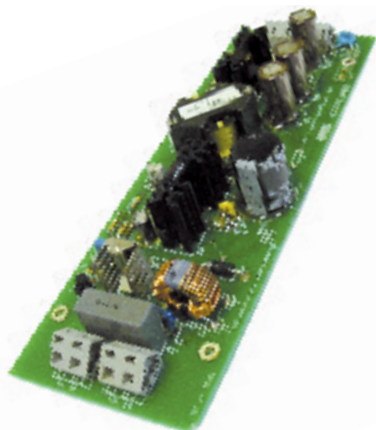




35W & 50 W JL SERIES

DC/DC CONVERTER



Description

Originally designed for on-board passenger information systems the JL series is now available in a wide variety of input and output configurations. Capable of providing 35W or 50W of continuous power at ambient temperatures of up to 75°C, the low component count makes the JL series a highly reliable yet low cost solution. For applications where the converter will be housed within an enclosure, the open frame version offers a further cost saving.

Features include:

- One or two outputs
- Wide operating temperature range
- Low component count, high reliability
- Simple construction - open frame or enclosed versions available
- Compliant with EN railway norms
- Low cost

Input Specifications

Product reference	All references
Nominal Input	Can be specified between 24V and 110 V dc
Input Range	60% -125% of nominal
Input Ripple	EN50155
Inrush Current	5 x nominal current (after 0.1ms)
Input Protection	Reverse polarity protection. Surges and transients to EN50155 (Direct and Indirect)
Efficiency	85% typical

Output Specifications

Product reference	All references
Maximum Output Power	JL series = 35W JLH series = 50W
Output Voltage	Single or dual output versions available. Fixed output can be specified in the range 5V to 110Vdc
Setting Tolerance	±2%
Line / Load Regulation	Single output version ±2%, second output where fitted ±10%
Temperature Coefficient	<0.02% / °C
Output Ripple	<1% p-p of output voltage
Output Noise	<75mV p-p superimposed (up to 20MHz)
Response Time	1.0ms to within 2% (for a 20% - 90% load change)
Primary Power Limit	Operates at approximately 120% of rated output power
Isolation	Input to Outputs 2.5kV dc Output / Input to Case 1.5kVdc (enclosed version) Output to Output N/A (common ground)

Environmental Details

Product reference	All references
Operating Temperature	-25°C to +75°C
Storage Temperature	-40°C to +80°C
Humidity	95% maximum
Shock and Vibration	EN50155 para 10.2.11, EN60068-2-27



Applicable Norms

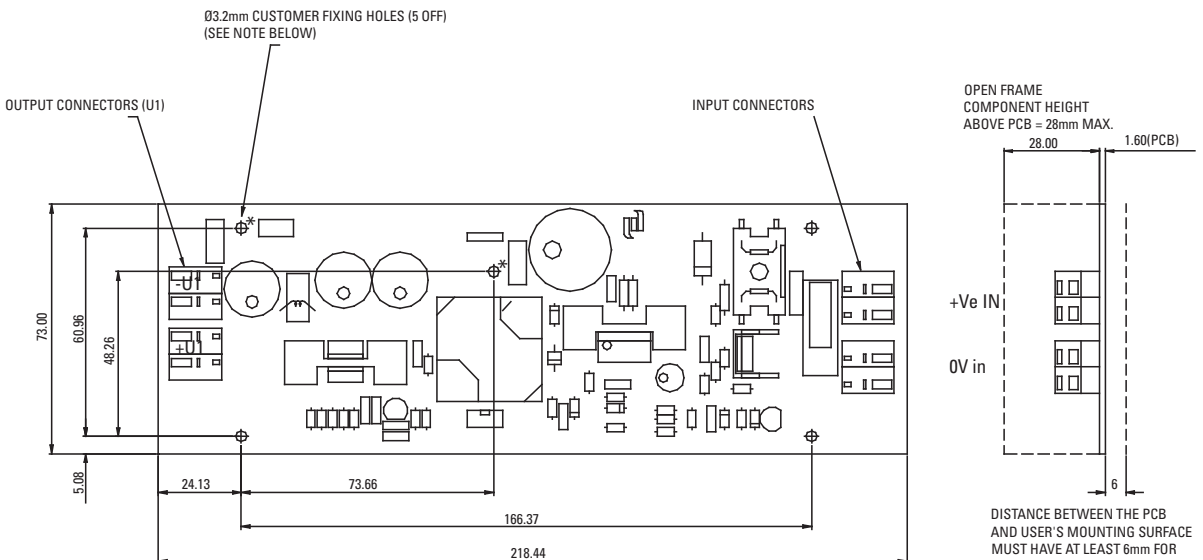
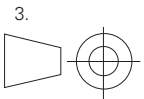
Item	Reference
EMC	EN50155, EN50121-3-2
Other	EN50155

Mechanical Characteristics

Product reference	All references
Construction	Open frame PCB or enclosed versions available
Finish	Conformal coated PCB; plated mild steel for enclosure
Mounting	Open frame version: Five Ø 3.2mm fixing holes on PCB Enclosed version : Four Ø 4.2mm fixing holes on base plate
Dimensions (PCB / enclosure)	Length = 220 / 250 mm Width = 73 / 78 mm Height = 30 / 35 mm
Weight	<0.5kg
Connections	Wago type 236-501
Cooling	By convection

Technical Drawing

- NOTES**
- All dimensions in mm
 - Specifications subject to change without notification



NOTES:
FOR OPTIMUM EMC PERFORMANCE THE TWO CUSTOMER FIXING HOLES (MARKED *) SHOULD BE CONNECTED TOGETHER AND TO EARTH.

TERMINAL BLOCKS ARE WAGO 236-501.