


|   |   |   |                       |                                       |
|---|---|---|-----------------------|---------------------------------------|
| <b>Test report no.:</b><br>Prüfbericht-Nr.:   | <b>14701556 017</b>   | <b>Order No.:</b><br>Auftragsnr.:   | <b>180264353</b>      | <b>Page 1 of 13</b><br>Seite 1 von 13 |
| <b>Client reference no.:</b><br>Kunden-Referenz-Nr.:  | N/A   | <b>Order date:</b><br>Auftragsdatum:  | 2023-06-01            |                                       |
| <b>Client:</b><br>Auftraggeber:   | Ningbo Zhongdi Industry & Trade Co., Ltd.<br>Jishigang Industry Zone Yinzhou District Ningbo 315171 P.R. China                  |   |                       |                                       |
| <b>Test item:</b><br>Prüfgegenstand:  | SMD Repairing System  |   |                       |                                       |
| <b>Identification / Type no.:</b><br>Bezeichnung / Typ-Nr.:   | ZD-912; ZD-982; ZD-8912; ZD-917; ZD-987; ZD-8917; ZD-8917B; ZD-8922   |   |                       |                                       |
| <b>Order content:</b><br>Auftrags-Inhalt:   | Type Test   |   |                       |                                       |
| <b>Test specification</b><br>Prüfgrundlage:   | EN 60335-1:2012+A11+A13+A1+A14+A2+A15<br>EN 60335-2-45:2002+A1+A2<br>EN 62233:2008<br>AfPS GS 2019:01 PAK<br>EK1 527-12 Rev. 2  |   |                       |                                       |
| <b>Date of sample receipt:</b><br>Wareneingangsdatum:   | 2023-06-01  |  |                       |                                       |
| <b>Test sample no.:</b><br>Prüfmuster-Nr.:  | A003433463  |   |                       |                                       |
| <b>Testing period:</b><br>Prüfzeitraum:   | 2023-06-01 to 2023-06-02  |   |                       |                                       |
| <b>Place of testing:</b><br>Ort der Prüfung:  | TÜV Rheinland /CCIC<br>(Ningbo) Co., Ltd  |   |                       |                                       |
| <b>Testing laboratory:</b><br>Prüflaboratorium:   | TÜV Rheinland /CCIC<br>(Ningbo) Co., Ltd  |   |                       |                                       |
| <b>Test result*:</b><br>Prüfergebnis*:  | Pass  |   |                       |                                       |
| <b>tested by: Lien Xie</b><br>geprüft von:  | <b>authorized by: Huafeng Gong</b><br>genehmigt von:  |   |                       |                                       |
| <b>Date:</b> 2023-06-25<br>Datum:   | <b>Issue date:</b> 2023-06-25<br>Ausstellungsdatum:   |   |                       |                                       |
| <b>Position / Stellung:</b>   | PE  | <b>Position / Stellung:</b>   | Authorizer            |                                       |
| <b>Other:</b><br>Sonstiges:   | 1. Update standards.<br>2. Add alternative components listed in table 24.1.<br>Attachment 1: Construction check report(5 pages) |   |                       |                                       |
| <b>Condition of the test item at delivery:</b><br>Zustand des Prüfgegenstandes bei Anlieferung:   | Test item complete and undamaged<br>Prüfmuster vollständig und unbeschädigt   |   |                       |                                       |
| * Legend:   | P(ass) = passed a.m. test specification(s)  | F(ail) = failed a.m. test specification(s)  | N/A = not applicable  | N/T = not tested                      |
| * Legende:  | P(ass) = entspricht o.g. Prüfgrundlage(n)   | F(ail) = entspricht nicht o.g. Prüfgrundlage(n)                                     | N/A = nicht anwendbar | N/T = nicht getestet                  |
| <b>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</b><br>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. |   |   |                       |                                       |

V05

Test report no.: 14701556 017  
Prüfbericht-Nr.:

Page 2 of 13  
Seite 2 von 13

**Remarks**  
*Anmerkungen*

- |   |   |
|---|---|
| 1 | <p>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</p> <p><i>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</i></p>  |
| 2 | <p>As contractually agreed, this document has been signed digitally only. TÜV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TÜV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged.</p> <p><i>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.</i></p>   |
| 3 | <p>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</p> <p><i>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</i></p>   |
| 4 | <p>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</p> <p><i>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</i></p> |

**TEST REPORT**  
**IEC 60335-2-45**  
**Safety of household and similar electrical appliances**  
**Part 2: Particular requirements for portable heating tools**

**Report Number.** ..... : See cover page

**Date of issue** ..... : See cover page

**Total number of pages** ..... : See cover page

**Applicant's name** ..... : Ningbo Zhongdi Industry & Trade Co., Ltd.

**Address** ..... : Jishigang Industry Zone Yinzhou District Ningbo 315171 Zhejiang  
P.R. China

**Test specification:**

**Standard** ..... : IEC 60335-2-45:2002 (Third edition) + A1:2008 + A2: 2011 used in  
conjunction with  
IEC 60335-1:2010 (Fifth Edition) (including corrigendum 1:2010)

**Test procedure** ..... : GS mark & CE LVD

**Non-standard test  
method** ..... : N/A

**Test Report Form No.** ..... : IEC60335\_2\_45H

**Test Report Form(s) Originator** .... : LCIE

**Master TRF** ..... : Dated 2012-08

**Copyright © 2012 Worldwide System for Conformity Testing and Certification of Electrotechnical  
Equipment and Components (IECEE), Geneva, Switzerland. All rights reserved.**

This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as  
copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from  
the reader's interpretation of the reproduced material due to its placement and context.

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB  
Scheme procedure shall be removed.

**This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and  
appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.**

**Test item description** ..... : Soldering Iron

**Trade Mark** ..... : N/A

**Manufacturer** ..... : Ningbo Zhongdi Industry & Trade Co., Ltd.  
Jishigang Industry Zone Yinzhou District Ningbo 315171 Zhejiang  
P.R. China

**Model/Type reference** ..... : ZD-912; ZD-982; ZD-8912; ZD-917; ZD-987; ZD-8917; ZD-8917B;  
ZD-8922;

**Ratings** ..... : AC220-240V; 50Hz; Class I  
250W: ZD-8912  
360W: ZD-8922  
380W: ZD-912; ZD-982  
160W: ZD-917; ZD-987;  
90W: ZD-8917;  
140W: ZD-8917B

|  |                               |   |
|--|-------------------------------|---|
| <b>Testing procedure and testing location:</b> |                               |   |
| <input checked="" type="checkbox"/>            | <b>Testing Laboratory:</b>    | TÜV Rheinland /CCIC (Ningbo) Co., Ltd.  |
| Testing location/ address .....                |                               | 3F,Building C13, R&D Park, No.32 Lane 299 Guanghua Road, National Hi-Tech Zone, Ningbo 315048 China |
| <input type="checkbox"/>                       | <b>Associated Laboratory:</b> |   |
| Testing location/ address .....                |                               |   |
| Tested by (name + signature) .....             |                               | See cover page  |
| Approved by (name + signature) .....           |                               | See cover page  |
| <input type="checkbox"/>                       | Testing procedure: TMP        |   |
| Testing location/ address .....                |                               |   |
| Tested by (name + signature) .....             |                               |   |
| Approved by (name + signature) .....           |                               |   |
| <input type="checkbox"/>                       | Testing procedure: WMT        |   |
| Testing location/ address .....                |                               |   |
| Tested by (name + signature) .....             |                               |   |
| Witnessed by (name + signature) .....          |                               |   |
| Approved by (name + signature) .....           |                               |   |
| <input type="checkbox"/>                       | Testing procedure: SMT        |   |
| Testing location/ address .....                |                               |   |
| Tested by (name + signature) .....             |                               |   |
| Approved by (name + signature) .....           |                               |   |
| Supervised by (name + signature) ...           |                               |   |
| <input type="checkbox"/>                       | Testing procedure: RMT        |   |
| Testing location/ address .....                |                               |   |
| Tested by (name + signature) .....             |                               |   |
| Approved by (name + signature) .....           |                               |   |
| Supervised by (name + signature) ...           |                               |   |

**Summary of testing: Pass**

**Reasonable foreseeable use is covered by the standard and related EK decision applied. Currently neither a safeguard clause procedure has been invoked nor is an increase in accidents known for this / these product (s).**

**Tests performed (name of test and test clause):**

New alternative PCB was subjected clause 30.1 and Annex E.

Visual construction check was conducted on models ZD-982 no change was identified.

**Testing location:**

TÜV Rheinland /CCIC (Ningbo) Co., Ltd.

3F,Building C13, R&D Park, No.32 Lane 299  
Guanghua Road, National Hi-Tech Zone, Ningbo  
315048 China

**Summary of compliance with National Differences**

DE(DE=Germany) and EU Group Differences

**The product fulfils the requirements of EN 60335-1:2012+A11+A13+A1+A14+A2+A15**

**EN 60335-2-45:2002+A1+A2, EN 62233:2008, AfPS GS 2019:01 PAK, EK1 527-12 Rev. 2**

**Copy of marking plate**

Refer to test report No.14701556 001-016

**Remark:**

Manufacture or/and his importer shall ensure product bears label requirements in article 6 and article 8 of the 2014/35/EU relate to name, batch number, post address prior place the product into EU market.

|   |  |
|---|--|
| <b>Test item particulars .....</b>  |  |
| <b>Classification of installation and use .....</b>   | Portable appliance                                 |
| <b>Supply Connection .....</b>  | Supply cord fitted with a plug (Type Y attachment) |
| <b>Possible test case verdicts:</b>   |  |
| - test case does not apply to the test object.....  | N/A  |
| - test object does meet the requirement .....   | P (Pass)   |
| - test object does not meet the requirement.....  | F (Fail)   |
| <b>Testing .....</b>  |  |
| <b>Date of receipt of test item .....</b>   | See cover page                                     |
| <b>Date (s) of performance of tests .....</b>   | See cover page                                     |
| <b>General remarks:</b><br><p>The test results presented in this report relate only to the object tested.<br/>         This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.<br/>         "(see Enclosure #)" refers to additional information appended to the report.<br/>         "(see appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.</p>  |  |
| <b>General product information:</b><br><ol style="list-style-type: none"> <li>1. ZD-917 incorporate a soldering iron and a desoldering iron, ZD-912 incorporate a soldering iron and a heat gun;</li> <li>2. The heating elements of soldering iron and desoldering iron except heat gun are all PTC;</li> <li>3. There is static electricity resist film cover the displayer and there is a plastic plate cover the static electricity resist film of displayer relative to heat gun;</li> <li>4. ZD-917 and ZD-912 withstand all the tests.</li> </ol> <p><b>Amendment 1 report:</b><br/>         The original Test Report Ref. No. 14701556 001, dated Oct.13, 2006 was additionally modified on Jun.29, 2009 to carry out PAHs evaluation and relevant tests.</p> <p><b>Amendment 2 report:</b><br/>         The original Test Report Ref. No. 14701556 001, dated Oct.13, 2006 was additionally modified on Nov. 04, 2009 to update Standards from EN 60335-1: 2002+A1+A11: 2004+A12:2006; EN 60335-2-45: 2002 and EN 50366: 2003+A1:2006 to EN 60335-1: 2002+A1+A11:2004+A12:2006+A2:2006+A13: 2008; EN 60335-2-45: 2002+A1:2008 and EN 62233: 2008, EMF test was carried out.</p> <p><b>Amendment 3 report:</b><br/>         The original Test Report Ref. No. 14701556 001, dated Oct.13, 2006 was additionally modified on Mar.1, 2011 to modify the construction of ZD-917 and changed the rating power input of ZD-917 from 200W to 160W. The CDF was revised to the latest version.<br/>         For ZD-912, the CDF was revised to the latest version, no other changes.</p> <p><b>Amendment 4 report:</b><br/>         The original Test Report Ref. No. 14701556 001, dated Oct.13, 2006 was additionally modified on Sep. 08, 2011 to update Standards from EN 60335-1: 2002+A1+A11+A12+A2+A13; EN 60335-2-45: 2002+A1 and EN 62233:2008 to EN 60335-1: 2002+A1+A11+A12+A2+A13+A14; EN 60335-2-45: 2002+A1 and EN 62233:2008. Construction check performed and no additional testes needed.</p> |  |

**Amendment 5 report:**

The original Test Report Ref. No. 14701556 001, dated Oct.13, 2006 was additionally modified on Sep.12, 2013 to update Standards from EN 60335-1: 2002+A1+A11+A12+A2+A13+A14; EN 60335-2-45: 2002+A1

and EN 62233:2008 to EN 60335-1:2012, EN 60335-2-45:2002+A1+A2, EN 62233:2008 and ZEK 01.4-08/11.11.

For details of color and material of PAHs related parts, refer to PAHs reports listed in Annex 2 of test report.

**Amendment 6 report:**

The original Test Report Ref. No. 14701556 001, dated Oct.13, 2006 was additionally modified on Feb.20, 2014 to add new models: ZD-982 and ZD-987.

For ZD-982, except the style of control panel and the PCB on the rear metal enclosure, it is same as ZD-912 which was certified in previous test report.

For ZD-987, except the style of control panel, it is same as ZD-917 which was certified in previous test report.

**Amendment 7 report:**

The original Test Report Ref. No. 14701556 001, dated Oct.13,2006 was additionally modified on Jan.19,2015 to include following change:

Add alternative internal wire for all models.

**Amendment 8 report:**

The original Test Report Ref. No. 14701556 001, dated Oct.13,2006 was additionally modified on Nov.20, 2015 to include following changes :

1. Update Standards from EN 60335-1:2012, EN 60335-2-45:2002+A1+A2 , EN 62233:2008, ZEK 01.4-08/11.11 to EN 60335-1:2012+A11, EN 60335-2-45:2002+A1+A2, EN 62233:2008, AfPS GS 2014:01.
2. Add new models: ZD-8912, ZD-8917 and ZD-8917B.
  - For models ZD-8912, except the style of control panel and plastic enclosure, it is same as ZD-982 which was certified in previous test report.
  - For models ZD-8917, except the style of control panel, plastic enclosure and transformer of soldering iron, it is same as ZD-917 which was certified in previous test report. The transformer of soldering iron in ZD-8917 is same as the transformer of soldering iron in ZD-982.
  - For models ZD-8917B, except control panel, plastic enclosure and numbers of AC-DC power supply module, it is same as ZD-917 which was certified in previous test report. The control panel of ZD-8917B including electric switch supplied at safety extra-low voltage, but ZD-917 has mechanical switch which supplied at rated voltage.  
ZD-8917B only has one AC-DC power supply module which is same as that in ZD-917.

3. CDFs were revised.

**Amendment 9 report:**

The original Test Report No. 14701556 001, dated Oct.13, 2006 was additionally modified on Apr.21, 2016 to issue LVD COC according to 2014/35/EU.

This test report is only valid together with test report 14701556 001-009.

**Amendment 10 report:**

The original Test Report No. 14701556 001, dated Oct.13, 2006 was additionally modified on Aug.23, 2017 to add new model ZD-8922.

- 1.ZD-8922 is a portable appliance and for household use only.
- 2.It is equipped inside with a power switch, an electronic controller, certified safety-isolated transformer, DC fan, self-resetting thermal cut-out of heat gun, heating element of heat gun and PTC heating element of soldering iron.

**Amendment 11 report:**

The original Test Report Ref. No.14701566 001, dated Oct.13, 2006 was additionally modified on 2018-02-08 to issue Co-license.

**Amendment 12 report:**

The original Test Report Ref. No.14701566 001, dated Oct.13, 2006 was additionally modified on 2018-11-12 to add alternative type approved thermal link incorporated in transformer and power switch in back of



control box which listed in table 24.1 for ZD-8922.

CDF was updated.

After review no additional test considered as necessary.

**Amendment 13 report:**

The original Test Report Ref. No.14701566 001, dated Oct.13, 2006 was additionally modified on 2019-09-23 to add alternative components (power plug, power cord, power switch, thermal link in transformer, thermal link inside pump, X2 capacitor).

More details see Cl.24.1 bold part.

CDF was revised.

**Amendment 14 report:**

1. Standards update, standards from original EN 60335-1:2012+A11, EN 60335-2-45:2002+A1+A2, EN 62233:2008, AfPS GS 2014:01 update to new standard EN 60335-1:2012+A11+A13+A1+A14+A2, EN 60335-2-45:2002+A1+A2, EN 62233:2008, AfPS GS 2019:01 PAK, relative testing refer to Summary of testing.
2. Issue new GS certificate to replace the original one for 5 years expire.
3. Add alternative plug, power cord and connector, details see table 24.1. CDF was revised.

**Amendment 15 report:**

The original Test Report Ref. No.14701566 001, dated Oct.13, 2006 was additionally modified on 2021-10-18 to modify as below:

1. Change the chip of PCB in ZD-8922. After evaluation, no more test needed. More details refer to photo documentation.
2. Add alternative power switch (Ningbo Yinzhou Lihe Switch Factory) for ZD-8922. More details refer to Cl.24.1.

**Amendment 16 report:**

1. Update standards from "EN 60335-1:2012+A11+A13+A1+A14+A2" to "EN 60335-1:2012+A11+A13+A1+A14+A2+A15".
2. Add alternative components listed in table 24.1, CDF has updated.



| IEC 60335-2-45 |  |                      |          |
|----------------|--|----------------------|----------|
| Clause         | Requirement + Test   | Result - Remark      | Verdict  |
| <b>24</b>      | <b>COMPONENTS</b>  |                      | <b>P</b> |
| 24.1           | Components comply with safety requirements in relevant IEC standards   |                      | P        |
|                | List of components..... :  | (see appended table) | P        |
| <b>30</b>      | <b>RESISTANCE TO HEAT AND FIRE</b>   |                      | <b>P</b> |
| 30.1           | External parts of non-metallic material,   |                      | P        |
|                | parts supporting live parts, and   |                      | P        |
|                | parts of thermoplastic material providing supplementary or reinforced insulation   |                      | P        |
|                | sufficiently resistant to heat   |                      | P        |
|                | Ball-pressure test according to IEC 60695-10-2   |                      | P        |
|                | External parts tested at 40 °C plus the maximum temperature rise determined during the test of clause 11, or at 75 °C, whichever is the higher; temperature (°C) ..... :                           | (see appended table) | P        |
|                | Parts supporting live parts tested at 40°C plus the maximum temperature rise determined during the test of clause 11, or at 125 °C, whichever is the higher; temperature (°C) ..... :              | (see appended table) | P        |
|                | Parts of thermoplastic material providing supplementary or reinforced insulation tested at 25 °C plus the maximum temperature rise determined during clause 19, if higher; temperature (°C)..... : | (see appended table) | P        |
| <b>E</b>       | <b>ANNEX E (NORMATIVE)<br/>NEEDLE-FLAME TEST</b>   |                      | <b>P</b> |
|                | Needle-flame test carried out in accordance with IEC 60695-11-5, with the following modifications:   |                      | P        |
| 7              | Severities   |                      | P        |
|                | The duration of application of the test flame is 30 s ± 1 s  |                      | P        |
| 9              | Test procedure   |                      | P        |
| 9.1            | The specimen so arranged that the flame can be applied to a vertical or horizontal edge as shown in the examples of Figure 1   |                      | P        |
| 9.2            | The first paragraph does not apply   |                      | P        |
|                | If possible, the flame is applied at least 10 mm from a corner   |                      | P        |
| 9.3            | The test is carried out on one specimen  |                      | P        |
|                | If the specimen does not withstand the test, the test may be repeated on two additional specimens, both withstanding the test  |                      | N/A      |
| 11             | Evaluation of test results   |                      | P        |
|                | The duration of burning not exceeding 30 s   |                      | N/A      |
|                | However, for printed circuit boards, the duration of burning not exceeding 15 s  |                      | P        |

| 24.1  | TABLE: Components information(other see ZC10-Xielie-14701556 017 1~1.3) |                  |                              |                             |                       | P |
|---|---|------------------|------------------------------|-----------------------------|-----------------------|---|
| Object / part No.   | Manufacturer/ trademark   | Type / model     | Technical data               | Standard                    | Mark(s) of conformity |   |
| Power plug  | Yuyao Zhongjian Electric Appliance Co., Ltd.                            | ZJ-03            | AC250V;16A                   | DIN VDE 0620-1              | VDE 40046201          |   |
| Power cord  | Zhejiang Jinniu Cable Co., Ltd  | H05RN-F;         | 3G0.75mm <sup>2</sup>        | EN 50525-2-21               | VDE 40028195          |   |
|   | Ningbo Qiaopu Electric Co., Ltd.  | H05RN-F; H05RR-F | 3G0,75mm <sup>2</sup>        | EN 50525-2-21               | TUV R 50460888        |   |
| Connector   | Yuyao Zhongjian Electric Appliance Co., Ltd.                            | ZT3              | AC250V;10A                   | EN 60320-1                  | TUV R 50450252        |   |
|   | Ningbo Qiaopu Electric Co., Ltd   | QT3              | AC250V;10A                   | EN 60320-1                  | TUV R 50449455        |   |
| Inlet   | Zhejiang Jialong Electron Co., Ltd.                                     | AC-011           | AC250V;10A; 70°C             | EN 60320-1                  | TUV R 50439174        |   |
|   | Zhejiang Jialong Electron Co., Ltd.                                     | AC-014           | AC250V;10A; 70°C             | EN 60320-1                  | TUV R 50439174        |   |
| Fuse  | Dongguan Reomax Electronics Technology Co.,Ltd                          | FBC              | AC250V; 1A L;5X20mm          | EN 60127-1<br>EN 60127-2    | VDE 40037392          |   |
| Power switch at the back  | Zhejiang Jialong Electron Co., Ltd.                                     | KCD1             | AC250V;10(4)A; 25T105/55;5E4 | EN 61058-1                  | TUV R 50533108        |   |
| PCB material  | Wan An YuWei Electronic Co.,Ltd   | USR              | V-0                          | EN 60335-1<br>EN 60335-2-45 | UL E511912*           |   |
| Switch in the gun   | 2.Zhejiang Jialong Electron Co., Ltd.                                   | MX12             | AC250V;16(4)A; 5E4;T125      | EN 61058-1                  | TUV R 50531495        |   |
| 1. Provided evidence ensures the agreed level of compliance. See OD-CB2039.<br>2. For the mark of conformity with *, it means the components also tested with appliance accordingly.<br>3. BS plug must fitted with approved fuse-links having a rating appropriate to the cord fitted in accordance with table 2 of BS 1363-1."<br>4. Compliance of clause is evaluated based on component license submitted by client. License copy available upon request. |   |                  |                              |                             |                       |   |

|  |   |                       |                          |   |
|--|---|-----------------------|--------------------------|---|
| 30.1                                     | TABLE: Ball Pressure Test of Thermoplastics |                       |                          | P |
| Allowed impression diameter (mm) ..... : |   | 2,0                   |                          | — |
| Object/ Part No./ Material               | Manufacturer/<br>trademark                  | Test temperature (°C) | Impression diameter (mm) |   |
| PCB                                      | See table 24.1                              | 125                   | 0,8222                   |   |
| Supplementary information:               |   |                       |                          |   |


| 30.2/30.4  | TABLE: Needle- flame test (NFT) |   |                                    |                              | P       |
|--|---------------------------------|---|------------------------------------|------------------------------|---------|
| Object/ Part No./ Material   | Manufacturer/ trademark         | Duration of application of test flame (ta); (s) | Ignition of specified layer Yes/No | Duration of burning (tb) (s) | Verdict |
| PCB  | See table 24.1                  | 30  | No                                 | --                           | P       |
| Supplementary information:   |                                 |   |                                    |                              |         |
| <b>NFT not relevant (or applicable) for Parts of material classified as V-0 or V-1</b><br><b>NFT not relevant (or applicable) for Base material of PCBs classified as V-0 or if relevant VTM-0</b> |                                 |   |                                    |                              |         |

| Difference report of EN 60335-1:2012 /A15:2021 |  |                 |         |
|--|--|-----------------|---------|
| Clause   | Requirement + Test   | Result - Remark | Verdict |
| 20.2   | Replace “dangerous” with “hazardous” (twice).  |                 | P       |
| 22.44  | An appliance is child-appealing if one of the following criteria is present  |                 | N/A     |
|  | — appliance decorated using faces, cartoon like characters, or similar images;   |                 | N/A     |
|  | — appliance using shapes representing animals, characters, persons or scale models.  |                 | N/A     |
|  | An appliance is child-appealing if more than one of the following criteria are present:  |                 | N/A     |
|  | — using non-functional light (functional light is e.g. illumination of an object or area, signal indicating status of an appliance);   |                 | N/A     |
|  | — using non-functional sound (e.g. music);   |                 | N/A     |
|  | — using non-functional movement.   |                 | N/A     |
|  | If the appliance is child-appealing, has a mass less than 4 kg or is mounted or normally intended for use at a height less than 850 mm, the following conditions shall be met:   |                 | N/A     |
|  | — No surface (both <b>functional surfaces</b> and non-functional) that are accessible by means of test probe 19 of IEC 61032 located at a height less than 850 mm shall exceed the temperature rises stated below:                                     |                 | N/A     |
|  | Temperature rise   |                 | N/A     |
|  | — of bare metal 38K  |                 | N/A     |
|  | — of coated metal 42K  |                 | N/A     |
|  | — of glass and ceramic 51K   |                 | N/A     |
|  | — of plastic having a thickness exceeding 0,4 mm 58K   |                 | N/A     |
|  | — Hazardous <b>moving parts</b> shall not be accessible by means of test probe 19 of IEC 61032 under the conditions specified for test probe 18 in Clause 20.2.  |                 | N/A     |
|  | — <b>Live parts</b> shall not be accessible by means of test probe 19 of IEC 61032 under the conditions specified for test probe 18 in Clause 8.1.1.   |                 | N/A     |
|  | — Liquid in the appliance shall not exceed 38 °C in normal use when it is accessible by means of test probe 19 under the conditions specified for test probe 18 in Clause 20.2 or can get out of the appliance when positioned in different positions. |                 | N/A     |
|  | Vessels in which two independent and sequential actions are needed to access the liquid are considered to meet the requirement.  |                 | N/A     |
|  | — The requirement of 22.12 is applicable for all accessible parts of the appliance.  |                 | N/A     |
|  | The requirement is not applicable to appliances where there is a toy shaped like the appliance.  |                 | N/A     |
|  | Compliance is checked by inspection and appropriate tests.   |                 | N/A     |
| 24.1.7   | If the remote operation of the appliance is via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is IEC 62151.  |                 | N/A     |

| Difference report of EN 60335-1:2012 /A15:2021 |  |                 |          |
|--|--|-----------------|----------|
| Clause   | Requirement + Test   | Result - Remark | Verdict  |
| <b>A</b>                                       | <b>ANNEX ZA (NORMATIVE)<br/>SPECIAL NATIONAL CONDITIONS (EN)</b>   |                 | N/A      |
|  | Modify the reference for Clause 25.8 by adding Cyprus to the countries listed  |                 | N/A      |
|  | <b>Annex ZB A-deviations</b>   |                 | P        |
|  | <i>Delete the second paragraph, including the note, starting with: "This European Standard/Harmonization Document ...."</i>  |                 | P        |
| <b>ZC</b>                                      | <b>ANNEX ZC (NORMATIVE)<br/>NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR<br/>CORRESPONDING EUROPEAN PUBLICATIONS</b>  |                 | <b>P</b> |
|  | The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. |                 | P        |
|  |  |                 |          |
| <b>ZF</b>                                      | <b>ANNEX ZF (INFORMATIVE)<br/>CRITERIA APPLIED FOR THE ALLOCATION OF PRODUCTS COVERED BY<br/>STANDARDS IN THE EN 60335 SERIES UNDER LVD OR MD</b>  |                 | P        |
|  | Modify the elements of the Table ZF.1  |                 | P        |
|  |  |                 |          |
| <b>ZH</b>                                      | <b>ANNEX ZH (INFORMATIVE)<br/>Common plug and socket-outlet types in CENELEC countries</b>   |                 | P        |
|  | <b>ZH.1 General</b>  |                 | P        |
|  | NOTE: The dimensions of the plugs are purely for information. The exact dimensions of the plugs can be found in the relevant national standards.   |                 | P        |
|  | <b>ZH.3.2 Cyprus</b>   |                 | N/A      |
|  | Only plugs according to standard sheets GB1, GB6 and GB7 of IEC/TR 60083 are allowed.  |                 | N/A      |
|  | They correspond with plug designations: EU9, EU6 and EU10.   |                 | N/A      |
|  | <b>ZH.3.4 Finland</b>  |                 | N/A      |
|  | Plugs according to Publications SFS 5610 and SFS-EN 50075 are allowed.   |                 | N/A      |
|  | Plugs according to Publications SFS 5215 and SFS-EN 60309 are allowed.   |                 | N/A      |
|  | <b>ZH.3.9 Netherlands</b>  |                 | N/A      |
|  | Only plugs according to NEN 1020:2019 are allowed, standard sheets:  |                 | N/A      |
|  | — IV or IVa 16 A 250 V class I plug (L+N+PE) with side earthing [ = TR IEC 60083 - NL 2 / <b>EU2</b> ]   |                 | N/A      |
|  | — VII or VIIa 16 A 250 V class I plug (L+N+PE) with dual (side and pin) earthing [ = TR IEC 60083 - NL 2 / <b>EU4</b> ]  |                 | N/A      |
|  | — XVI 2,5 A 250 V class II plug (L+N): [ = TR IEC 60083 - NL 3 / <b>EU5</b> ]  |                 | N/A      |

| Difference report of EN 60335-1:2012 /A15:2021 |  |                 |         |
|--|--|-----------------|---------|
| Clause   | Requirement + Test   | Result - Remark | Verdict |
|  | — XVII or XVIIa 16 A 250 V class II plug (L+N) [ = TR IEC 60083 - NL 4 / <b>EU7</b> ]  |                 | N/A     |
|  | — IX (Perilex) 16 A 400/230 V class I plug (L1+L2+L3+N+PE) [ = <b>EU8</b> ]  |                 | N/A     |
|  | Or plug according EN 50075 is allowed, standard sheet:   |                 | N/A     |
|  | — 1 2,5 A 250 V class II plug (L+N) [ = TR IEC 60083 - NL 5 / <b>EU6</b> ]   |                 | N/A     |
|  | These plugs are shown in IEC/TR 60083 as NL2, NL3, NL4, NL5 and DE4.   |                 | N/A     |
|  | They correspond with plug designations: EU 2, EU4, EU5, EU6, EU7 and EU8.  |                 | N/A     |
|  |  |                 |         |
|  | <b>ZH.3.14 Switzerland</b>   |                 | N/A     |
|  | Supply cords of portable household and similar electrical appliances having a rated current not exceeding 16 A shall be provided with a plug complying with SN 441011-1:2019. The Table A is applicable for Plug with IP20 and Table B is applicable for plug with IP55: |                 | N/A     |

&lt;End of Test Report&gt;

|   |   |   |                  |                              |
|---|---|---|------------------|------------------------------|
| <b>Prüfbericht-Nr.:</b><br>Test report no.:   | <b>Attachment 1 of 14701556</b><br>017  | <b>Auftrags-Nr.:</b><br>Order no.:  | <b>180264353</b> | Seite 1 von 5<br>Page 1 of 5 |
| <b>Kunden-Referenz-Nr.:</b><br>Client reference no.:  | N/A   | <b>Auftragsdatum:</b><br>Order date:  | 2023-06-01       |                              |
| <b>Auftraggeber:</b><br>Client:   | Ningbo Zhongdi Industry & Trade Co., Ltd.<br>Jishigang Industry Zone Yinzhou District Ningbo 315171 Zhejiang P.R. China |   |                  |                              |
| <b>Prüfgegenstand:</b><br>Test item:  | Soldering Iron  |   |                  |                              |
| <b>Bezeichnung / Typ-Nr.:</b><br>Identification / Type no.:   | ZD-982  |   |                  |                              |
| <b>Auftrags-Inhalt:</b><br>Order content:   | Type examination  |   |                  |                              |
| <b>Prüfgrundlage:</b><br>Test specification:  | 2 PfG 2516:2014-11<br><br>Checkliste für die Warenkontrollprüfung<br>Checklist for the Product Control Test             |   |                  |                              |
| <b>Wareneingangsdatum:</b><br>Date of sample receipt:   | 2023-06-01  |  |                  |                              |
| <b>Prüfmuster-Nr.:</b><br>Test sample no.:  | A003433463  |   |                  |                              |
| <b>Prüfzeitraum:</b><br>Testing period:   | 2023-06-01 to 2023-06-02  |   |                  |                              |
| <b>Ort der Prüfung:</b><br>Place of testing:  | TÜV Rheinland / CCIC (Ningbo) Co., Ltd.   |   |                  |                              |
| <b>Prüflaboratorium:</b><br>Testing laboratory:   | TÜV Rheinland / CCIC (Ningbo) Co., Ltd.   |   |                  |                              |
| <b>Prüfergebnis*:</b><br>Test result*:  | Pass  |   |                  |                              |
| <b>geprüft von:</b><br>tested by: Lien Xie  | <b>genehmigt von:</b><br>authorized by: Huafeng Gong  |   |                  |                              |
| <b>Datum:</b><br>Date: 2023-06-25   | <b>Ausstellungsdatum:</b><br>Issue date: 2023-06-25   |   |                  |                              |
| <b>Stellung / Position:</b>   | PE  | <b>Stellung / Position:</b>   |                  | Authorizer                   |
| <b>Sonstiges /</b><br>Other:  |   |   |                  |                              |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br>Condition of the test item at delivery:   |   | <b>Prüfmuster vollständig und unbeschädigt</b><br>Test item complete and undamaged  |                  |                              |
| <p>* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet</p> <p>* Legend: P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested</p>   |   |   |                  |                              |
| <p><b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b></p> <p><i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p> |   |   |                  |                              |

V05

**Prüfbericht-Nr.:** Attachment 1 of 14701556 017  
**Test Report No.:**

Seite 2 von 5  
Page 2 of 5

**Produktbeschreibung**  
**Product description**

|   |   |  |
|---|---|--|
|   | <b>Zertifikatsnummer</b><br><i>Certificate number</i>   | S 50476781                               |
| 2 | <b>Produkt</b><br><i>Product</i>                        | Soldering Iron                           |
| 3 | <b>Produziert am</b><br><i>Manufactured at</i>          | Ningbo Zhongdi Industry & Trade Co.,Ltd. |
| 4 | <b>Fertigungsstättennummer</b><br><i>Factory number</i> | 2095405                                  |
|   |   |  |
|   |   |  |
|   |   |  |



**Prüfbericht-Nr.:** Attachment 1 of 14701556 017  
**Test Report No.:**

Seite 3 von 5  
Page 3 of 5

| Absatz   | 2 PfG 2516:2014-11   | Messergebnisse - Bemerkungen | Bewertung   |
|----------|--|------------------------------|---|
| Clause   | Anforderungen - Prüfungen / Requirements - Tests   | Measuring results - Remarks  | Evaluation  |
| <b>1</b> | <b>Produkt</b><br><b>Product</b>   |                              |   |
|          | Äußere Erscheinung des Musters stimmt mit der Fotodokumentation überein.<br><i>Outer appearance of the drawn sample is same as in photo documentation.</i>   |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Interner Aufbau stimmt mit der Fotodokumentation überein.<br><i>Internal construction of the drawn sample is same as in photo documentation.</i>   |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Es wurden nur sicherheitsrelevanten Komponenten verbaut, die CDF oder Prüfbericht benannt sind.<br><i>Only safety relevant components as described in CDF or Test Report have been used in the drawn sample.</i>           |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
| <b>2</b> | <b>Typenschild</b><br><b>Label</b>   |                              |   |
|          | Das Typenschild entspricht dem zertifizierten.<br><i>The label is same as the certified one.</i>   |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Der Ausweisinhaber, Importeur oder Bevollmächtigte ist auf dem Typenschild benannt.<br><i>The license holder, importer or authorized representative is displayed in the label.</i>   |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Die Adresse (bei GS zwingend eine aus dem EWR) ist auf dem Typenschild benannt.<br><i>Complete postal address (for GS it must be a European address) is mentioned in the label.</i>  |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Bei Fail: in Bedienungsanleitung angegeben<br><i>If fail: in the user manual</i>   |                              |   |
|          | Bei Fail: auf der Verpackung angegeben<br><i>if fail: on packaging</i>   |                              |   |
|          | Wenn eine CE Markierung notwendig ist, wurde diese auf dem Typenschild in dem richtigen Layout abgebildet.<br><i>If CE marking is mandatory, it's on the product and apparently complies with the design restrictions.</i> |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Wenn ein TÜV Rheinland Zeichen abgebildet ist, entspricht dies den Vorgaben.<br><i>In event a TUV Mark is displayed it complies with the design restrictions.</i>  |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |

**Prüfbericht-Nr.:** Attachment 1 of 14701556 017  
**Test Report No.:**

Seite 4 von 5  
Page 4 of 5

| Absatz   | 2 PfG 2516:2014-11   | Messergebnisse - Bemerkungen | Bewertung   |
|----------|--|------------------------------|---|
| Clause   | Anforderungen - Prüfungen / Requirements - Tests   | Measuring results - Remarks  | Evaluation  |
| <b>3</b> | <b>Bedienungs-, Installations-, Aufbauanleitung</b><br><b>User Manual, Installation - / Assembly Manual</b>  |                              |   |
|          | Liegt in der richtigen Sprache vor, bei GS zwingend in deutscher Sprache, und entspricht dem zertifizierten.<br><i>Is available in the correct language (German version a must for GS) and the same as certified one.</i>  |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Wenn ein TÜV Rheinland Zeichen abgebildet ist, entspricht dies den Vorgaben.<br><i>In event a TUV Mark is displayed it complies with the design restrictions.</i>  |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Wenn eine Herstelleradresse angegeben ist, wurde diese komplett (bei GS zwingend eine Adresse im EWR) angegeben und stimmt mit der vom Typen-schild überein.<br><i>If the license holder and/or importer, authorized representative is displayed with address, it's complete (for GS it must be a European address) and correlates with the information on the rating label.</i> |                              | P <input checked="" type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Wenn die Serviceadresse von der vom Hersteller, Importeur oder Bevollmächtigten abweicht, ist das akzeptabel.<br><i>If the address for service inquiries differs from manufacturer's, importer's or authorized representative's, it's acceptable.</i>  |                              |   |
| <b>4</b> | <b>Verpackung</b><br><b>Packaging/Gift box</b>   |                              |   |
|          | Wenn ein TÜV Rheinland Zeichen abgebildet ist, entspricht dies den Vorgaben.<br><i>In event a TUV Mark is displayed it complies with the design restrictions.</i>  | Packaging not provided       | P <input type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input checked="" type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Der Ausweisinhaber, Importeur und/oder Bevollmächtigte ist mit auf der Verpackung benannt.<br><i>The license holder, importer and/or authorized representative are displayed with complete address on the packaging.</i>   |                              | P <input type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input checked="" type="checkbox"/><br>N/T <input type="checkbox"/> |
|          | Auf der Verpackung wird das Produkt nicht anders beworben als es die Zertifizierung beschreibt.<br>Z.B. Kinder werden mit der Verpackung explizit angesprochen und aus dem Zertifikat geht hervor, dass es kein Spielzeug ist.<br><i>Packaging does not imply another use as certified. E.g. the package explicitly addresses but the certificate excludes use by children.</i>  |                              | P <input type="checkbox"/><br>F <input type="checkbox"/><br>N/A <input checked="" type="checkbox"/><br>N/T <input type="checkbox"/> |

**ANLAGE zum Prüfbericht-Nr.** Attachment 1 of 14701556 017  
*APPENDIX to Test Report No.:*

Seite 5 von 5  
Page 5 of 5

**ZUSATZ-DOKUMENTATION**  
**ADDITIONAL DOCUMENTATION**

Nachweise für die in der Checkliste benannten Punkte:  
*Evidences found during Product Verification Test:*

