



Nader Electrical ▪ Foresee the Future
良信电器 ▪ 预见未来

www.sh-liangxin.com

Nader Electrical ▪ Foresee the Future
良信电器 ▪ 预见未来

NDR2M-95系列
热继电器使用说明书
NDR2M-95 Series
Product Specification of Thermal Overload Relay

Nader 良信电器

上海良信电器股份有限公司
Shanghai Liangxin Electrical CO., LTD.
上海市浦东新区申江南路2000号
No.2000, South ShenJiang Road. Pudong New District
Shanghai, 201315
T/021-68586699 F/021-23025796
E/liangxin@sh-liangxin.com

V1.0

Nader 良信电器

1、适用范围与用途/ Application

NDR2M-95 系列热过载继电器（以下简称热继电器），在交流 50Hz（60Hz）、额定电压至 690V、电流 17A 至 95A 的电路中，作三相交流电动机的过载和断相保护之用。

/NDR2M-95 series bimetal thermal overload relay is applicable to circuits with AC 50 Hz or 60Hz, rated working voltage up to 690V and rated current of 17~95A, for overload and phase loss sensitive protection of AC motors.

2、型号说明/ Explain Specifications of the products

a) 热继电器的型号及其含义/Model and meaning of thermal relay



b) 安装座的型号及其含义



表 1 电流规格基本参数 / Table 1 Basic Parameters of Current Spec

序号 /No.	产 品 型 号 / Product model	整定电流范围 (A) / Setting Current Range (A)	用 (SCPD) 熔断器 (A) / Use (SCPD) Fuse (A)		壳架等级 / Shell frame grade	安装接触器 / Matching Contactor
			aM	gG		
1	NDR2M-9525	17 ~ 25	25	50	95	NDC1-40~95
2	NDR2M-9532	23 ~ 32	40	63		
3	NDR2M-9540	30 ~ 40	40	100		
4	NDR2M-9550	37 ~ 50	63	100		
5	NDR2M-9565	48 ~ 65	63	100		NDC1-50~95
6	NDR2M-9570	55 ~ 70	80	125		
7	NDR2M-9580	63 ~ 80	80	125		NDC1-65~95
8	NDR2M-95104	80 ~ 104	100	160		NDC1-80~95

（注：仅适用交流线圈接触器，勿搭配直流线圈接触器使用）

/(Note: Only applicable to AC coil contactors, do not use with DC coil contactors)

3、技术参数/Main Technical Parameters

表 2 技术参数 / Table 2 Technical Parameters

型号/ Model		NDR2M-38	
整定电流范围 Ie A/ Setting current range Ie A		0.1 ~ 30	36, 38
主回路端子形式（电源侧）/ Main circuit terminal form (power supply side)		插头插入式/ Plug-in type	
主回路端子形式（负载侧）/ Main circuit terminal form (load side)		M4 螺钉/ screw	M5 螺钉/ screw
额定绝缘电压 Ui V/ Rated insulation voltage Ui V		690	
额定冲击耐受电压 Uimp kV/ Rated impulse withstand voltage Uimp kV		6	
脱扣等级/ Trip level		10A	
补偿温度 °C/ Compensation temperature °C		-5 ~ +40	
外壳防护等级/ Enclosure rating		IP20	
辅助触头 /Auxiliary contact	类型/ Type	1NO+1NC	
	约定发热电流 Ith A /Conventional free-air thermal current Ith A	10	
	AC-15 额定工作电压 Ue V /Rated operational voltage Ue V	240/380	
	额定工作电流 Ie A / Rated operational current Ie A	3/1.9	
	DC-13 额定工作电压 Ue V / Rated operational voltage Ue V	125/250	
	额定工作电流 Ie A / Rated operational current Ie A	0.55/0.27	

表3 接线端子连接导线的能力 / Table 3 Connection Capacity of Connection Terminal

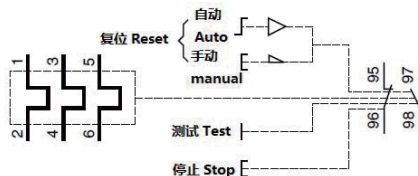
产品型号 NDR2M- /Product model NDR2M-			25~104
			最小截面积/最大截面积 (mm ²) /Minimum cross-sectional area /maximum cross-sectional area
接线能力 (min/max) mm ² / Connection capacity (min/max) mm ²	主回路 / Main circuit	软线 (无预绞端子) 1根 / Cord (without precast end) 1 pc	4/35
		软线 (有预绞端子) 1根 / Cord (with precast end) 1pc	
	辅助回路 /Auxiliary circuit	硬线 1根 / Hard wire 1pc	1/2.5
		软线 (无预绞端子) 1根或2根 / Cord (without precast end) 1 or 2 pcs 软线 (有预绞端子) 1根或2根 / Cord (with precast end) 1 or 2 pcs 硬线 1根或2根 / Hard wire 1 or 2 pcs	
拧紧力矩 /Tightening torque	主回路/ Main circuit		1.7 N·m ±10%
	辅助回路/ Auxiliary circuit		2 N·m ±10%

4、正常工作环境/ Normal Operational Temperature

4.1 使用环境/ Use environment

- 周围环境温度：储存温度为-20~+55℃；工作温度为-5~+40℃，且其在24h内的平均温度值不超过+35℃
/ Ambient temperature: storage temperature -20~+55℃; working temperature -5~+40℃, and its average temperature value within 24 hours does not exceed +35℃
- 海拔：安装地点的海拔不超过2000m
/ Altitude: the altitude of the installation site should not exceed 2000m
- 湿度：最高温度为+40℃时，空气的相对湿度不超过50%，在较低的温度下可以允许有较高的相对湿度，例如20℃时达90%，对于温度变化偶尔产生的凝露应采取特殊的措施
/ Humidity: When the max temperature is +40℃, the relative air humidity cannot exceed 50%; higher relative humidity is allowed at lower temperature, for example humidity can be 90% at 20℃
- 污染等级：安装地点的污染等级为3级
/ Pollution level: the pollution level at the installation site is level 3
- 安装类别（过电压类别）：安装类别为Ⅲ类
/ Installation category (overvoltage category): installation category is Class III
- 有关冲击和振动的条件由用户与本公司协商
/ The conditions related to impact and vibration shall be negotiated between the user and our company

5、接线方式（接线图）/Wiring method(wiring diagram)



6、使用说明/Instructions for use



6.1 电流整定/Current setting

1. 抬起透明盖/Lift the transparent cover
2. 顺时针转动以安培为单位的电流调整旋钮，进行电流调节
/Turn the current adjustment knob(in ampere) clockwise to adjust the current
3. 将透明盖盖上/Cover the transparent cover

6.2 手动-自动复位选择 /Manual-automatic reset mode selection

6.2.1 抬起透明盖，通过旋转绿色旋钮，实现手动复位模式或自动复位模式的切换

/Lift the transparent cover and turn the green knob for switching of the manual or automatic reset mode

1. 用螺丝刀将旋钮逆时针转动90°后释放，复位模式为手动复位

/ Turn the knob 90° anticlockwise and release through a screwdriver when the reset mode changed to the manual reset mode

2、按下旋钮再顺时针转动 90° 后释放，产品即切换为自动复位模式

/Press the knob, turn it 90° clockwise and release; the reset mode will change to automatic reset mode

3、放下透明盖，完成复位模式的切换

/Drop the transparent cover to accomplish the switching of the reset mode

注：产品出厂时设置为手动复位

/Note: The product is set to manual reset mode when delivery

6.2.2 产品在手动复位模式下脱扣约 5min 后，按下旋钮可实现产品的复位，在自动复位模式下脱扣 8min 内，产品自动复位

/ After the product about 5min in the manual reset mode, press the knob for resetting the product; the product achieves the automatic reset within 8min after tripping in the automatic reset mode

6.3 停止功能/ Stop functions

按下停止按钮，可实现下述功能

/The following functions can be realized by pressing the stop button

1、95-96 常闭触头断开 /95-96 NC contacts off

2、97-98 常开触头无影响 /97-98 NO contacts not affected

6.4 测试功能/ Testing functions

按下测试按钮，可实现下述功能

/The following functions can be realized by pressing the test button

1、95-96 常闭触头断开 /95-96 NC contacts off

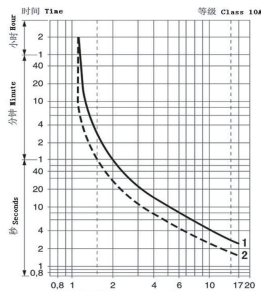
2、97-98 常开触头接通 /97-98 NO contacts on

3、视察窗内显示橘黄色指示件 /The orange indicator displays in the inspection window

7、脱扣特性/Tripping Characteristics

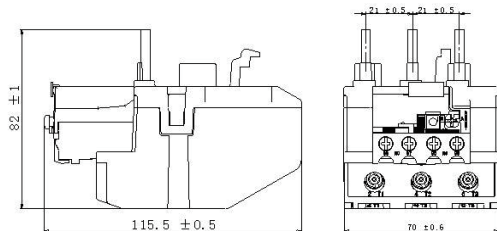
产品的脱扣级别为 10A 级，脱扣特性曲线参见下图/The tripping level of the product is level 10A with the tripping characteristic curve shown in the following figure

8、产品外形及安装尺寸/ Product Outline and Installing Dimensions



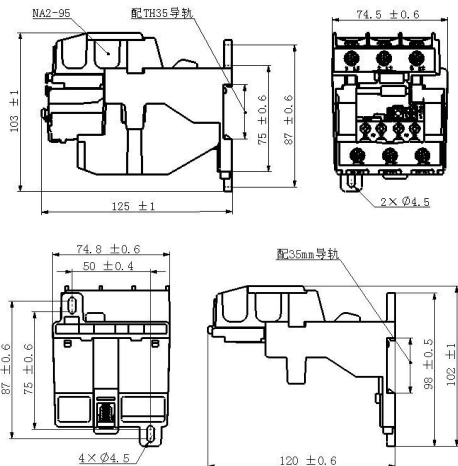
a、NDR2M-95 外形尺寸与安装尺寸/ NDR2M-95 external dimensions and installation dimensions

b、NDR2M-95 带独立安装座 (NA2-95) 外形尺寸与安装尺寸

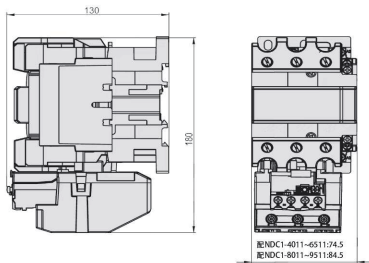


/NDR2M-95 with independent mounting seat (NA2-95) external dimensions and installation dimensions

c、NA2-95 外形尺寸/NA2-95 external dimensions



d、NDR2M-95 配接触器尺寸/ NDR2M-95 with contactor size



9、安装方式/Installation Methods

a) 组合式: NDR2M-95 热继电器直接安装在 NDC1-40 ~ 95 交流接触器上。

/a) Combination type: NDR2M-95 thermal relay is directly installed on NDC1-40-95 AC contactor.

b) 分立式: NDR2M-95 热继电器配上 NA2-95 安装座后用螺钉安装或用符合 GB/T19334-2003 中的 A.1 TH35 安装轨安装。

/b) Split type: NDR2M-95 thermal relay is installed with NA2-95 mounting seat and then installed with screws or with A.1 TH35 mounting rail in accordance with GB/T19334-2003.

10、使用和维护/Use and Maintenance

连接导线需要定期拧紧/Connecting wires require to be tightened regularly

11、注意事项/Note

1、因私自拆开产品而引起的质量问题, 责任自负

/A user must be responsible for addressing a product issue because the user disassembles the product without approval

2、请不要随意对热继电器的特性进行调试, 由此引起的产品质量问题厂家不予负责

/Do not commission the characteristics of the thermal relay randomly; the manufacturer shall not be responsible for any quality problem caused

3、接线可靠, 防止因接线端出现异常热引起热继电器误动作或造成接线端烧毁

/Wiring must be reliable to prevent the malfunction of the thermal relay or terminal burning due to the abnormal heat generation on the terminal

12、订货须知/Ordering Instructions

在订货时应指明下列事项:

The following matters shall be indicated when ordering:

a) 热继电器的全型号和名称 /All models and name of the thermal relay

b) 订货数量/Order quantity

例如:

NDR2-9522 热继电器 10 台

表示: NDR2 热继电器, 可与 NDC1-40 ~ 95 交流接触器配合, 整定电流为 17 ~ 25A, 订货数量为 10 台

For example:

NDR2-9522 thermal relay 10 pcs

Intend: NDR2 thermal relay can be used with the NDC1-40 ~ 95 AC contactor with the setting current of 17 ~ 25A and the order quantity of 10 pcs