Underwriters Laboratories Inc.®

Northbrook Division
333 Pfingsten Road
Northbrook, IL 60062-2096
USA
www.ul.com
tel: 1 847 272 8800
fax: 1 847 272 8129
Customer service: 1 877 854 3577

File E205607 Vol 1 Issued: 2002-06-19
Revised: 2005-09-09

FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

COMPONENT - AUXILIARY DEVICES
(NKCR2,NKCR8)

Manufacturer: (111876-001) ZHEJIANG CHINT ELECTRICS CO LTD
CHINT INDUSTRIAL ZONE
WENZHOU,
ZHEJIANG 325604 CHINA

Applicant: (111876-001) SAME AS MANUFACTURER

Recognized Company: (111876-001) SAME AS MANUFACTURER

This Procedure authorizes the above Manufacturer to use the marking specified by Underwriters Laboratories Inc. only on products covered by this Procedure, in accordance with the applicable Follow-Up Service Agreement.

The prescribed Mark or Marking shall be used only at the above manufacturing location on such products which comply with this Procedure and any other applicable requirements.

The Procedure contains information for the use of the above named Manufacturer and representatives of Underwriters Laboratories Inc. and is not to be used for any other purpose. It is lent to the Manufacturer with the understanding that it is not to be copied, either wholly or in part, and that it will be returned to Underwriters Laboratories Inc. upon request.

This PROCEDURE, and any subsequent revisions, is the property of UNDERWRITERS LABORATORIES INC. and is not transferable.

UNDERWRITERS LABORATORIES INC.



Sajeev Jesudas
Chief Operating Officer



Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

ML FILE NO. E244412

Issued: 2004-06-21
Revised: 2008-07-23

This page replaces the Multiple Recognition Correlation sheet between files E244412 and E205607, Volume 1

WITHDRAWN - W-C
Client's Request

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

ML FILE NO. E155557

Issued: 2007-01-31
Revised: 2008-06-10

This page replaces the Multiple Recognition Correlation sheet between files E155557 and E205607, Volume 1

WITHDRAWN - W-P
Procedures Combined

The ML's File E155557 has been Combined in to File E303503, Basic E205607 Volume 1.

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

ML FILE NO. E303503

Issued: 2007-01-31
Revised: 2008-06-10

MULTIPLE RECOGNITION
of
AUXILIARY DEVICES - COMPONENT
(NKCR2, NKCR8)
for

[250431-001] ELECTRICAL & ELECTRONIC CONTROLS INC

Basically Recognized for:

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

Basically Recognized products covered by Procedure and/or Reports under File No. E205607, Volume 1

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designations
Thermal overload relay	2002-06-19	NR2-25-Z	ECX-.4-.63A
		NR2-25-Z	ECX-.63-1A
		NR2-25-Z	ECX-1-1.6A
		NR2-25-Z	ECX-1.25-2A
		NR2-25-Z	ECX-1.6-2.5A
		NR2-25-Z	ECX-2.5-4A
		NR2-25-Z	ECX-4-6A
		NR2-25-Z	ECX-5.5-8A
		NR2-25-Z	ECX-7-10A
		NR2-25-Z	ECX-9-13A
		NR2-25-Z	ECX-12-18A
		NR2-25-Z	ECX-17-25A
		NR2-36-Z	ECX-23-32A
		NR2-36-Z	ECX-28-36A
		NR2-93-Z	ECX95-23-32A
		NR2-93-Z	ECX-30-40A
		NR2-93-Z	ECX-37-50A
		NR2-93-Z	ECX-48-65A
		NR2-93-Z	ECX-63-80A
		NR2-93-Z	ECX-80-93[A]
Manually operated switches	2004-05-14	NP2	EXT-ST
Indicator	2004-06-28	ND16	B22-LED

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

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

INDEX

Section	Product Covered	Report Date
1	Transferred to Volume 2 Section 1	2002-06-19
2	Model JQC-3F(T73).	2003-08-26
3	Model JQX-102F.	2003-08-27
4	Model JQX-13F.	2003-08-28
5	Model JQX-15F (T90)	2003-08-29
6	Model JQX-21F.	2003-08-30
7	Model JZC-32F.	2003-08-31
8	Models NP2, or NP4 followed by up to three numbers or letters.	2004-05-14
9	Indicator: ND16 Series.	2004-06-28
10	LAY36 pushbutton.	2004-12-17
11	Model YBLX-P1 Auxiliary Switch.	2005-03-14
12	Electronic overload relays, Type NRE8 followed by 25, 40, or 100. May be followed by additional letters and/or numbers.	2005-04-21
13	Open Type Magnetic Relays, Model JQX, JTX or MK Series.	2006-07-18
14	Open Type Magnetic Relay, Model JQX-115F Series.	2006-07-19
15	Open Type time relays, Model JSZ3 series.	2006-07-20
16	Open Type micro-computer time control switches, KG10D or KG10M.	2006-07-21
17	Open type electromagnetic relays, Model NJQC-3FW Series.	2006-07-22
18	Open Type Magnetic Relay, Model NJX-13FW.	2006-07-23
19	Open Type time relays, Model NJS1 series, Model NJS, followed by 1, followed by A, C, J or blank, followed by 2Z, 11, S or blank, may be followed by additional suffixes.	2006-07-24
20	Open Type phase-loss and phase sequence relays, Model XJ Series, followed by 3, followed by D, G or S, may be followed by additional suffixes.	2006-07-25
21	**Open Type Magnetic Relays, models, NJB1, followed by YW, X, X1, Y or S.**	**2008-12-26**
22	**Open Type Magnetic Relays, Series JZX-22F, may be followed by D, B, or M, followed by 3 digits, followed by 2, 3, or 4, followed by Z, followed by 1 or 6, may be followed by 1 or 2.**	**2008-12-27**

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

GENERAL

PRODUCT COVERED:

COMPONENT - MOTOR CONTROLLERS, MAGNETIC.

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.

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

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, 10th 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	COMPONENT - MOTOR CONTROLLERS, MAGNETIC	All

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

File E205607
Project 08NK16870

December 26, 2008

REPORT

on

COMPONENT – AUXILIARY DEVICES

Zhejiang Chint Electrics Co.Ltd.
Wenzhou, Zhejiang, China

Copyright © 2008 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above named company to reproduce this Report provided it is reproduced in its entirety.

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

DESCRIPTION

PRODUCT COVERED:

USR, CNR - Open Type Magnetic Relays, models, NJB1, followed by YW, X, X1, Y or S.

GENERAL:

These devices are an Open Type Magnetic Relays intended to be used in Industrial Control Equipment.

RATINGS:

Model	Input (Control)	Relay Output
NJB1-YW: 1Z(1C)	220Vac, 380Vac	3A, 220/240Vac
NJB1-X or X1: 1Z(1C)	3 phase/3 wire, 380Vac, 400Vac, 415Vac, 480Vac or 3 phase/4 wire, 220Vac, 230Vac, 240Vac, 277Vac	3A, 220/240Vac
NJB1-Y: 1Z(1C)	24Vac, 110Vac, 220Vac; 24Vdc	3A, 220/240Vac
NJB1-S: 1Z(1C)	220Vac, 380Vac; 24Vdc	NO: 3A, 220/240Vac; 5A, 28Vdc NC: 2A, 220/240Vac; 3A, 28Vdc

ENVIRONMENTAL:

Open Type

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

NOMENCLATURE:

N	JB	1	- YW	/	X
I	II	III	IV		V

I - Company code
II - Relays
III - Design sequence No.
IV - Function code
YW for floatless relay
Y for single-phase voltage relay
X or X1 for phase-sequence, phase-loss relay
S for time relay
V - Control voltage

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

CONSTRUCTION DETAILS:

General - Reference may be made to accompanying photographs and itemized descriptive pages for the essential details of construction.

Corrosion Protection - All parts of the device are constructed of corrosion resistant material or are suitably plated or painted as a protection against corrosion.

Tolerance - Unless specified otherwise, the indicated dimensions are nominal.

Marking - Ink-stamped adhesive backed labels secured to or printed on the devices designated with the Recognized Company's name or file number, and model number. Devices may be marked appropriately for the intended use in amperes, volt-amperes or watts or any combination thereof.

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

USL - Complies with UL 508, Seventeenth edition.

CNL - Complies with CSA C22.2 No. 14-2005, 10th

Spacings - Spacings were evaluated per Table 36.1 of UL 508, the Standard for Industrial Control Equipment, Seventeenth Edition.

Conditions of Acceptability

1. These devices should be used within their Recognized ratings as specified below.

2. Open type devices should be mounted in enclosures having adequate strength and thickness and in the intended manner and with acceptable spacings being provided.

3. The terminals are not suitable for field wiring. They are to be factory wired only and the suitability of the connection (including spacings between factory connectors) shall be determined.

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

RELAY MODEL NJB1 SERIES – FIG. 1

1. Terminal Case (1) – R/C (QMFZ2), DSM Engineering Plastics B V, designated P A 6 K-FK GS6, with minimum thickness 0.8mm, overall dimension 21.2×19.5×26.3 mm.

2. Terminal Case (2) - R/C (QMFZ2), DSM Engineering Plastics B V, designated PA6 K-FK GS6, with minimum thickness 1.2mm, overall dimension 21.2×12.7×26.3mm.

3. Panel - R/C (QMFZ2), DSM Engineering Plastics B V, designated PA6 K-FK GS6, with minimum thickness 0.8mm, overall dimension 48.4×10×21.9mm.

4. Enclosure (1) - R/C (QMFZ2), DSM Engineering Plastics B V, designated PA6 K-FK GS6, with minimum thickness 0.9mm, overall dimension 90×17.5×100mm.

5. Enclosure (2)- R/C (QMFZ2), DSM Engineering Plastics B V, designated PA6 K-FK GS6, with minimum thickness 0.9mm, overall dimension 90×17.3×100mm.

6. Limiting part - R/C (QMFZ2), KOREA ENGINEERING PLASTICS CO LTD, designated F30-(xx)(+), with minimum thickness 1mm, overall dimension 19.1×3.5×35mm.

7. Rotating knob - R/C (QMFZ2), KOREA ENGINEERING PLASTICS CO LTD, designated F30-(xx)(+), with minimum thickness 1.9mm, overall dimensionφ6×14.4mm.

8. Relay – R/C (NRNT2), Xiamen Hongfa Electroacoustic Co. Ltd., designated HF41F 24-ZS

9. PCB – R/C (ZPMV2), Zhejiang SUNHOPE, rated 105C minimum, suitable for direct support.

10. Terminals - cold-rolled sheet steel, designated Q195, measuring 11.7 by 6.2 by 4.9mm.

11. Electric slice (1) – brass, designated H62, measuring 15.6 by 5.5 by 0.8mm.

12. Electric slice (2) – brass, designated H62, measuring 12.7 by 9.8 by 0.8mm.

13. Electric slice (3) – brass, designated H62, measuring 16 by 12.7 by 0.8mm.

14. Screw – Fe/Ep Ni3, measuringφ5 by 10.6mm.

15. Transformer □Models NJB1-S, NJB1-Y, NJB1-YW□- R/C (FQGS2), ZHENJIANG HONGDA ELECTRIC APPLIANCES CO LTD, designated BD-5-02A, having LVLC outputs.

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00

16. Capacitor – rated 0.33uF/1000V (only for NJB1-X)

17. Resistor (R1~R10) - ratings 1MΩ

18. Varistor (RV2) – R/C (XUHT2), Model 10K112

19. Varistor (RV1) – R/C (XUHT2), Model 10K112

MODEL NJB1-S

20. Varistor (RV1) – R/C (XUHT2), Model 10K471

21. Capacitor(C11) – rated 220uF/50V

22. Capacitor(C9,C13) – rated 0.1uF/16V

23. Capacitor(C12) – rated 100uF/50V

MODEL NJB1-Y

24. Varistor (RV2) – R/C (XUHT2), Model 07K270/07K271

25. Varistor (RV1) – R/C (XUHT2), Model 07K471/07K271

26. Varistor (RV3) – R/C (XUHT2), Model 07K270/07K470/07K271

27. Varistor (RV4) – R/C (XUHT2), Model 07K270/07K271/10K821

28. Resistor(R1,R2) – model RC1206 ratings 16.5KΩ, RC1206 ratings 604KΩ, RC1206 ratings 768KΩ

29. Resistor(R3,R4) – model RC1206 ratings 3.4KΩ, RC1206 ratings 100KΩ, RC1206 ratings 249KΩ

30. Resistor(R5,R6) – model RC1206 ratings 4.99KΩ, RC1206 ratings 49.9KΩ, RC1206 ratings 511KΩ

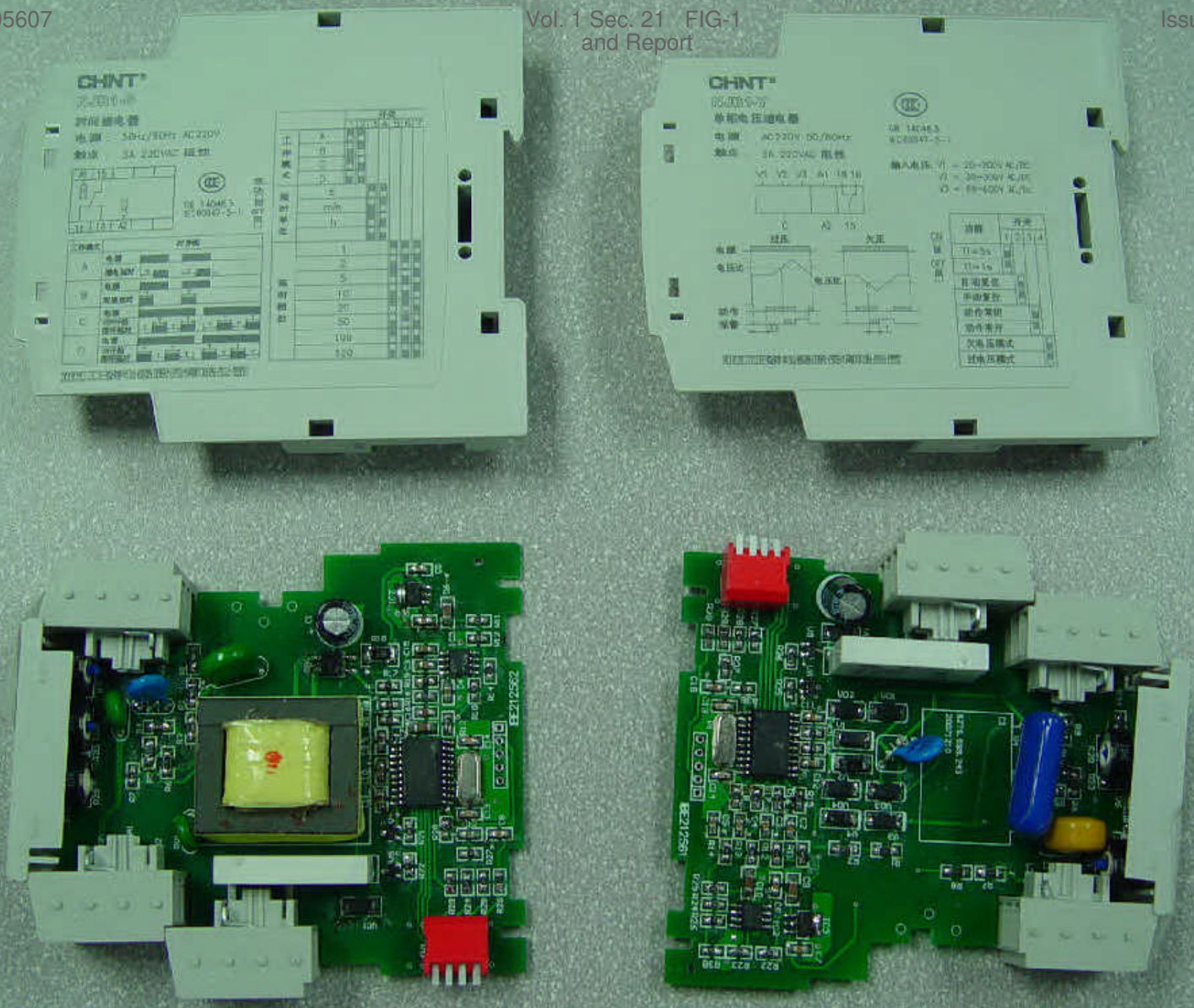
31. Resistor(R7,R8) – rated 10KΩ

MODEL NJB1-YW

32. Varistor (RV1) - R/C (XUHT2), Model 10K150/10K471/10K821

33. Capacitor (C102) – rated 100nF/63V

Created by UL Document Assembler 2010-05-16 01:51:02 -05:00


CHNT
CHNT