



SPECIFICATION FOR APPROVAL

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KED-100W SERIES

AC-DC POWER SUPPLY

AC-DC POWER SUPPLY

KED-100W SERIES Manufacturer Part No.: KS251468



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1. INPUT REQUIREMENTS

1.1 Highlight & Features

- EN 60601 62368 3.1 certified
- 4,000 Vac isolation
- 2 MOPP
- adjustable output voltage
- power factor > 0.9
- Class I or Class II



MOEDL	Output voltage	Output current	Output power	Ripple and noise	Efficiency
	(Vdc)	max (A)	Max (W)	max (mVp-p)	Typ (%)
KED-100W-120EP	12	8.33	100	160	90
KED-100W-240EP	24	4.16	100	240	90
KED-100W-480EP	48	2.08	100	480	90

Note: 1. Ripple and noise are measured at 20 MHz BW with 47 uF aluminum electrolytic capacitor and 0.1 uF ceramic capacitor on the output.

2. At 230Vac input.

2. INPUT

Parameter	Conditions/description	Min	Typ	Max	Units
voltage	(see derating curve)	90		264	Vac
frequency		47		63	Hz
current	at 115 Vac			2.0	A
	at 230 Vac			1.0	
inrush current	at 115 Vac			40	A
	at 230 Vac			70	
leakage current	at 264Vac			0.1	mA
power factor	at 115 Vac, full load	0.97			
	at 230 Vac, full load	0.9			
no load power consumption				0.21	W

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3. OUTPUT

Parameter	Conditions/description	Min	Typ	Max	Units
capacitive load	12 Vdc output			3,000	μ F
	24 Vdc output			1500	
	48 Vdc output			500	
initial set point accuracy	at full load		± 2		%
line regulation			± 1		%
load regulation	10%~100% load		± 1		
hold-up time	at 115 Vac, 90% output		10		ms
temperature coefficient			± 0.05		% $^{\circ}$ C
adjustability	with built-in trimpot		± 10		%
remote ON/OFF	ON: tie pin 4 (REM) to pin 6 (-Vo) or leave floating				
	OFF: apply +5 Vdc to pin 4 (REM) with respect to pin 6 (-Vo)				

4. PROTECTIONS

Parameter	Conditions/description	Min	Typ	Max	Units
over voltage protection	auto recovery, hiccup				
over current protection	auto recovery, hiccup				
short circuit protection	level 1 (nominal): continuous, auto				
	recovery level 2 (instantaneous high current): latch				
over temperature protection	latch off				

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5. SAFETY & COMPLIANCE

Parameter	Conditions/description	Min	Typ	Max	Units
isolation voltage	input to output	4000			Vac
		5656			Vdc
	input to PE ground	2000			Vac
		2828			Vdc
	output to PE ground	1500			Vac
		2121			
safety approvals	certified to 60601: IEC/EN/UL				
safety class	Class I (with PE) and Class II (without PE)				
conducted emission	EN 55011 Class B				
radiated emissions	EN 55011 Class I Class B / Class II Class A				
ESD	IEC/EN61000-4-2				
radiated immunity	IEC/EN61000-4-3				
EFT/burst	IEC/EN61000-4-4				
surge	IEC/EN61000-4-5				
conducted immunity	IEC/EN61000-4-6				
voltage dips and interruption	IEC/EN61000-4-11				
MTBF	per MIL-HDBK-217F at 25 °C	250,000			hours
RoHS	yes				

6. ENVIROMENTAL

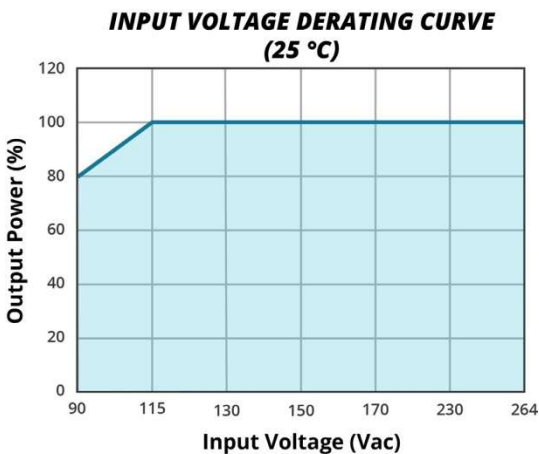
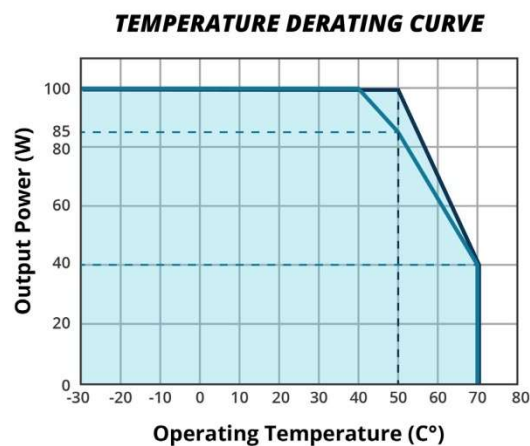
Parameter	Conditions/description	Min	Typ	Max	Units
Operating temperature	(see derating curve)	-30		70	°C
Storage temperature		-30		85	°C
Storage humidity		0		95	%

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6.1 DERATING CURVES



Note: If the input voltage is below 99Vac, it can only be used under the environment of higher than -10°C.

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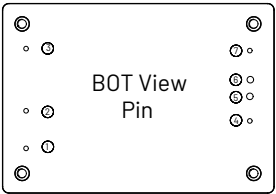
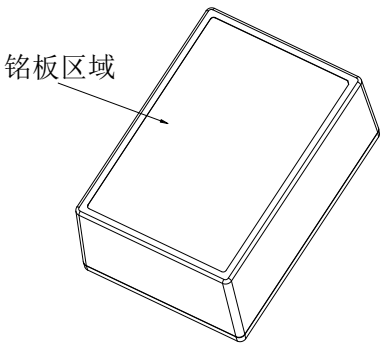
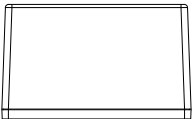
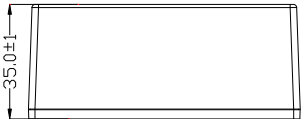
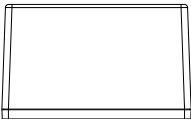
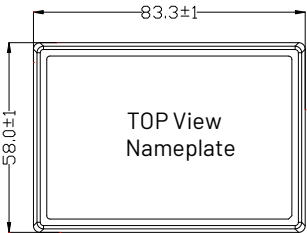
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7. MECHANICAL DRAWING

PIN CONNECTIONS	
Pin	Function
1	PE
2	AC - N
3	AC - L
4	ON/OFF
5	+V out
6	-V out
7	TRIM

Note: If the Remote ON/OFF function (pin 4) is not required, tie directly to -volpin 6/leave floating/open.



NOTE:

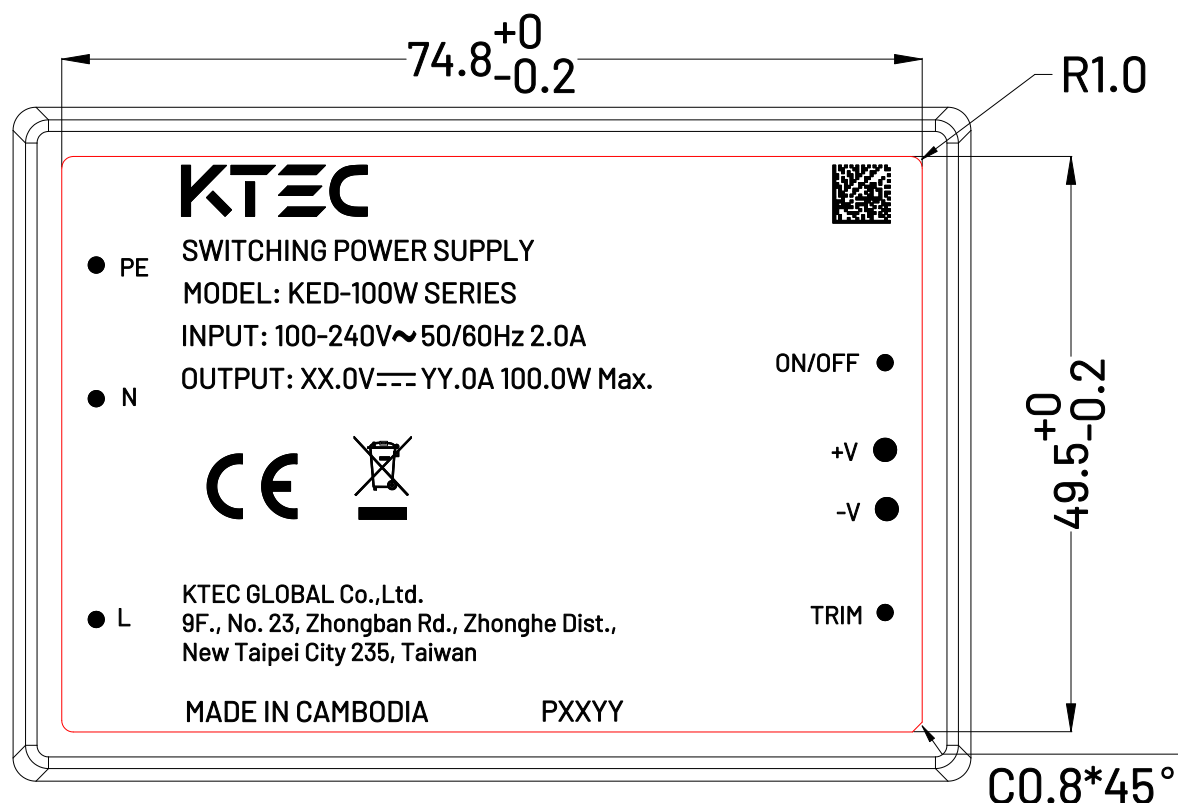
- 1. Case cover & chassis material PC BLACK (NO KTEC)
- 2. AC PIN MATERIAL: BRASS (NI PLATED)
- 3. PAHS 6P NP NOP REACH ROHS
- 4. Satin Finish
- 5. Top mold: JYM2508 Bottom mold: JYM2507

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8. NAME PLATE



Note: Laser

PXXYY (P=PAHS, 6P, NP XX=Week, YY=Year), use the actual production date.

SN (Data Matrix Code size: 5*5mm):

First code G(Ktec) + Production part number (Product code) + Ten yards of flow code SSSSSSSSSS (decimal) Total 19 codes

Example : GKS2514680000000001, GKS2514680000000002...GKS2514689999999999.

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9. MAIN FUNCTION INTRODUCTION:

9.1 BLOCK DIAGRAM

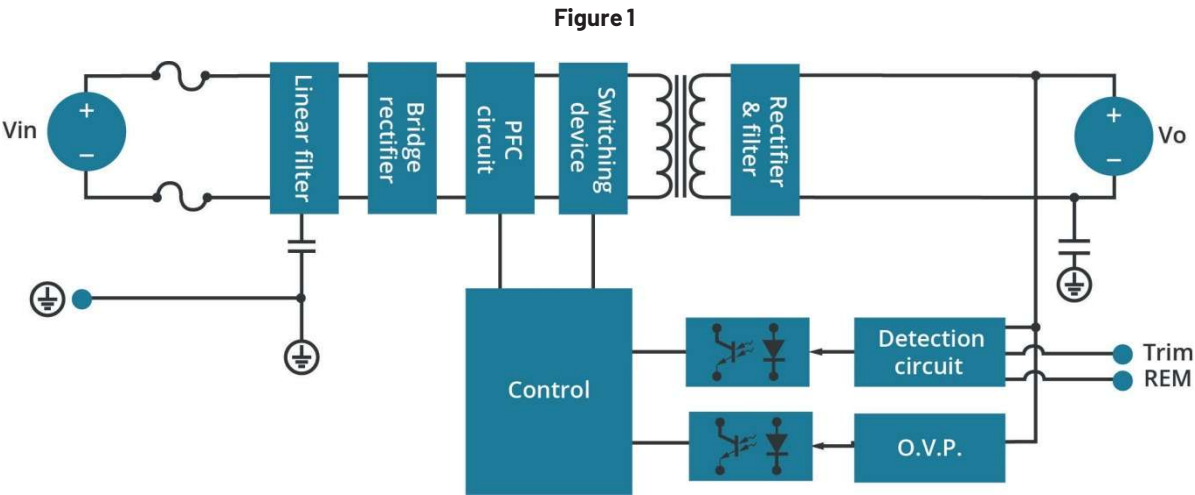


Table1

Part No.	Trim	-Vo	Trim	+Vo
KED-100W-120EP	10% / 0%		0% / -10%	
KED-100W-240EP	10% / 0%		0% / -10%	
KED-100W-480EP	10% / 0%		0% / -10%	

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10. PACKING (UNIT: MM)

