

DATE: 2025/3/19 (YY/MM/DD)

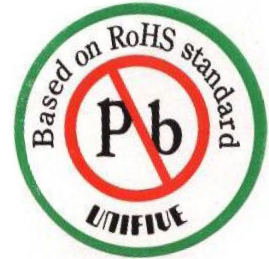
Customer : ASKA ELECTRIC SERVICE CO.,LTD.

Confidential

# APPROVAL SHEET

RoHS Compliant

PRODUCT : AC/DC ADAPTOR  
 MODEL : UM305-2425  
 PART NO. : JASK-0664PZD  
 VER. : 250319 V1  
 CUSTOMER NO. :



Receiver's stamp or signature

PLEASE APPROVE & RETURN BEFORE 2025/4/2  
 OR WE WOULD REGARD IT BEEN CONFIRMED.

RESPONSIBLE	APPROVED	ISSUED
楊全亮 2025/3/19	楊紅梅 2025/3/19	張穎穎 2025/3/19

「 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



CONTENTS :

- 1.INPUT SPECIFICATION
- 2.OUTPUT SPECIFICATION
- 3.MECHANICAL
- 4.RELIABILITY
- 5.ENVIRONMENT
- 6.OUTLOOKING
- 7.QC CHECK
- 8.STANDARD
- 9.PRODUCT DRAWING
- 10.PACKING
- 11.LABEL

UNIFIVE

## 1.INPUT SPECIFICATION

ITEM	SPECIFICATION	MIN	TYPICAL	MAX
AC INPUT VOLTAGE	SINGLE PHASE		100/240Vac	
AC INPUT VOLTAGE RANGE	SINGLE PHASE	90Vac		264Vac
AC INPUT FREQUENCY	SINGLE PHASE	47Hz	50/60Hz	63Hz
AC INPUT CURRENT	TYPICAL INPUT VOLTAGE 100Vac & OUTPUT AT FULL LOAD.		0.135A	0.16A
	TYPICAL INPUT VOLTAGE 240Vac & OUTPUT AT FULL LOAD.		0.075A	0.1A
AC INRUSH CURRENT	TYPICAL INPUT VOLTAGE & FOR A COLD START AT 25°C.			40A
EFFICIENCY	ACCORDING TO DOE VI	78.88%		
STAND BY CONSUMPTION	ACCORDING TO DOE VI			0.1W
LEAKAGE CURRENT	MAX INPUT VOLTAGE			0.1mA

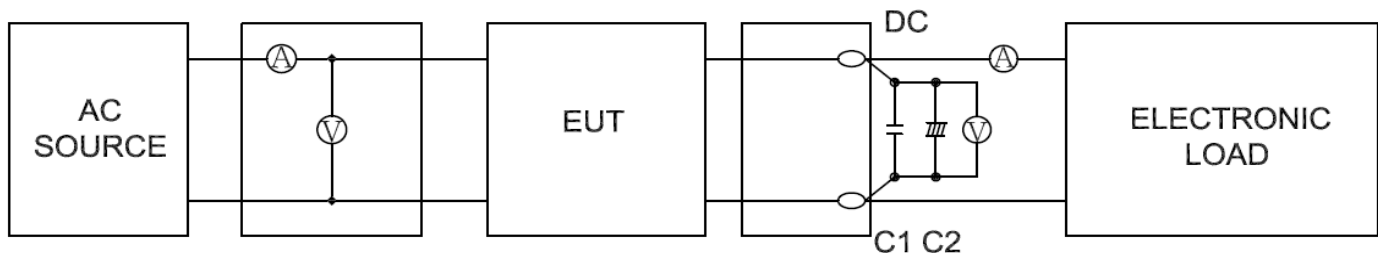
## 2.OUTPUT SPECIFICATION

ITEM	SPECIFICATION	MIN	TYPICAL	MAX
NOMINAL DC OUTPUT VOLTAGE			24Vdc	
DC OUTPUT VOLTAGE RANGE	TYPICAL OUTPUT VOLTAGE	22.8Vdc		25.2Vdc
LOAD CURRENT				0.25A
RIPPLE	TYPICAL INPUT VOLTAGE , FULL LOAD CURRENT , 25°C			300mV
NOISE	TYPICAL INPUT VOLTAGE , FULL LOAD CURRENT , 25°C			300mV
HOLD-UP TIME	AT TYPICAL INPUT VOLTAGE AND FULL LOAD ,50Hz	6mS		
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	22.5Vdc		25.5Vdc

## PROTECTION

OVER CURRENT PROTECTION	AUTO RECOVERY, THE MINIMUM POSSIBLE PROTECTION POINT IS 105% OF THE RATED LOAD AT TYPICAL INPUT VOLTAGE
SHORT CIRCUIT PROTECTION	THE ADAPTOR SHALL NOT DAMAGE BY SHORT TO THE DC OUTPUT GROUND
OVER VOLTAGE PROTECTION	AUTO RECOVERY , AT TYPICAL INPUT VOLTAGE

## TEST MEASURES



C1: 0.1uF CERAMICS CAPACITOR

C2: 10uF LOW ESR ALUMINUM CAPACITOR

THE BANDWIDTH OF OSCILLOSCOPE IS SET WITH 20MHz

## 3.MECHANICAL

ITEM	SPECIFICATION OR TEST CONDITION	ACCEPTANCE CRITERIA
BENDING TEST	NORMAL TEMPERATURE THE PLUG SHALL WITHSTAND WEIGHT OF 2.94N,IT SWINGS FROM LEFT TO RIGHT AT AN ANGLE OF 60DEG. 500 TIMES MIN.,S/R SHALL WITHSTAND WEIGHT OF 2.94N. IT SWING FROM LEFT TO RIGHT AT AN ANGLE OF 60DEG. 500 TIMES MIN.,BENDING SPEED 40CYCLE/MIN.	NO SHORT CIRCUIT THE BREAK RATE OF WIRE SHALL BE BELOW 30%.
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	BETWEEN INPUT & OUTPUT 4000Vac 60 SECONDS 10mA, IT IS BASE ON IEC/EN60601 Clause 20 TEST PROCEDURE. FOR MASS PRODUCTION, IT IS TESTED BY 4000Vac/1 SECOND.	NO DAMAGE
INSULATION RESISTANCE	INPUT TO OUTPUT, DC 500V	>50M $\Omega$ (below at R.H 70%). >10M $\Omega$ (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 $\pm 15\text{KV}$ CONTACT DISCHARGE $\pm 8\text{KV}$	NO DAMAGE 1 ROUND/SEC ABOVE
IEC61000-4-5 SURGE WITHSTAND	LINE TO LINE: $\pm 0.5\text{kV}, \pm 1\text{kV}$	NO DAMAGE

## 5.ENVIRONMENT

ITEM	SPECIFICATION OR TEST CONDITION	MIN	TYPICAL	MAX
OPERATING TEMPERATURE		0°C		40°C
STORAGE TEMPERATURE		-20°C		65°C
OPERATING HUMIDITY	NON-CONDENSING	5%RH		95%RH
STORAGE HUMIDITY	NON-CONDENSING	5%RH		95%RH

## 6.OUTLOOKING

DIMENSION	59.0(L)*28.0(W)*37.6(H) TYP
WEIGHT	ABOUT 63g
AC INPUT TYPE	WALL MOUNT
DC OUTPUT TYPE	5.5*2.1*9.5
DC OUTPUT CABLE	USE UL 2468 24 AWG WIRE
INDICATION	LASER MARKING
FLAMMABILITY OF POWER SUPPLY ADAPTER ENCLOSURE IS 94V0	
FLAMMABILITY OF PWB IS 94V0	

## 7.QC CHECK

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

- (1)DC PLUG POLE CHECK
- (2)DC OUTPUT VOLTAGE CHECK
- (3)HI-POT&INSULATION CHECK
- (4)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"

## 8.STANDARD

## SAFETY

COMPLY SAFETY STANDARDS	STANDARD
PSE	別表第八
CUL	ES 60601-1
CE-LVD	EN 60601-1

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 18
VCCI	CLASS B
CE	EN55011 CISPR11 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**

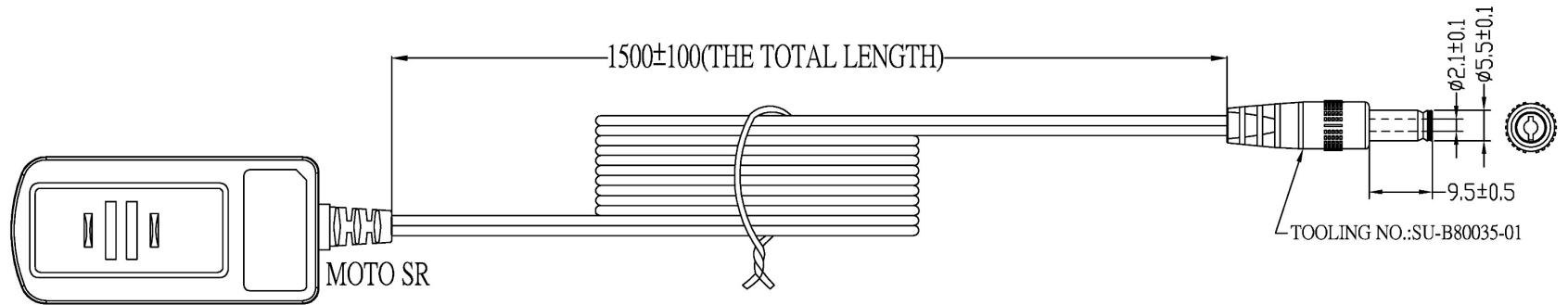
THE EUT HAS BEEN TESTED ACCORDING TO THE FOLLOWING SPECIFICATIONS:

<b>EMISSION</b>			
<b>STANDARD</b>	<b>TEST TYPE</b>	<b>RESULT</b>	<b>REMARKS</b>
EN55011:2009+A1:2010	MAINS TERMINAL DISTURBANCE VOLTAGE	PASS	COMPLY WITH THE CLASS B LIMIT
	RADIATED TEST	PASS	COMPLY WITH THE CLASS B LIMIT
EN61000-3-2:2014	HARMONIC CURRENT EMISSIONS	PASS	COMPLY WITH THE CLASS A LIMIT
EN61000-3-3:2013	VOLTAGE FLUCTUATIONS & FLICKER	PASS	COMPLY WITH THE REQUIREMENTS.

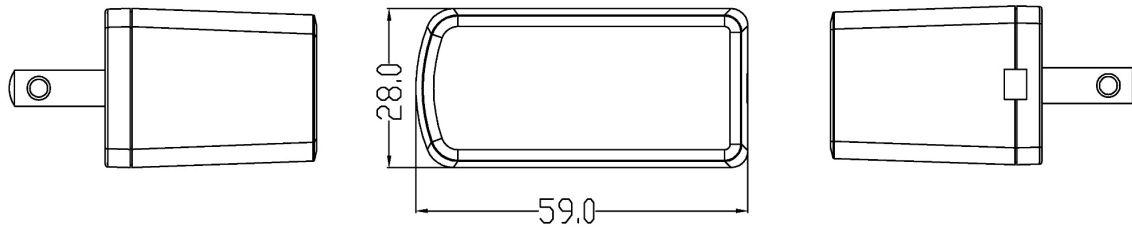
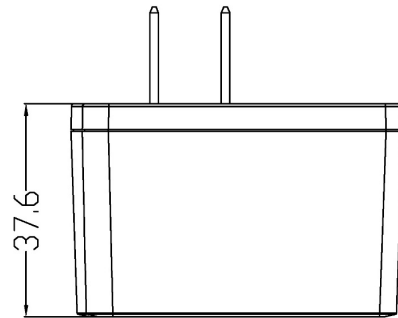
<b>IMMUNITY(EN 60601-1-2:2015)</b>			
<b>STANDARD</b>	<b>TEST TYPE</b>	<b>RESULT</b>	<b>REMARKS</b>
EN 61000-4-2:2009	ELECTROSTATIC DISCHARGE IMMUNITY TEST	PASS	COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION A
EN 61000-4-3:2006+A1:2008+A2:2010	RADIATED,RADIO-FREQUENCY, ELECTROMAGNETIC FIELD IMMUNITY 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 A
EN 61000-4-5:2014	SURGE IMMUNITY TEST	PASS	COMPLY WITH THE REQUIREMENTS OF PERFORMANCE CRITERION A
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: 1.0% 0.5 CYCLE REDUCTION- PERFORMANCE CRITERION B 2. 70% 25/30 CYCLE REDUCTION- PERFORMANCE CRITERION C VOLTAGE INTERRUPTIONS: 0% 250/300 CYCLE REDUCTION- PERFORMANCE CRITERION C

9.PRODUCT DRAWING

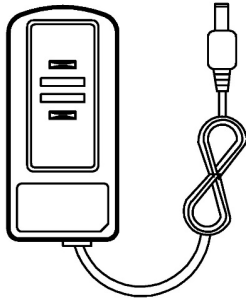
CASE TOLERANCE:  $\pm 0.8\text{mm}$



MEMO: Fork insulation with tonometer groove type



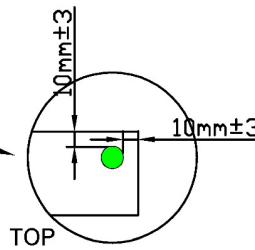
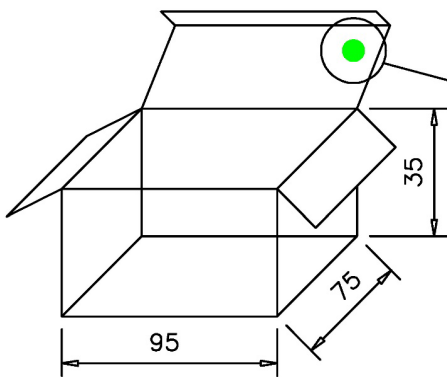
10.PACKING



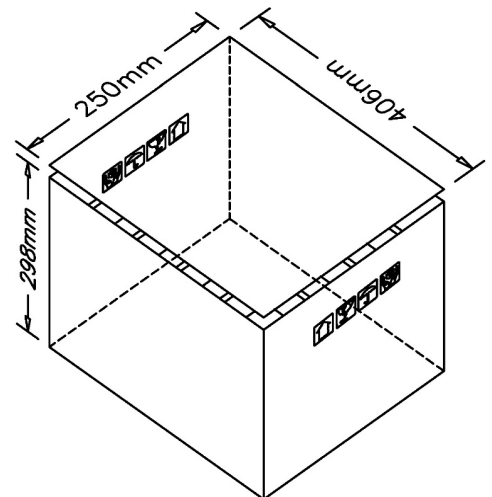
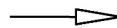
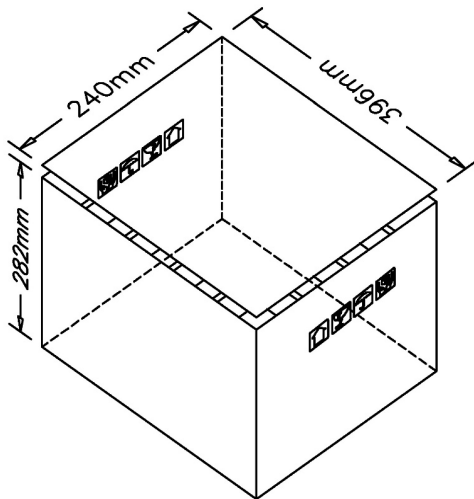
GREEN LABEL :



- 1、color: green 3405C
- 2、size: Ø8mm



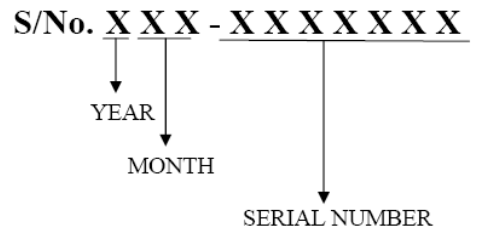
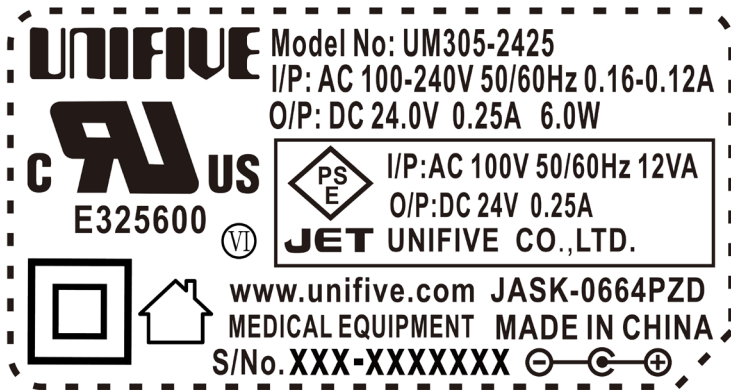
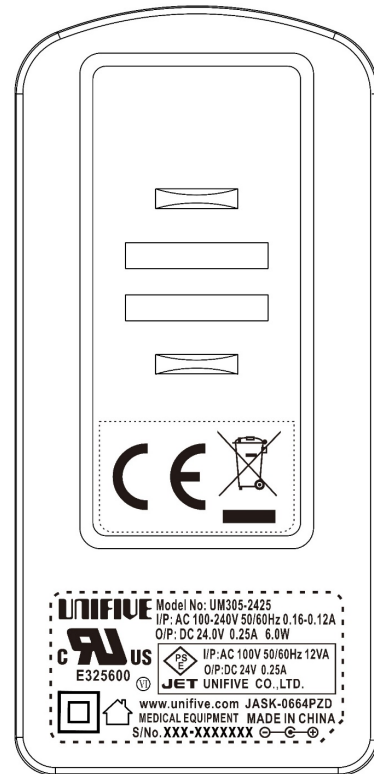
Q'TY: 84pcs(4\*3\*7)



TOLERANCE: ±5mm

11.LABEL (LASER MARKING)

SKETCH MAP



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

- ex. 2025/03...R03-XXXXXXX
- 2026/01...S01-XXXXXXX
- 2027/01...T01-XXXXXXX
- 2028/01...U01-XXXXXXX
- 2029/01...V01-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)