



Autometers Alliance Ltd

Autometers Alliance Ltd offers 500 kVA HOG (Head on Generation) Converter. The product is designed to meet requirements of IEC 60571 (Edition 2.1), IEC 61287-1 (Edition 2.0), IEC 60310 (Edition 3.0), IEC 61373 (Edition 2.0) and other relevant IEC and Indian (BIS) Standards.

Salient Features

- State of the art DSP based system
- Stabilised and balanced output at 750 V and 50 Hz with minimum distortion
- Balanced output eliminates the need of special auxiliary motors thereby reducing the cost of auxiliary motors
- Near unity power factor achieved using Four Quadrant (4Q) front end converter
- Maintenance free, being fully static
- Less noise
- Event and data logging/ debugging using USB / CAN / RS232 / RS485
- Online monitoring for fault diagnostics
- Data modem for remote feed back of status
- Optical link between DSP and power devices

HOG CONVERTER 500 kVA



Applications

Converts single phase input voltage with typical railway characteristics to stabilised 3-phase voltages for the safe and reliable operation of Air conditioners and other hotel load of full train (coaches)



Technical Specifications

A. Input

Factors	Values
Nominal voltage	AC single phase, 750 V, +20%, -30% (corresponding to catenary voltage of 25 kV)
Power factor	Close to unity
Frequency	50±8% Hz
Regeneration facility	Available due to front end Four Quadrant (4Q) operation

B. Output

Factors	Values
Output Power	500 kVA, 0.8pf (at nominal operation)
Output Voltage	AC 750 V ±5% (three phase)
Waveform	Near Sine wave
Total harmonic distortion in voltage	≤ 10% (up to 20th harmonic)
Current unbalance	15% maximum
Efficiency	≥ 92% (at nominal input voltage)

C. General

Factors	
Operating ambient temperature	0 to 70°C
Cooling	Forced air cooling (Sintered Heat Pipe based)
Display & communication port	Vacuum fluorescent display (VFD) and USB (2.0) / RS-232 port for online monitoring and data retrieval
Control voltage	Nominal 110 V(77 to 137.5 V)
Mounting	Onboard floor mounting
Weight	~2800kg
Envelope size	1400×1075×1750 mm (Main converter box 1) 350×1075×1750 mm (Input Inductor box 2) 400×800×1100 mm (Output inductor box 3)



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