

**KaRaTec**  
POWER SUPPLIES PTY LTD

**GBX30 & GBX60**  
**30W & 60W hi-rel**  
**industrial DC/DC converters**



..... **RUGGED POWER YOU CAN REPLY ON.....**

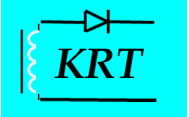
- **Reliable and Durable with *Field Proven MTBF***
- **Ruggedized for *Harsh Environment***
- **Transient & Surge protected for 'dirty' electrical area**
- **Space saving with *Low profile and Highly Integrated Design***
- **Simple installation with *Top-down Mounting and Pluggable I/O Connections***
- **Versatile combinations with *Extended Range of Input and Output available***
- **Dedicated technical support directly from *The Australian Manufacturer***



**STANDARD MODELS (NON-STANDARD INPUT AND OUTPUT AVAILABLE UPON REQUEST)**

30W Model:	Input voltage:	Input fusing recommended:	Output rating:
GBX30-1205	<b>12V nominal</b> 10.8V to 16V continuous	5AF	5V 6A
GBX30-1212			12V 2.5A
GBX30-1224			24V 1.25A
GBX30-1248			48V 0.65A
GBX30-2405	<b>24V nominal</b> 21V to 32V continuous	2AF	5V 6A
GBX30-2412			12V 2.5A
GBX30-2424			24V 1.25A
GBX30-2448			48V 0.65A
GBX30-4805	<b>48V nominal</b> 42V to 64V continuous	1.5AF	5V 6A
GBX30-4812			12V 2.5A
GBX30-4824			24V 1.25A
GBX30-4848			48V 0.65A

60W Model:	Input voltage:	Input fusing recommended:	Output rating:
GBX60-1205	<b>12V nominal</b> 10.8V to 16V continuous	10AF	5V 12A
GBX60-1212			12V 5A
GBX60-1224			24V 2.5A
GBX60-1248			48V 1.25A
GBX60-2405	<b>24V nominal</b> 21V to 32V continuous	5AF	5V 12A
GBX60-2412			12V 5A
GBX60-2424			24V 2.5A
GBX60-2448			48V 1.25A
GBX60-4805	<b>48V nominal</b> 42V to 64V continuous	2.5AF	5V 12A
GBX60-4812			12V 5A
GBX60-4824			24V 2.5A
GBX60-4848			48V 1.25A



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## INPUT:

**Reverse polarity protection:**  
Blow input fuse (see table for recommended values)

**Input surge, transient & immunity:**  
1.5KW transorb protected.

## OUTPUT:

**Setup accuracy:** better than 4%

**Input adjustment:** typical  $\pm 10\%$

**Line & Load regulation:** better than 0.25%

**Noise and ripple (20MHz BW):** better than 1%  
( $< 100mV_{p-p}$  5V model)

**Efficiency:** typical 88%

**Current limit (@90%  $V_{nominal}$ ):** 120%  $I_{rated}$   
(auto-recovery)

**Overload protection:** constant current/  
hiccup mode

## ISOLATION:

**Input to Output:** 500Vdc

**Input to Chassis:** 500Vdc

**Output to Chassis:** 500Vdc

## MECHANICAL:

**Outside dimension:** 100x65x18 (mm)

**Casing:** Black anodised aluminium extrusion

**Weight:** 0.18Kg

## OPERATING CONDITIONS:

**Operating temperature  $T_{max}$  (no derating)**

**standalone free air convection cooling:** 55°C  $T_{amb}$

**chassis conduction cooling:** 90°C  $T_{chassis}$

**Overtemperature protection:** 100°C  $T_{chassis}$   
(auto-recovery)

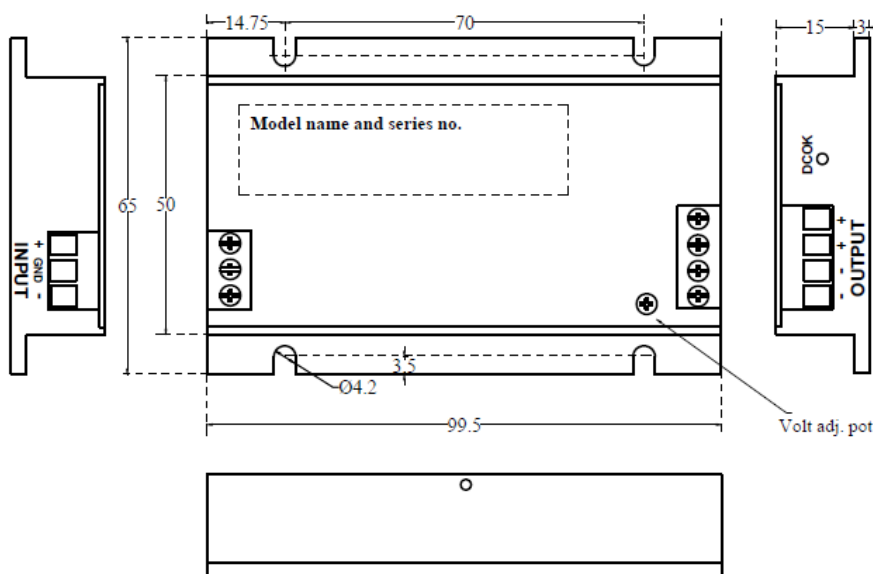
**MTBF ( $G_b, T_{amb}=25^\circ C$ ):** 720Khours  
(estimated MIL-SPEC 217K)

**Shock and Vibration:** MIL-STD 810E & IEC61373  
(designed to meet, fully encapsulated design)

**Relative Humidity:** 95%  
(designed to meet, fully encapsulated design)

**Power on indication** Green LED on output side panel

**Input & Output mating connectors:** 2.5mm<sup>2</sup> screw terminal block



Finish: Black anodised.  
Note: Remove all burr and shape edges  
All dimensions in mm unless otherwise stated.

Title GBX 30/60 Outline		Doc No GB-outline		Issue
KaRaTec™	Drawn By: RC	Chkd:	Appvd:	
	Date: 20th Sept 2002	Date:	Date:	
		Sheet 1 of 1		