

FOLLOW-UP SERVICE PROCEDURE  
(TYPE R)AUXILIARY DEVICES  
(NKCR, NKCR7)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

Applicant: 459021 (Party Site)  
(111876-001) ZHEJIANG CHINT ELECTRICS CO LTD  
CHINT INDUSTRIAL ZONE  
WENZHOU  
ZHEJIANG 325604 CHINAListee/Classified Co.: 459021 (Party Site)  
(111876-001) SAME AS APPLICANT

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party and any applicable Service Terms. The UL Contracting Party for Follow-Up Services is listed on addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

UL further defines responsibilities, duties and requirements for both Manufacturers and UL representatives in the document titled, "UL Mark Surveillance Requirements" that can be located at the following web-site: <http://www.ul.com/fus> and in the document titled "UL and Subscriber Responsibilities" that can be located at the following website: <http://www.ul.com/responsibilities>. Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the applicable Service Terms, please contact UL's Customer Service at <http://www.ul.com/global/eng/pages/corporate/contactus>, select a location and enter your request, or call the number listed for that location.

The Applicant, the specified Manufacturer(s) and any Listee/Classified Co. in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable agreement is a Global Services Agreement ("GSA") with an effective date of January 1, 2012 or later and this Follow-Up Service Procedure is issued on or after that effective date, the Applicant, the specified Manufacturer(s) and any Listee/Classified Co. will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of use of the prescribed UL Mark, acceptance of the factory inspection, or payment of the Follow-Up Service fees which will incorporate such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking here: <http://www.ul.com/contracts/Terms-After-12-31-2011>. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

It is the responsibility of the Listee/Classified Co. to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

This Follow-Up Service Procedure contains information for the use of the above Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Manufacturer with the understanding that it will be returned upon request and is not to be copied in whole or in part.

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the above named Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

UL LLC has signed below solely in its capacity as the accredited entity to indicate that this Follow-Up Service Procedure is in compliance with the accreditation requirements.

William R. Carney  
Director  
North American Certification Program

LOCATION

(111876-001) 459021 (Party Site)  
ZHEJIANG CHINT ELECTRICS CO LTD  
CHINT INDUSTRIAL ZONE  
WENZHOU  
ZHEJIANG 325604 CHINA

Factory ID:  
UL Contracting Party for above site is: UL AG

ML FILE NO. E49375

Issued: 2008-12-09  
Revised: 2010-05-14

MULTIPLE LISTING  
of  
AUXILIARY DEVICES  
(NKCR,NKCR7)  
for

[402451-001] DAYTON ELECTRIC MFG CO

Basically Listed for:

[111876-001] ZHEJIANG CHINT ELECTRICS CO LTD (NBK)

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Basically Listed products covered by Procedure and/or Reports under File No. E205607, Volume 2

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation
Thermal overload relays	2002-06-19	NR2-25	2UXP6
		NR2-25	2UXP8
		NR2-25	2UXP7
		NR2-25	2UXR6
		NR2-25	2UXP9
		NR2-25	2UXR1
		NR2-25	2UXR2
		NR2-25	2UXR3
		NR2-25	2UXR4
		NR2-25	2UXP2
		NR2-25	2UXP3
		NR2-25	2UXP4
		NR2-25	2UXR5
		NR2-25	2UXP5
		NR2-36	2UXR7
		NR2-36	2UXR8

LITERATURE IS IDENTICAL TO BASICS

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for Multiple Listee's name, ML Tradename, when applicable, and product designation.

UL INSPECTION CENTER HANGZHOU - 325

Issued: 2008-12-09  
Revised: 2010-05-14

M/L [402451-001] DAYTON ELECTRIC MFG CO

AP [111876-001] ZHEJIANG CHINT ELECTRICS CO LTD (NBK)

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Basically Listed products covered by Procedure and/or Reports under File No. E205607, Volume 2

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation
Thermal overload relays	2002-06-19	NR2-93	2UXJ5
		NR2-93	2UXJ6
		NR2-93	2UXJ7
		NR2-93	2UXJ8
		NR2-93	2UXJ9
		NR2-93	2UXK1
		NR2-93	2UXR9

LITERATURE IS IDENTICAL TO BASICS

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for Multiple Listee's name, ML Tradename, when applicable, and product designation.

ML FILE NO. E40944

Issued: 2008-12-09

Revised: 2010-05-14

This page replaces the Multiple Listing Correlation sheet between files E40944 and E205607.

WITHDRAWN - W-P  
Procedures Combined

The ML's File E40944 has been Combined in to File E49375 Volume 2.

ML FILE NO. E303503

Issued: 2010-06-07

MULTIPLE LISTING  
of  
MOTOR CONTROLLERS, MAGNETIC  
(NLDX, NLDX7)  
for

[250431-001] ELECTRICAL & ELECTRONIC CONTROLS INC

Basically Listed for:

[111876-001] ZHEJIANG CHINT ELECTRICS CO LTD (NBK)

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Basically Listed products covered by Procedure and/or Reports under File No. E205607, Volume 2

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation	ILL #
Thermal overload relay	2002-06-19	NR2-11.5 [x]	ECX2-0.16	1
		NR2-11.5 [x]	ECX2-0.25	1
		NR2-11.5 [x]	ECX2-0.40	1
		NR2-11.5 [x]	ECX2-0.63	1
		NR2-11.5 [x]	ECX2-1.0	1
		NR2-11.5 [x]	ECX2-1.6	1
		NR2-11.5 [x]	ECX2-2.0	1
		NR2-11.5 [x]	ECX2-2.5	1
		NR2-11.5 [x]	ECX2-4.0	1
		NR2-11.5 [x]	ECX2-6.0	1
		NR2-11.5 [x]	ECX2-8.0	1
		NR2-11.5 [x]	ECX2-10	1
		NR2-11.5 [x]	ECX2-13	1
		NR2-200 [x]	ECX-80-125A	1
		NR2-200 [x]	ECX-125-200A	1
		NR2-630 [x]	EXC-200-315A	1
		NR2-630 [x]	EXC-315-500A	1
		NR2-630 [x]	EXC-400-630A	1

[x] may be followed by Z or F.

LITERATURE IS IDENTICAL TO BASICS

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for Multiple Listee's name, ML Tradename, when applicable, and product designation.

UL INSPECTION CENTER HANGZHOU - 325



Multiple Listing Correlation Sheet

ML FILE NO. E342546

Issued: 2011-01-25

Revised: 2016-10-13

MULTIPLE LISTING  
of  
AUXILIARY DEVICES  
(NKCR,NLDX7)  
for

654266 US BREAKER INC

Basically Listed for:

156413 ZHEJIANG CHINT ELECTRICS CO LTD

Basically Listed products covered by Procedure and/or Reports under File No. E205607, Volume 2

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation
Thermal overload relays	2002-06-19	<b>NR2-25</b>	<b>LR25</b>
		<b>NR2-36</b>	<b>LR36</b>
		<b>NR2-93</b>	<b>LR93</b>
		<b>NR2-200</b>	<b>LR200</b>

\*

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for Multiple Listee's name, file number, Trademark / Tradename, when applicable, and product designation. The Control Number remains 3PUB.

LITERATURE: If literature is packaged with the Multiple Listed product(s) it shall be in compliance with the requirements outlined in the appropriate UL Standard(s).





Multiple Listing Correlation Sheet

ML FILE NO. E353865

Issued: 2012-03-20

MULTIPLE LISTING  
of  
AUXILIARY DEVICES  
(NKCR, NKCR7)  
for

[100566-887] NOARK ELECTRIC USA INC

Basically Listed for:

[111876-001] ZHEJIANG CHINT ELECTRICS CO LTD (NBK)

Basically Listed products covered by Procedure and/or Reports under File No. E205607, Volume 2

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation
Thermal overload relay	2002-06-19	NR2-11.5+	Ex9RD11.5+
		NR2-25+	Ex9RD25+
		NR2-36+	Ex9RD36+
		NR2-93+	Ex9RD93+
		NR2-200+	Ex9RD200+
		NR2-630+	Ex9RD630+

+ - May be followed by Z or F.

**MARKING:** Same as that described in Follow-Up Service Procedure and/or Report except for Multiple Listee's name, file number, Trademark / Tradename, when applicable, and product designation.

**LITERATURE:** If literature is packaged with the Multiple Listed product(s) it shall be in compliance with the requirements outlined in the appropriate UL Standard(s).

ECX and ECX2 NOMENCLATURE:

EXAMPLE:  $\frac{\text{ECX2}}{\text{I}} - \frac{0.16}{\text{II}}$

I - Basic type designation - ECX2

II - Rated operating current (A).

0.16 = 0.10-0.16  
0.25 = 0.16-0.25  
0.40 = 0.25-0.40  
0.63 = 0.40-0.63  
1.0 = 0.63-1.0  
1.6 = 1.0-1.6  
2.0 = 1.25-2.0  
2.5 = 1.6-2.5  
4.0 = 2.5-4.0  
6.0 = 4.0-6.0  
8.0 = 5.5-8.0  
10 = 7.0-10  
13 = 9.0-13

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EXAMPLE:  $\frac{\text{ECX}}{\text{I}} - \frac{80-125\text{A}}{\text{II}}$

I - Basic type designation - ECX

II - Rated operating current (A).

80-125A  
125-200A  
200-315A  
315-500A  
400-630A

## Listing Mark Data Page (LMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

LISTING MARK

The Listing Mark consists of four elements placed in close proximity and shall appear on Listed products only. Minimum size is not specified, as long as the Listing Mark is legible. The following is suggested.



XXXX = The control number assigned by UL, 3PUB.

The minimum height of the registered trademark symbol ® shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

The product identity is: "INDUSTRIAL CONTROL EQUIPMENT" or "IND.CONT.EQ."

The product identity may be omitted if the Mark is directly and permanently applied to the product by stamping, molding, ink-stamping, silk screening or similar process. The product identity may appear elsewhere on the product if the other three elements are part of the nameplate which includes the rating or the catalog or model designation.

Separable Listing Mark (not part of a name plate and in the form of decals, stickers or labels) will always include the four elements.

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier.

THIS PAGE IS TO BE REVISED BY FUS DEPARTMENT ONLY

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

LISTING MARK

The Listing Mark consists of four elements placed in close proximity and shall appear on Listed products only. Minimum size is not specified, as long as the Listing Mark is legible. The following is suggested. (If only Canadian coverage is authorized, use only the C-UL Symbol).

UL Symbol to the left and the C-UL Symbol to the right.



Alternatively, the Canadian/US Mark may be used. The UL Symbol with "C" to the left and "US" to the right.



XXXX = The control number assigned by UL, 3PUB.

The minimum height of the registered trademark symbol ® shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

The product identity is: "INDUSTRIAL CONTROL EQUIPMENT", or "IND.CONT.EQ.", or "INDUSTRIAL CONTROL EQUIPMENT-ENCLOSED", or "ENCLOSURE FOR INDUSTRIAL CONTROL EQUIPMENT", or "ENCLOSURE FOR IND.CONT.EQ.".

The product identity may be omitted if the Mark is directly and permanently applied to the product by stamping, molding, ink-stamping, silk screening or similar process. The product identity may appear elsewhere on the product if the other three elements are part of the nameplate which includes the rating or the catalog or model designation.

Separable Listing Mark (not part of a nameplate and in the form of decals, stickers or labels) will always include the four elements.

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier.

THIS PAGE IS TO BE REVISED BY FUS DEPARTMENT ONLY

## INDEX

<u>Section</u>	<u>Product Covered</u>	<u>Report Date</u>
*1	Thermal overload relays, Type NR2, followed by <b>11.5, 25, 36, 93, 200 or 630, may be</b> followed by Z or F.	2008-01-07

## GENERAL

## PRODUCT COVERED:

## AUXILIARY DEVICES.

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Spacings - Spacings have been evaluated in accordance with the Standard for Industrial Control Equipment, UL 508, Seventeenth Edition.

## CONSTRUCTION DETAILS:

General - Unless specified otherwise, the products covered in this Procedure volume shall be constructed in accordance with the following description.

Tolerances - All indicated dimensions are nominal.

Corrosion Protection - All parts are of corrosion resistant material or are plated or painted as corrosion protection.

Printed Wiring Boards - All printed wiring boards shall be R/C (ZPMV2) whose solder time and temperature are not exceeded and which can be confirmed in the Recognized Component Directory and whose maximum operating temperature is 105°C or higher.

Marking - Refer to individual reports.

**TRADEMARK DESIGNATION:**

**The following trademark, trade name, or File Number may be used to identify products described in this Procedure in lieu of the Listee and/or Recognized Company name.**

The logo for CHINT, featuring the letters 'CHINT' in a bold, blue, sans-serif font. A small red square is positioned above the letter 'H'.

## GENERAL

## COVERAGE BASED ON CANADIAN STANDARDS:

The products tabulated below also comply with the requirements of CSA Standard for Industrial Control Equipment, C22.2 No. 14-05 dated April 2005, 10<sup>th</sup> edition.

Marking Requirements - These products are intended to be marked in Canada. Markings shall be based on the "Marking" provisions of the Section General and each individual section within this volume.

The necessity for a bilingual marking (i.e., English and French) shall be determined by the Listee depending upon which Provinces in Canada the product will be marketed. When the product identification is also required in French, the French translation shall be consistent with the English version as described in each individual section. The above CSA Standard, presently, only requires bilingual marking of warning and cautionary statements when applicable. Unless specified otherwise, the products are not required to be marked with any warning or cautionary statements.

Model/Type	Type of Product	Section
All	<b>AUXILIARY DEVICES</b>	All

File E205607  
Project 01NK14805

Issued: June 19, 2002  
Revised: January 7, 2008

REPORT

on

\*AUXILIARY DEVICES

Chint Group Corp.  
Zhejiang, China

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\*



DESCRIPTION

PRODUCT COVERED:

\* USL, CNL Thermal overload relays, Type NR2, followed by **11.5, 25, 36, 93, 200 or 630, may be** followed by Z or F.

GENERAL:

These devices are open-type adjustable thermal overload relays intended for use in industrial applications with **NC1 or** CJX2 type contactors. They have been additionally evaluated to the Canadian Standard for Industrial Control Equipment, CAN/CSA C22.2 No. 14.

RATINGS:

Model	NR2-25	NR2-25	NR2-25	NR2-25	NR2-25	NR2-36	NR2-36	NR2-93	NR2-93	NR2-93	NR2-93
Rated A	0.16/0.25/ 0.4/0.63/ 1/1.6 /2/ 2.5/4/6/8/	10	13	18	25	32	36	32/40/ 50	65	70/80	93
Setting Range (A)	0.1~0.16 0.16~0.25 0.25~0.4 0.4~0.63 0.63~1 1~1.16 1.25~2 1.6~2.5 2.5~4 4~6 5.5~8	7~10	9~13	12~18	17~25	23~32	28~36	23~32 30~40 37~50	48~65	55~70 63~80	80~93
AWG	18	16	14	12	10	10	8	8	6	4	3
Matched Contactors	CJX2-09 CJX2-18 CJX2-32	CJX2-12 CJX2-25		CJX2-12 CJX2-18 CJX2-25 CJX2-32	CJX2-18 CJX2-25 CJX2-32	CJX2-25 CJX2-32	CJX2-32	CJX2-40 CJX2-50 CJX2-65 CJX2-80 CJX2-95	CJX2-50 CJX2-65 CJX2-80 CJX2-95	CJX2-80 CJX2-95	CJX2-80 CJX2-95
Rated Trip A	120% of rated current										
Rated Load A	100% of rated current										
Rated Load A of Aux. Circuit	5 A										
AWG of Aux. Circuit	20										
Rated V	600										

\*

Model	NR2-11.5	NR2-200	NR2-200	NR2-200	NR2-630	NR2-630	NR2-630	NR2-630	NR2-630		
Rated A	0.16,0.25, 0.4,0.63, 1,1.6 2,2.5 4,6,8,10,13	125	160	200	250	315	400	500	630		
Setting Range (A)	0.1~0.16 0.16~0.25 0.25~0.4 0.4~0.63 0.63~1 1~1.16 1.25~2 1.6~2.5 2.5~4 4~6 5.5~8 7~10 9~13	80- 125	100- 160	125- 200	160- 250	200- 315	250- 400	315- 500	400- 630		
AWG	18	1	2/0	3/0	250 mcm	400 mcm	500 mcm	250 x 2	350 x 2		
Matched Contactors	NC6										
Rated Trip A	120% of rated current										
Rated Load A	100% of rated current										
Rated Load A of Aux. Circuit	5 A										
AWG of Aux. Circuit	18										
Rated V	600										

Short Circuit - 600 V, 5,000 rms symmetrical amperes.

Note: Auxiliary circuit ratings are based on the use of the intended R/C (NKCR2) accessories.

## NOMENCLATURE:

\* Type  $\frac{NR2}{I}$  -  $\frac{25}{II}$  -  $\frac{Z}{III}$   
\*

I - Basic type designation.

\* II - \*

\* Rated operating current (A).

11.5 - 0.1-13A  
25 - 25 A  
36 - 36 A  
93 - 93 A  
200 - 200A  
630 - 630A

**III** - Mounting method (**optional**).

Z - Combined  
F - Separated

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

These devices have been judged in accordance with the required spacings in the Standard for Industrial Control Equipment, UL 508, Seventeenth Edition.

File E205607

Vol. 2

Sec. 1  
and Report

Page 2

Issued: 2002-06-19  
Revised: 2008-01-07

Replaces Page 2

## CONSTRUCTION DETAILS:

These devices shall be constructed in accordance with the following description.

Corrosion Protection - All parts are of corrosion resistant material or are plated or painted as corrosion protection.

Tolerance - Unless otherwise indicated all dimensions are nominal.

Spacings - The following minimum spacings are maintained between any uninsulated live part and an uninsulated live part of opposite polarity, uninsulated grounded part, or exposed metal part.

Potential	Through-Air	Over-Surface
0 - 50	1.6 mm	1.6 mm
51 - 150	3.2 mm	6.4 mm
151 - 300	6.4 mm	9.5 mm
301 - 600	9.5 mm	12.7 mm

Markings - Company name, model designation and electrical **ratings, including overload Class, trip current, short circuit rating, type of branch circuit protection, field wiring instructions.**

The rated tripping current is to be marked on the overload relay or on a table furnished with the relay if the relay is marked with a code designation. The outside ambient temperature of 40°C on which the rating of the overload relay was based, shall be marked along with the tripping current.

Adjustable overload relays are to be provided with instructions for such adjustment.

## MODEL NR2-25

General - Model NR2-25 is considered representative of NR2-36 and NR2-93 overload relays described in this Report, except where variations are specifically described below. The NR2-11.5, NR2-200, and NR2-630 are described separately. See Ill. 1 for overview.

- \*1. **Housing** - R/C (QMFZ2), Shanghai Euro Asia, designated EA-5551J. Rated 130°C, with minimum thickness 1.2 mm.  
**Alternate - R/C (QMFZ2), CHANG CHUN PLASTICS CO LTD Designated T375J or T355J. Overall dimensions 56x45x65 mm, minimum thickness 1.2mm.**  
**Alternate - Same as above, except any R/C (QMFZ2), having an RTI rating of 90°C minimum.**
2. **Cover** - R/C (QMFZ2), BASF, designated PA66-G30 black. Rated 120°C, with minimum thickness 1 mm.  
**Alternate - same as above, except Zhejiang Juner New Materials Co.Ltd., designated PA66-301-GM,with minimum thickness 1 mm .**  
**Alternate - Same as above, except any R/C (QMFZ2), having an RTI rating of 90°C minimum.**
3. **Guide Plate** - R/C (QMFZ2), Shanghai Euro Asia, designated SP3304TR. Rated 130°C, with minimum thickness 1.5 mm.  
**Alternate - R/C (QMFZ2), Ryton Polyphenylene Sulfide Resins, with minimum thickness 1.5 mm.**
4. **Lever** - R/C (QMFZ2), Ryton Polyphenylene Sulfide Resins, with minimum thickness 1.2 mm.  
**Alternate - R/C (QMFZ2), DSM, designated PA46 TE250F6, with minimum thickness 1.2 mm.**  
**Alternate - Same as above, except any R/C (QMFZ2), having an RTI rating of 90°C minimum.**
5. **Cam** - R/C (QMFZ2), E. I. Dupont, designated FR50 black. Rated 130°C, with minimum thickness 0.5 mm.  
**Alternate - Same as above except Zhejiang Juner, designated PA66-301-GM.**  
**Alternate - Same as above, except any R/C (QMFZ2), having an RTI rating of 90°C minimum.**
6. **Bearing Holder** - R/C (QMFZ2), E. I. Dupont, designated FR50 black. Rated 130°C, with minimum thickness 0.5 mm.  
**Alternate - same as above except Zhejiang Juner, designated PA66-301-GM.**
7. **Contact** - Consists of AgNi10/Cu, measures 2.8 by 0.07 by 0.5 mm minimum.

8. Contact Bridge - Tin bronze tape QSn6.5-0.1Y, measured 0.5 by 6.2 by 15.5 mm.
9. Contact Plate - Copper plated H62, measuring 1.2 by 8 by 36 mm.
10. Spring - Spring steel wire 1Cr18Ni9, 0.35 mm stainless steel wire.
11. Terminals - See Ill. 2.

## MODEL NR2-11.5

1. Enclosure - R/C(QMFZ2), Changshu South-East Plastic Co., Ltd. Designated PF2A4-151J. Overall dimensions 56x45x65, minimum thickness 1.5mm.
2. Supporting Lever - R/C(QMFZ2), Jiangyin Jihua New Material Co., Ltd. Designated PBT-4308G30. Overall dimensions 14.5x12.6x8.6, minimum thickness 0.9mm.
3. Cover/Support Part - R/C(QMFZ2), Jiangyin Jihua New Material Co., Ltd. Designated PBT-4308G30. Overall dimensions 60x45x29/34.2x12.3x14.9, minimum thickness 0.9mm.
4. Cam/Pushbutton - R/C(QMFZ2), Jiangyiin Jihua New Material Co., Ltd. Designated PA6 4306M30. Overall dimensions 5.2x14.8/29.5x13.8x7.7, minimum thickness 1.5mm.
5. Shielding - Same as item #4. Overall dimensions 42.9x20.2x15.2
6. Indicator - Same as item #4. Overall dimensions 7.2x5.6x3.5
7. Plug - Same as item #4. Overall dimensions 8.9x5.2x3.8
8. Lever/guide plate/pushing bar - R/C(QMFZ2), Guangzhou Pengyun Engineering Plastics Co., Ltd. Designated PPS. Overall dimensions 19x5.5x9/34x9.5x2/30x5.2x7.2, minimum thickness 1.5mm.
9. Cover/window - R/C(QMFZ2), GE Plastics Shanghai Co., Ltd. Designated PC HF1110R. Overall dimensions 38.8x21x8.6/2.5x2.4x4, minimum thickness 1.5mm.
10. Sleeve - R/C(QMFZ2), Anji Hengtai Insulation Materials Co., Ltd. Designated 2753.
11. Main Bimetal - Designated TB155/78 (FPA206-78). Dimensions 0.9 X 41.7 X 10mm.
12. Auxiliary Bimetal - Designated TB155/78 (FPA2306-78). Dimensions 0.7 X
13. Contact - Material AgNi10/Cu. Dimensions  $\Phi$ 3.0 X 0.5 or  $\Phi$ 2.8 X 0.6.
14. Contact Plate - Sheet steel designated Q235-A.F. Dimensions 1.2 X 10.4 X 14.7mm.
15. Electric Heating Element as follows:

Model	Material	Dimensions
	1Cr13Al4	$\Phi$ 0.6
	1Cr13Al4	$\Phi$ 0.25
	1Cr13Al4	$\Phi$ 0.32
	1Cr13Al4	$\Phi$ 0.42
	1Cr13Al4	0.4 X 1.3
	1Cr13Al4	0.6 X 1.2
	1Cr13Al4	0.5 X 1.6
	1Cr13Al4	0.28 X 4
	CuNi44	0.4 X 3.2
	CuNi34	0.4 X 3.5
	CuNi23	0.4 X 4
	CuNi18	0.6 X 3

16. **Terminals - See Ill. 2.**



## MODEL NR2-200

General - Model NR2-200 represents Model NR2-630. See Ill. 1 for overview.

\*

1A. Housing 1 - R/C(QMFZ2), Shanghai European-Asian Synthetic Material Co., Ltd., designated EA-5551J. Overall dimensions 44 by 51.5 by 90 mm, minimum thickness 1.2 mm.

Alternate - R/C(QMFZ2), CHANG CHUN PLASTICS CO LTD, designated T375J or T355J. Overall dimensions 44 by 51.5 by 90, minimum thickness 1.2 mm.

Alternate - Same as above, except any R/C (QMFZ2), having an RTI rating of 90°C minimum.

1B. Housing 2 - R/C (QMFZ2), Guilin Chenshan Special Plastics Co., designated PT-310. Overall dimensions 126 by 67 by 81 mm, minimum thickness 1.5mm.

Alternate - R/C (QMFZ2), Guilin CONINST electrical @electronic Materials CO.Ltd., designated PT-310. Overall dimensions 126 by 67 by 81, minimum thickness 1.5mm.

Alternate - same as above, except Hangzhou Jiemin Electronic, designated JM-800.

Alternate - same as above, except Hongtai Electrical Apparatus Co.ltd., designated BMC31.

Alternate - same as above, except Industrial Dielectrics Inc, designated 46-12.

Alternate - Same as above, except any R/C (QMFZ2), having an RTI rating of 90°C minimum.

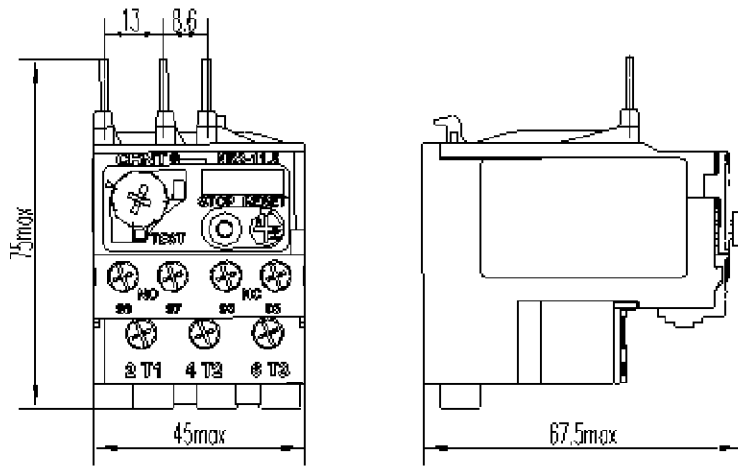
2A. Cover - R/C (QMFZ2), BASF, designated A3X2G5, Overall dimensions 44 by 30.5 by 88 mm, minimum thickness 1mm.

Alternate - same as above, except Jiangyin Jihua New Material Co.Ltd., designated PA664306-G30

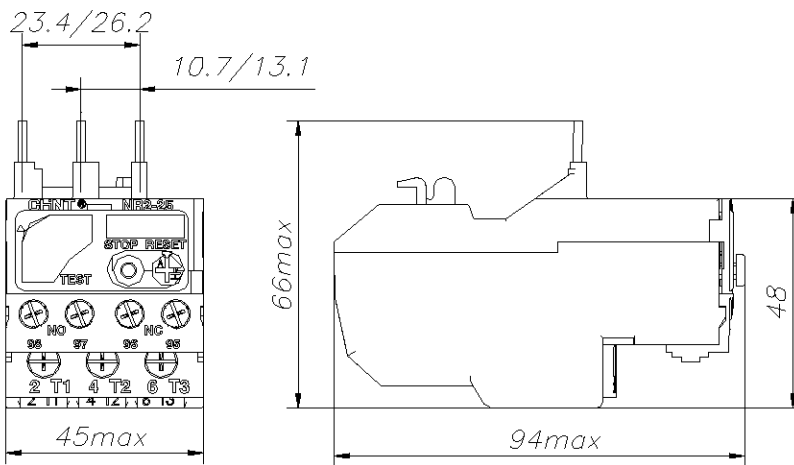
Alternate - same as above, except Zhejiang Juner, designated PA66-301-GM.

Alternate - Same as above, except any R/C (QMFZ2), having an RTI rating of 90°C minimum.

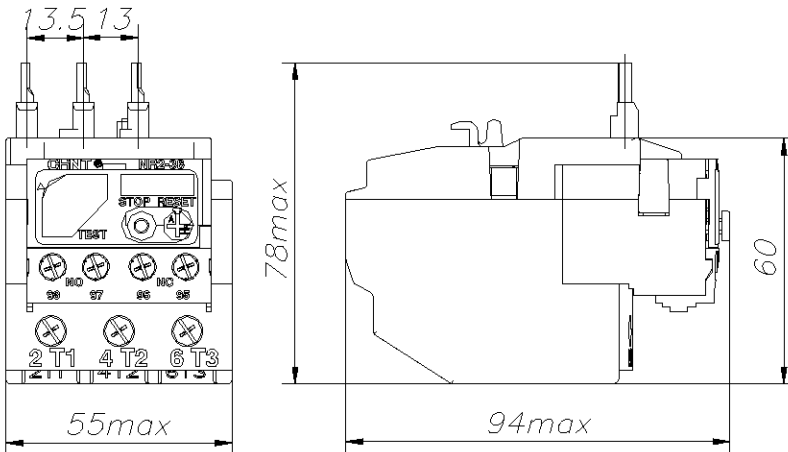
- 2B. Shielding Cover - R/C(QMFZ2), BASF, designated A3X2G5, Overall dimensions 44 by 30.5 by 88 mm, minimum thickness 1mm.
- Alternate - Jiangyin Jihua New Material Co.Ltd., designated PA664306-G30. Overall dimensions 44 by 30.5 by 88, minimum thickness 1mm.
- Alternate - same as above, except Zhejiang Juner, designated PA-A4-1a.
- Alternate - Same as above, except any R/C (QMFZ2), having an RTI rating of 90°C minimum.
- 2C. Mounting Seat - R/C(QMFZ2), BASF, designated A3X2G5, Overall dimensions 44 by 30.5 by 88 mm, minimum thickness 1mm.
- Alternate - same as above, except Jiangyin Jihua New Material Co.Ltd., designated PA664306-G30.
- Alternate - same as above, except Zhejiang Juner, designated PA66-301-GM.
3. Insulating Tube - R/C(QMFZ2), Anji Hengtai Insulation Materials Co. Ltd., designated 2753.
4. Contact - Designated AgNi10/Cu. Overall dimensions 3 by 0.5 or 2.8 by 0.6.
5. Contact Bridge - Brass plate, designated H62. Overall dimensions 0.5 by 6.2 by 15.5.
6. Contact Plate - Brass, designated H62. Overall dimensions 1.2 by 8 by 10.5.
7. Connecting Plate - Cold-rolled steel, designated 08F. Overall dimensions 1.5 by 10 by 39.7mm.
8. Iron Core - Cold-rolled steel, designated DW360-50. Overall dimensions 0.5 by 39 by 45.5.
9. Conductor - Steel, designated 08F. Overall dimensions 2 by 44.
10. Electric plate - Copper Plate designated T2. Overall dimensions 3 by 20 by 160, 4 by 25 by 180, 5 by 30 by 194mm.
11. Bimetal - Designated TB155/78. Overall dimensions 1 by 10 by 45mm.
12. Coil - Enameled wire designated QZ-2. Dimensions 0.7 by 0.8 by 0.9.
13. Terminals - See Ill. 2.



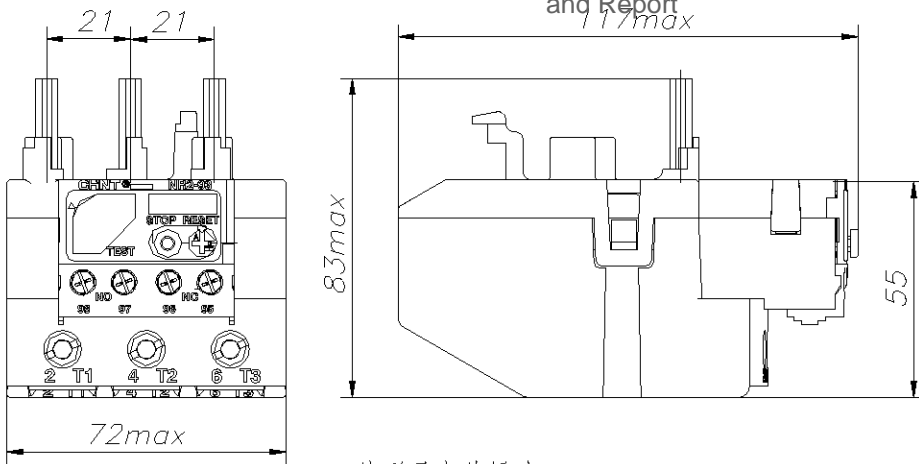
Outline size and installed size of NR2-11.5



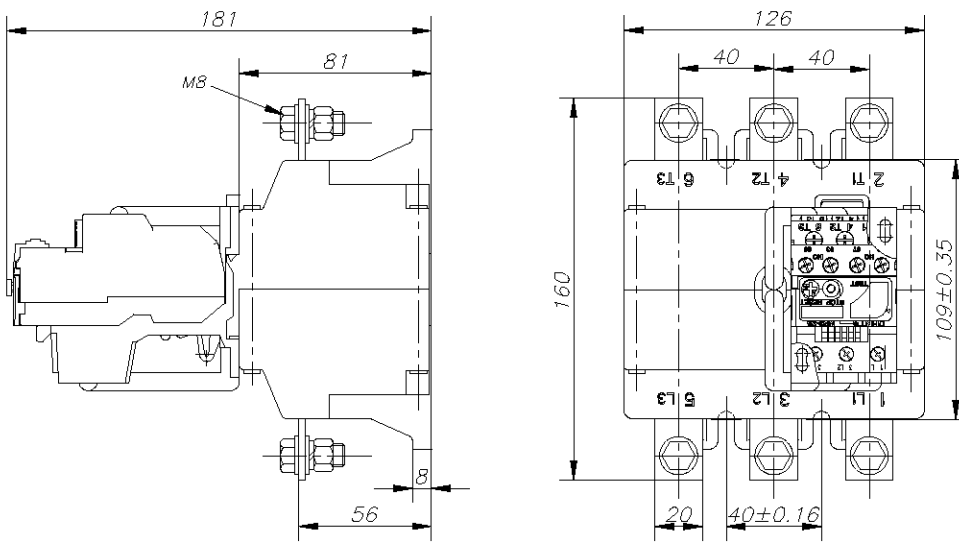
Outline size and installed size of NR2-25



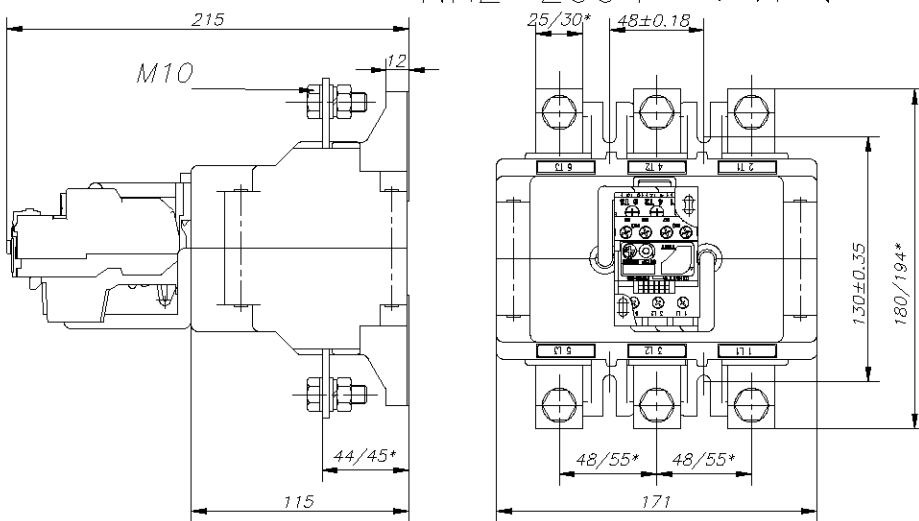
Outline size and installed size of NR2-36



NR2-93外形及安装尺寸

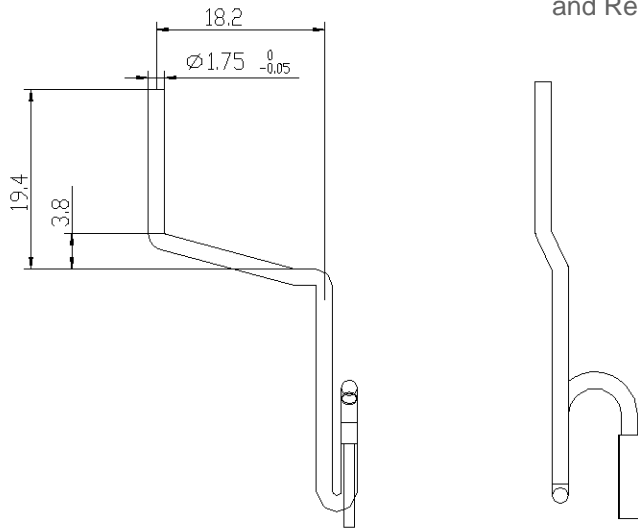


NR2-200外形及安装尺寸

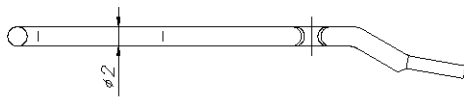
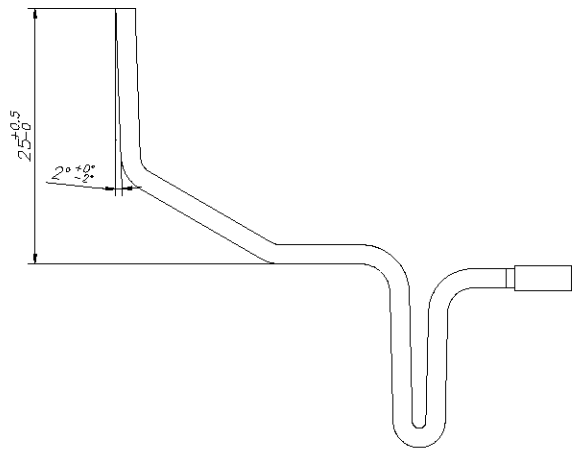


注:带“\*”尺寸含义——400A及以下电流规格尺寸/400A以上电流规格尺寸

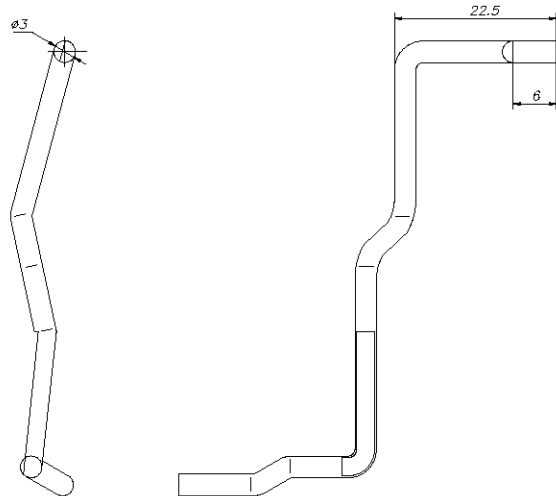
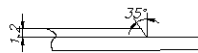
NR2-630外形及安装尺寸



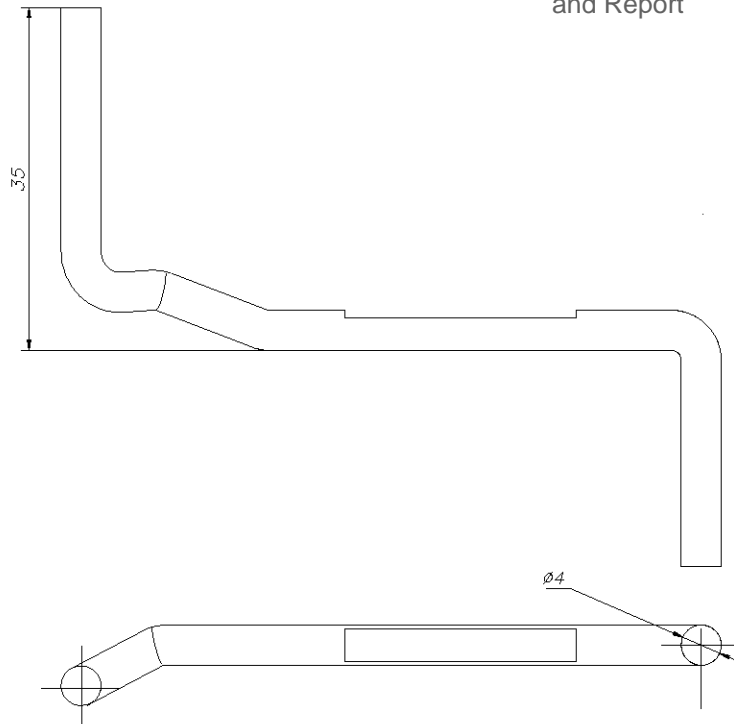
NR2-11.5 Terminal



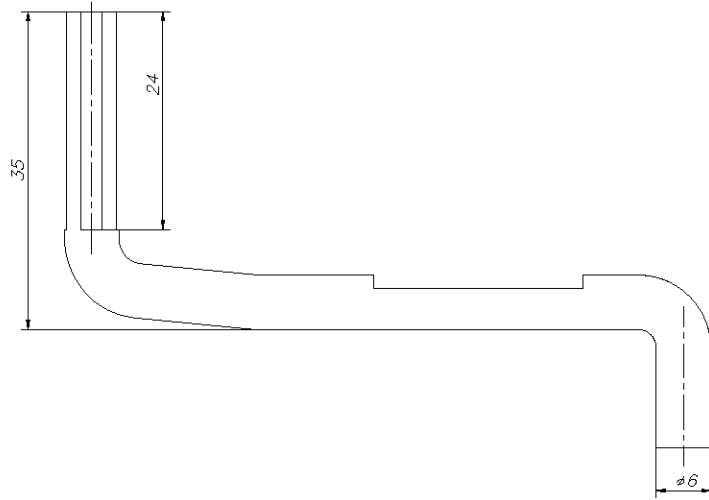
NR2-25 Terminal



NR2-36 Terminal



NR2-93 Terminal (used for 80A and below 80A)



NR2-93 Terminal (used for 93A)