

## 20 Watt, AKC Series, Encapsulated Power Supply

**ALL PSU LTD**  
Electronic Power Solutions

- Universal AC Input
- Fully Encapsulated, PCB Mounting Plastic Case plus option of Chassis Mounting with Screw Terminals.
- Wide Temperature Range
- Short Circuit, OVP Protected
- Convection Cooled
- Full Approvals: UL/CE
- Low Ripple And Noise



### Specification

Input Voltage.....	90~264 VAC, 47~440 Hz (100-375 VDC)
Inrush Current.....	30 A @ 115 VAC, 50 A @ 230 VAC
Output Voltage.....	See table below, +/-2% preset accuracy
Load Regulation.....	Single output: +/-1%, dual output: +/- 3 % Triple: +/-2% output 1, +/-5% outputs 2 & 3
Line Regulation (full range).....	Single output: +/-0.5%, dual output +/-0.5 % Triple: +/-1% output 1, +/-5% outputs 2 & 3
Over Voltage Protection.....	Zener diode clamp
Short Circuit Protection.....	Hiccup mode, indefinite (automatic recovery)
Hold Up Time.....	13 ms, min
Input to Output Isolation.....	I/P-O/P: 3 kVAC,
Operating Temperature .....	-25 to +70 °C, see derating curve
Storage Temperature.....	-40 to +85 °C
Switching Frequency.....	100 kHz
Safety Standards.....	UL/cUL, EN60950, CE
EMC.....	EN55022 Class B, EN55024
Mechanical (PCB Mount Version).....	Encapsulated, 70 x 48 x 22 mm
Connections Input & Output.....	PCB mounting: through hole pins
Mechanical Options.....	Chassis mounting with screw terminal connections

### Models and Ratings (Single, Dual & Triple Outputs)

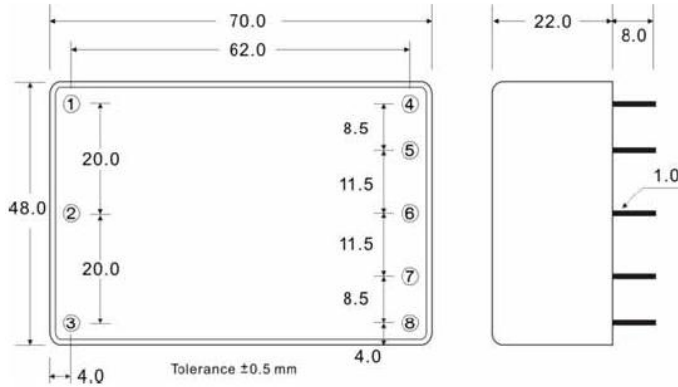
Model	Output 1	Output 2	Output 3	Output Current	Efficiency
AKC-3.3S-AP	3.3 V			4.5 A	75%
AKC-5S-AP	5.0 V			4.0 A	79%
AKC-7.35S-AP	7.35 V			2.73 A	82%
AKC-9S-AP	9.0 V			2.23 A	82%
AKC-12S-AP	12.0 V			1.67 A	83%
AKC-15S-AP	15.0 V			1.34 A	83%
AKC-24S-AP	24.0 V			0.84A	84%
AKC-5D-AP	+ 5.0 V	- 5.0 V		+/- 2.0 A	79%
AKC-12D-AP	+ 12.0 V	- 12.0 V		+/- 0.833 A	82%
AKC-15D-AP	+15.0 V	-15.0 V		+/- 0.667 A	82%
AKC-5S12D-AP	+ 5.0 V	+ 12.0 V	- 12.0 V	2.8 A, +/- 0.25 A	79%
AKC-5S15D-AP	+ 5.0 V	+15.0 V	-15.0 V	2.8 A, +/- 0.2 A	79%

Note: A 10% minimum load is required on the triple output units to maintain stated regulation

Please see next page for mechanical drawings.

**ALL PSU Ltd, Unit D6 Laser Quay, Culpeper Close, Medway City Estate,  
Rochester, Kent, ME2 4HU, Tel: 01634 725527, Fax: 01634 739111  
Email: sales@allpsu.co.uk, Web: www.allpsu.co.uk**

## Mechanical Details, standard unit (top view)



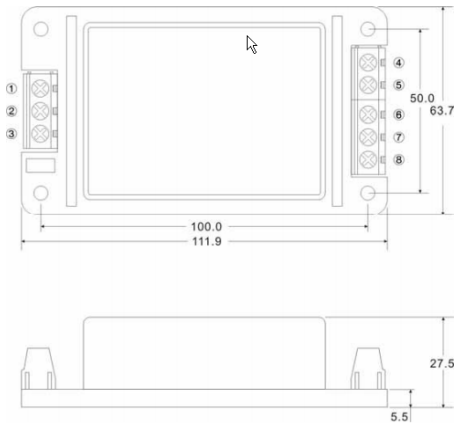
## Pinout Details

Pin	Function		
	Single	Dual	Triple
1	Gnd	Gnd	Gnd
2	AC Neutral	AC Neutral	AC Neutral
3	AC Live	AC Live	AC Live
4	No Pin	No Pin	-DC Out
5	-DC Out	-DC Out	Common
6	No Pin	Common	+DC Out
7	+DC Out	+DC Out	+5V Rtn
8	No Pin	No Pin	+5V Out

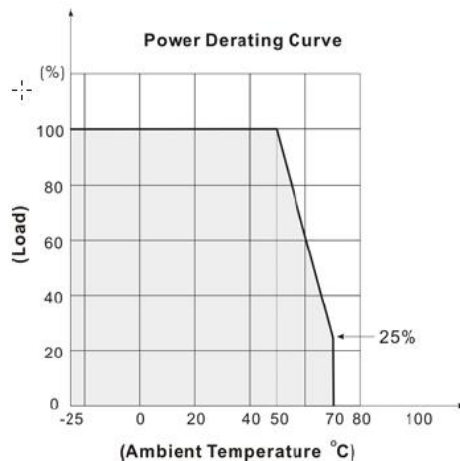
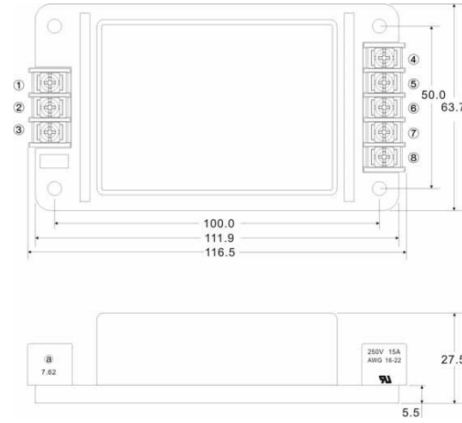
### Mechanical Options – add suffix:

- A2 = Chassis mounting with screw terminals for stripped wires
  - A5 = Chassis mounting with screw terminals for crimped terminals
- Please contact ALL PSU sales office for further details

#### Option “A2”



#### Option “A5”



Specifications may change without notice. E&OE. ALL PSU Terms & Conditions apply.