

Datasheet

Specification acknowledgment

CUSTOMER NAME : _____

CUSTOMER SPEC.NO. : _____

DESCRIPTION : 12W POWER SUPPLY

VENDOR PART NO. : KR-WGK-E012W270-FDC

DATE : 2021-12-7

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MODEL: KR-WGK-E012W270-FDC

1. Revision Record:

Revision	Date	Modify Item	Modify Reason	Prepared	Approved
Rev:A0	2021-12-7				

MODEL:KR-WGK-E012W270-FDC

1、Description

This document defines KR-WGK-E012W270-FDC special power supply for indoor lamps, which has OSP and OTP protection functions and can protect the lamps to work properly.

The power supply is: plastic case type.

2、Electrical Characteristics

2.1 Input Characteristics

Item	Minimum	Typical	Maximum	Unit	Remark
Rated Input voltage	110	/	240	Vac	
AC Input range	90	/	264	Vac	
Input current $\pm 10\%$	/	/	270	mAac	Input: 110Vac 50/60HZ Output: 12*1W LED
InputPower $\pm 0.5W$	12.5	13	13.5	W	Input: 110-264 50/60HZ Output: 12*1W LED
Input frequency	47	50	63	Hz	
Power factor	≥ 0.45	≥ 0.5	≥ 0.55		Input: 110-264 50/60HZ Output: 12*1W LED
Harmonic	/	/	/	%	Input: 110-264 50/60HZ Output: 12*1W LED
Surge	/	/	20	A	Input: 264V 50/60HZ Output: 12*1W LED
Standby power consumption	/	/	0.25	W	Input: 264V 50/60HZ Output: No load

2.2 Output Characteristics

Item	Minimum	Typical	Maximum	Unit	Remark
Output Power $\pm 0.5W$	10.3	10.8	11.3	W	Within the rated output voltage, the maximum output power is $P_o=V_o \times I_o$
Output voltage	24		43	Vdc	Input: 110-264 50/60HZ Output: 12*1W LED
Output Current $\pm 5\%$	256	270	284	mAdc	Input: 110-264 50/60HZ Output: 12*1W LED
Output open circuit voltage	50	55	60	Vdc	No load
Efficiency 效率	84%	85%	86%		@230Vac
	81%	82%	83%		@110Vac
Accuracy of current	-5%		+5%		
Output Ripple Voltage (PK-PK)		1%	2%		full load
Output Ripple current (PK-PK)		3%	5%		full load
Current overshoot			10%		
Start up time		0.6S	1S		@110Vac
		0.4S	0.5S		@230Vac
Linear adjustment rate	-2%		+2%	full load	
Load Regulation	-5%		+5%		

3.Other characteristics

Item		Minimum	Typical	Maximum	Remark
Protection Function	Over temp protection	140℃	150℃		IC internal temperature
	short circuit protection	Long time short circuit is not damaged, short circuit power < 2W			Burp mode
Life time		30000hours			@230Vac, full load, case temperature 75℃ @230Vac, full load 75℃
MTBF		200, 000hours			@230Vac, full load, case temperature 25℃
Temperature coefficient		-0. 03%/℃		+0. 03%/℃	Case temperature:0℃~80℃
Case temperature				80℃	
Quality assurance			3years		Case temperature:80℃
Wight			47g		
Size		68mm×32mm×23mm			LxWxH

PS:All performance parameters are typical values measured under 25℃ conditions, unless otherwise noted

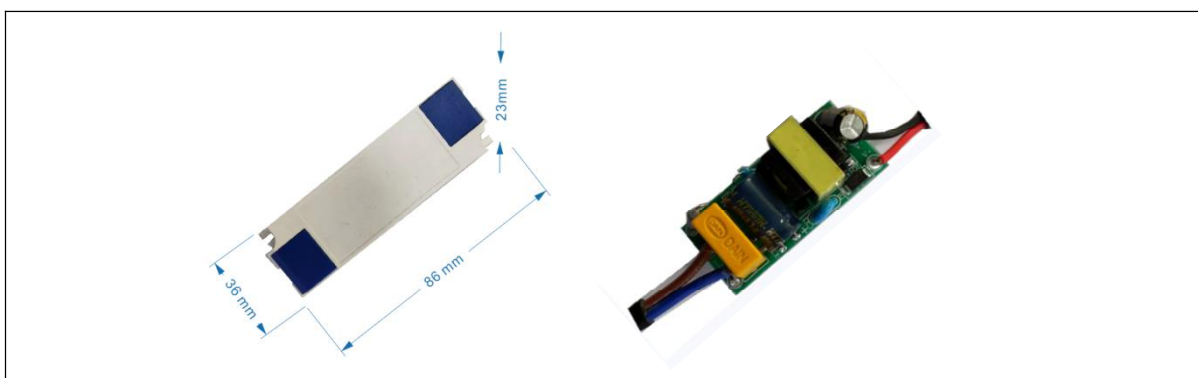
4. Safety and EMC standards

Certification	Safety standards	Certification status	Remark
UL/CUL	UL8750	×	
TUV	EN 61347-2-13:2014 EN61347-1:2008+A1:2011+A2:2013 EN62493:2015	×	
SAA	AS/NZS61347.2.13	×	
CCC	GB 19510.14-2009	×	

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Safety items		Specification	Remark
Dielectric strength	Input to output	500Vac/5mA Max/60s	
	Primary to FG	/	
	Secondary to FG	/	
Insulation resistance	Input to output	/	
Earth resistance		/	
Leakage current		/	
EMI/EMS		Specification	Remark
CE		EN55015:2013+A1:2015	No requirement
RE		EN55015:2013+A1:2015	No requirement
Harmonic		IEC/EN 61000-3-2	No requirement
Lightning surge		IEC/EN61000-4-5	No requirement

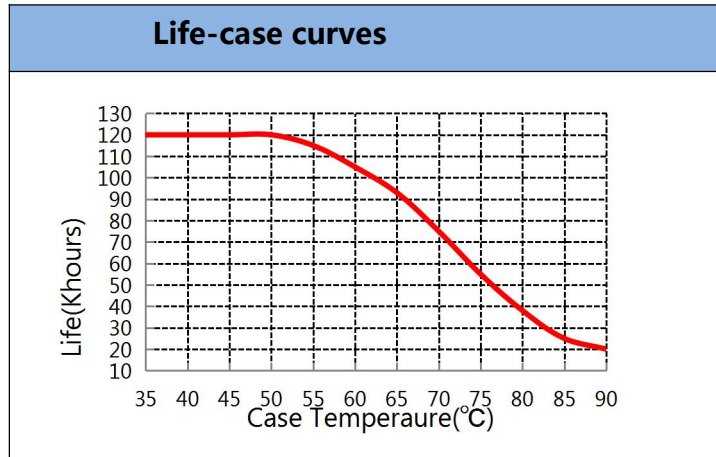
5. Product structure and dimension



Supply connect	0.3 mm ² sheathed wire
DC Connect	0.2mm ² DC female head
Case	QH-756-2/86*3623mm
Remark	ABS No ROHS products

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6. Product life curves



7. Environmental requirements

Item	Minimum	Typical	Maximum	Remark
Operating Temperature	-20°C	25° C	+45°C	
Storage Temperature	-40°C	25° C	+85°C	
Operating Humidity	10%RH		90%RH	
Storage Humidity	5%RH		95%RH	

8. Nameplate



LED Driver

MODEL: KR-WGK-E012W270-FDC

AC-N INPUT: AC100-265V 50/60Hz 0.20A LED-

AC-L OUTPUT: DC24-43V 270mA±5% LOAD: 8-12W LED+

ta: 40°C tc: 80°C PF≥0.5 ★2021-IV

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9. Note

- 1、 Before installation, carefully confirm the input and output terminals, do not misconnect.
- 2、 Input voltage of this product 110-240 VAC, confirm line voltage before installation.

3. When installing, pay attention to the ventilation of the product. Do not close the product in a high temperature environment. When working in a high temperature environment, the life of the power supply will be shortened

10. Packaging, transportation, and storage

10. 1 Transportation

Adapt to the transport of vehicles, ships, aircraft, transport should cover shelter, sunscreen, civilized loading and unloading.

10. 1. Storage

The product shall be stored in accordance with IEC-60721-2-3;

The storage period of more than 1 year of products to be re-tested, qualified rear can be used.