

# SPECIFICATION

## CUSTOMER LINE

HANDLING	CHECK	APPROVAL	CONFIRMATION
<b>DATE:</b>			

PLEASE SIGN AND RETURN ONE COPY.

With your signature, you confirm all the details in this specification, and the products will be made according to below description.

REMARKS: \_\_\_\_\_

CUSTOMER \_\_\_\_\_

ITEM NUMBER\_\_\_\_\_

Adapter

PRODUCT \_\_\_\_\_

KYT W825A

KYT-825 20W

MODEL NO \_\_\_\_\_ DESIGNED NO \_\_\_\_\_

001

VERSION \_\_\_\_\_ MODEL NUMBER \_\_\_\_\_

## SPEC. Revision History

MODEL NO. :	KYT W825A	Approve	Check	Preparation
DESIGNED NO. :	KYT-825 20W			
Date :	2022.4.25			

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## 1. Description

This specification apply to the Switching power whose model No. is KYTW825A , which has a high efficiency and reliability, and have the over voltage, over current and short circuit function.

## 2. Electrical Specification

### 2.1 INPUT SPECIFICATION

Input voltage range	90Vac – 264Vac
Rated voltage	100Vac / 240Vac
Input frequency range	47Hz – 63Hz
Rated input frequency	50Hz / 60Hz
No Load Input Power	0.1W max. @ no loading, rated voltage
Inrush current	50A type peak @ 220Vac Input, cold start

### 2.2 OUTPUT SPECIFICATION

#### 2.2.1 Rated Output

Rated Output Voltage (Vdc)	Output Voltage Range (Vdc)	Output Ripple & Noise (mV)	Rated Output Current (A)
5.0	4.75–5.25	≤200	3.0A
9.0	8.55–9.45	≤200	2.22A
12.0	11.4–12.6	≤200	1.67A
3.6–5.9	3.6–5.9	≤200	3.0A
3.6–11	3.6–11	≤200	1.8A

**Notes:** The test condition as with oscilloscope with bandwidth 20MHz . A 10uF E-cap and 0.1uF ceramic-cap shall be connected to the connector in parallel.

#### 2.2.2 Output Overshoot At Turn On & Turn Off

Rated Output Voltage (Vdc)	Proportion of the output voltage overshoot	
	Turn on	Turn off
5.0	10%	10%
9.0	10%	10%
12.0	10%	10%
3.3–5.9	10%	10%
3.3–11	10%	10%

Note: the test condition as: All of output current from Min to Max

#### 2.2.3 Combined Load / Line Regulation

Rated Output Voltage (Vdc)	Min. Loading	Rated. Loading	Line Regulation	Load Regulation
5.0V	0A	3.0A	±3%	±5%
9.0V	0A	2.22A	±3%	±5%
12.0V	0A	1.67A	±3%	±5%

3. 3-5. 9	0A	3. 0A	±3%	±5%
3. 3-11	0A	1. 8A	±3%	±5%

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#### **2.2.4 Turn on delay time:**

3 Second Max. at 115Vac input and output Max. load.

#### **2.2.5 Rise time:**

40mS Max. at 115Vac input and output Max load.

#### **2.2.6 Hold up time:**

10mS Min. at 115Vac input and output Min. Load.

#### **2.2.7 Average Efficiency:**

In the regular voltage, The output current is at 25%, 50%, 75% and full load cases,

The average efficiency of  $\geq 81.3\%$  ( warm up 30 minutes) , Which meet the standards of energy efficiency level VI.

### **3. Protection Feature**

#### **3.1 Output Short circuit protection:**

Input voltage 90V/60Hz and 264VAC/50Hz, when the output is full and the electronic load is set to CC mode, when the output is short-circuited and the short circuit lasts for 3 seconds, the input power is less than 3W; when the short circuit is released, the output voltage can be 3 The power supply automatically recovers in seconds.

#### **3.2 Over current Protection:**

Input rated voltage, electronic load setting CC mode, OCP current range: 110%–150%, when the output is overcurrent, the product enters the protection state; when the overcurrent is released, the output voltage can be automatically restored within 3 seconds. normal.

### **4. Reliability Requirements**

#### **4.1. Burn-in**

The power supply shall be burn-in for 2-4 Hours under normal input and 80% rated load at  $40^{\circ}\text{C} \pm 5^{\circ}\text{C}$

#### **4.2. MTBF Qualification**

The MTBF shall be at least 20,000hours at  $25^{\circ}\text{C}$ , Full load and nominal input condition

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## **5. Environment Requirement**

**5.1 Operating Temperature:** 0°C–35°C

**5.2 Storage Temperature:** -40°C to 85°C

**5.3 Relative Humidity:** Relative Humidity 25%–90%, Non –Condensing

**5.4 Storage Humidity:** Relative Humidity 10%–90%, Non –Condensing

### **5.5 Vibration**

**5.5.1. Operating Standard:** IEC 721-3-3 3M3

5~9Hz, A=1.5mm 9~200Hz, Acceleration 5m/S

**5.5.2. Transportation:** IEC 721-3-2 2M2

5~9Hz, A=3.5mm

9~200Hz, Acceleration=5m/S 200~500Hz, Acceleration=15m/S

**5.5.3. Axes, 10 cycles per axis:**

No permanent damage may occur during testing, and The product can restore to its original situation after power off / on.

### **5.6 Dropping Packed:**

After the Dropping test (1 corner, 1 edges, and 1 surfaces, Height:100cm, 3times), function well.

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## 6. Safety and EMI Requirement:

### 6.1 Safety: accord with:

certificate	Country	standards	
<input type="checkbox"/> UL/CUL	USA	UL60065	
<input type="checkbox"/> UL/CUL	USA	UL60950	
<input type="checkbox"/> TUV/GS	Europe	EN60065	
<input type="checkbox"/> TUV/GS	Europe	EN60950	
<input type="checkbox"/> FCC	USA	Class B	
<input type="checkbox"/> CE	Europe	EN60065	
<input type="checkbox"/> CE	Europe	EN62368	
<input type="checkbox"/> MEPS	Australia	AS/NZS 4665	
<input type="checkbox"/> SAA	Australia	AS/NZS 60065	
<input type="checkbox"/> SAA	Australia	AS/NZS 60950	
<input type="checkbox"/> CCC	China	GB8898	
<input type="checkbox"/> CCC	China	GB4943	
<input type="checkbox"/> PSE	Japan	J60950 (H22)	
<input type="checkbox"/> CB	Europe	IEC60065	
<input type="checkbox"/> CB	Europe	IEC60950	
<input type="checkbox"/> C-TICK	Australia	AS/NZS CISPR13:2004	
<input type="checkbox"/> EK/KC	Korea	K60065	
<input checked="" type="checkbox"/> EK/KC	Korea	K60950	

### 6.2 EMI STANDARD: Meets the Limits

6.2.1. Fcc class B rules

6.2.2. EN55032 class B rules

### 6.3 Dielectric Strength Testing: Dielectric strength to meet the requirements under the table)

#### 6.3.1 HI-POT TEST:

ITEM	SPECIFICATION	REMARK
Primary to Secondary	3000Vac/5mA/60S	No arcing
Primary to P.G	1500Vac/5mA/60S	No arcing
Secondary to P.G	—	—

Note: before testing, input L/N short circuit, make output positive and negative short circuit and connected.

6.3.2. Isolation Test : Input to output 500Vdc/2Sec, isolation resistance > 50M ohm

Note: at the test, input L/N short circuit, make output positive and negative short circuit

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## 7. Test Equipment List

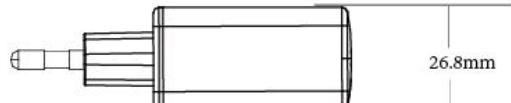
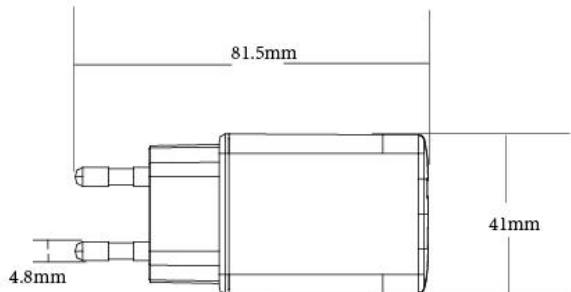
ITEM	Equipment Name	Manufacture	Model
1	AC power source	Chroma	6120
2	Oscilloscope	Tektronix	TDS1002B
3	Electronic load	TET	T3515
4	Multimeter	FLUCK	87III
5	Dynamometer	Chroma	2100
6	hermograph	LUTRON	TW-902C
7	Plug lead bend test machine		LX-817
8	Saltsprayingtester		LX-8827B
9	Vibration table		FZD-25
10	Drop test bed		
11	Digimatic caliper		0-150mm

## 8. MECHANICAL REQUIREMENT:

### 8.1 Enclosure:

The power supply size: L \* W \* H =81.5mm \* 41mm \* 26.8mm

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10. label



MODEL NO.:

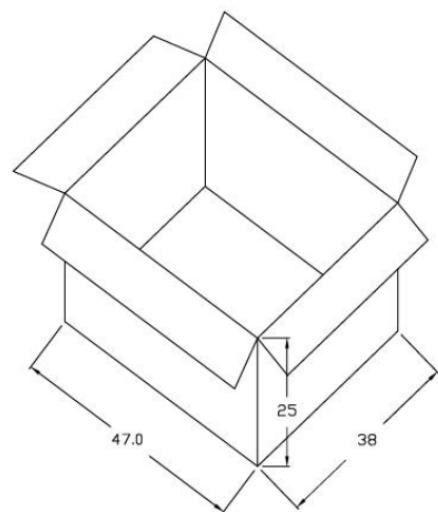
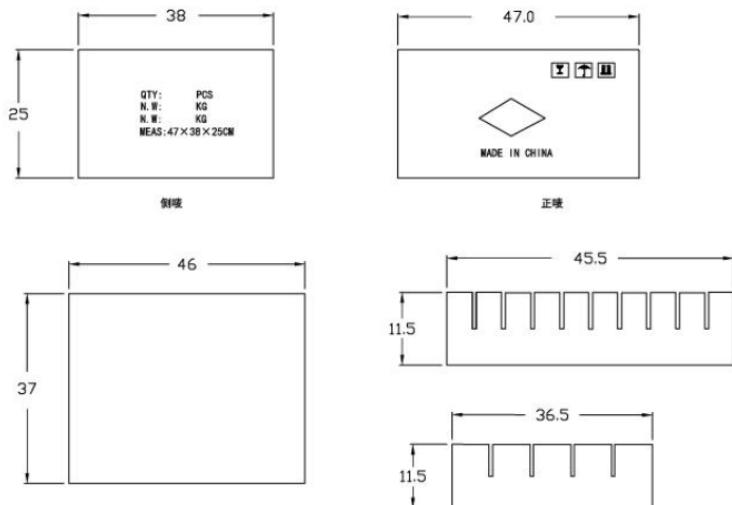
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## 12. Package Drawing

200PCS



### PACKING:

Our own packing style will be adopted if no special packing required .

a Inner package

PO bag

b Outer package

paper-box.

Size: 47×38×25cm, 1sheet 46X37cm

c Outer package notes include the information

Customer Name, LOT Number, Model No., Date, and so on.

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