

- Wide range of input options
- Convection cooled: No fans 240W Full Power
- Low profile 40mm
- Fully encapsulated, ideal for harsh environments
- Fully isolated input – output
- Over voltage protection
- Overload and short circuit protection
- Suitable for a wide range of industrial applications
- MTBF > 200,000hrs
- Specials input / output combinations on request
- Battery Charging options: Consult office



Model Selection Table

Model Number	Description
GB2-240-1212	DC/DC Converter Fully Encapsulated Input:10-20VDC Output: 12VDC 20A 240W
GB2-240-1224	DC/DC Converter Fully Encapsulated Input:10-20VDC Output: 24VDC 10A 240W
GB2-240-1248	DC/DC Converter Fully Encapsulated Input:10-20VDC Output: 48VDC 5A 240W
GB2-240-2412	DC/DC Converter Fully Encapsulated Input:18-40VDC Output: 12VDC 20A 240W
GB2-240-2412	DC/DC Converter Fully Encapsulated Input:18-40VDC Output: 12VDC 20A 240W
GB2-240-2424	DC/DC Converter Fully Encapsulated Input:18-40VDC Output: 24VDC 10A 240W
GB2-240-2448	DC/DC Converter Fully Encapsulated Input:18-40VDC Output: 48VDC 5A 240W
GB2-240-4812	DC/DC Converter Fully Encapsulated Input:36-72VDC Output: 12VDC 20A 240W
GB2-240-4824	DC/DC Converter Fully Encapsulated Input:36-72VDC Output: 24VDC 10A 240W
GB2-240-4848	DC/DC Converter Fully Encapsulated Input:36-72VDC Output: 48VDC 5A 240W
GB2-240-11012	DC/DC Converter Fully Encapsulated Input:80-175VDC Output: 12VDC 20A 240W
GB2-240-11024	DC/DC Converter Fully Encapsulated Input:80-175VDC Output: 24VDC 10A 240W
GB2-240-11048	DC/DC Converter Fully Encapsulated Input:80-175VDC Output: 48VDC 5A 240W

Description

The GB2-240 series DC/DC converter is a highly integrated DC/DC converter designed for DC/DC conversion. This series is rated at 240W. With various combinations of input and output voltages, the converters are ideal of any standalone operation. The unit is encapsulated into an aluminium U-channel as the heatsink surface for the converter. Utilising the latest planar magnetic and high integration ceramic technology, the unit has a small carbon footprint. Input and Output to the unit are screw terminal block. A green LED indicates the presense of output voltage. The GB2-240 units can withstand high temperature operation. The maximum surface temperature rise of the heatsink would be around 45°C above ambient. (Direct skin contact with the heatsink surface should be avoided.)

Specifications

Input Specs

Reverse polarity protection	By input fuse
Input fuse recommended values	12V Input: 30A Fast Blow 24V Input:20A Fast Blow 48V Input:10A Fast Blow 110V Input: 4A Fast Blow
Input Voltage Range	12V Input: 10-20 VDC Startup: 11V Shutdown: 9.5V 24V Input: 18-40 VDC Startup: 20V Shutdown: 17V 48V Input: 36-72 VDC Startup 37V Shutdown: 33V 110V Input: 80-175 VDC Startup 87.5V Shutdown: 77V

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

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	120% Irated (@90% Vnominal)(auto-recovery)
Overload Trip:	150% Irated (0.4s on/4s off, auto-restart)
Overvoltage latch:	125% Vnominal (reset by recycling input power)
Isolation:	Input to OUTPUT: 1KVDC Input to Chassis:1KVDC Output to Chassis: 500Vdc

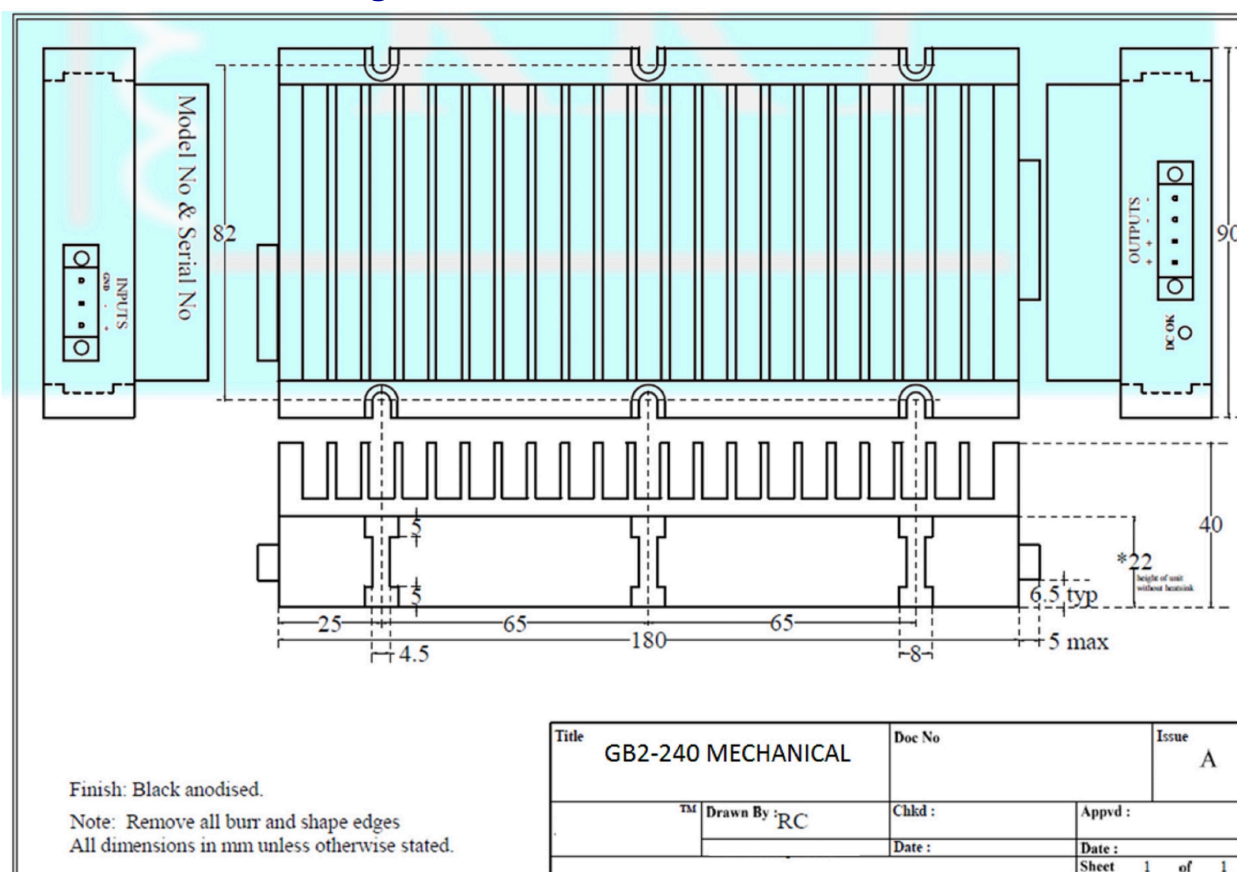
Mechanical Specifications:

Outside dimension:	180x90x40 (mm)
Casing:	Black anodised aluminium extrusion
Weight:	0.95Kg
Input Output Connectors	Input: 5.08mm 3way lock , Output: 5.08mm 4way lock For 12V input units: Input connector: Weidmuller OMNIMATE SV7.62 3way

Operating Coniditions:

Operating temperature	Standalone free air convection cooling: 55°C at full power
MTBF	260Khours (estimated MIL-SPEC 217K)
Shock and Vibration:	Designed to meet MIL-STD 810E & IEC61373
Relative Humidity:	95%
Power on indication	Green LED on output side panel

GB2-240 Mechanical Drawing



GB2-240 Mechanical Drawing - 12V Input

