

# KaRaTec

POWER SUPPLIES PTY LTD

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

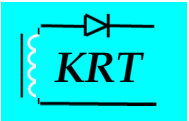
- **Reliable and Durable with *Field Proven MTBF & 100% burn-in test***
- **Ruggedized for *Harsh Environment***
- **EMC harden for *'dirty' Electrical Area***
- **Space saving with *Low profile and Highly Integrated Design***
- **Simple installation with *Top-down Mounting and Pluggable I/O Connections***
- **Versatile combinations with *Extended Range of Input and Output available***
- **Dedicated technical support directly from *The Australian Manufacturer***

## GBP2120 120W hi-rel Industrial DC/DC converters



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

Model:	Input voltage:	Input startup/ shutdown (typ):	Input fusing recommended:	Output rating:
GBP2120-1205	<b>12V nominal</b> 10V to 20V continuous	11V startup 9.5V shutdown	16AF	5V 24A
GBP2120-1212				12V 10A
GBP2120-1224				24V 5A
GBP2120-1248				48V 2.5A
GBP2120-2405	<b>24V nominal</b> 18V to 40V continuous	20V startup 17V shutdown	10AF	5V 24A
GBP2120-2412				12V 10A
GBP2120-2424				24V 5A
GBP2120-2448				48V 2.5A
GBP2120-2213.7	<b>24V nominal</b> 14.5V to 36V continuous	15V startup 13V shutdown	12.5AF	13.75V 8.8A
GBP2120-4805	<b>48V nominal</b> 36V to 72V continuous	37V startup 33V shutdown	5AF	5V 24A
GBP2120-4812				12V 10A
GBP2120-4824				24V 5A
GBP2120-4848				48V 2.5A
GBP2120-11005	<b>110V nominal</b> 80V to 175V continuous	87.5V startup 77V shutdown	2AF	5V 24A
GBP2120-11012				12V 10A
GBP2120-11024				24V 5A
GBP2120-11048				48V 2.5A
<i>Wide Input model 100W</i>				
GBP2100-W2412	<b>9.5V to 36V</b> continuous	11.5V startup 9.3V shutdown	12.5AF	12V 8.3A
GBP2100-W2424				24V 4.2A



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### INPUT:

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

**Input surge, transient & immunity:**  
IEC61000-4-2, IEC61000-4-3,  
IEC61000-4-4, IEC61000-4-6,

### OUTPUT:

**Setup accuracy:** better than 0.5%

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

**Noise and ripple (20MHz BW):** better than 0.25%

**Efficiency:** typical 91%

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

**Overload Trip:** 150%  $I_{rated}$   
(0.4s on/4s off, auto-restart)

**Overvoltage latch:** 125%  $V_{nominal}$   
(reset by recycling input power)

### MECHANICAL:

**Outside dimension:** 150x90x22 (mm)

**Casing:** Black anodised aluminium extrusion

**Weight:** 0.55Kg

### ISOLATION:

**Input to Output:** 1KVdc

**Input to Chassis:** 1KVdc

**Output to Chassis:** 500Vdc

### 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 ( $G_m, T_{amb}=25°C$ ):** 260Khours  
(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

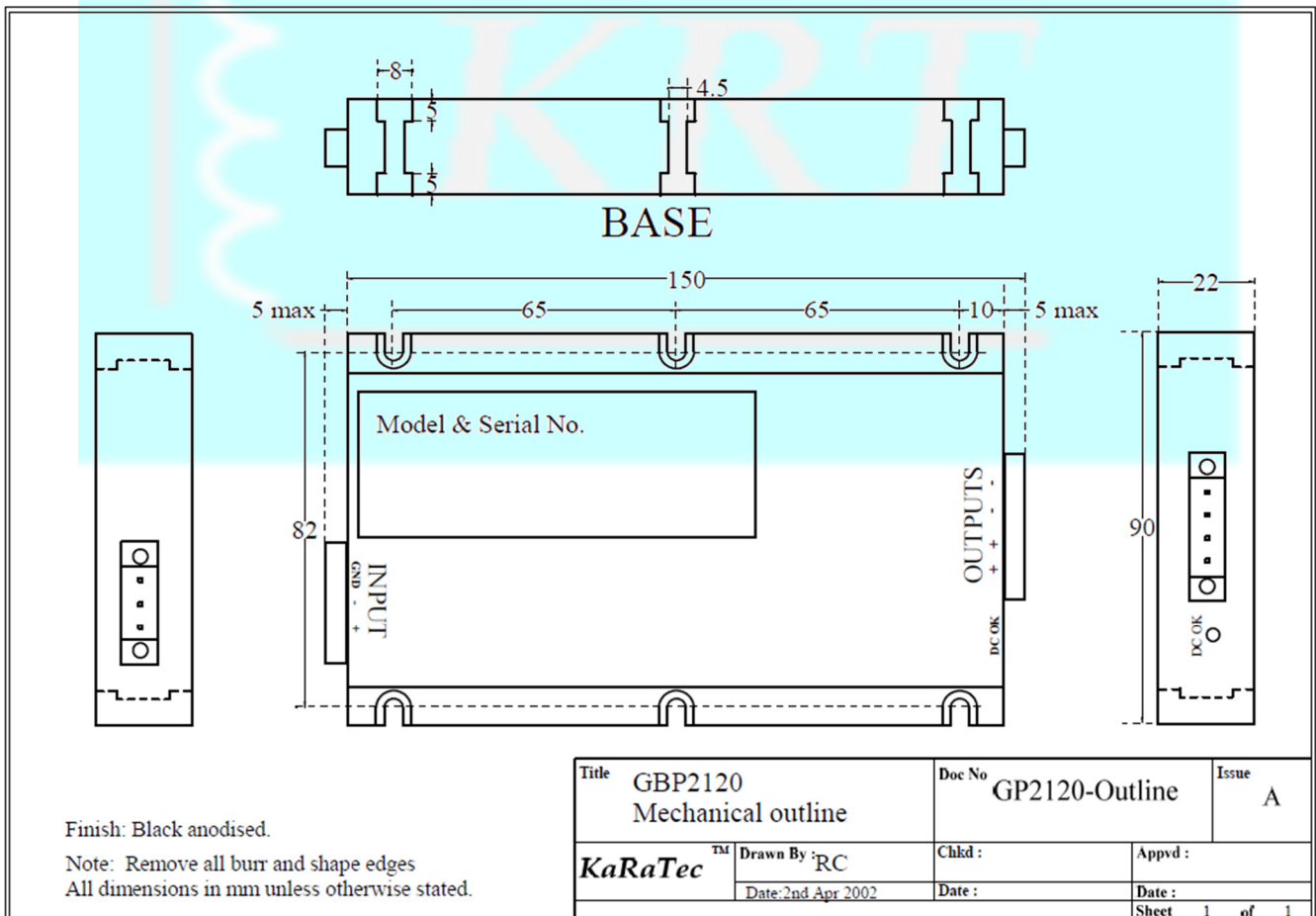
**Input & Output mating connectors (wurth type 3405 series):**  
**Input:** 5.08mm 3way lock  
**Output:** 5.08mm 4way lock

Note: Mating connectors supplied with converter.

### OPTIONS:

**Adjustable output:** -adj ( $\pm 7\%$  typ via pot)

**DC OK alarm contact:** -Al (60V 0.5A 1formA SSR)



Finish: Black anodised.

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