

## 4W Wide Input AC-DC PCB-Mount Power Supplies

<https://product.tdk.com/en/power/kas>  
[www.emea.tdk-lambda.com/kas](http://www.emea.tdk-lambda.com/kas)



Industrial



Test



COMM



Broadcast

The encapsulated KAS board mount power supplies are certified to IEC/CSA/UL/EN 62368-1, designed to meet IEC/EN 60335-1 and meet EN 55032 Class B for conducted and radiated emissions. With a wide input range of 90-305Vac requiring no earth ground (Class II), the KAS series is ideally suited for a wide range of applications including security systems, building automation, professional household appliances, portable equipment and products requiring a separate standby voltage.

### Features

- 90 - 305Vac Input
- Wide Temperature Range (-40 to +70°C)
- Low No Load Power Consumption
- Class II Double Insulated Input

### Benefits

- Operates From 115V, 230V and 277Vac Nominal Inputs
- Suitable For Industrial Applications
- Energy Saving During System Standby
- No Ground Connection Needed

### Model Selector

Model	Output Voltage (V)	Maximum Current (A)	Maximum Power (W)	Ripple & Noise (mVpk-pk)	Line Regulation (mV)	Load Regulation (mV)	Efficiency (%)	Maximum Load Capacitance (uF)
KAS4-3P3	3.3	1.2	4	250	±16.5	±49.5	68	5,000
KAS4-5	5	0.8	4	250	±25	±75	72	4,200
KAS4-8	8	0.5	4	200	±40	±120	74	1,470
KAS4-9	9	0.444	4	200	±45	±135	75	1,330
KAS4-12	12	0.333	4	150	±24	±60	76	680
KAS4-14	14	0.286	4	150	±28	±70	76	470
KAS4-15	15	0.267	4	100	±30	±75	76	330
KAS4-24	24	0.167	4	100	±48	±120	77	120

Specifications		
Model		KAS4
<b>Input</b>		
AC Input Voltage Range	Vac	90 - 305
Input Frequency	Hz	47 - 440*
DC Input Voltage Range	Vdc	120 - 430*
Input Current (115 / 230Vac)	mA	110 / 70
Inrush Current (115 / 230Vac)	A	15 / 25 (Cold start, 25°C, requires 10Ω 5A external NTC thermistor)
Touch Current (< 240Vac)	mA	<0.25
No Load Power Consumption	W	<0.3
Hold Up Time (typ) (115 / 230Vac)	ms	>15
Efficiency (1)	-	See model selector table
Conducted & Radiated EMI	-	EN55032-B
Immunity	-	EN55024 (With external varistor L-N rated at 350Vrms maximum, 920V clamp, 0.6W minimum)
Safety Certifications and Markings	-	UL/CSA/IEC/EN62368-1, IEC/EN60335-1 (Designed to meet), CE Mark and UKCA Mark

Immunity				
Test	Standard	Test Level	Criteria	Notes
ESD	IEC61000-4-2	2	A	Contact Discharge: ±4kV, Air Discharge: ±8kV
Radiated Susceptibility	IEC61000-4-3	2	A	Test Level: 3V/m at 80-1,000MHz
Electrical Fast Transient Burst	IEC61000-4-4	2	A	Voltage Peak: 1kV at 5kHz
Surge	IEC61000-4-5	2	A	Test Level: 1kV, Max Peak Current: 500A
Conducted Susceptibility	IEC61000-4-6	2	A	Test Level: 3Vrms
Magnetic Fields	IEC61000-4-8	1	A	Test Level: 1A/m
Voltage Dips and Short Interruptions	IEC61000-4-11	<5% for 1/2 cycle	A	-
		70% for 25/30 cycles	A	-
		<5% for 250/300 cycles	C	-

Specifications		
Model		KAS4
<b>Output</b>		
Output Voltage Set Accuracy	%	±2
Output Voltage Adjustment	-	None
Ripple and Noise	-	See model selector table
Switching Frequency	kHz	124 to 140
Temperature Coefficient	%/°C	±0.02
Minimum Load	-	None
Overcurrent Protection	%	>115 (Hiccup mode with auto-recovery)
Overvoltage Protection	-	None
Short Circuit Protection	-	None
Parallel Operation	-	Not possible

Specifications		
Model	KAS4	
<b>Environmental</b>		
Operating Temperature (2)	°C	-40 to +70, see derating curves below
Maximum Case Temperature	°C	90 (83 for <115Vac)
Storage Temperature	°C	-40 to +85
Humidity (non condensing)	%RH	10 to 95
Cooling	-	Convection
Altitude	m	3,000
Construction Class	-	II
Withstand Voltage (For 1 minute)	Vac	Input to Output 3,000
<b>Other</b>		
Weight (Typ)	g	26
Size (LxWxH)	mm	37.0 x 27.5 x 17.5
Size (LxWxH)	Inches	1.46 x 1.08 x 0.69
Case Material	-	Plastic Resin Case (UL 94V-0)
MTBF (MIL-HDBK-217F, 25°C)	Hours	450,000
Warranty	Years	3

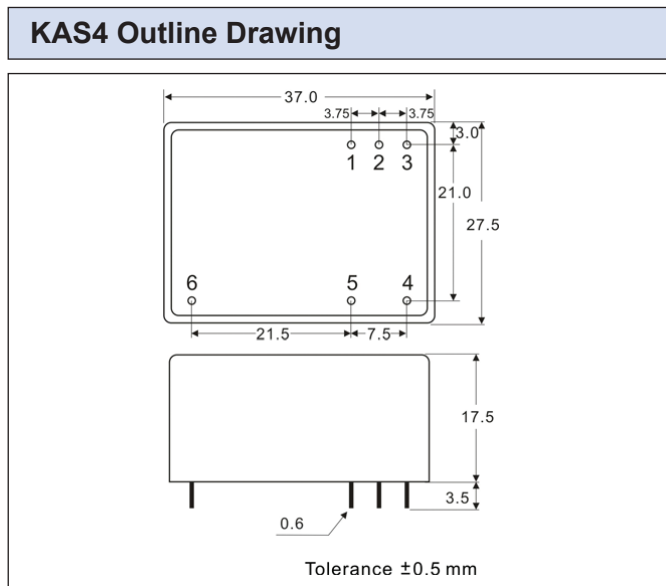
**Notes:**

See website for detailed specifications, test methods and installation manual

(1) Measured at 25%, 50%, 75% and 100% load conditions

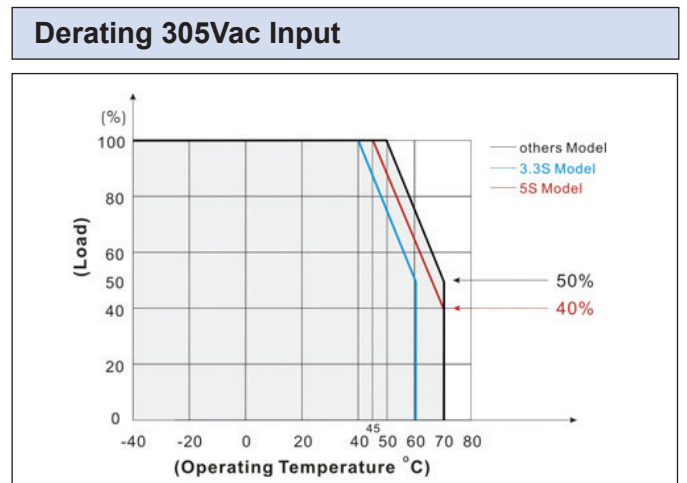
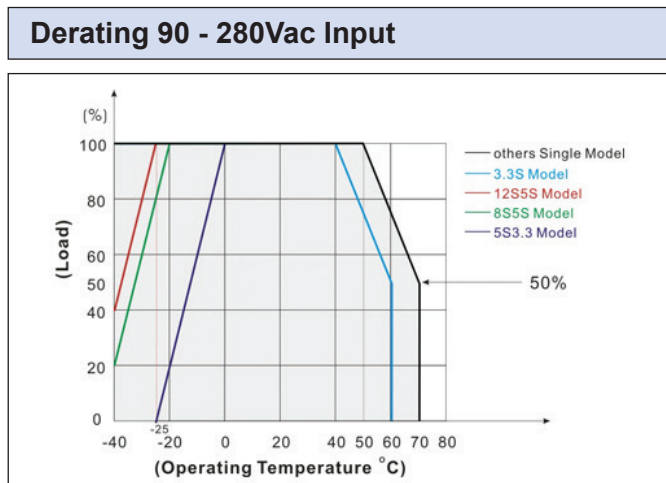
(2) Model dependent, see installation manual for details

\* Safety certified for AC input and 47-63Hz only



### Pinout

Pin	Function
1	+Vout
2	-Vout
3	Not connected
4	AC (L)
5	AC (N)
6	Not connected





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