

KAM30 SERIES

BM ENERGIE - AC-DC POWER MODULE

20 ~ 30W **UL / cUL / TUV / CE**



KAM30 12 D

WATTAGE

03 : 3.3V OUT
05 : 5V OUT
12 : 12V OUT
15 : 15V OUT
24 : 24V OUT
503 : 5V & 3.3V OUT
512 : 5V & 12V OUT

* : SINGLE OUTPUT
D : DUAL OUTPUT

* = BLANK

MODEL LIST

MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (TYP.)	EFF. (MIN.)	CASE
Single Output Models							
KAM3003	85~265 VAC	25 WATTS	+3.3 VDC	7500 mA	76%	74%	M2
KAM3005	85~265 VAC	30 WATTS	+ 5 VDC	6000 mA	79%	77%	M2
KAM3012	85~265 VAC	30 WATTS	+ 12 VDC	2500 mA	80%	78%	M2
KAM3015	85~265 VAC	30 WATTS	+ 15 VDC	2000 mA	84%	82%	M2
KAM3024	85~265 VAC	30 WATTS	+ 24 VDC	1250 mA	84%	82%	M2
Dual Output Models							
KAM3012D	85~265 VAC	30 WATTS	± 12 VDC	± 1250 mA	83%	81%	M2
KAM3015D	85~265 VAC	30 WATTS	± 15 VDC	± 1000 mA	84%	82%	M2
KAM30503D	85~265 VAC	20 WATTS	+5/+3.3 VDC	+3A/+1.5A	71%	68%	M2
KAM30512D	85~265 VAC	30 WATTS	+5/+12 VDC	+3A/+1.25A	81%	79%	M2

FEATURES

- * AC/DC POWER MODULE
- * UNIVERSAL INPUT 85 ~ 265 VAC
- * HIGH EFFICIENCY UP TO 84%
- * SHORT CIRCUIT PROTECTION
- * INTERNAL INPUT FILTER
- * 2 YEARS WARRANTY



CHINFA ELECTRONICS IND., CO. LTD.
ISO 9001 Certified

BM ENERGIE - Siège Courtaboeuf : 01.64.46.33.33
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SPECIFICATION

All Specifications Typical At Nominal Line, Full Load, 25°C Unless Otherwise Noticed

GENERAL SPECIFICATION

- | | |
|--|--|
| * Switching frequency: | 100KHz (typ.) |
| * Isolation voltage: | 3,000VAC (min.) |
| * Isolation resistance: | 100M Ω (min.) |
| * Operating ambient temperature: | -20 to +71°C |
| * Storage temperature: | -40 to +100°C |
| * Relative humidity: | 20% to 95%RH |
| * M.T.B.F.: | 205,000Hrs at @ GF40, according to MIL-HDBK-217F |
| * Cooling: | Free air convection |
| * Transient recovery time: | 500 μ S, 50% load step change |
| * Temperature coefficient: | $\pm 0.02\%$ / °C |
| * Dimension: | 89.2 x 63.8 x 32.3mm |

INPUT SPECIFICATIONS

- * Input voltage range / frequency: 85 ~ 265VAC / 47 ~ 63Hz
 * Max. Input voltage: 265VAC
 * Inrush current: < 12A at 110VAC
 < 20A at 230VAC

OUTPUT SPECIFICATIONS

- | | | |
|-----------------------------|-------|---|
| * Output voltage accuracy: | | ±2% at Vo_nom(max.) |
| * Minimum load: | | None at Vo_nom for single output models
20% FL each output at Vo_nom for dual output models |
| * Line regulation: | | ±1% at Vo_nom |
| * Load regulation: | | ±2% (NL ~ FL) at Vo_nom for single output models
±5% (20% ~ FL) at Vo_nom for dual output models
[±2% (20% ~ FL) at Vo_nom for +3.3V & +5V output models] |
| * Ripple & noise: | | Vout x ±1% _{mV} p-p (max.)
≤ 100mV for 3.3V _{out} |
| * Efficiency: | | Up to 84%, see model list |
| * Derating: | | +51 to +71°C, 2%/°C |
| * Case material: | | Non-conductive black plastic |
| * External trim ADJ. Range: | | ±10% for 5V ~ 24V _{out} at 5% ~ 100% load
(for single output only)
±5% for 3.3V _{out} at 5% ~ 100% load
(see Fig. 1 & table 1 for trim connection) |

CONTROL AND PROTECTION

- * Input fuse: T2A / 250VAC
* Output short circuit: Current limited

APPROVALS AND STANDARD

- UL / cUL: UL1950
TUV: IEC60950
CE: EN55022 for EMI
EN50082-1 for EMS



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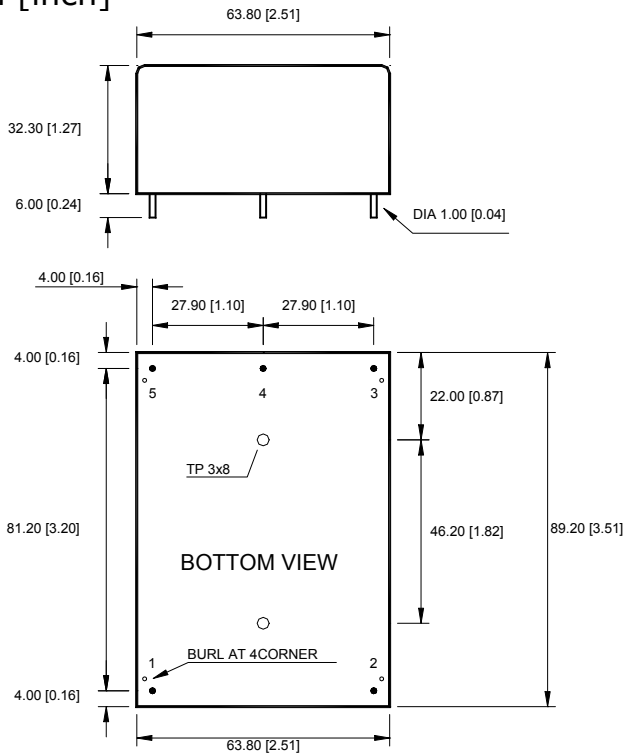
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MECHANISM & PIN CONFIGURATION

mm [inch]



PHYSICAL CHARACTERISTICS

CASE SIZE	89.2 x 63.8 x 32.3mm 3.51 x 2.51 x 1.27inch
CASE MATERIAL	Plastic
WEIGHT	320 g

PIN ASSIGNMENT

PIN NO.	1	2	3	4	5
SINGLE	AC IN	AC IN	Vo+	Vo-	Trim
DUAL	AC IN	AC IN	Vo1	com	Vo2

Fig. 1 Trim connection (For single output only)

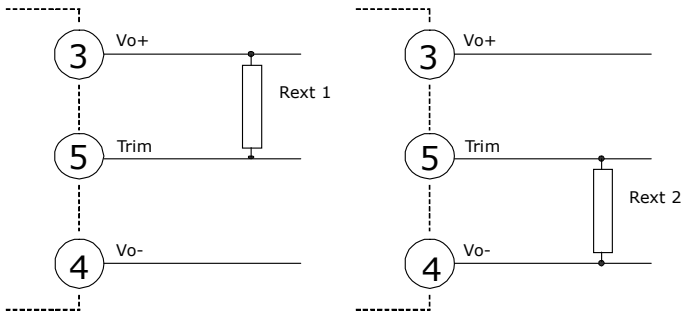
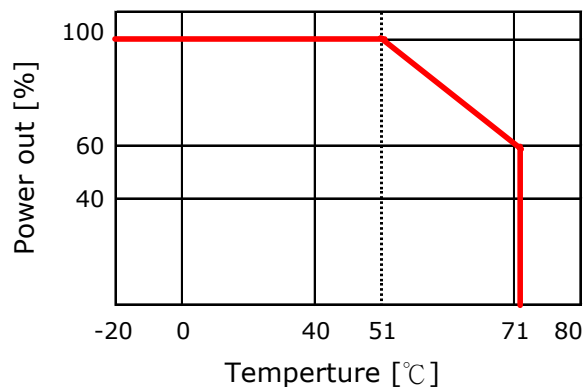


Table 1 Typical resistor values for various output voltage adjustment settings

Type	Rext 1		Rext 2	
	$U_o \text{ nom} +5\%$	$U_o \text{ nom} +10\%$	$U_o \text{ nom} +5\%$	$U_o \text{ nom} +10\%$
KAM3003	100 Ω	N/A	12K Ω	N/A
KAM3005	4.7K Ω	0K Ω	5.6K Ω	820 Ω
KAM3012	39K Ω	15K Ω	15K Ω	2.7K Ω
KAM3015	120K Ω	51K Ω	22K Ω	2.7K Ω
KAM3024	130K Ω	56K Ω	8.66K Ω	510 Ω

Derating:



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