



The table below describes the files that were selected to be included as part of this package.

Supplements, such as Figures and Illustrations, will appear as X number of Figures, X number of Illustrations, etc., rather than naming each one.

|                             |
|-----------------------------|
| E158873-A6197-DescriptionUL |
| Figure-18-Total             |

This material is provided on behalf of UL LLC (UL Solutions) or any authorized licensee of UL Solutions.

## UL TEST REPORT AND PROCEDURE

|                                    |                                                                                                                                                                                                                                                                                |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Standard:</b>                   | UL 62368-1, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements)<br>CAN/CSA C22.2 No. 62368-1:19, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements) |
| <b>Certification Type:</b>         | Listing                                                                                                                                                                                                                                                                        |
| <b>CCN:</b>                        | AZOT, AZOT7 (Audio/video, Information and Communication Technology Equipment)                                                                                                                                                                                                  |
| <b>Complementary CCN:</b>          | N/A                                                                                                                                                                                                                                                                            |
| <b>Product:</b>                    | Public View Monitor                                                                                                                                                                                                                                                            |
| <b>Model:</b>                      | SMT-2731PV, SMT-2721PV                                                                                                                                                                                                                                                         |
| <b>Rating:</b>                     | 1. 24Vdc, 1.2A<br>2. HPoE(53 Vdc), 0.6A                                                                                                                                                                                                                                        |
| <b>Applicant Name and Address:</b> | HANWHA VISION CO LTD<br>6, PANGYO-RO 319BEON-GIL, BUNDANG-GU<br>SEONGNAM-SI GYEONGGI-DO 13488 KOREA                                                                                                                                                                            |

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared By: Seohwan Kim / Project Handler      Reviewed By: Sungil Kim / Reviewer

**Supporting Documentation**

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

A. Authorization - The Authorization page may include additional Factory Identification Code markings.

B. Generic Inspection Instructions -

- i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
- ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
- iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

**Product Description**

Public View Monitor has been designed for indoor use and stationary equipment  
It is a commercial equipment supplied from 24 Vdc or HPoE(53Vdc)

**Model Differences**

Basic model: SMT-2731PV

The model SMT-2731PV is similar as model, SMT-2721PV except for model designation, software.

**Test Item Particulars**

|                                                |                                                  |
|------------------------------------------------|--------------------------------------------------|
| Product group                                  | end product                                      |
| Classification of use by                       | Ordinary person<br>Children likely to be present |
| Supply Connection                              | not mains connected:<br>ES1                      |
| Supply tolerance                               | None                                             |
| Supply connection – type                       | Not directly connected to the mains              |
| Considered current rating of protective device | N/A                                              |
| Equipment mobility                             | stationary                                       |
| Over voltage category (OVC)                    | OVC I                                            |
| Class of equipment                             | Class III                                        |
| Special installation location                  | N/A                                              |
| Pollution degree (PD)                          | PD 2                                             |
| Manufacturer's specified Tma (°C)              | 40                                               |
| IP protection class                            | IPX0                                             |
| Power systems                                  | not AC mains                                     |
| Altitude during operation (m)                  | 2000 m or less                                   |
| Altitude of test laboratory (m)                | 2000 m or less                                   |
| Mass of equipment (kg)                         | 8.55                                             |

**Technical Considerations**

- ☐ The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of : 40
- ☐ Considered current rating of protective device as part of the building installation (A) : N/A
- ☐ The following are available from the Applicant upon request : Installation (Safety) Instructions / Manual

**Additional Information**

4790993248

- Tests were not considered necessary to determine compliance with Standard UL 62368-1, 3rd Ed, 2021-10-22 and CAN/CSA C22.2 No. 62368-1:19, 3rd Ed, 2021-10-22 based upon previous evaluation under the IEC 62368-1: 2018 for the CB Scheme Test Certificate, Ref. Certi. DK-147372-UL and Report Ref. No. C23IA069-M0A0 dated 2023-11-17 were prepared by UL International Demko A/S, Borupvang 5A, DK-146175 Ballerup, Denmark.

- Maximum Normal Load: Full White Screen, Max. Brightness, 1/8 Pmax for speaker, Contrast, Resolution 1 920 x 1 080.

4791235740

- Add model name: SMT-2721PV

- Tests were not considered necessary to determine compliance with Standard UL 62368-1, 3rd Ed, 2021-10-22 and CAN/CSA C22.2 No. 62368-1:19, 3rd Ed, 2021-10-22 based upon previous evaluation under the IEC 62368-1: 2018 for the CB Scheme Test Certificate, Ref. Certi. DK-147372-M1-UL and Report Ref. No. C23IA069-M1A0 dated 2024-03-25 were prepared by UL Solutions (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK.

**Additional Standards**

The product fulfills the requirements of: N/A

**Markings and Instructions**

| Clause Title                                                   | Marking or Instruction Details                                                                               |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| See Installation Instructions                                  | The symbol<br>            |
| Equipment identification marking – Manufacturer identification | Listee's or Recognized Company's name, Trade Name, Trademark or File Number                                  |
| Equipment identification marking – model identification        | Model Number                                                                                                 |
| Equipment rating marking – ratings                             | Input Ratings (voltage, frequency/dc, current/power) Output Ratings (voltage, frequency/dc, current/power)   |
| (Website) Manual - 1                                           | This product is intended to be supplied by a UL Listed Power Supply Unit marked "Class 2" or "LPS" or "PS2". |

|                                                         |                                                                                                                                                                                                                                      |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Website) Manual - 2                                    | The wired LAN hub providing power over the Ethernet (PoE) in accordance with IEEE 802.3bt shall be a<br>UL Listed device with the output evaluated as a Limited Power Source as defined in UL60950-1 or PS2 as defined in UL62368-1. |
| Hard Copy                                               | A. IMPORTANT or ATTENTION or similar wording.<br>B. Please check 'Manuals' from our website, before connecting to the supply.<br>C. Company website URL ( <a href="https://www.~~">https://www.~~</a> ) or QR code.                  |
| <b>Special Instructions to UL Representative</b><br>N/A |                                                                                                                                                                                                                                      |

|              |                                                                                                                                                                                        |                 |                     |            |           |              |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------|------------|-----------|--------------|
| <b>BD1.0</b> | <b>TABLE: Production-Line Testing Requirements</b>                                                                                                                                     |                 |                     |            |           |              |
| <b>BD1.1</b> | <b>Electric Strength Test Special Constructions – Refer to Generic Inspection Instructions, Part AC for further information.</b>                                                       |                 |                     |            |           |              |
| Model        | Component                                                                                                                                                                              | Removable parts | Test probe location | Test V rms | Test V dc | Test Time, s |
| N/A          | N/A                                                                                                                                                                                    | N/A             | N/A                 | N/A        | N/A       | N/A          |
| <b>BD1.2</b> | <b>Earthing Continuity Test Exemptions – This test is not required for the following models:</b>                                                                                       |                 |                     |            |           |              |
|              | All models                                                                                                                                                                             |                 |                     |            |           |              |
| <b>BD1.3</b> | <b>Electric Strength Test Exemptions – This test is not required for the following models:</b>                                                                                         |                 |                     |            |           |              |
|              | All models                                                                                                                                                                             |                 |                     |            |           |              |
| <b>BD1.4</b> | <b>Electric Strength Test Component Exemptions – The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test.</b> |                 |                     |            |           |              |
|              | All models                                                                                                                                                                             |                 |                     |            |           |              |

|              |                                                            |          |      |            |                |
|--------------|------------------------------------------------------------|----------|------|------------|----------------|
| <b>BE1.0</b> | <b>Sample and Test Specifics for Follow-Up Tests at UL</b> |          |      |            |                |
| Model        | Component                                                  | Material | Test | Sample (s) | Test Specifics |
| -            | -                                                          | -        | -    | -          | -              |

| 4.1.2                                       | TABLE: List of critical components      |                                  |                                                                                         |                            |                          | Pass          |
|---------------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------|----------------------------|--------------------------|---------------|
| Object / part No.                           | Manufacturer/<br>trademark              | Type / model                     | Technical data                                                                          | Product Category<br>CCN(s) | Mark(s) of<br>conformity | Supplement ID |
| Metal enclosure                             | Interchangeable                         | Interchangeable                  | Steel, approximately<br>607.1 mm by 354.1 mm<br>by 19.0 mm, Min. 1.0<br>mm thickness    | -                          | -                        |               |
| LCD Panel                                   | LG Display Co., Ltd.                    | LM270WF7                         | 27.0 inch LCD,<br>LCD module: 5.5 Vdc,<br>0.780 A max.<br>LED Bar:51 Vdc, 65<br>mA max. | -                          | -                        |               |
| Network Camera                              | HANWHA VISION<br>CO LTD                 | TNB-C6005                        | Input: 24 Vdc, 0.21 A                                                                   | -                          | -                        |               |
| Fuse (F1) for LED<br>Driver board           | KOA CORP                                | CCF1N, may be<br>followed by TE* | Rated 60 Vdc, 4 A                                                                       | JDYX2                      | UL (E171861)             |               |
| Fuse (F1) for<br>Network board              | LITTELFUSE INC                          | 454*                             | 125 Vac, 1.5 A                                                                          | JDYX2                      | UL (E10480)              |               |
| Fuse (F1) for<br>Network<br>board_Alternate | SEMITELELECTRONICS CO<br>LTD            | S6125S                           | 125 Vac, 1.5 A                                                                          | JDYX2                      | UL (E338954)             |               |
| Fuse (F1) for<br>Network<br>board_Alternate | LITTELFUSE INC                          | 449*                             | 125 Vac, 1.5 A                                                                          | JDYX2                      | UL (E10480)              |               |
| Transformer (T1)                            | KYUNGWON<br>ELECTRONICS<br>CO., LTD.    | TWC7030BT                        | 130 deg.C                                                                               | -                          | -                        |               |
| Transformer<br>(T1)_Alternate               | WEIHAI YILIAN<br>ELECTRICS CO.,<br>LTD. | 7030BT                           | 130 deg.C                                                                               | -                          | -                        |               |
| Opto-coupler (PC1)                          | EVERLIGHT<br>ELECTRONICS CO<br>LTD      | EL3H7                            | Isolation Voltage: 3<br>750. Max. Operation                                             | FPQU2                      | UL (E214129)             |               |

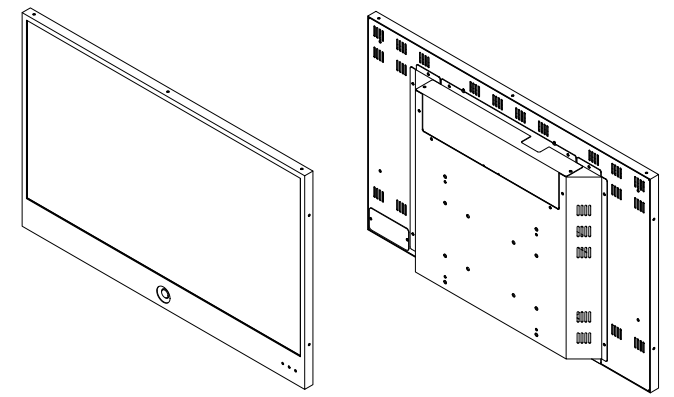
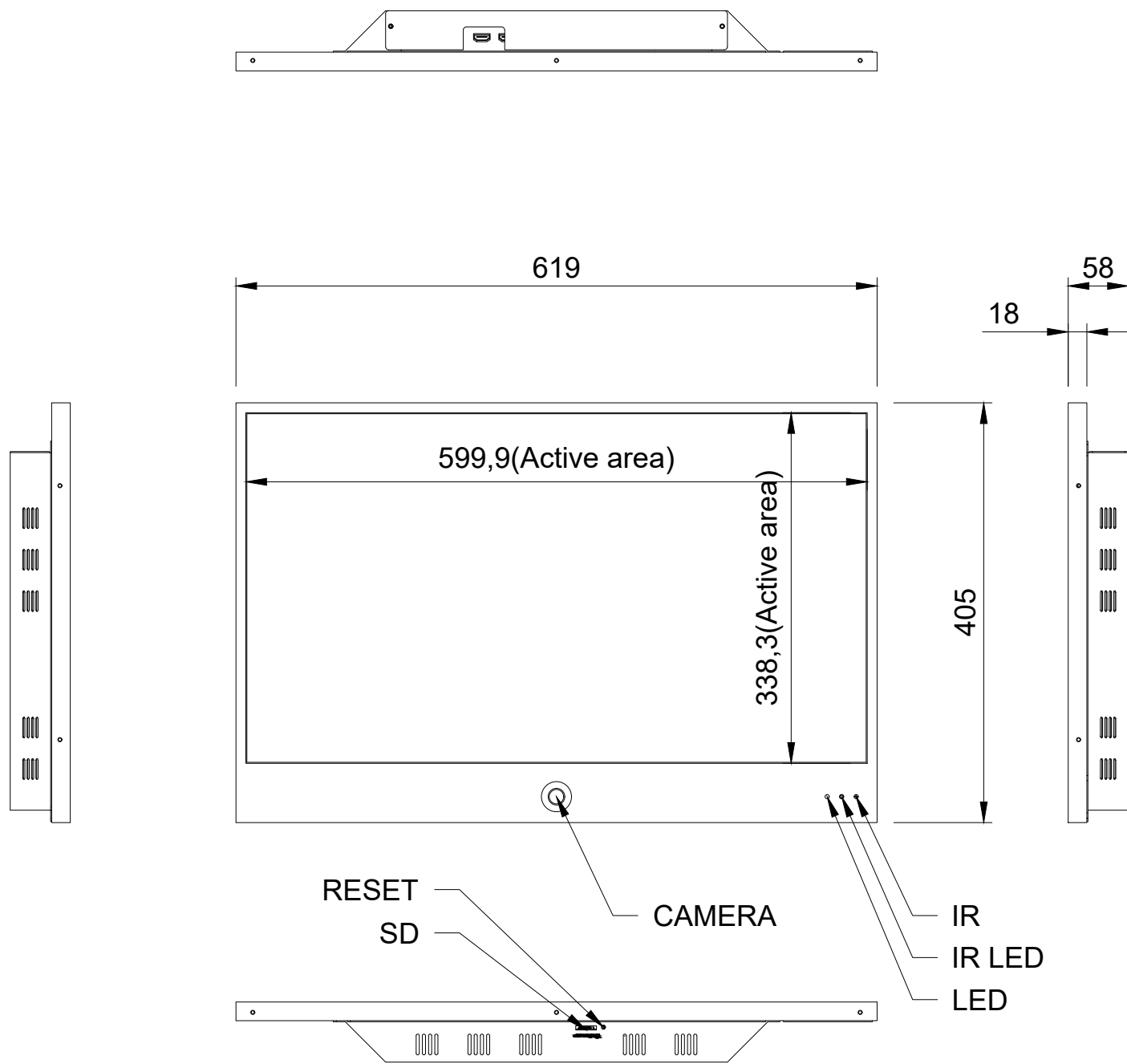
|                                                                    |                                        |                 |                                                                                              |       |              |  |
|--------------------------------------------------------------------|----------------------------------------|-----------------|----------------------------------------------------------------------------------------------|-------|--------------|--|
|                                                                    |                                        |                 | Temperature: 110 deg.C                                                                       |       |              |  |
| Opto-coupler (PC1)_Alternate                                       | COSMO ELECTRONICS CORP                 | KPS2801         | Isolation Voltage: 3 750. Max. Operation Temperature: 100 deg.C                              | FPQU2 | UL (E169586) |  |
| Lithium Battery (BAT1)                                             | SEIKO INSTRUMENTS INC MICRO-ENERGY DIV | ML414H          | Lithium (Coin), Rechargeable, Max. Charging Voltage: 3.4 Vdc, Max. Charging Current: 300 mAh | BBCV2 | UL (MH15628) |  |
| Reverse Current Protection Circuit for Lithium Coin Battery (BAT1) | Interchangeable                        | Interchangeable | Diode (D2, 80 V, 300 mA) and resistor (R79, 3.3 kohm) in series.                             | -     | -            |  |
| Thermal pad                                                        | KOMOTECH CO LTD                        | KGP-1(a)        | V-0, 150 deg.C, Min. 5.0 mm                                                                  | QMFZ2 | UL (E245303) |  |
| FFC cable                                                          | Interchangeable                        | Interchangeable | Marked VW-1; Min. 60 V, 105 deg.C                                                            | AVLV2 | UL           |  |
| PCB                                                                | HANNSTAR BOARD CORP                    | MV-4            | Min. V-0, 130 deg.C                                                                          | ZPMV2 | UL (E89382)  |  |
| PCB_Alternate                                                      | Interchangeable                        | Interchangeable | Min. V-0, 130 deg.C                                                                          | ZPMV2 | UL           |  |



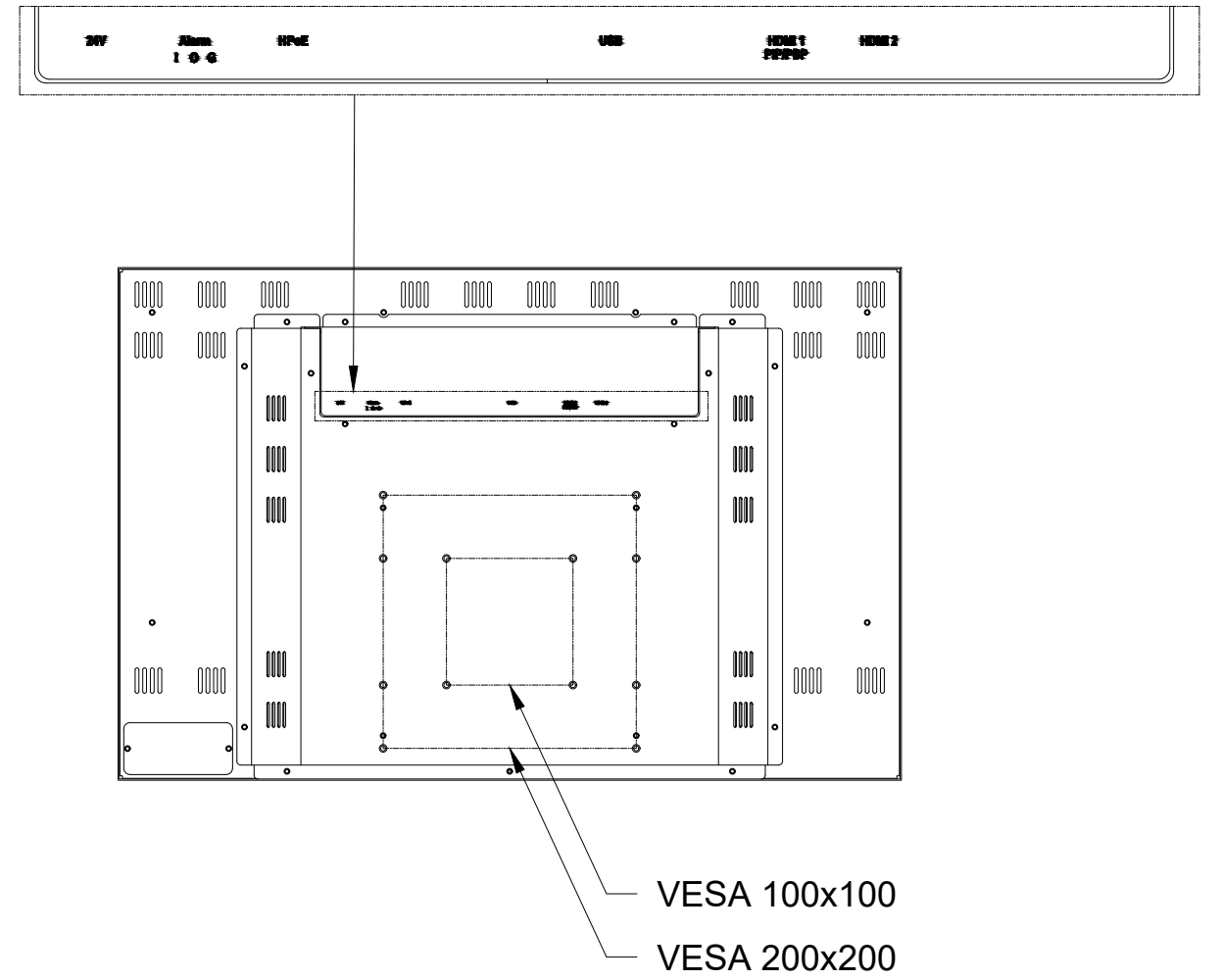
## Enclosures

| Type          | Supplement Id | Description                 |
|---------------|---------------|-----------------------------|
| Photographs   | 03-01         | Front View                  |
| Photographs   | 03-02         | Rear View                   |
| Photographs   | 03-03         | Internal View               |
| Photographs   | 03-04         | Network Camera board_top    |
| Photographs   | 03-05         | Network Camera board_bottom |
| Photographs   | 03-06         | PoE board_top               |
| Photographs   | 03-07         | PoE board_bottom            |
| Photographs   | 03-08         | RMM411 board_top            |
| Photographs   | 03-09         | RMM411 board_bottom         |
| Photographs   | 03-10         | LED driver board_top        |
| Photographs   | 03-11         | LED driver board_bottom     |
| Photographs   | 03-12         | Pannel board                |
| Photographs   | 03-13         | Port view                   |
| Photographs   | 03-14         | LED Board                   |
| Diagrams      | 04-01         | Appearance                  |
| Manuals       | 06-01         | Manuals                     |
| Miscellaneous | 07-01         | Label                       |
| Miscellaneous | 07-02         | Trans Specification         |

The following Page(s) are related to Diagrams-01. The next supplement, if applicable, will be identified with a new Supplement Page Heading.



\*COVER OPEN



The following Page(s) are related to Manuals-01. The next supplement, if applicable, will be identified with a new Supplement Page Heading.

# **PUBLIC VIEW MONITOR**

SMT-2731PV

SMT-3231PV

# SAFETY INSTRUCTIONS

---

## 1. WARNING

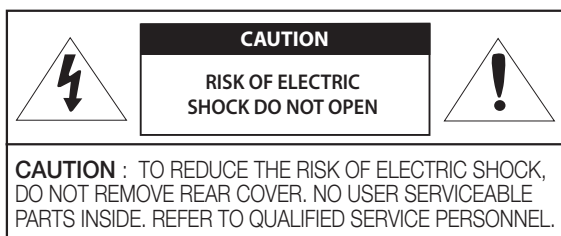
To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

Do not insert any metallic object through the ventilation grills or other openings on the equipment.

Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

To prevent injury, this apparatus must be securely attached to the Wall/ceiling in accordance with the installation instructions.

## 2. CAUTION



## 3. EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of "dangerous voltage: within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

## CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.  
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

## ATTENTION

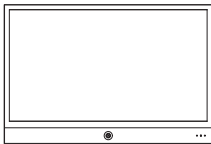
IL Y A RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UNE BATTERIE DE TYPE INCORRECT.  
METTRE AU REBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS.

※ This device has been verified using STP cable. The use of appropriate GND grounding and STP cable is recommended to effectively protect your product and property from transient voltage, thunderstroke, communication interruption.

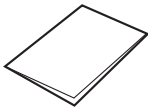
※ Select an installation site that can hold at least 4 times the monitor weight.

PACKAGE CONTENTS

Please check the following contents are included in addition to the main unit.



Public View Monitor



Quick Start Guide



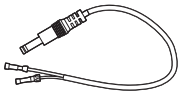
Alarm terminal block



Remote Controller



Battery



Power Inverter Harness

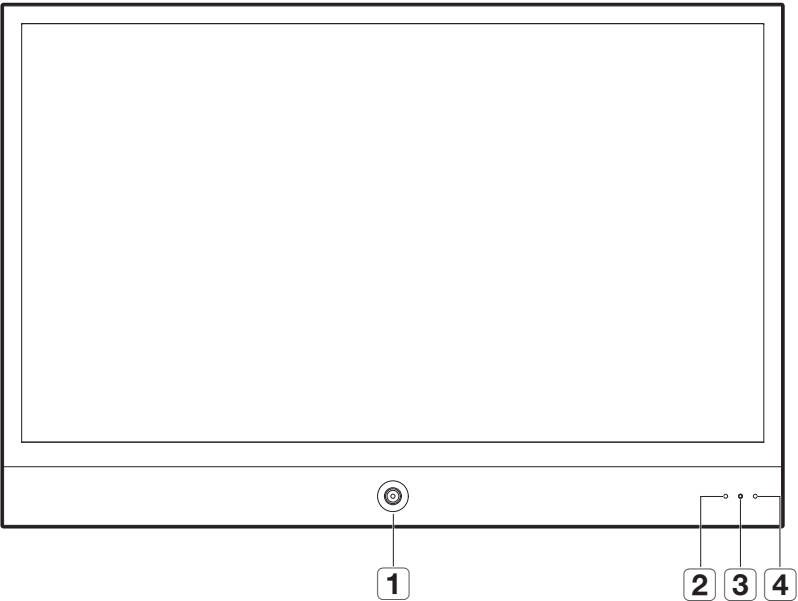
SEPARATELY SOLD PRODUCT

| Appearance                                                                          | Item Name     | Description                       | Model Name |
|-------------------------------------------------------------------------------------|---------------|-----------------------------------|------------|
|  | HPoE Injector | Connects power supply and network | SPO-8315   |
|  | Adpater       | DC 24V power supply               | SPU-60240  |

The wired LAN hub providing power over the Ethernet (PoE) in accordance with IEEE 802.3bt shall be a UL Listed device with the output evaluated as a Limited Power Source as defined in UL60950-1 or PS2 as defined in UL62368-1.

NAMES AND FUNCTIONS OF EACH PART

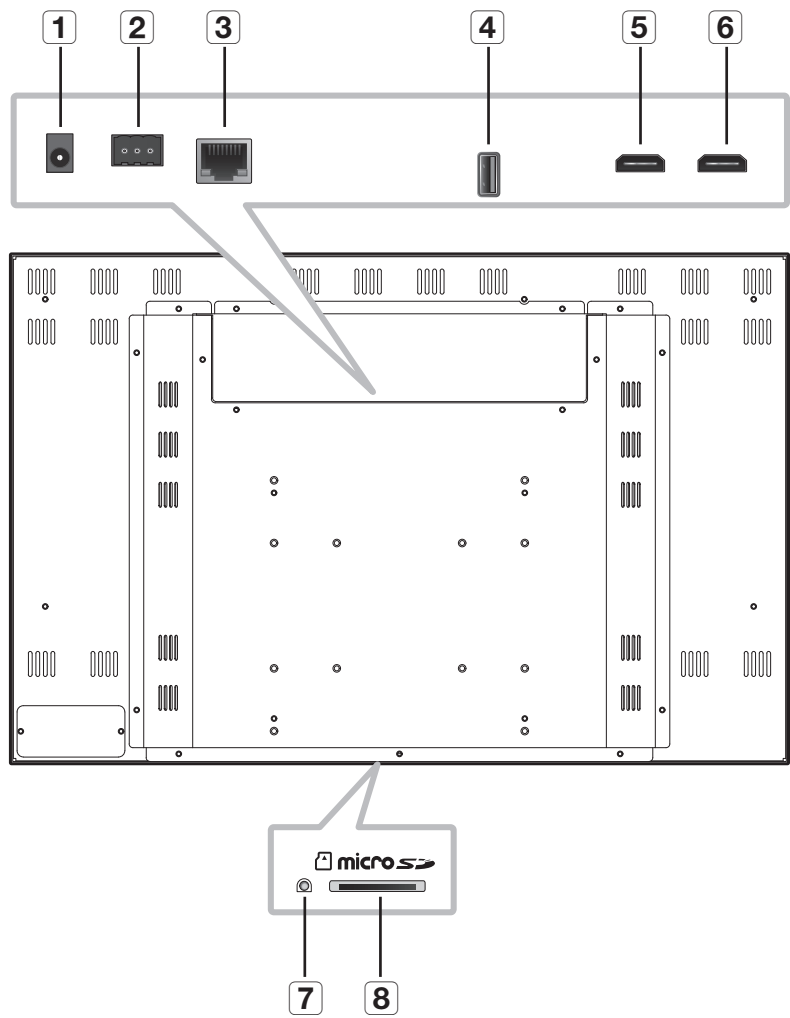
Front



| Name |             | Description of functions                                     |
|------|-------------|--------------------------------------------------------------|
| 1    | Camera Lens | IP camera is installed.                                      |
| 2    | ALARM LED   | Displayed when an alarm output occurs.                       |
| 3    | LED         | Displays the power ON/OFF status.<br>ON – GREEN<br>OFF – RED |
| 4    | IR Receiver | Receive IR signal from Remote Controller.                    |



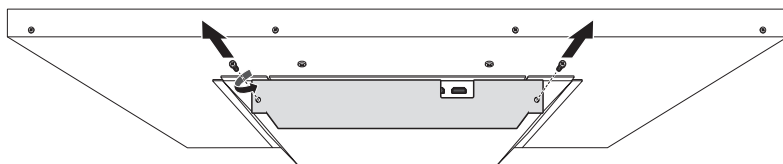
Back



| Name     |                           | Description of functions                                                                                                            |
|----------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b> | <b>24V</b>                | This is the DC 24V Power input terminal.                                                                                            |
| <b>2</b> | <b>ALARM</b>              | ALARM signal input / output                                                                                                         |
| <b>3</b> | <b>HPoE</b>               | Used to connect the HPoE or Ethernet cable for network connection.                                                                  |
| <b>4</b> | <b>USB</b>                | Connect the USB Devices for Monitor F/W update.                                                                                     |
| <b>5</b> | <b>HDMI1<br/>PIP/PBP</b>  | HDMI Input terminal for PIP/PBP                                                                                                     |
| <b>6</b> | <b>HDMI2</b>              | HDMI Input terminal (not support PIP/PBP in Web viewer)                                                                             |
| <b>7</b> | <b>RESET</b>              | Resets the camera installed in the monitor to its factory default settings.<br>■ If you forget your password, use the RESET button. |
| <b>8</b> | <b>Micro SD card slot</b> | Compartment for the Micro SD card.                                                                                                  |



- Detach the terminal cover by rotating the fastening screw in a counterclockwise direction to loosen it, then connect the cable.



- This product is intended to be supplied by a UL Listed Power Supply Unit marked "Class 2" or "LPS" or "PS2".
- This product dose not support LLDP.

# connecting with other device

## THINGS TO CHECK BEFORE CONNECTION

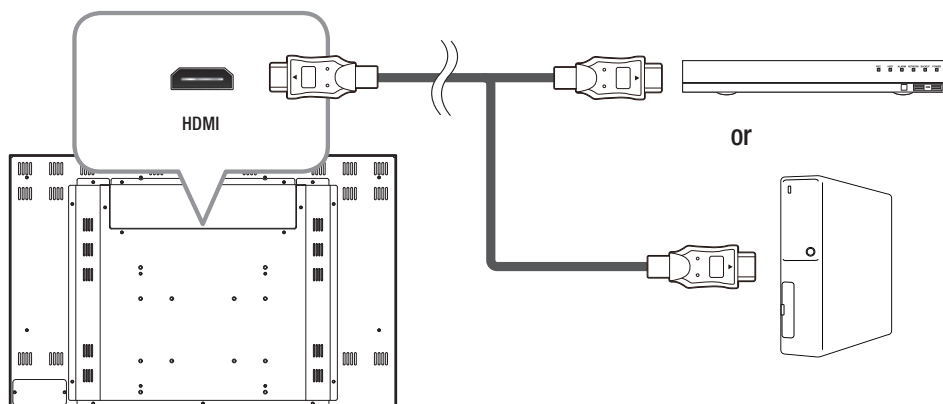
### Check before connecting



- When connecting, refer to the instruction manual of the product to be connected. The number and position of external devices may differ depending on the product.
- Do not connect the power until all connections are complete. Connecting the power supply during connection may damage the product.
- Check the type of terminal behind the product you want to connect.

## CONNECTING WITH EXTERNAL DEVICES

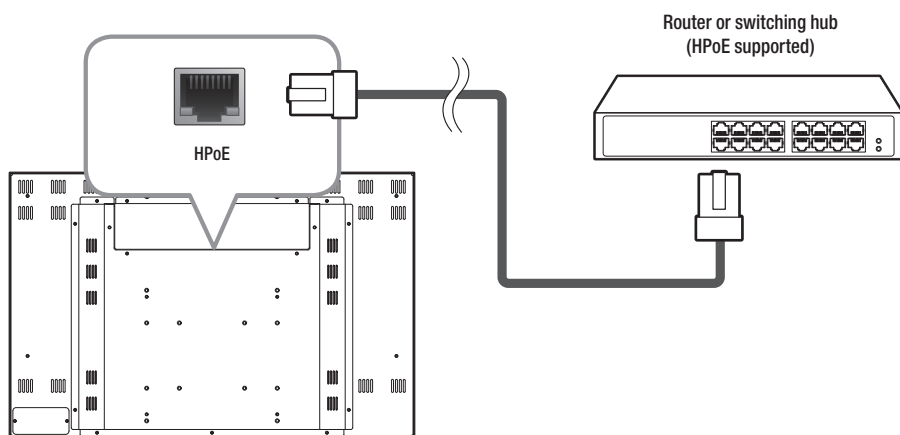
### HDMI cable connection method



# connecting with other device

---

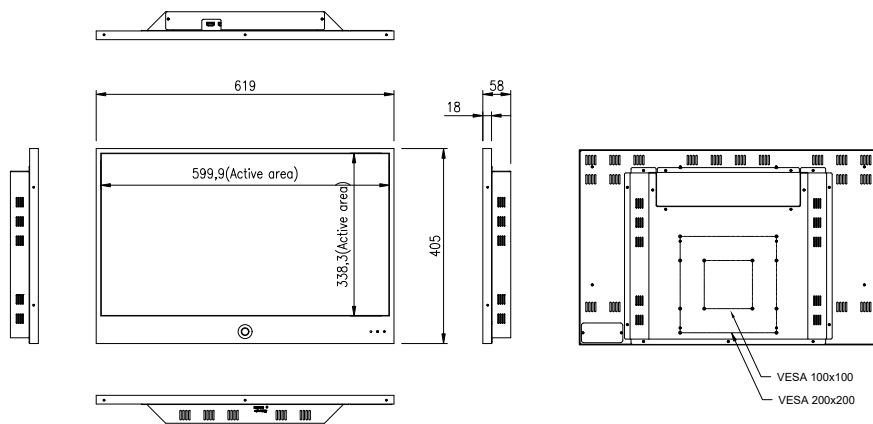
## Powering and networking



## MECHANICAL

### SMT-2731PV

unit : mm



- Since the use of a screw longer than the standard size may cause a problem, the above recommended screw must be used.

# TROUBLESHOOTING

---

When the following troubles are occurred, follow the trouble shooting.  
Before contacting service center.

| Problems and Symptoms              | Troubleshooting                                                                                                                                                                                    |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The screen doesn't show up         | <ul style="list-style-type: none"><li>• Make sure if the power supply is connected property</li><li>• Turn on the power.</li><li>• Select the input signal right for the connected port.</li></ul> |
| The screen is too light or to dark | <ul style="list-style-type: none"><li>• Control the BRIGHTNESS</li></ul>                                                                                                                           |



Hanwa Vision cares for the environment at all product manufacturing stages, and is taking measures to provide customers with more environmentally friendly products.

The Eco mark represents Hanwa Vision's devotion to creating environmentally friendly products, and indicates that the product satisfies the EU RoHS Directive.



### Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.



### Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.





The following Page(s) are related to Miscellaneous-01. The next supplement, if applicable, will be identified with a new Supplement Page Heading.

Public View Monitor  
MODEL: SMT-2731PV  
INPUT : DC24V  $\overline{=}$  1.20A  
HPoE(53V  $\overline{=}$  ) 0.60A  
M/C: SMT-2731PV/KUS



2023.08 S/N: ZTCG71MW800001L

MAC ADDRESS: E4-30-22-E7-CC-1E

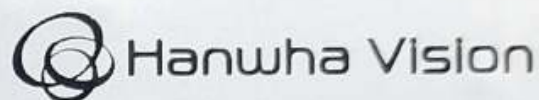
Canada ICES-003 Class A /

Canada NMB-003 Class A

Factory ID : 0

Made in Korea

Hanwha Vision Co., Ltd



I.T.E.

US LISTED  
E158873



WARNING : TO PREVENT FIRE OR SHOCK HAZARD  
DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE  
AVIS : RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR

The following Page(s) are related to Miscellaneous-02. The next supplement, if applicable, will be identified with a new Supplement Page Heading.

|          |  |
|----------|--|
| CUSTOMER |  |
|----------|--|

# SPECIFICATIONS

|             |                       |
|-------------|-----------------------|
| ITEM        | SWITCHING TRANSFORMER |
| DISCRIPTION | EFD2020 H 6+6 SMD     |
| CODE NO     |                       |
| MODEL NO.   | 7030BT                |
| DATE        | 2022.07.18            |

Approve by

WEIHAI YILIAN ELECTRICS CO.,LTD

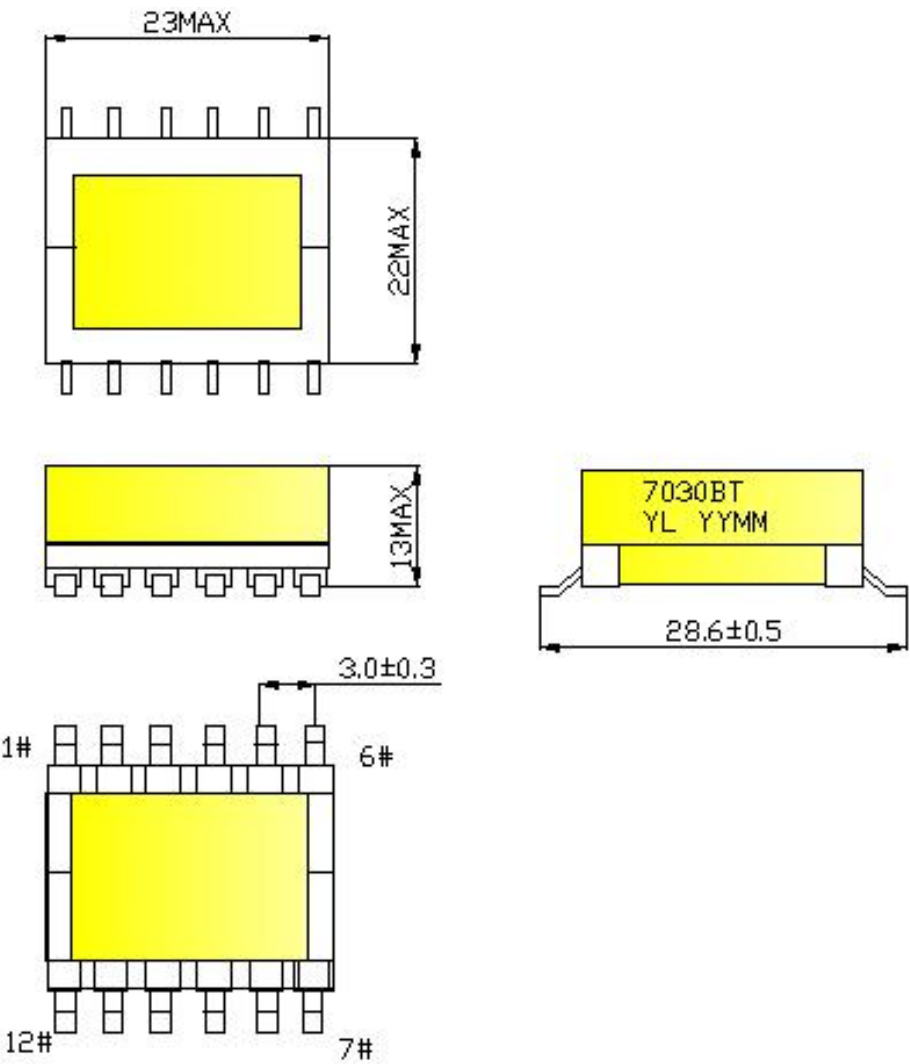
WEIHAI JINGJIJISHUKAIFAQU HUANSHANLUXI

DONGSHANKOUCUNBEI SHANDONG CHINA

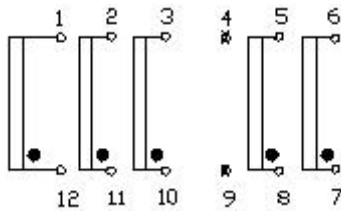
TEL 13563133134

|                |             |            |                   |
|----------------|-------------|------------|-------------------|
| SPECIFICATIONS |             | SHEET NO.  | 2 OF 9            |
| PART NAME      | TRANSFORMER | MODEL NAME |                   |
| PART NO.       | 7030BT      | TYPE       | EFD2020 H 6+6 SMD |

1、 DIMENSION ( unit : mm )



| NO. | REVISION | DESIGN     | CHECK      | APPROVAL   |
|-----|----------|------------|------------|------------|
|     |          | 丁春敏        | 高秀菊        | 沙芳芳        |
|     |          |            |            |            |
|     |          |            |            |            |
|     |          | 2022.07.18 | 2022.07.18 | 2022.07.18 |

| SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |             |             | SHEET NO.  |                  | 3 OF 9            |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------|-------------|------------|------------------|-------------------|------------|---------|----------------|-------|---------------|-----------|----------------|------------|------|--------------|---------|---|---|------|-----|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|----|---|---|------------|----|----------|-------------------|---|------|-------|----------------|------------|---|--------------|---|------------------|-------------------|-----|-----|-----|-----|----|-------------|----|----|---|-------------|----|----------|-------------------|---|------------|----|----------|-------------------|---|-------------|---|------------------|-------------------|---|-------------|---|------------------|-------------------|-------------|---|----|----|-------------|-------------|----|----|---|-------------|----|----------|-------------------|---|------------|----|----------|-------------------|---|-------------|---|------------------|-------------------|---|------------|---|-------|-------------------|-------------|---|----|------------------|-------------|---|----|---|---|-----------------|----|----------|-------------------|-----|--|----------|----|---|--------|------------|----------|-------|-------------------|---|--|--|------------------|-----|-----|-----|--|--|-----------------|---|--|--|-----|--|----------|--|--|--------|-------|----------|--|---|------------|------------|------------|--|-----|-----|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|------------|------------|--|
| PART NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                | TRANSFORMER |             | MODEL NAME |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| PART NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                | 7030BT      |             | TYPE       |                  | EFD2020 H 6+6 SMD |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| <div><div><div>2、PIN CONNECTION</div><div></div></div><div><table><tr><th>WINDING</th><th>SECONDARY VIEW</th><th>C.C.W</th></tr><tr><td>BOBBIN INSERT</td><td colspan="2">SECONDARY</td></tr><tr><td>REMOVE PIN</td><td colspan="2">4,9#</td></tr><tr><td>CUT PIN</td><td colspan="2"></td></tr><tr><td>TUBE</td><td colspan="2"></td></tr></table></div><div>“●” MARKS ARE START POINT</div></div> <tr><td colspan="8"><div><div>3、WINDING SPECIFICATION</div><table><tr><th rowspan="3"></th><th colspan="2">TERMNAL</th><th rowspan="3">WIRE</th><th rowspan="3">TURNS</th><th rowspan="3">WINDING METHOD</th><th colspan="2">INSULATION</th><th colspan="2">BARRIER TAPE</th></tr><tr><th rowspan="2">S</th><th rowspan="2">F</th><th rowspan="2">T/W</th><th rowspan="2">T/S</th><th>PRI</th><th>SEC</th></tr><tr><th>mm</th><th>`mm</th></tr><tr><td>N1</td><td>7</td><td>6</td><td>UEW0.26Φ×2</td><td>20</td><td>SOLENOID</td><td>0.025T*13.5 mm(Y)</td><td>1</td><td></td><td></td></tr><tr><td rowspan="3">N2</td><td>12</td><td>1</td><td>UEW 0.32Φ×2</td><td>5</td><td rowspan="3">BIFILAR SOLENOID</td><td rowspan="3">0.025T*13.5 mm(Y)</td><td rowspan="3">1</td><td rowspan="3"></td><td rowspan="3"></td></tr><tr><td>11</td><td>2</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>10</td><td>3</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>N3</td><td>7</td><td>6</td><td>UEW0.26Φ×2</td><td>20</td><td>SOLENOID</td><td>0.025T*13.5 mm(Y)</td><td>1</td><td></td><td></td></tr><tr><td rowspan="3">N4</td><td>12</td><td>1</td><td>UEW 0.32Φ×2</td><td>5</td><td rowspan="3">BIFILAR SOLENOID</td><td rowspan="3">0.025T*13.5 mm(Y)</td><td rowspan="3">1</td><td rowspan="3"></td><td rowspan="3"></td></tr><tr><td>11</td><td>2</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>10</td><td>3</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>N5</td><td>7</td><td>6</td><td>UEW0.26Φ×2</td><td>20</td><td>SOLENOID</td><td>0.025T*13.5 mm(Y)</td><td>1</td><td></td><td></td></tr><tr><td>N6</td><td>8</td><td>5</td><td>UEW0.15Φ×1</td><td>5</td><td>SPACE</td><td>0.025T*13.5 mm(Y)</td><td>3</td><td></td><td></td></tr><tr><td colspan="6">CORE FIXING TAPE</td><td>0.025t*6.5mm(Y)</td><td>3</td><td></td><td></td></tr></table></div><tr><td colspan="2">NO.</td><td colspan="3">REVISION</td><td colspan="1">DESIGN</td><td colspan="1">CHECK</td><td colspan="2">APPROVAL</td></tr><tr><td colspan="2">1</td><td colspan="3"></td><td colspan="1" rowspan="3">丁春敏</td><td colspan="1" rowspan="3">高秀菊</td><td colspan="2" rowspan="3">沙芳芳</td></tr><tr><td colspan="2"></td><td colspan="3"></td></tr><tr><td colspan="2"></td><td colspan="3"></td></tr><tr><td colspan="2"></td><td colspan="3"></td><td colspan="1">2017.04.05</td><td colspan="1">2017.04.05</td><td colspan="2">2017.04.05</td></tr></td></tr> |                |             |             |            |                  |                   |            | WINDING | SECONDARY VIEW | C.C.W | BOBBIN INSERT | SECONDARY |                | REMOVE PIN | 4,9# |              | CUT PIN |   |   | TUBE |     |     | <div><div>3、WINDING SPECIFICATION</div><table><tr><th rowspan="3"></th><th colspan="2">TERMNAL</th><th rowspan="3">WIRE</th><th rowspan="3">TURNS</th><th rowspan="3">WINDING METHOD</th><th colspan="2">INSULATION</th><th colspan="2">BARRIER TAPE</th></tr><tr><th rowspan="2">S</th><th rowspan="2">F</th><th rowspan="2">T/W</th><th rowspan="2">T/S</th><th>PRI</th><th>SEC</th></tr><tr><th>mm</th><th>`mm</th></tr><tr><td>N1</td><td>7</td><td>6</td><td>UEW0.26Φ×2</td><td>20</td><td>SOLENOID</td><td>0.025T*13.5 mm(Y)</td><td>1</td><td></td><td></td></tr><tr><td rowspan="3">N2</td><td>12</td><td>1</td><td>UEW 0.32Φ×2</td><td>5</td><td rowspan="3">BIFILAR SOLENOID</td><td rowspan="3">0.025T*13.5 mm(Y)</td><td rowspan="3">1</td><td rowspan="3"></td><td rowspan="3"></td></tr><tr><td>11</td><td>2</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>10</td><td>3</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>N3</td><td>7</td><td>6</td><td>UEW0.26Φ×2</td><td>20</td><td>SOLENOID</td><td>0.025T*13.5 mm(Y)</td><td>1</td><td></td><td></td></tr><tr><td rowspan="3">N4</td><td>12</td><td>1</td><td>UEW 0.32Φ×2</td><td>5</td><td rowspan="3">BIFILAR SOLENOID</td><td rowspan="3">0.025T*13.5 mm(Y)</td><td rowspan="3">1</td><td rowspan="3"></td><td rowspan="3"></td></tr><tr><td>11</td><td>2</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>10</td><td>3</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>N5</td><td>7</td><td>6</td><td>UEW0.26Φ×2</td><td>20</td><td>SOLENOID</td><td>0.025T*13.5 mm(Y)</td><td>1</td><td></td><td></td></tr><tr><td>N6</td><td>8</td><td>5</td><td>UEW0.15Φ×1</td><td>5</td><td>SPACE</td><td>0.025T*13.5 mm(Y)</td><td>3</td><td></td><td></td></tr><tr><td colspan="6">CORE FIXING TAPE</td><td>0.025t*6.5mm(Y)</td><td>3</td><td></td><td></td></tr></table></div> <tr><td colspan="2">NO.</td><td colspan="3">REVISION</td><td colspan="1">DESIGN</td><td colspan="1">CHECK</td><td colspan="2">APPROVAL</td></tr> <tr><td colspan="2">1</td><td colspan="3"></td><td colspan="1" rowspan="3">丁春敏</td><td colspan="1" rowspan="3">高秀菊</td><td colspan="2" rowspan="3">沙芳芳</td></tr> <tr><td colspan="2"></td><td colspan="3"></td></tr> <tr><td colspan="2"></td><td colspan="3"></td></tr> <tr><td colspan="2"></td><td colspan="3"></td><td colspan="1">2017.04.05</td><td colspan="1">2017.04.05</td><td colspan="2">2017.04.05</td></tr> |    |     |    |   |   |            |    |          | TERMNAL           |   | WIRE | TURNS | WINDING METHOD | INSULATION |   | BARRIER TAPE |   | S                | F                 | T/W | T/S | PRI | SEC | mm | `mm         | N1 | 7  | 6 | UEW0.26Φ×2  | 20 | SOLENOID | 0.025T*13.5 mm(Y) | 1 |            |    | N2       | 12                | 1 | UEW 0.32Φ×2 | 5 | BIFILAR SOLENOID | 0.025T*13.5 mm(Y) | 1 |             |   | 11               | 2                 | UEW 0.32Φ×2 | 5 | 10 | 3  | UEW 0.32Φ×2 | 5           | N3 | 7  | 6 | UEW0.26Φ×2  | 20 | SOLENOID | 0.025T*13.5 mm(Y) | 1 |            |    | N4       | 12                | 1 | UEW 0.32Φ×2 | 5 | BIFILAR SOLENOID | 0.025T*13.5 mm(Y) | 1 |            |   | 11    | 2                 | UEW 0.32Φ×2 | 5 | 10 | 3                | UEW 0.32Φ×2 | 5 | N5 | 7 | 6 | UEW0.26Φ×2      | 20 | SOLENOID | 0.025T*13.5 mm(Y) | 1   |  |          | N6 | 8 | 5      | UEW0.15Φ×1 | 5        | SPACE | 0.025T*13.5 mm(Y) | 3 |  |  | CORE FIXING TAPE |     |     |     |  |  | 0.025t*6.5mm(Y) | 3 |  |  | NO. |  | REVISION |  |  | DESIGN | CHECK | APPROVAL |  | 1 |            |            |            |  | 丁春敏 | 高秀菊 | 沙芳芳 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2017.04.05 | 2017.04.05 | 2017.04.05 |  |
| WINDING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SECONDARY VIEW | C.C.W       |             |            |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| BOBBIN INSERT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | SECONDARY      |             |             |            |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| REMOVE PIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 4,9#           |             |             |            |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| CUT PIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |             |             |            |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| TUBE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                |             |             |            |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| <div><div>3、WINDING SPECIFICATION</div><table><tr><th rowspan="3"></th><th colspan="2">TERMNAL</th><th rowspan="3">WIRE</th><th rowspan="3">TURNS</th><th rowspan="3">WINDING METHOD</th><th colspan="2">INSULATION</th><th colspan="2">BARRIER TAPE</th></tr><tr><th rowspan="2">S</th><th rowspan="2">F</th><th rowspan="2">T/W</th><th rowspan="2">T/S</th><th>PRI</th><th>SEC</th></tr><tr><th>mm</th><th>`mm</th></tr><tr><td>N1</td><td>7</td><td>6</td><td>UEW0.26Φ×2</td><td>20</td><td>SOLENOID</td><td>0.025T*13.5 mm(Y)</td><td>1</td><td></td><td></td></tr><tr><td rowspan="3">N2</td><td>12</td><td>1</td><td>UEW 0.32Φ×2</td><td>5</td><td rowspan="3">BIFILAR SOLENOID</td><td rowspan="3">0.025T*13.5 mm(Y)</td><td rowspan="3">1</td><td rowspan="3"></td><td rowspan="3"></td></tr><tr><td>11</td><td>2</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>10</td><td>3</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>N3</td><td>7</td><td>6</td><td>UEW0.26Φ×2</td><td>20</td><td>SOLENOID</td><td>0.025T*13.5 mm(Y)</td><td>1</td><td></td><td></td></tr><tr><td rowspan="3">N4</td><td>12</td><td>1</td><td>UEW 0.32Φ×2</td><td>5</td><td rowspan="3">BIFILAR SOLENOID</td><td rowspan="3">0.025T*13.5 mm(Y)</td><td rowspan="3">1</td><td rowspan="3"></td><td rowspan="3"></td></tr><tr><td>11</td><td>2</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>10</td><td>3</td><td>UEW 0.32Φ×2</td><td>5</td></tr><tr><td>N5</td><td>7</td><td>6</td><td>UEW0.26Φ×2</td><td>20</td><td>SOLENOID</td><td>0.025T*13.5 mm(Y)</td><td>1</td><td></td><td></td></tr><tr><td>N6</td><td>8</td><td>5</td><td>UEW0.15Φ×1</td><td>5</td><td>SPACE</td><td>0.025T*13.5 mm(Y)</td><td>3</td><td></td><td></td></tr><tr><td colspan="6">CORE FIXING TAPE</td><td>0.025t*6.5mm(Y)</td><td>3</td><td></td><td></td></tr></table></div> <tr><td colspan="2">NO.</td><td colspan="3">REVISION</td><td colspan="1">DESIGN</td><td colspan="1">CHECK</td><td colspan="2">APPROVAL</td></tr> <tr><td colspan="2">1</td><td colspan="3"></td><td colspan="1" rowspan="3">丁春敏</td><td colspan="1" rowspan="3">高秀菊</td><td colspan="2" rowspan="3">沙芳芳</td></tr> <tr><td colspan="2"></td><td colspan="3"></td></tr> <tr><td colspan="2"></td><td colspan="3"></td></tr> <tr><td colspan="2"></td><td colspan="3"></td><td colspan="1">2017.04.05</td><td colspan="1">2017.04.05</td><td colspan="2">2017.04.05</td></tr>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |             |             |            |                  |                   |            |         | TERMNAL        |       | WIRE          | TURNS     | WINDING METHOD | INSULATION |      | BARRIER TAPE |         | S | F | T/W  | T/S | PRI | SEC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | mm | `mm | N1 | 7 | 6 | UEW0.26Φ×2 | 20 | SOLENOID | 0.025T*13.5 mm(Y) | 1 |      |       | N2             | 12         | 1 | UEW 0.32Φ×2  | 5 | BIFILAR SOLENOID | 0.025T*13.5 mm(Y) | 1   |     |     | 11  | 2  | UEW 0.32Φ×2 | 5  | 10 | 3 | UEW 0.32Φ×2 | 5  | N3       | 7                 | 6 | UEW0.26Φ×2 | 20 | SOLENOID | 0.025T*13.5 mm(Y) | 1 |             |   | N4               | 12                | 1 | UEW 0.32Φ×2 | 5 | BIFILAR SOLENOID | 0.025T*13.5 mm(Y) | 1           |   |    | 11 | 2           | UEW 0.32Φ×2 | 5  | 10 | 3 | UEW 0.32Φ×2 | 5  | N5       | 7                 | 6 | UEW0.26Φ×2 | 20 | SOLENOID | 0.025T*13.5 mm(Y) | 1 |             |   | N6               | 8                 | 5 | UEW0.15Φ×1 | 5 | SPACE | 0.025T*13.5 mm(Y) | 3           |   |    | CORE FIXING TAPE |             |   |    |   |   | 0.025t*6.5mm(Y) | 3  |          |                   | NO. |  | REVISION |    |   | DESIGN | CHECK      | APPROVAL |       | 1                 |   |  |  |                  | 丁春敏 | 高秀菊 | 沙芳芳 |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   | 2017.04.05 | 2017.04.05 | 2017.04.05 |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TERMNAL        |             | WIRE        | TURNS      | WINDING METHOD   | INSULATION        |            |         | BARRIER TAPE   |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | S              | F           |             |            |                  | T/W               | T/S        |         | PRI            | SEC   |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |             |             |            |                  |                   |            | mm      | `mm            |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| N1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7              | 6           | UEW0.26Φ×2  | 20         | SOLENOID         | 0.025T*13.5 mm(Y) | 1          |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| N2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 12             | 1           | UEW 0.32Φ×2 | 5          | BIFILAR SOLENOID | 0.025T*13.5 mm(Y) | 1          |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 11             | 2           | UEW 0.32Φ×2 | 5          |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10             | 3           | UEW 0.32Φ×2 | 5          |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| N3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7              | 6           | UEW0.26Φ×2  | 20         | SOLENOID         | 0.025T*13.5 mm(Y) | 1          |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| N4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 12             | 1           | UEW 0.32Φ×2 | 5          | BIFILAR SOLENOID | 0.025T*13.5 mm(Y) | 1          |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 11             | 2           | UEW 0.32Φ×2 | 5          |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10             | 3           | UEW 0.32Φ×2 | 5          |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| N5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7              | 6           | UEW0.26Φ×2  | 20         | SOLENOID         | 0.025T*13.5 mm(Y) | 1          |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| N6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8              | 5           | UEW0.15Φ×1  | 5          | SPACE            | 0.025T*13.5 mm(Y) | 3          |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| CORE FIXING TAPE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |             |             |            |                  | 0.025t*6.5mm(Y)   | 3          |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                | REVISION    |             |            | DESIGN           | CHECK             | APPROVAL   |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |             |             |            | 丁春敏              | 高秀菊               | 沙芳芳        |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |             |             |            |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |             |             |            |                  |                   |            |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |             |             |            | 2017.04.05       | 2017.04.05        | 2017.04.05 |         |                |       |               |           |                |            |      |              |         |   |   |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |     |    |   |   |            |    |          |                   |   |      |       |                |            |   |              |   |                  |                   |     |     |     |     |    |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |             |   |                  |                   |             |   |    |    |             |             |    |    |   |             |    |          |                   |   |            |    |          |                   |   |             |   |                  |                   |   |            |   |       |                   |             |   |    |                  |             |   |    |   |   |                 |    |          |                   |     |  |          |    |   |        |            |          |       |                   |   |  |  |                  |     |     |     |  |  |                 |   |  |  |     |  |          |  |  |        |       |          |  |   |            |            |            |  |     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |            |            |  |

| NO. | REVISION | DESIGN     | CHECK      | APPROVAL   |
|-----|----------|------------|------------|------------|
| 1   |          | 丁春敏        | 高秀菊        | 沙芳芳        |
|     |          |            |            |            |
|     |          |            |            |            |
|     |          | 2017.04.05 | 2017.04.05 | 2017.04.05 |



| SPECIFICATIONS      |                      | SHEET NO.                                           | 6 OF 9                                                     |                   |            |
|---------------------|----------------------|-----------------------------------------------------|------------------------------------------------------------|-------------------|------------|
| PART NAME           |                      | TRANSFORMER                                         | MODEL NAME                                                 |                   |            |
| PART NO.            |                      | 7030BT                                              | TYPE                                                       | EFD2020 H 6+6 SMD |            |
| 6、LIST OF MATERIALS |                      |                                                     |                                                            |                   |            |
| NO                  | COMPONENT            | MATERIALS                                           | MANUFACTURES                                               | UL<br>FILE NO     |            |
| 1                   | CORE                 | EFD2020 PC40                                        | SHANGHAI JISHUN ELECTRONICS CO.,LTD                        |                   |            |
|                     |                      | EFD2020 PC40                                        | SUZHOU GUANDA ELECTRONICS CO.,LTD                          |                   |            |
|                     |                      | EFD2020 PC40                                        | ZAOZHUANG XIANGSHENG ELECTRONICS CO.,LTD                   |                   |            |
| 2                   | BOBBIN               | PHENOLIC (94V-0),<br>EFD2020,12PIN(6+6)             | CHANG CHUN PLASTICS CO.,LTD                                | E59481            |            |
| 3                   | WIRE                 | POLYURETHANE<br>UEW Φ0.26<br>UEW Φ0.32<br>UEW Φ0.15 | JIANGSU DATONG QINGJIANG M&E CO.,LTD                       | E237377           |            |
| 4                   | INSULATION<br>TAPE   | POLYESTER TAPE<br>0.025*13.5Y                       | GUANGDONG KANGLI NEW ENERGY<br>MATERIAL TECHNOLOGY CO.,LTD | E511186           |            |
| 5                   | CORE FIXXING<br>TAPE | POLYESTER TAPE<br>0.025*6.5Y                        |                                                            |                   |            |
| 6                   | VARNISH              | VARNISH<br>DVA-1411                                 | JIANGYIN CITY DENG FENG ELETRICAL<br>MATERIAL CO.,LTD      | E236421           |            |
| 7                   | SOLDER               | Sn 99.3% BAR                                        | TIANJIN SONGBEN ENVIRONMENTAL<br>PROTECTION CO., LTD       |                   |            |
| 8                   | FLUX                 | Pb FREE                                             |                                                            |                   |            |
| 9                   | MARKING              | INK                                                 | WUHAN WIDODA CO., LTD.                                     |                   |            |
|                     |                      |                                                     |                                                            |                   |            |
| NO.                 | REVISION             |                                                     | DESIGN                                                     | CHECK             | APPROVAL   |
|                     |                      |                                                     | 丁春敏                                                        | 高秀菊               | 沙芳芳        |
|                     |                      |                                                     |                                                            |                   |            |
|                     |                      |                                                     |                                                            |                   |            |
|                     |                      |                                                     | 2022.07.18                                                 | 2022.07.18        | 2022.07.18 |



|                |             |            |                   |
|----------------|-------------|------------|-------------------|
| SPECIFICATIONS |             | SHEET NO.  | 7 OF 9            |
| PART NAME      | TRANSFORMER | MODEL NAME |                   |
| PART NO.       | 7030BT      | TYPE       | EFD2020 H 6+6 SMD |

BOBBIN

Plastics - Component

[See General Information for Plastics - Component](#)

CHANG CHUN PLASTICS CO LTD

7TH FL

301 SONGKIANG RD

TAIPEI, 104 TAIWAN

E59481

|                                                                                                     |       |      |       |   |   |       |      |     |   |   |   |
|-----------------------------------------------------------------------------------------------------|-------|------|-------|---|---|-------|------|-----|---|---|---|
|                                                                                                     |       |      |       |   |   |       |      |     | H | D |   |
|                                                                                                     |       | Min. |       | H | H | R T I |      |     | V | 4 | C |
|                                                                                                     |       | Thk  | Flame | W | A | Elec  | Mech |     | T | 9 | T |
| Material Dsg                                                                                        | Color | mm   | Class | I | I |       | Imp  | Str | R | 5 | I |
| Epoxy Casting Compound (EP - Casting), potting, "SUMIKON", furnished as granular material, pellets. |       |      |       |   |   |       |      |     |   |   |   |
| EME-1200                                                                                            | BK    | 0.37 | V-0   | - | - | 130   | 130  | 130 | - | - | 2 |

WIRE

Magnet Wire - Component

JIANGSU DARTONG QINGJIANG M & E CO LTD

ECONOMY DEVELOPMENT ZONE 1 DARTONG RD, HUAIAN,

JIANGSU 223001 CHINA

E237377

| Mil Dsg | Mark Dsg | Coat Type       |                 | ANSI Type | Temp Class |
|---------|----------|-----------------|-----------------|-----------|------------|
| UEW     | (1)      | Polyurethane    | —               | MW 79-C   | 155        |
|         |          |                 |                 | MW 75-C   | 130        |
| EIW     | (1)      | Polyester-imide | —               | MW30#     | 180        |
|         |          |                 |                 | @         | 200        |
| UEW     | UEW/180  | Polyurethane    | —               | MW82      | 180        |
| EI/AIW  | (1)      | Polyester-imide | Polyamide-imide | MW35#     | 200        |
|         |          |                 |                 | MW73#     |            |
|         |          |                 |                 | @         | 220        |
| PEW     | (1)      | Polyester       | —               | MW5       | 155        |
| PEW/NY  | (1)      | Polyester       | Polyamide       | MW76      | 180        |
|         |          |                 |                 | MW24#     | 155        |
| UEW/NY  | (1)      | Polyurethane    | Polyamide       | MW80      | 155        |

8/23/2005

Underwriters Laboratories Inc.

Card 1 of 2

| NO. | REVISION | DESIGN     | CHECK      | APPROVAL   |
|-----|----------|------------|------------|------------|
|     |          | 丁春敏        | 高秀菊        | 沙芳芳        |
|     |          |            |            |            |
|     |          |            |            |            |
|     |          | 2022.07.18 | 2022.07.18 | 2022.07.18 |

|                |             |            |                   |
|----------------|-------------|------------|-------------------|
| SPECIFICATIONS |             | SHEET NO.  | 8 OF 9            |
| PART NAME      | TRANSFORMER | MODEL NAME |                   |
| PART NO.       | 7030BT      | TYPE       | EFD2020 H 6+6 SMD |

TAPE



| NO. | REVISION | DESIGN     | CHECK      | APPROVAL   |
|-----|----------|------------|------------|------------|
|     |          | 丁春敏        | 高秀菊        | 沙芳芳        |
|     |          |            |            |            |
|     |          |            |            |            |
|     |          | 2022.07.18 | 2022.07.18 | 2022.07.18 |

|                       |             |            |                   |
|-----------------------|-------------|------------|-------------------|
| <b>SPECIFICATIONS</b> |             | SHEET NO.  | 9 OF 9            |
| PART NAME             | TRANSFORMER | MODEL NAME |                   |
| PART NO.              | 7030BT      | TYPE       | EFD2020 H 6+6 SMD |

VARNISH

JIANGYIN CITY DENG FENG ELECTRICAL MATERIAL CO LTD

RIVER EAST ZHOU ZHANG TOWN JIANGYIN CITY, JIANSU

214423 CHINA

E236421

|          |           |     |                 |    |
|----------|-----------|-----|-----------------|----|
| Varnish  | ANSI      |     | Varnish         |    |
| Dsg      | Magnet    |     | Thermal Class C |    |
| 319-5(a) | Wire Type | TP  | HC              | CE |
|          | MW80      | 155 | —               | —  |
|          | MW76      | 180 | 180             | —  |
|          | MW5       | 155 | —               | —  |

Marking: Company name and varnish designation on shipping container.

---

See General Information Preceding These Recognitions  
 For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

| NO. | REVISION | DESIGN     | CHECK      | APPROVAL   |
|-----|----------|------------|------------|------------|
|     |          | 丁春敏        | 高秀菊        | 沙芳芳        |
|     |          |            |            |            |
|     |          |            |            |            |
|     |          | 2022.07.18 | 2022.07.18 | 2022.07.18 |

|      |     |
|------|-----|
| 승 인  |     |
| 정식승인 | ( ) |
| 한도승인 | ( ) |

# SPECIFICATIONS

|                  |                  |
|------------------|------------------|
| <b>CUSTOMER</b>  | 테크웨어(주)          |
| <b>PART NAME</b> | S/W TRANSFORMER  |
| <b>PART NO</b>   | TWC7030BT        |
| <b>MODEL NO</b>  |                  |
| <b>DATE</b>      | 2022 . 07 . 22 . |

|        |        |     |
|--------|--------|-----|
| 검 토    | 심 사    | 승 인 |
|        |        |     |
| 승인유효기간 | 승인일로부터 | 년   |

|       |                                                                                                                           |     |                  |
|-------|---------------------------------------------------------------------------------------------------------------------------|-----|------------------|
| 신청회사명 |  <b>KYUNGWON ELECTRONICS CO., LTD.</b> | TEL | 032 - 555 - 6715 |
|       |                                                                                                                           | FAX | 032 - 555 - 6716 |
| 주 소   | 738-3, Jakjeon-dong, Gyeyang-gu, Incheon, Korea                                                                           |     |                  |

# SPECIFICATIONS

SHEET NO.

1 OF 10

DATE

2022. 07. 22.

PART NAME

S/W TRANSFORMER

MODEL NO

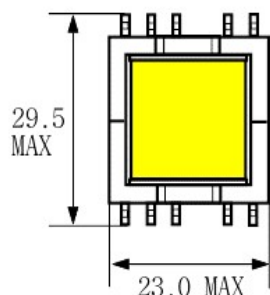
PART NO.

TWC7030BT

TYPE

EFD2020

1.DIMENSION(UNIT:mm)



\* MARKING (BLACK) \*

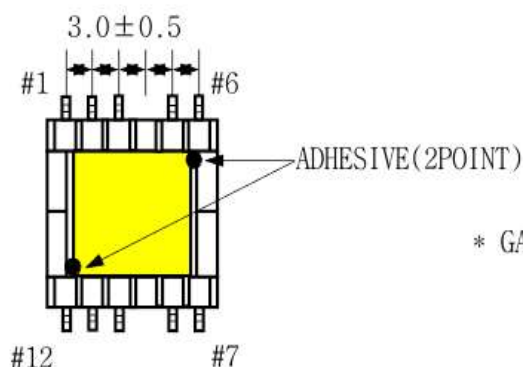
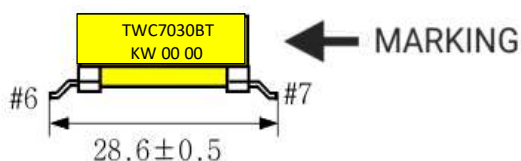
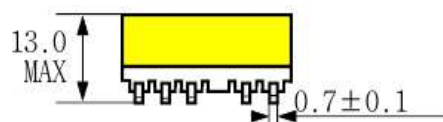
TWC7030 BT ← PART NO.

KW 00 00

제조주차

제조년

제조 MAKER



\* GAP : CENTER AIR GAP

KYUNGWON ELECTRONICS CO., LTD.

DESIGN

CHECK

APPROVAL

개발실

G.R.LEE

22.07.22

개발실

J.P.KIM

22.07.22

관리부

T.W.LEE

22.07.22

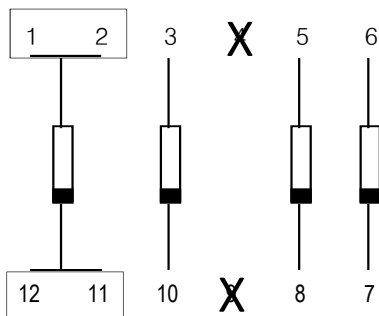
FILE NO.

KW - 220722 - 01

# SPECIFICATIONS

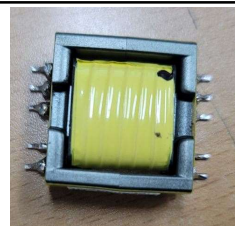
|           |                 |
|-----------|-----------------|
| SHEET NO. | 2 OF 10         |
| DATE      | 2022. 07. 22.   |
| PART NAME | S/W TRANSFORMER |
| PART NO.  | TWC7030BT       |
| MODEL NO  |                 |
| TYPE      | EFD2020         |

## 2. SCHEMATIC DIAGRAM (BOTTOM VIEW) \*\*중점관리 POINT: W6 간격 정렬 권선



\* BOBBIN INSERT : #1~#6 (한국권선기 기준)

\* PCB PATTEN간 SHORT : #1,2 / 11,12



|             |             |       |
|-------------|-------------|-------|
| WINDNG      | BOTTOM VIEW | C.C.W |
| TEFLON TUBE |             |       |
| REMOVE PIN  | # 4,9       |       |
| CUT PIN     | #           |       |

## 3. WINDING SPECIFICATION

| NO               | TERMINAL |   | WIRE            | Ts                                | WINDING METHOD   | INSULATION            |    | BARRIER |     |
|------------------|----------|---|-----------------|-----------------------------------|------------------|-----------------------|----|---------|-----|
|                  | S        | F |                 |                                   |                  | MATERIAL ( t / mm )   | Ts | PRI     | SEC |
| W1               | 7        | 6 | 2UEW 0.26Φ * 2P | 20                                | SOLENOID         | 0.025 /13.5<br>YELLOW | 1  |         |     |
| W2               | 12       | 1 | 2UEW 0.32Φ * 2P | 5                                 | BIFILAR SOLENOID | 0.025 /13.5<br>YELLOW | 1  |         |     |
|                  | 11       | 2 | 2UEW 0.32Φ * 2P | 5                                 |                  |                       |    |         |     |
|                  | 10       | 3 | 2UEW 0.32Φ * 2P | 5                                 |                  |                       |    |         |     |
| W3               | 7        | 6 | 2UEW 0.26Φ * 2P | 20                                | SOLENOID         | 0.025 /13.5<br>YELLOW | 1  |         |     |
| W4               | 12       | 1 | 2UEW 0.32Φ * 2P | 5                                 | BIFILAR SOLENOID | 0.025 /13.5<br>YELLOW | 1  |         |     |
|                  | 11       | 2 | 2UEW 0.32Φ * 2P | 5                                 |                  |                       |    |         |     |
|                  | 10       | 3 | 2UEW 0.32Φ * 2P | 5                                 |                  |                       |    |         |     |
| W5               | 7        | 6 | 2UEW 0.26Φ * 2P | 20                                | SOLENOID         | 0.025 /13.5<br>YELLOW | 1  |         |     |
| W6               | 8        | 5 | 2UEW 0.15Φ      | 5                                 | SPACE            | 0.025 /13.5<br>YELLOW | 2  |         |     |
| CORE FIXING TAPE |          |   |                 | POLYESTER TAPE YELLOW 0.025 / 6.0 |                  |                       | 2  |         |     |

KYUNGWON ELECTRONICS CO., LTD.

|                            |                            |                            |
|----------------------------|----------------------------|----------------------------|
| DESIGN                     | CHECK                      | APPROVAL                   |
| 개발실<br>G.R.LEE<br>22.07.22 | 개발실<br>J.P.KIM<br>22.07.22 | 관리부<br>T.W.LEE<br>22.07.22 |
| FILE NO.                   | KW - 220722 - 01           |                            |

# SPECIFICATIONS

SHEET NO.

3 OF 10

DATE

2022. 07. 22.

PART NAME

S/W TRANSFORMER

MODEL NO

PART NO.

TWC7030BT

TYPE

EFD2020

## 4. ELECTRICAL CHARACTERISTICS

| NO | CLOSURE               | TERMINAL NO.                       | SPECIFICATION                   | CONDITION                                          |
|----|-----------------------|------------------------------------|---------------------------------|----------------------------------------------------|
| 1  | INDUCTANCE            | 7 - 6                              | 50 $\mu$ H $\pm$ 10%            | LCR METER AG 4304<br>HP-4274A<br>at 100KHz 1V      |
| 2  | LEAKAGE INDUCTANCE    | 7 - 6<br>( SEC COIL<br>ALL SHORT ) | $\mu$ H MAX                     |                                                    |
| 3  | DC RESISTANCE (20℃)   |                                    | 1.0 ohm MAX                     | WHEATSTONE BRIDGE<br>HIOKI 3540 (m $\Omega$ METER) |
| 4  | WITHSTANDING VOLTAGE  | PRI. - CORE                        | AC 2.0 KV RMS<br>1 MIN. CC=10mA | KIKUSUI<br>TOS-5050 , TOS-8750                     |
|    |                       | SEC. - CORE                        | AC 2.0 KV RMS<br>1 MIN. CC=10mA |                                                    |
|    |                       | PRI. - SEC.                        | AC 3.0 KV RMS<br>1 MIN. CC=10mA |                                                    |
| 5  | INSULATION RESISTANCE | COIL - COIL<br>COIL - CORE         | 100 Mohm MIN<br>at DC 500V      | MEGOHM METER<br>(SM-5E)                            |

KYUNGWON ELECTRONICS CO., LTD.

DESIGN

CHECK

APPROVAL

개발실  
G.R.LEE  
22.07.22

개발실  
J.P.KIM  
22.07.22

관리부  
T.W.LEE  
22.07.22

FILE NO.

KW - 220722 - 01

# SPECIFICATIONS

SHEET NO.

4 OF 10

DATE

2022. 07. 22.

PART NAME

S/W TRANSFORMER

MODEL NO

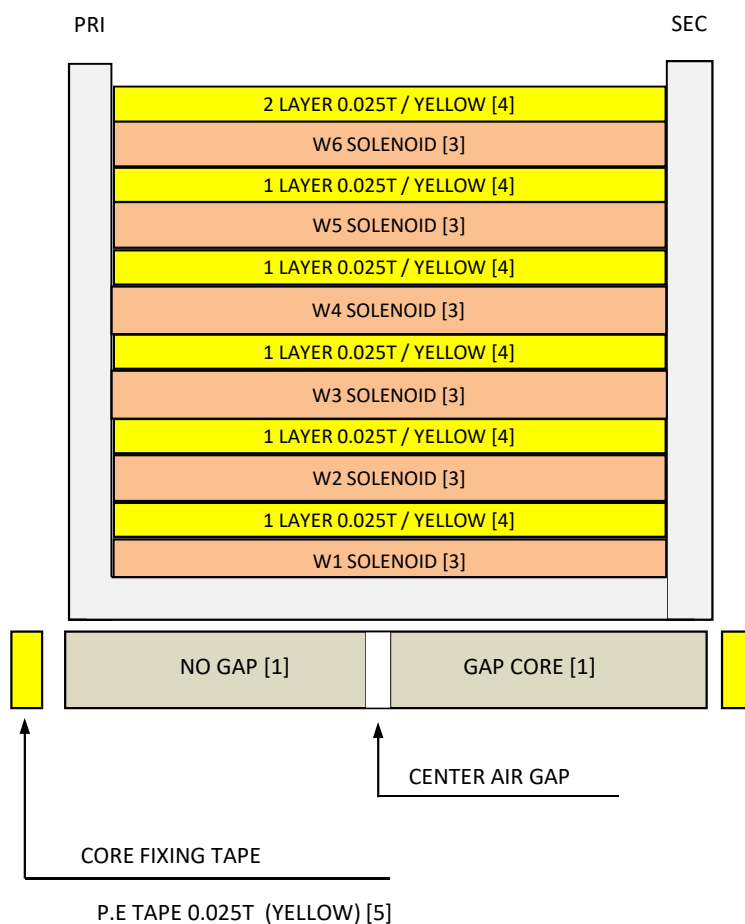
PART NO.

TWC7030BT

TYPE

EFD2020

## 5. CONSTRUCTION



\* WIRE :



\* TAPE :



KYUNGWON ELECTRONICS CO., LTD.

DESIGN

CHECK

APPROVAL



FILE NO.

KW - 220722 - 01



# SPECIFICATIONS

SHEET NO.

5 OF 10

DATE

2022. 07. 22.

PART NAME

S/W TRANSFORMER

MODEL NO

PART NO.

TWC7030BT

TYPE

EFD2020

## 6. MATERIAL LIST

| NO | COMPONENT        | NAME OF MATERIAL                                                                                                           | MANUFACTURER OF MATERIAL                                                                                                                                                          | REMARKS               |
|----|------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1  | CORE             | EFD 2020 (PM7)<br>EFD 2020 (NH2C)<br>EFD 2020 (GP4)<br>EFD 2020 (YR28)<br>EFD 2020 (KH40)<br>EFD 2020 (HX-4P)              | TODAISU CO.,LTD.<br>LFG MAGNETICS CO.,LTD.<br>GUANDA MAGNETICS CO.,LTD.<br>YAORUN ELECTRONICS<br>SHANDONG KAITONG ELECTRON CO.,LTD.<br>NANTONG HUAXING MAGNETIC MATERIAL CO.,LTD. |                       |
| 2  | BASE             | PHENOLIC 94V-0<br>EFD2020 12P SMD H-TYPE                                                                                   | CHANG CHUN PLASTICS CO.,LTD                                                                                                                                                       | E59481                |
| 3  | WIRE             | POLYURETHANE<br>2UEW 0.15Φ,0.26Φ,0.32Φ                                                                                     | TAIHAN ELECTRIC WIRE CO., LTD.<br>JIANGSU DARTONG M&E CO.,LTD                                                                                                                     | E109312(N)<br>E237377 |
| 4  | INSULATION TAPE  | POLYESTER FILM TAPE<br>0.025mm<br>CAT NO.DTS-204A or<br>CAT NO. 800<br>CAT NO. YL-168* or<br>CAT NO. YL-188*<br>CAT NO. CT | DUCKSUNG TAPE CO.,LTD.                                                                                                                                                            | E105147               |
| 5  | CORE FIXING TAPE | POLYESTER FILM TAPE<br>0.025mm<br>CAT NO.DTS-204A or<br>CAT NO. 800<br>CAT NO. YL-168* or<br>CAT NO. YL-188*<br>CAT NO. CT | WEIHAI KANGLI TAPE CO.,LTD                                                                                                                                                        | E475896               |
| 6  | SOLDER           | SN 98%, CU 2%                                                                                                              | ALPHA SOLDER CO.,LTD.<br>TIANJIAN SONGBEN TECHNOLOGY CO.,LTD                                                                                                                      |                       |
| 7  | VARNISH          | 319-5                                                                                                                      | JIANGYIN CITY DENG FENG ELECTICAL                                                                                                                                                 | E236421               |

KYUNGWON ELECTRONICS CO., LTD.

DESIGN

CHECK

APPROVAL

개발실  
G.R.LEE  
22.07.22

개발실  
J.P.KIM  
22.07.22

관리부  
T.W.LEE  
22.07.22

FILE NO.

KW - 220722 - 01

# SPECIFICATIONS

|           |               |
|-----------|---------------|
| SHEET NO. | 6 OF 10       |
| DATE      | 2022. 07. 22. |
| MODEL NO  |               |
| TYPE      | EFD2020       |

|           |                 |
|-----------|-----------------|
| PART NAME | S/W TRANSFORMER |
| PART NO.  | TWC7030BT       |

## 7. UL LIST



ONLINE CERTIFICATIONS DIRECTORY

[Home](#) [Quick Guide](#) [Contact Us](#) [UL.com](#)

### QMFZ2.E59481 Plastics - Component

For enhanced search functionality, please visit UL's [iQ™ Family of Databases](#).  
Click on a product designation for complete information.

[Page Bottom](#)

### Plastics - Component

[See General Information for Plastics - Component](#)

CHANG CHUN PLASTICS CO LTD  
7TH FL  
301 SONGKIANG RD  
TAIPEI, 104 TAIWAN

E59481

|              |       |      |       |   |   |       |      |     |   |   |   |
|--------------|-------|------|-------|---|---|-------|------|-----|---|---|---|
|              |       |      |       |   |   |       |      |     | H | D |   |
|              |       | Min. |       | H | H | R T I |      |     | V | 4 | C |
|              |       | Thk  | Flame | W | A | Elec  | Mech |     | T | 9 | T |
| Material Dsg | Color | mm   | Class | I | I |       | Imp  | Str | R | 5 | I |

Phenolic Molding Compound (PMC), "LONGLITE", furnished as granular material.

|       |        |      |     |   |   |     |     |     |   |   |   |
|-------|--------|------|-----|---|---|-----|-----|-----|---|---|---|
| T375J | BK, BN | 0.45 | V-0 | - | - | 150 | 150 | 150 | 4 | 5 | 3 |
|       |        | 0.75 | V-0 | 1 | 0 | 150 | 150 | 150 |   |   |   |
|       |        | 1.5  | V-0 | 0 | 0 | 150 | 150 | 150 |   |   |   |
|       |        | 3.0  | V-0 | 0 | 0 | 150 | 150 | 150 |   |   |   |

KYUNGWON ELECTRONICS CO., LTD.

DESIGN

CHECK

APPROVAL



FILE NO.

KW - 220722 - 01

# SPECIFICATIONS

|           |               |
|-----------|---------------|
| SHEET NO. | 8 OF 10       |
| DATE      | 2022. 07. 22. |
| MODEL NO  |               |
| TYPE      | EFD2020       |

|           |                 |
|-----------|-----------------|
| PART NAME | S/W TRANSFORMER |
| PART NO.  | TWC7030BT       |

## Magnet Wire - Component

[See General Information for Magnet Wire - Component](#)

JIANGSU DARTONG M & E CO LTD  
1 DARTONG RD  
HUAIAN ECONOMY DEVELOPMENT ZONE  
HUAIAN, JIANGSU 223238 CHINA

E237377

| Material Designation | Mark Dsg           | Base Coat       | Top Coat        | ANSI Type | Temp Class |
|----------------------|--------------------|-----------------|-----------------|-----------|------------|
| Q (ZY/XY) BP-x/200   | Q (ZY/XY) BP-x/200 | Polyester       | Polyamide-imide | MW 35-C   | 200        |
|                      |                    | Polyester       | Polyamide-imide | MW 73-C   | 200        |
| QY(F)x/240/UL        | QY(F)x/240/UL      | Polyimide       | -               | MW 16-C   | 240        |
| xEI/AIW              | xEI/AIW            | Polyester-imide | Polyamide-imide | MW 37-C   | 220        |
|                      |                    | Polyester-imide | Polyamide-imide | MW 35-C   | 200[#]     |
|                      |                    | Polyester-imide | Polyamide-imide | MW 73-C   | 200[#]     |
| xEI/AIW-220(AL)      | xEI/AIW-220(AL)    | Polyester-imide | Polyamide-imide | MW 35-A   | 220        |
| xEIW                 | xEIW               | Polyester-imide | -               | MW 30-C   | 180[#]     |
| xPEW                 | xPEW               | Polyester       | -               | MW 5-C    | 155[#]     |
| xPEW/NY              | xPEW/NY            | Polyester       | Polyamide       | MW 76-C   | 180        |
|                      |                    | Polyester       | Polyamide       | MW 24-C   | 155[#]     |
| xUEW                 | xUEW               | Polyurethane    | -               | MW 79-C   | 155        |
|                      |                    | Polyurethane    | -               | MW 75-C   | 130        |
| xUEW/180             | xUEW/180           | Polyurethane    | -               | MW 82-C   | 180        |
| xUEW/NY              | xUEW/NY            | Polyurethane    | Polyamide       | MW 80-C   | 155[#]     |
|                      |                    | Polyurethane    | Polyamide       | MW 28-C   | 130[#]     |

KYUNGWON ELECTRONICS CO., LTD.

| DESIGN                     | CHECK                      | APPROVAL                   |
|----------------------------|----------------------------|----------------------------|
| 개발실<br>G.R.LEE<br>22.07.22 | 개발실<br>J.P.KIM<br>22.07.22 | 관리부<br>T.W.LEE<br>22.07.22 |
| FILE NO.                   | KW - 220722 - 01           |                            |

# SPECIFICATIONS

|           |               |
|-----------|---------------|
| SHEET NO. | 9 OF 10       |
| DATE      | 2022. 07. 22. |
| MODEL NO  |               |
| TYPE      | EFD2020       |

|           |                 |
|-----------|-----------------|
| PART NAME | S/W TRANSFORMER |
| PART NO.  | TWC7030BT       |

## Insulating Tape

[See General Information for Insulating Tape](#)

DUCK SUNG HITECH CO LTD

E105147

225-2 SHINNEUNG-RI SEOUN-MYEON

ANSEONG-SI, GYEONGGI-DO 456-850 REPUBLIC OF KOREA

|                                                                                    |                  |                  |                     |                 |
|------------------------------------------------------------------------------------|------------------|------------------|---------------------|-----------------|
|                                                                                    |                  | Optional Ratings |                     |                 |
| Cat. No.                                                                           | Color            | Flame Retardant+ | Sunlight Resistant+ | Cold Resistant+ |
| Thermoplastic PVC tapes with synthetic rubber adhesive. For use as sole insulation |                  |                  |                     |                 |
| 270D                                                                               | All except clear | Yes              | Yes                 | Yes             |

+ Complies with "Flame Retardant" and/or "Cold Resistant" and/or "Sunlight Resistant" requirements if authorized in the table above and when so marked.

Trademark and/or Tradename: "E105147",



[Last Updated](#) on 2015-06-24

## Insulating Tape - Component

[See General Information for Insulating Tape - Component](#)

WEIHAI KANGLI TAPE CO LTD

E475896

No.233 Huoju Road, High-tech Industrial Development Zone

Weihai city, Shandong 264200 CHINA

|                                                                      |                  |           | Optional Ratings |                     |                 |
|----------------------------------------------------------------------|------------------|-----------|------------------|---------------------|-----------------|
| Cat. No.                                                             | Color            | Temp (°C) | Flame Retardant+ | Sunlight Resistant+ | Cold Resistant+ |
| PET film with acrylic adhesive insulating tape                       |                  |           |                  |                     |                 |
| KL-168                                                               | All except clear | 130       | Yes              | No                  | No              |
| PET film / Nonwoven cloth tape with acrylic adhesive insulating tape |                  |           |                  |                     |                 |
| KL-188                                                               | White            | 130       | Yes              | No                  | No              |

+ Complies with "Flame Retardant" and/or "Cold Resistant" and/or "Sunlight Resistant" requirements if authorized in the table above and when so marked.

Marking: Company name and catalog designation printed on the central paper core or outer package.

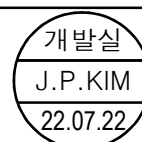
[Last Updated](#) on 2016-03-26

KYUNGWON ELECTRONICS CO., LTD.

DESIGN

CHECK

APPROVAL



FILE NO.

KW - 220722 - 01

# SPECIFICATIONS

|           |               |
|-----------|---------------|
| SHEET NO. | 10 OF 10      |
| DATE      | 2022. 07. 22. |
| MODEL NO  |               |
| TYPE      | EFD2020       |

|           |                 |
|-----------|-----------------|
| PART NAME | S/W TRANSFORMER |
| PART NO.  | TWC7030BT       |

## Varnishes - Component

[See General Information for Varnishes - Component](#)

JIANGYIN CITY DENG FENG ELECTRICAL MATERIAL CO LTD  
 ZHOUSHUANG VILLAGE  
 ZHOUSHUANG TOWN  
 JIANGYIN, JIANGSU 214423 CHINA

E236421

| Varnish Designation | ANSI Type | Thermal Class (°C) |              |                  |
|---------------------|-----------|--------------------|--------------|------------------|
|                     |           | Twisted Pair       | Helical Coil | Curved Electrode |
| 319-5(a)            | MW 5-C    | 155                | -            | -                |
|                     | MW 76-C   | 180                | 180          | -                |
|                     | MW 80-C   | 155                | -            | -                |

(a) - May be followed by one or two numbers and/or one or two letters indicating the viscosity changes accomplished via inorganic fillers, solvents or a small amount of monomer.

Marking: Company name and model designation.

[Last Updated](#) on 2014-05-26

KYUNGWON ELECTRONICS CO., LTD.

|                            |                            |                            |
|----------------------------|----------------------------|----------------------------|
| DESIGN                     | CHECK                      | APPROVAL                   |
| 개발실<br>G.R.LEE<br>22.07.22 | 개발실<br>J.P.KIM<br>22.07.22 | 관리부<br>T.W.LEE<br>22.07.22 |
| FILE NO.                   | KW - 220722 - 01           |                            |







