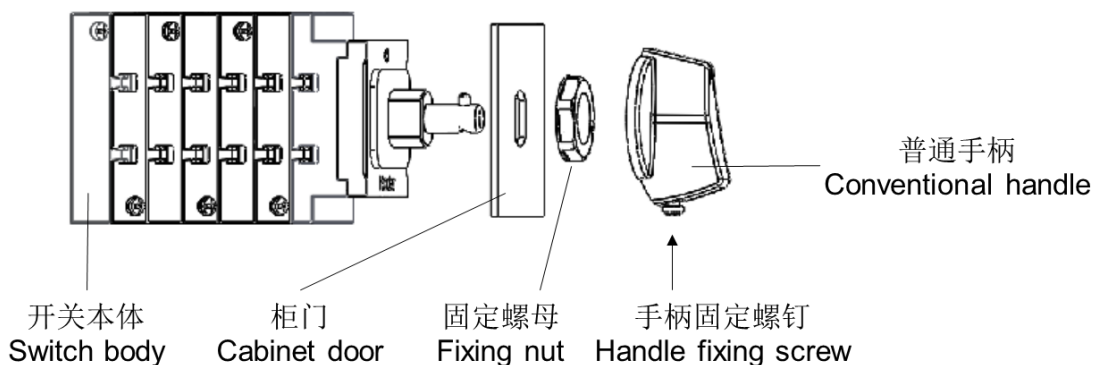


5.5 安装方式: 手柄柜门安装

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

5.5.1 开关本体及常规手柄安装示意图:

Installation instruction of switch and conventional handle:

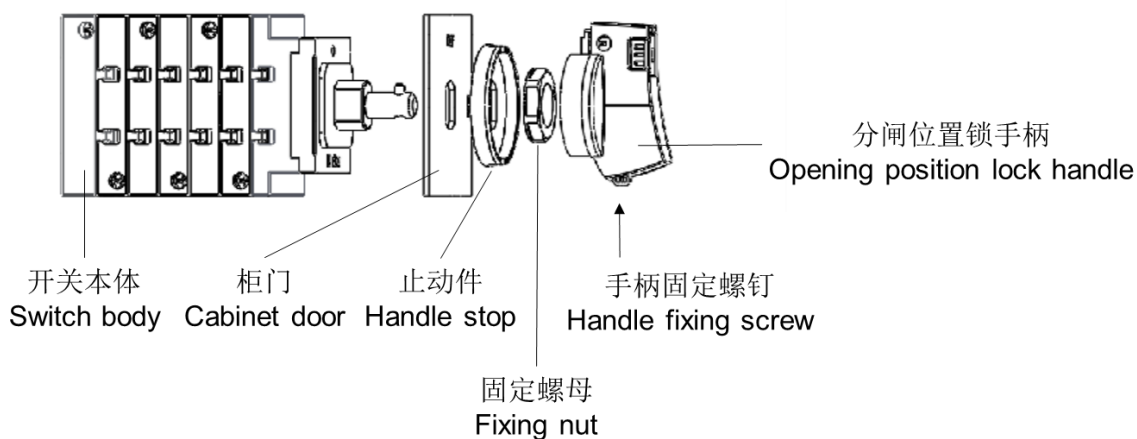


将开关本体穿入柜门开孔中, 依次将固定螺母、手柄安装到位后, 将手柄固定螺钉沿箭头示意方向打紧。

Put the switch body into the opening of the cabinet door, install the fixing nut and handle in place in sequence, and then tighten the handle fixing screw along the direction of the arrow.

5.5.2 开关本体及分闸位置锁手柄安装示意图:

Installation instruction of switch and opening position lock handle:



将开关本体穿入柜门开孔中,依次将止动件、固定螺母、手柄安装到位后,将手柄固定螺钉沿箭头示意方向打紧。

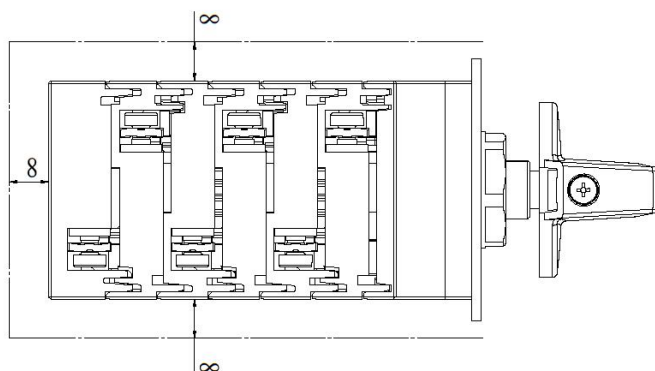
Put the switch body into the opening of the cabinet door, install the Handle stop,fixing nut and handle in place in sequence, and then tighten the handle fixing screw along the direction of the arrow.

*分闸位置锁手柄螺钉头为特殊梅花形内六角带孔形式规格 T10。

*Opening position lock handle screw is plum-shaped hexagonal with holes,T10.

5.5.3 推荐安全安装距离 (单位: mm):

Recommended installation distance(Unit:mm) :



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.