

DATE: 2023/11/6 (YY/MM/DD)

Customer : ASKA ELECTRIC SERVICE CO.,LTD.

Confidential

APPROVAL SHEET

RoHS Compliant

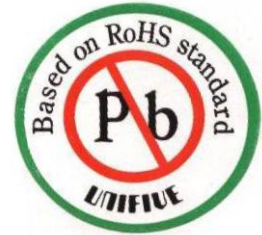
PRODUCT : SWITCHING POWER SUPPLY

MODEL : UNOWT3030-050060SA

PART NO. : JASK-0636Z

VER. : 231106 V1

CUSTOMER NO. :



Receiver's stamp or signature

PLEASE APPROVE & RETURN BEFORE 2023/11/20
OR WE WOULD REGARD IT BEEN CONFIRMED.

| RESPONSIBLE | APPROVED | ISSUED |
|------------------|------------------|------------------|
| 梁國康 2023/11/6 | 楊紅梅 2023/11/6 | 李文珍 2023/11/6 |

「 Due to market conditions or safety regulations change, we may submit your request for a change in parts or safety specifications. If you have not placed an order for more than two years, we will not initiate these changes until we receive a new order from you, and we will reconfirm it and get back to you as to whether you can continue production or need to make changes. 」

「 No part of this specification may be reproduced or reprinted in any form or by any means without the prior written permission of the Company. 」

「 The disclaimer applicable to the product described in this specification document is stated on <https://en.unifive.com/quality-assurance.html>

Signing back this specification document will be considered as agreeing to the disclaimer. 」

UNIFIVE

UNIFIVE CO., LTD

Revised History

| NO. | Revised Date | Description | | ISSUED |
|-----|--------------|--------------|--------|--------|
| | | After | Before | |
| | 2023/11/6 | FIRST ISSUED | | 李文珍 |
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PS:  CHANGE MARKING

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2.OUTPUT SPECIFICATION

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7.OUTLOOKING

8.QC CHECK

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10.PRODUCT DRAWING

11.PACKING

12.LABEL

UNIFIVE

1.INPUT SPECIFICATION

| ITEM | SPECIFICATION | MIN | TYPICAL | MAX |
|------------------------|--|--------|------------|-----------------------------|
| AC INPUT VOLTAGE | SINGLE PHASE | | 100~240Vac | |
| AC INPUT VOLTAGE RANGE | SINGLE PHASE | 85Vac | | 265Vac |
| AC INPUT FREQUENCY | SINGLE PHASE | 47Hz | 50/60Hz | 63Hz |
| AC INPUT CURRENT | TYPICAL INPUT VOLTAGE & OUTPUT AT FULL LOAD. | | 0.53A | 0.8A |
| AC INRUSH CURRENT | TYPICAL INPUT VOLTAGE & FOR A COLD START AT 25°C . AC 100V(*1) | | | 15A |
| | TYPICAL INPUT VOLTAGE & FOR A COLD START AT 25°C . AC 200V(*1) | | | 30A |
| EFFICIENCY | THE ADAPTOR SHALL ACCORD WITH THE REQUEST OF DOE VI | 85.07% | | |
| STAND BY CONSUMPTION | THE ADAPTOR SHALL ACCORD WITH THE REQUEST OF DOE VI | | | 0.1W |
| LEAKAGE CURRENT | MAX INPUT VOLTAGE | | | 5mA r.m.s or 7.07mA peak |

2.OUTPUT SPECIFICATION

| ITEM | SPECIFICATION | MIN | TYPICAL | MAX |
|---------------------------|--|--------|---------|--------|
| NOMINAL DC OUTPUT VOLTAGE | | | 5Vdc | |
| DC OUTPUT VOLTAGE RANGE | TYPICAL OUTPUT VOLTAGE (ADJUSTABLE) | 4.5Vdc | | 5.5Vdc |
| LOAD CURRENT | OPERATING TEMPERATURE -10°C ~ 50°C | | | 6A |
| OUTPUT POWER | | | | 30W |
| RIPPLE & NOISE | TYPICAL INPUT VOLTAGE ,0-100% LOAD CURRENT ,0°C ~ 60°C | | | 120mV |
| | TYPICAL INPUT VOLTAGE , 0-100% LOAD CURRENT , -10°C ~ 0°C | | | 160mV |
| HOLD-UP TIME | AT TYPICAL INPUT VOLTAGE AND FULL LOAD ,50Hz | 20mS | | |
| TURN-ON DELAY | TYPICAL INPUT VOLTAGE AND FULL LOAD CURRENT | | | 3S |
| DYNAMIC TEST | TYPICAL INPUT VOLTAGE,20%-80% LOAD,TH 5mS TL 5mS, 100mA/uS | 4.5Vdc | | 5.5Vdc |

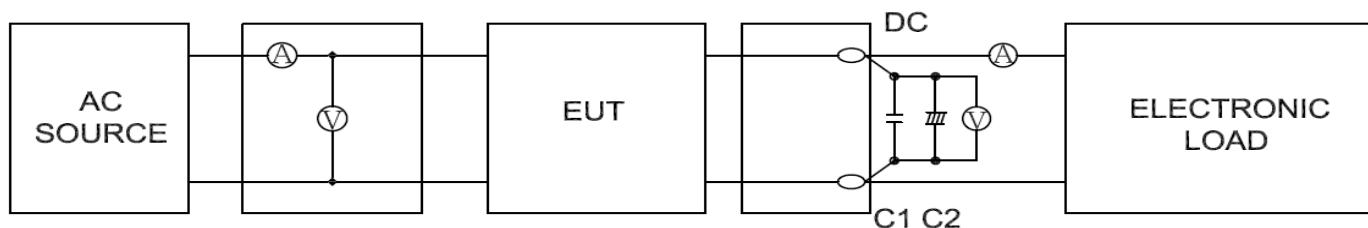
PROTECTION

| | | | | |
|--------------------------|---|---------|--|--------|
| OVER CURRENT PROTECTION | AUTO RECOVERY | 6.3A | | |
| SHORT CIRCUIT PROTECTION | THE ADAPTOR SHALL NOT DAMAGE BY SHORT TO THE DC OUTPUT GROUND | | | |
| OVER VOLTAGE PROTECTION | LATCH | 5.75Vdc | | 7.0Vdc |

NOTES :

*1.NOT APPLICABLE FOR THE IN-RUSH CURRENT TO NOISE FILTER FOR LESS THAN 0.2mS.

TEST MEASURES



C1: 0.1 μ F CERAMICS CAPACITOR

C2: 100 μ 100V ALUMINUM CAPACITOR

THE BANDWIDTH OF OSCILLOSCOPE IS SET WITH 100MHz

USE CABLE LENGTH 150mm FOR RIPPLE TEST

3.MECHANICAL

| ITEM | SPECIFICATION OR TEST CONDITION | ACCEPTANCE CRITERIA |
|-----------|---|---|
| VIBRATION | DURATION:30MINUTES AMPLITUDE:0.35mm FREQUENCY RANGE:10Hz...55Hz...10Hz SWEEP RANGE: APPROXIMATELY 1 OCTAVE / MIN | THERE SHALL BE NO ABNORMALITY ON THE APPEARANCE STRUCTURE AND OPERATING |

4.RELIABILITY

| ITEM | TEST CONDITION | ACCEPTANCE CRITERIA |
|-------------------------------|---|---|
| TEMPERATURE UP WITH FULL LOAD | TEST AT SURFACE OF THE CASE WITH TYPICAL AC INPUT AND FULL LOAD IN OUTPUT 50/60Hz | TEMPERATURE RISEN MEET SAFETY APPROVALED AT THE SURFACE OF CASE |
| HI-POT TEST | 1.BETWEEN INPUT(L,N) & OUTPUT(V+) 2829Vac or 4000Vdc 60 SECONDS 10mA,2.BETWEEN INPUT(L,N) & INPUT(PE) 1768Vac or 2500Vdc 60 SECONDS 10mA,IT IS BASE ON IEC/EN62368-1 5.4.9 TEST PROCEDURE.FOR MASS PRODUCTION, IT(1) IS TESTED BY 2829Vac or 4000Vdc 1 SECOND.FOR MASS PRODUCTION, IT(2) IS TESTED BY 1768Vac or 2500Vdc 1 SECOND. | NO DAMAGE |
| INSULATION RESISTANCE | INPUT TO OUTPUT, DC 500V | >50M Ω (below at R.H 70%). >10M Ω (at R.H 71 ~ 95%). *Put it into normal temperature & humidity for 24H,when testing. (Ta:20~30 °C, below R.H 70%) |
| MTBF | TYPICAL INPUT & FULL LOAD AT 25°C | 100000 HOURS (min) |
| BURN-IN TEST | AT 30°C ($\pm 10^\circ\text{C}$),TYPICAL INPUT VOLTAGE | 2~4 HOURS |
| IEC61000-4-2 ESD TEST | AIR DISCHARGE $\pm 8\text{KV}$ CONTACT DISCHARGE $\pm 4\text{KV}$ | NO DAMAGE 1 ROUND/SEC ABOVE |
| IEC61000-4-5 SURGE WITHSTAND | Line to Line $\pm 1\text{KV}$; Line to FG $\pm 2\text{KV}$ | NO DAMAGE |

5.ENVIRONMENT

| ITEM | SPECIFICATION OR TEST CONDITION | MIN | TYPICAL | MAX |
|-----------------------|---|-------|---------|-------|
| OPERATING TEMPERATURE | Convection : -10 - +70°C (-10 - +50°C:100%, +60°C:70%, +70°C:20%) | -10°C | | 70°C |
| STORAGE TEMPERATURE | | -30°C | | 75°C |
| OPERATING HUMIDITY | NON-CONDENSING | 5%RH | | 95%RH |
| STORAGE HUMIDITY | NON-CONDENSING | 5%RH | | 95%RH |

6.OUTPUT DERATING

*COOLING: CONVECTION COOLING

| | | | | |
|-------------------------|--------------------|--------|----|----|
| LOADING CONDITION(%) | Ta (°C) | -10~50 | 60 | 70 |
| | Mounting A,C,D,E,F | 100 | 70 | 20 |
| | Mounting B | 100 | 80 | 60 |

*COOLING: FORCED AIR COOLING

| | | | |
|-------------------------|--------------------|--------|----|
| LOADING CONDITION(%) | Ta (°C) | -10~60 | 70 |
| | All Mounting (A~F) | 100 | 70 |

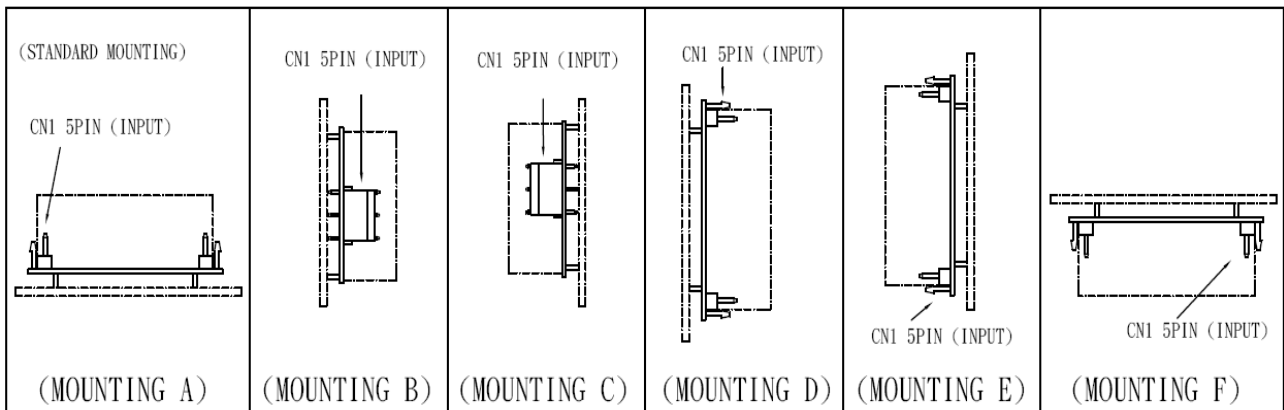
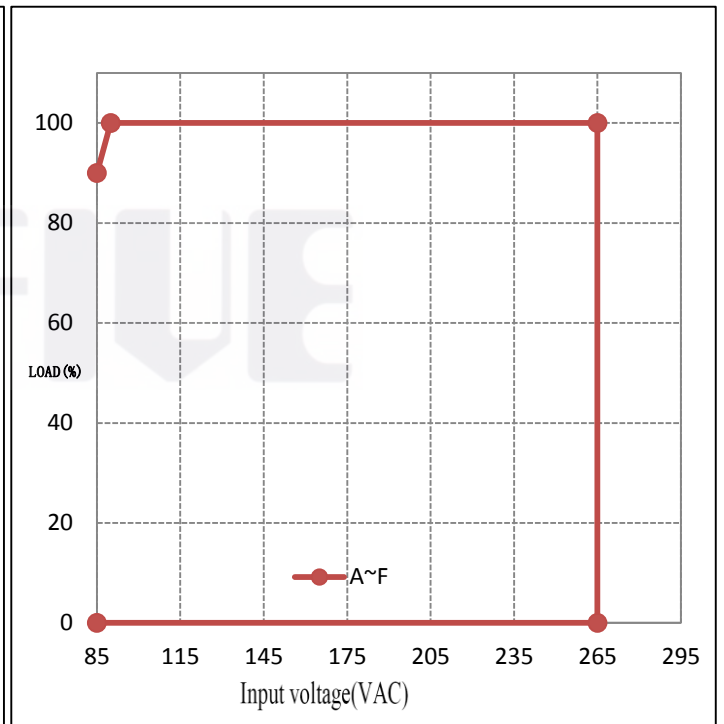
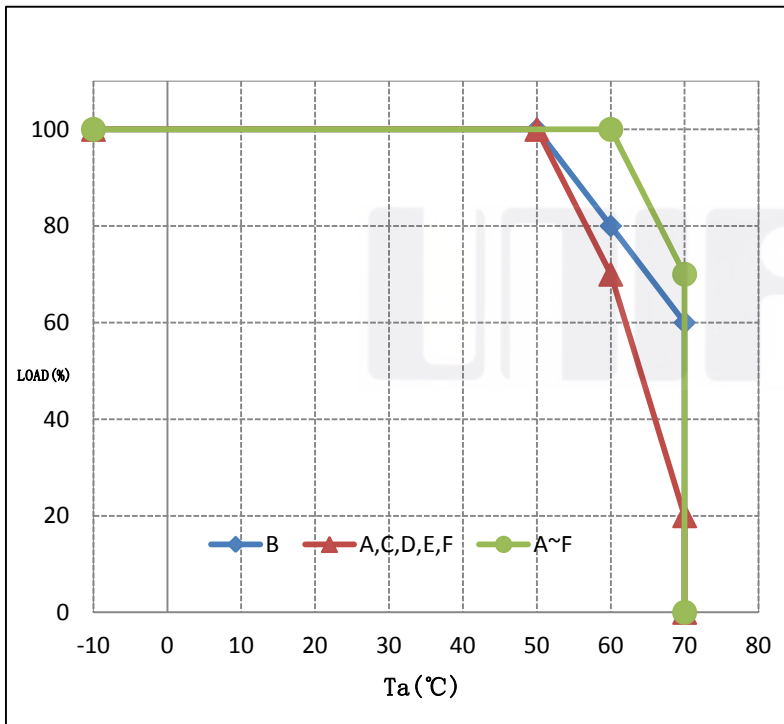
OUTPUT DERATING VS. INPUT VOLTAGE

| | | | |
|-------------------------|--------------------|-------|-------------------|
| LOADING CONDITION(%) | Input voltage | 85VAC | 90VAVC- 265VAC |
| | All Mounting (A~F) | 90 | 100 |

Air Velocity>0.7m/s: Air must flow through component side.

*COOLING: Forced air corresponds to the following graphs (● A~F).

Convection cooling corresponds to the following graphs (◆ B),(▲ A,C,D,E,F).



7.OUTLOOKING

DIMENSION 105.0(L)*50.0(W)*27.0(H) TYP
WEIGHT ABOUT 111g

8.QC CHECK

ALL OF THE QUANTITY SHALL BE CHECKED BEFORE SHIPMENT,CHECK ITEM AS BELOW:

- (1)DC OUTPUT VOLTAGE CHECK
- (2)HI-POT&INSULATION CHECK
- (3)OUTLOOKING CHECK

STANDARD OF RoHS

| NO. | chemical substances group |
|-----|---------------------------------------|
| 1 | Cadmium |
| 2 | Chromium(VI) |
| 3 | Lead |
| 4 | Mercury |
| 5 | Polybrominated biphenyls (PBBs) |
| 6 | Polybrominated diphenyl ethers(PBDEs) |

Effective in 1st Jan. 2019

| NO. | chemical substances group |
|-----|-------------------------------------|
| 1 | Bis (2-ethylhexyl) phthalate (DEHP) |
| 2 | Butyl benzyl phthalate (BBP) |
| 3 | Dibutyl phthalate (DBP) |
| 4 | Diisobutyl phthalate (DIBP) |

FOR ENVIRONMENTAL IMPACT SUBSTANCES CONTAINED IN PARTS. COMPLY WITH "RoHS 2.0"

9.STANDARD

SAFETY

| COMPLY SAFETY STANDARDS | STANDARD |
|-------------------------|-----------------|
| CE-LVD | MEET EN 62368-1 |

Manufacturer: UNIFIVE TECHNOLOGY (SHENZHEN) CO., LTD.

Factory Address: 101,201,301,BLDG E DATIANYANG INDUSTRIAL ZONE LONGMEN VLG

HONGXING SONGGANG ST BAOAN DISTRICT SHENZHEN GUANDONG, 518105 CHINA

RoHS

| COMPLY STANDARDS | STANDARD |
|------------------|------------------------|
| RoHS | 2011/65/EU及2015/863/EU |

EMC (EMI+EMS)

| COMPLY STANDARDS | STANDARD |
|------------------|---------------------------------|
| FCC | FCC Part 15 |
| VCCI | CLASS B |
| CE | EN55032,EN55035 CISPR32 Class B |

The EMC result will be affected when connecting of end device. The end user should be re-test the EMC of the complete set of equipments

The value which list on the spec,were tested by resistance.

EMS

THE EUT HAS BEEN TESTED ACCORDING TO THE FOLLOWING SPECIFICATIONS:

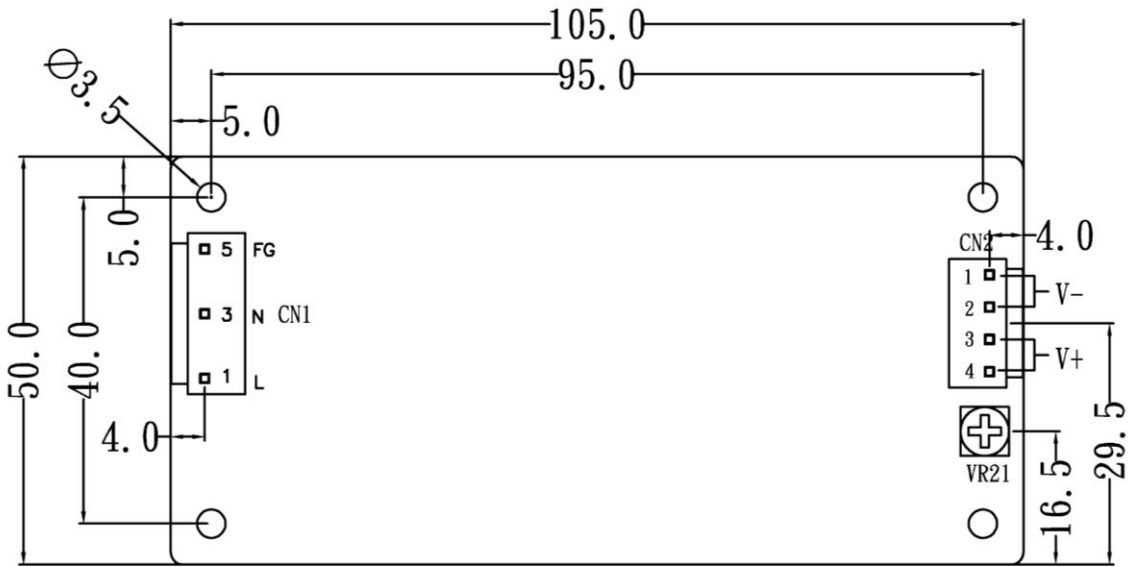
| EMISSION | | | |
|-------------------|--------------------------------|---------------|-------------------------------|
| STANDARD | TEST TYPE | RESULT | REMARKS |
| EN 55032 :2015 | CONDUCTED TEST | PASS | COMPLY WITH THE CLASS B LIMIT |
| | RADIATED TEST | PASS | COMPLY WITH THE CLASS B LIMIT |
| EN 61000-3-2:2014 | HARMONIC CURRENT EMISSIONS | PASS | COMPLY WITH THE CLASS A LIMIT |
| EN61000-3-3:2013 | VOLTAGE FLUCTUATIONS & FLICKER | PASS | COMPLY WITH THE REQUIREMENTS. |

| IMMUNITY(EN55035 : 2017) | | | |
|------------------------------------|---|---------------|--|
| STANDARD | TEST TYPE | RESULT | REMARKS |
| EN 61000-4-2:2009 | ELECTROSTATIC DISCHARGE IMMUNITY TEST | PASS | COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION B |
| EN 61000-4-3: 2006+A1:2008+A2:2010 | RADIATED,RADIO-FREQUENCY, ELECTROMAGNETIC FIELD IMMUNITY TEST | PASS | COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION A |
| EN 61000-4-4:2012 | ELECTRICAL FAST TRANSIENT / BURST IMMUNITY TEST. | PASS | COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION B |
| EN 61000-4-5:2014+A1:2017 | SURGE IMMUNITY TEST | PASS | COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION B |
| EN 61000-4-6:2014 | IMMUNITY TO CONDUCTED DISTURBANCES, INDUCED BY RADIO-FREQUENCY FIELDS | PASS | COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION A |
| EN 61000-4-8:2010 | POWER FREQUENCY MAGNETIC FIELD IMMUNITY TEST. | PASS | COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION A |
| EN 61000-4-11:2004+A1:2017 | VOLTAGE DIPS,SHORT INTERRUPTIONS AND VOLTAGE VARIATIONS IMMUNITY TESTS | PASS | COMPLY WITH THE REQUIREMENTS OF VOLTAGE DIPS: 1.>95% 0.5 CYCLE REDUCTION-PERFORMANCE CRITERION B 2. 30% 25 CYCLE REDUCTION-PERFORMANCE CRITERION C VOLTAGE INTERRUPTIONS: 3.>95% 250 CYCLE REDUCTION-PERFORMANCE CRITERION C |
| 4.2.7 | BROADBAND IMPULSE NOISE DISTURBANCES,REPETTIVE | PASS | COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION A |
| | BROADBAND IMPULSE NOISE DISTURBANCES,ISOLATED | PASS | COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION B |
| 2016/C 272/01 4.2.2.1 | MANUFACTURERS TO INDICATE THE FOLLOWING THREE ELEMENTS: THEIR (1) NAME (2) REGISTERED TRADE NAME OR REGISTERED TRADE MARK (192) AND (3) THE ADDRESS AT WHICH THEY CAN BE CONTACTED, ON THE PRODUCT OR, WHERE THAT IS NOT POSSIBLE, ON ITS PACKAGING OR IN A DOCUMENT ACCOMPANYING THE PRODUCT." | PASS | A:THE RELATED INFORMATION IS SHOWED ON SPECIFICATION SHEET,WHEN THE LIMITED ROOM OF ADAPTOR. B:THE RELATED INFORMATION IS SHOWED ON THE RELATED PACKAGE,IF CUSTOMER REQUIREMENT. C:THE RELATED INFORMATION SHOWED ON THE END DEVICE. |

10.PRODUCT DRAWING

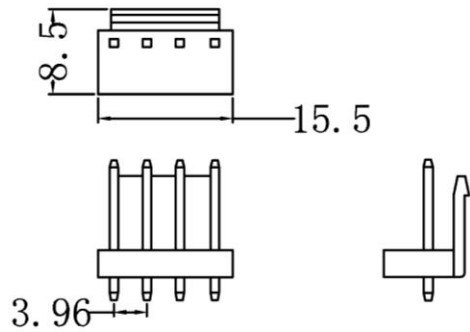
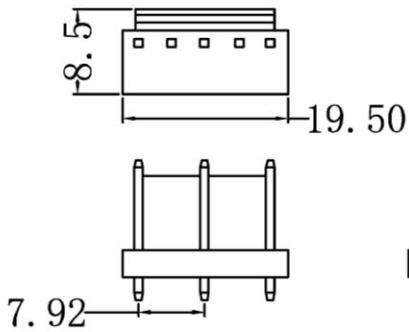


TOLERANCE: ± 0.5
Unit:mm



CN1

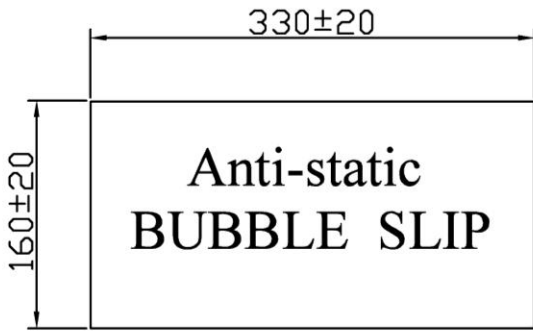
CN2



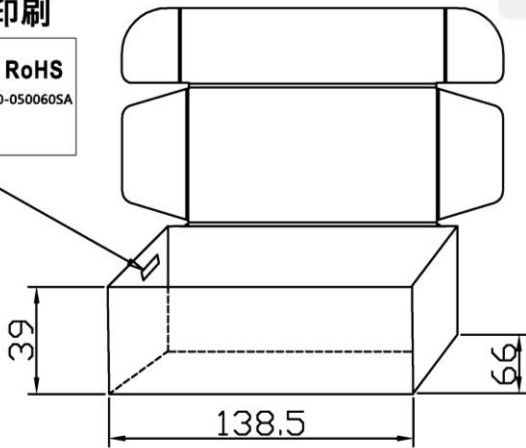
CN1: INPUT CONNECT
MODEL:JSW A3963WV-5P 5PIN PIN2, 4無
(THE EQUIVALENT)

CN2: OUTPUT CONNECT
MODEL:JSW 4PIN A3963WV-4P P=3.96
(THE EQUIVALENT)

11.PACKING

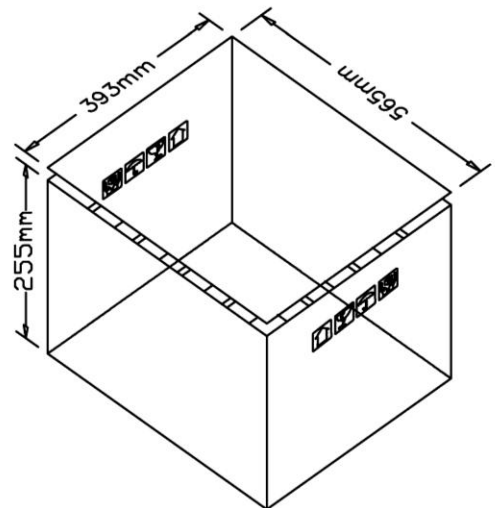
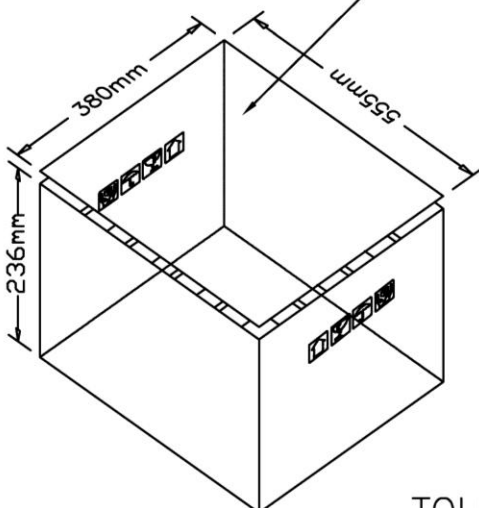


PRINTING 印刷



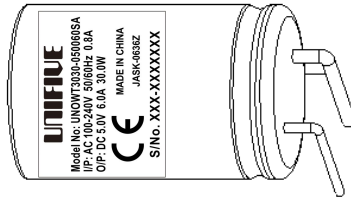
Q'TY:99pcs (8*9+3*9)

空余部分请使用气泡袋填充
Clearids Fill Fill with bubble
bag (BUBBLE BAG 165*210mm)

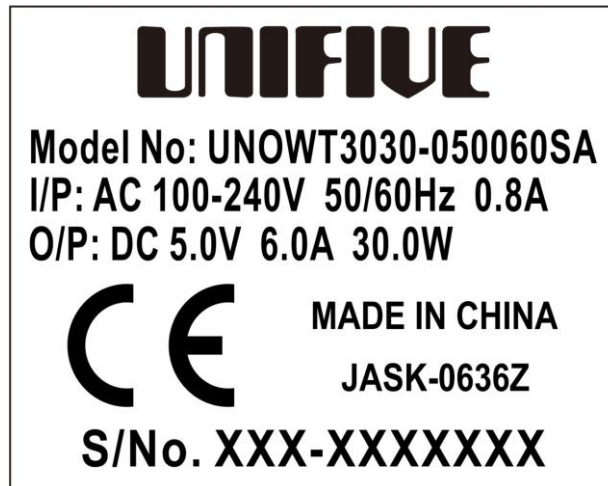


TOLERANCE: ±5mm

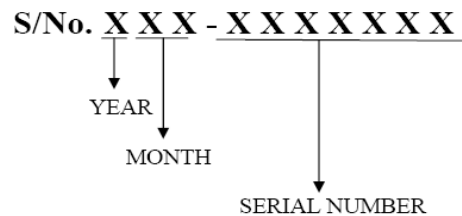
12.LABEL (BLACK WORD ON SILVER BASE)



(LABEL SHOULD BE STICKED ON C1)



LABEL SIZE : 26*20 mm (TOLERANCE: ± 0.3mm)



About S/No. From the year of 2010, notation of year will be as below;

- ex. 2023/11...P11-XXXXXXX
- 2024/01...Q01-XXXXXXX
- 2025/01...R01-XXXXXXX
- 2026/01...S01-XXXXXXX
- 2027/01...T01-XXXXXXX

(A,B,C~Z)the letters of "I" and "O" will not be used.(In order not to make confusion of 1 and 0)

