

上海良信电器股份有限公司

Shanghai Liangxin Electrical Co., Ltd.

NDZ3 (A) T-10~400 直流接触器

NDZ3 (A) T-10~400

产品使用说明书
Product Manual

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

编制	赵岚	日期	2021-03-30
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批准	路晓苗	日期	2021-04-01

修订记录 Revision History					
版本 Version	修订原因/内容 Revision Reason/Content	实施日期 Implementation Date	编制人 Prepared by	审核人 Reviewed by	批准人 Approved by
0 Version	新增 New addition	20200708	赵岚 Zhao Lan	谢强强 Xie Qiangqiang	朱华 Zhu Hua
1	更新 NDZ3T-20 安装尺寸 Change the installation dimension of NDZ3T-20	20200915	赵岚 Zhao Lan	谢强强 Xie Qiangqiang	朱华 Zhu Hua
2	增加 NDZ3AT-250C/300C 参数 addition NDZ3AT-250C/300C	20210324	赵岚 Zhao Lan	谢强强 Xie Qiangqiang	朱华 Zhu Hua

1. 适用范围与用途

1. Application Scope and Purpose

NDZ3(A)T-10~400 系列直流接触器适用于工作电压至 DC750V，工作电流为 10~400A 的直流系统中，主要用于电动汽车、充电桩、充电站等领域。

The NDZ3(A)T-10~400 series of DC contactors apply to the DC system with the working voltage of DC750V and working current of 10~400A, which are mainly used in electric vehicles, charging piles, charging stations and other fields.

2. 工作环境

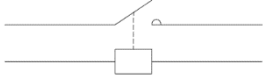
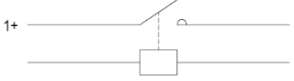
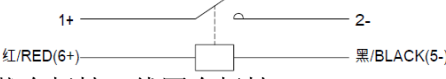
2. Operating Environment

温度: -40~85℃, 湿度: 5%~95%RH

Temperature: -40~85℃, humidity: 5%~95%RH

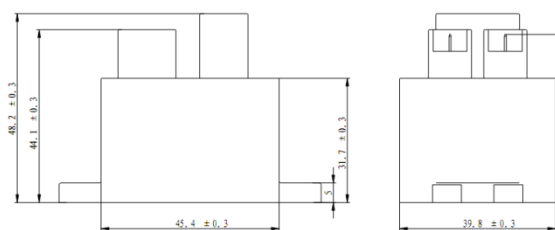
3. 电气线路图

3. Electric Circuit Diagram

型号/type	电气线路图 Electric Circuit Diagram
NDZ3T-10/20	 负载无极性，线圈无极性; Load without polarity, coil without polarity
NDZ3T-40 NDZ3AT-250C/300C	 负载无极性，线圈无极性; Load without polarity, coil without polarity
NDZ3T-100/100P/150/150P NDZ3AT-120/120P/150B/150C/150CP/200B/200/250	 负载有极性，线圈无极性; Load with polarity, coil without polarity
NDZ3T-200/200P/300P/350/400 NDZ3AT-400	 负载有极性，线圈有极性; Load with polarity, coil with polarity

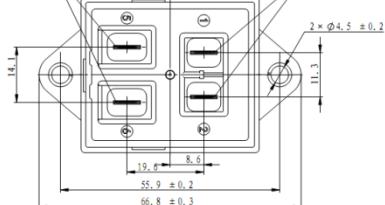
4. 产品外形尺寸和安装尺寸 (mm)

4. External Dimensions and Installation Dimensions (mm)

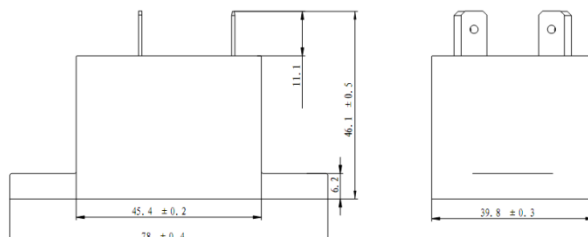


线圈输入端子, 无极性
Coil input terminal without polarity
#187 插片, t=0.5
#187 insertion piece t=0.5

线圈输入端子, 无极性
Coil input terminal without polarity
#187 插片, t=0.5
#187 insertion piece t=0.5

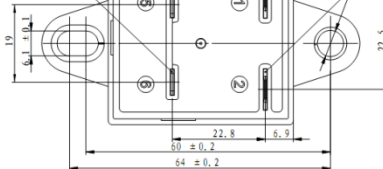


NDZ3T-10

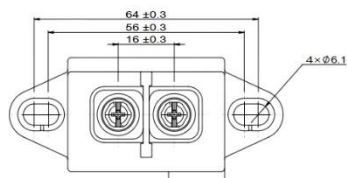
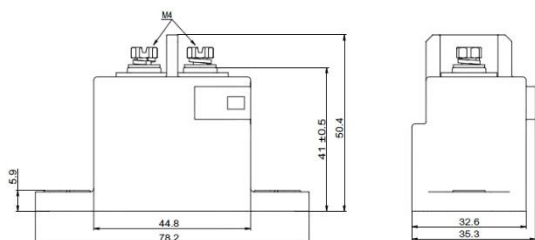


线圈输入端子, 无极性
Coil input terminal without polarity
#250 插片, t=0.8
#250 insertion piece t=0.8

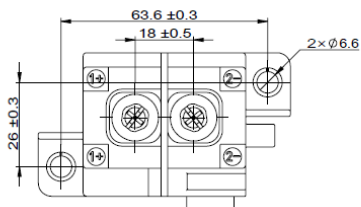
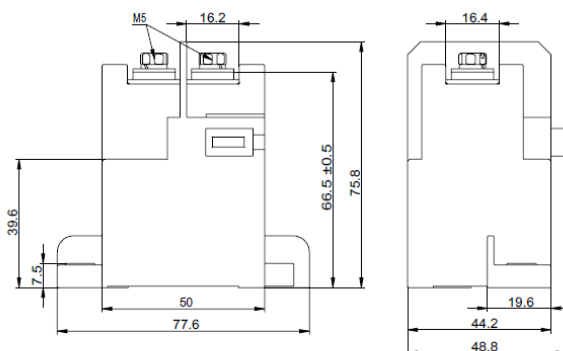
线圈输入端子, 无极性
Coil input terminal without polarity
#250 插片, t=0.8
#250 insertion piece t=0.8



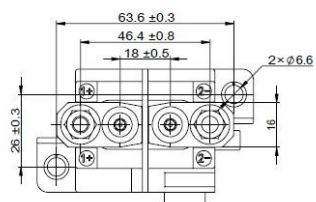
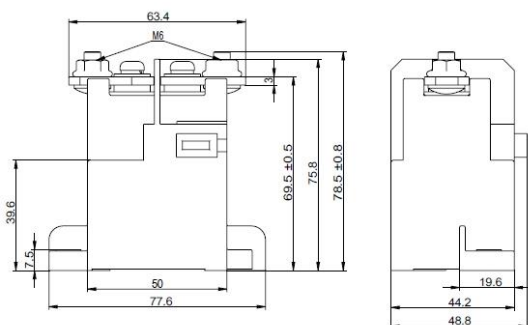
NDZ3T-20



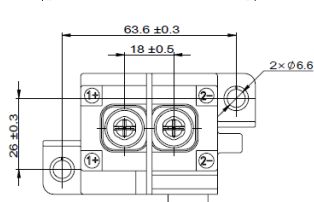
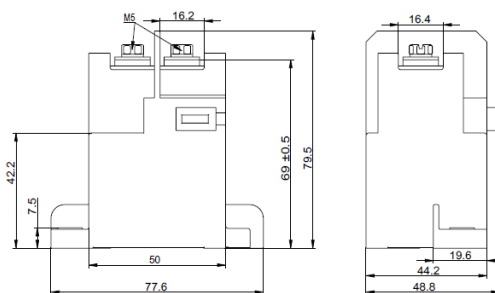
NDZ3T-40



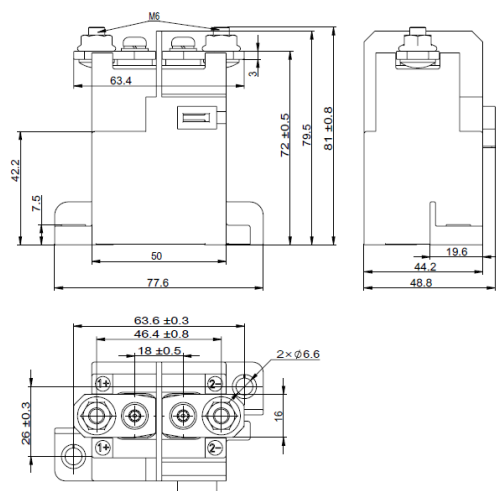
NDZ3T-100



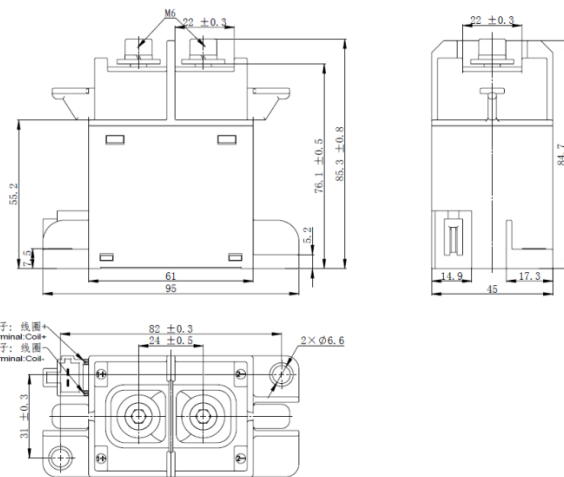
NDZ3T-100P



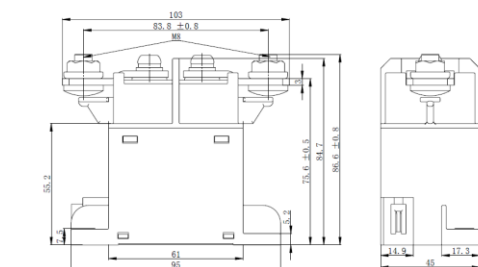
NDZ3T-150



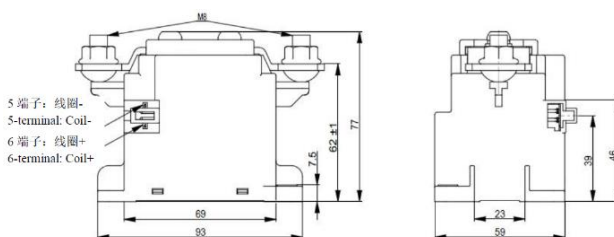
NDZ3T-150P



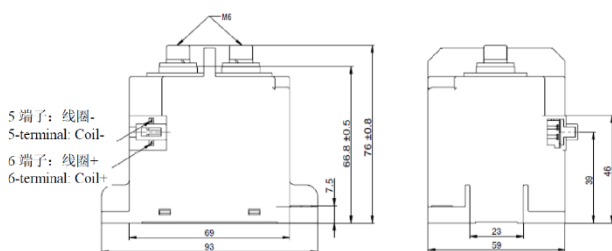
NDZ3T-200



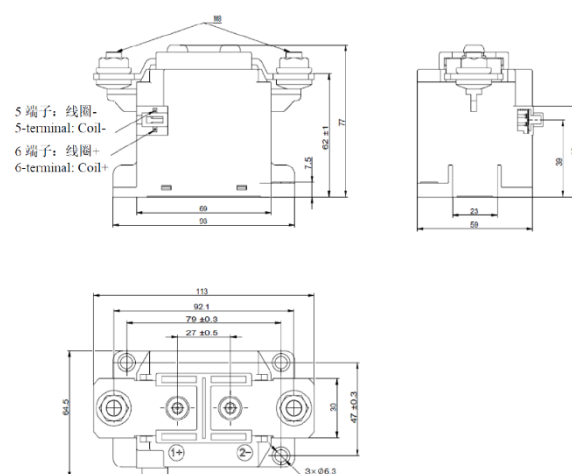
NDZ3T-200P



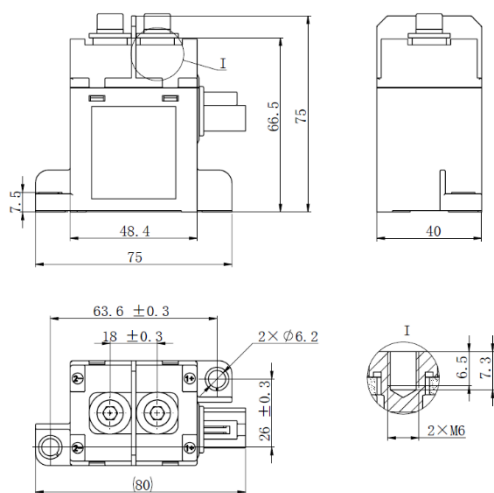
NDZ3T-300P



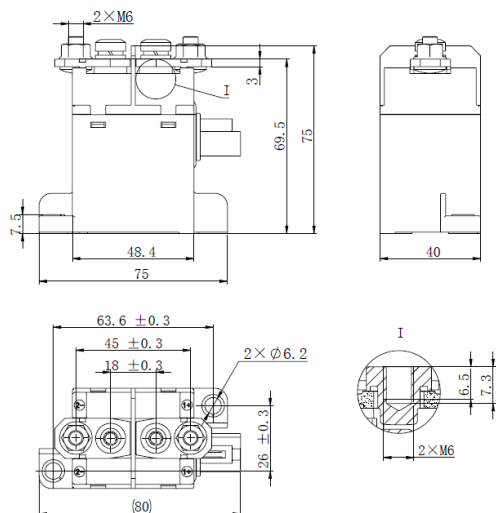
NDZ3T-300/350/400



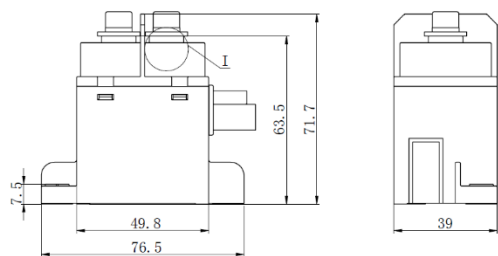
NDZ3T-350P/400P



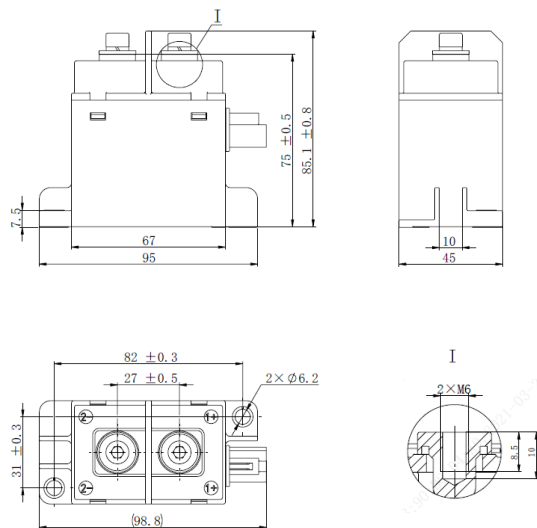
NDZ3AT-120/150C



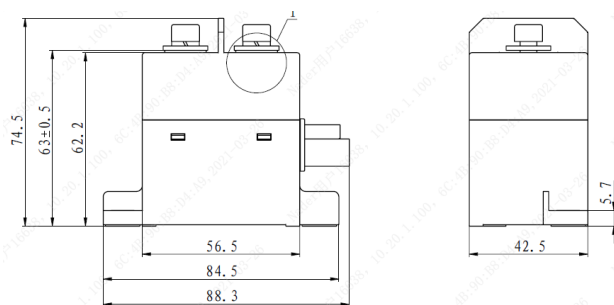
NDZ3AT-120P/150CP



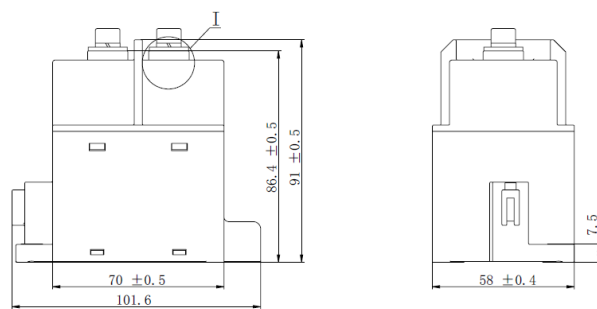
NDZ3AT-150B/200B



NDZ3AT-200/250



NDZ3AT-250C/300C



NDZ3AT-400

注：产品外形尺寸未注尺寸公差按下表执行。

Note: All unspecified tolerance according to following table.

产品外形尺寸未注尺寸公差 Outline dimensions hadn't specified tolerance	
外形尺寸 Outline Dimensions	公差 Tolerance
≤10 mm	±0.3 mm
>10~50 mm	±0.5 mm
>50 mm	±0.8 mm

5. 安装方式

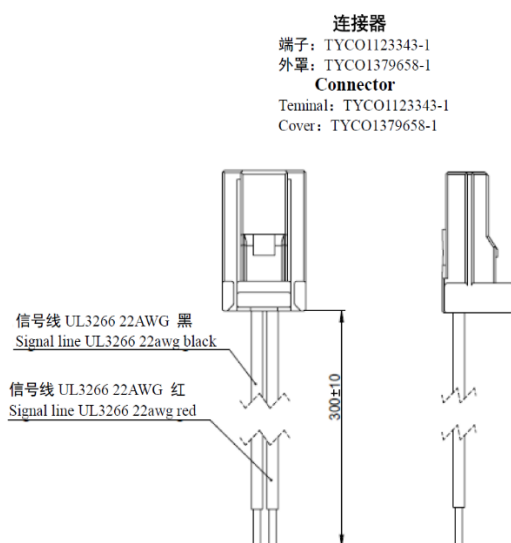
5. Installation mode

螺钉安装

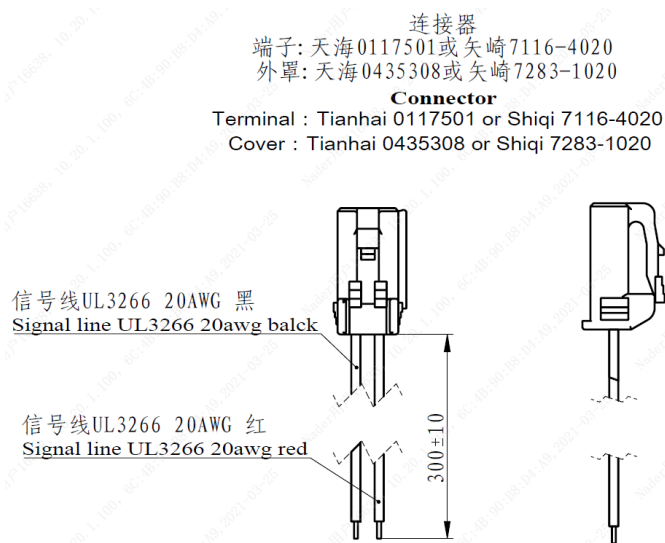
For screw installation

6. 线圈连接器

6. Coil connector



NDZ3T-40



NDZ3T-100~400/NDZ3AT-120~400

注：未注单位为 mm。

Note: The unit not noted is mm.

7. 使用和维护

7. Use and Maintenance

- 应按规定的使用条件和使用环境安装；
- It is required to carry out the installation according to the specified conditions and use environment;
- 触点间的绝缘电阻低于 50MΩ 时寿命已到极限需要更换产品；
- Replace the product when the life has reached to its end in case the insulation resistance between contacts is

below 50M Ω ;

8. 注意事项

8. Precautions

a、接触器线圈的驱动电路功率必须大于产品线圈启动功率;

a. The drive circuit power of the contactor coil must be greater than the coil's starting power;

b、严禁在强磁场的地方或者靠近热辐射的范围内使用;

b. It is strictly forbidden to use the product in places with strong magnetic fields or in proximity to thermal radiation;

c、NDZ3T-200/300/350/400、NDZ3AT-400 内置节能板, 驱动 0.2s 后会进行线圈切换, 请不要在 <0.2s 的时间内重复启动;

c..With the built-in energy-saving board, NDZ3T-200/300/350/400 and NDZ3AT-400 will perform coil switching after driven for 0.2s. Do not repeat starting within <0.2s;

d、NDZ3T-200/300/350/400 、NDZ3AT-400 不能使用缓慢上升电压的方式进行驱动, 否则产品不会动作, 直接使用脉冲电压驱动。

d. NDZ3T-200/300/350/400 and NDZ3AT-400 can't be driven by the slowly rising voltage ; otherwise, the product will not act. It will be directly driven with the pulse voltage.

e、接线端子扭力矩

e. Wiring terminal torque

型号 Type	负载端 Wiring terminal torque	安装处扭力矩 Installation position torque
NDZ3T-10	/	M4 螺钉 crew: 2~3 N•m
NDZ3T-20	/	M5 螺钉 crew: 3~4 N•m
NDZ3T-40	M4 螺钉 screw: 2~3N•m	
NDZ3T-100/150	M5 螺钉 screw: 3~4N•m	
NDZ3T-100P/150P	M6 螺母 nut: 6~8N•m	
NDZ3T-200/300/350/400	M6 螺钉 screw: 6~8N•m	
NDZ3T-200P/300P/350P/400P	M8 螺母 nut: 9~11N•m	
NDZ3AT-120/150C	M6 螺钉 crew: 5~6N•m	
NDZ3AT-120P/150CP	M6 螺母 nut: 6~8N•m	
NDZ3AT-150B/200B	M6 螺钉 screw: 5~6N•m	
NDZ3AT-200/250	M6 螺钉 screw: 6~8N•m	
NDZ3AT-250C/300C	M6 螺钉 screw: 6~8N•m	
NDZ3AT-400	M6 螺钉 screw: 6~8N•m	

f、请避免在接线端上粘附油脂等异物, 并使用以下规格的连接导线, 否则有可能会造成接线部分的异常发热;

f. Avoid adhering grease and other foreign matters on the wiring terminal and use the connecting conductor with the following specifications, which may otherwise lead to the abnormal heating of the wiring part;

产品型号 Type	导线截面积 Wire cross-section area
NDZ3T-10	$\geq 2.5\text{mm}^2$
NDZ3T-20	$\geq 4\text{mm}^2$
NDZ3T-40	$\geq 10\text{mm}^2$
NDZ3T-100	$\geq 40\text{mm}^2$
NDZ3T-150	$\geq 50\text{mm}^2$
NDZ3T-200	$\geq 60\text{mm}^2$
NDZ3T-300	$\geq 100\text{mm}^2$
NDZ3T-350/400	$\geq 120\text{mm}^2$
NDZ3AT-120/150	$\geq 50\text{mm}^2$
NDZ3AT-200	$\geq 60\text{mm}^2$
NDZ3AT-250	$\geq 100\text{mm}^2$
NDZ3AT-250C	$\geq 60\text{mm}^2$
NDZ3AT-300C	$\geq 100\text{mm}^2$
NDZ3AT-400	$\geq 120\text{mm}^2$