



Autometers Alliance Ltd

Autometers Alliance Ltd offers 180 kVA IGBT based Static 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 415 V and 50 Hz with minimum distortion
- Eliminates the need of special auxiliary motors thereby reducing the cost of auxiliary motors
- Near unity power factor achieved using 4 quadrant front end converter
- Maintenance free, being fully static
- Less noise
- Event and data logging facility helps in fault diagnostics
- Electrically and functionally one to one replacement of Arno Converter
- Online monitoring
- Controlled battery charger with galvanic isolation between converter and battery
- Eliminates the disadvantages of rotary converter
- Optical link between DSP and power devices



AUXILIARY CONVERTER 180 kVA

Applications

Converts single phase input voltage with typical railway characteristics to stabilised 3-phase voltages for the safe and reliable operation of electrical equipment onboard railway vehicles.



Technical Specifications

A. Input

Factors	Values
Nominal voltage	AC single phase, 380 V or 415 V, -22%, +33% (corresponding to catenary voltage of 22.5 kV)
Power factor	Close to unity
Frequency	50±8% Hz
Regeneration facility	Available due to front end 4 quadrant operation

B. Output

Factors	Values
Output Power	180 kVA, 0.8pf (at nominal operation)
Overload	200% for 5 sec (360 kVA & current limit of 600A)
Voltage 1	AC 415 ± 5%, 3-phase system
Voltage 2	DC 110V ±5% ripple (rms) at full load
Waveform	Sine wave
Total harmonic distortion in voltage	≤10% (up to 20th harmonic)
Efficiency	≥92% (at nominal input voltage)

C. General

Factors	Values
Operating ambient temperature	0 to 70 °C
Cooling	Forced air cooling
Display & communication port	Vacuum fluorescent display (VFD) and RS-232 port for online monitoring and data retrieval
Control voltage	Nominal (77 to 137.5 V)
Mounting	Onboard floor mounting
Weight	~1400kg
Envelope size	670x1765x1700 mm (approx)



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