

iTrac 25 PBT Inverter For Railway AC Coach



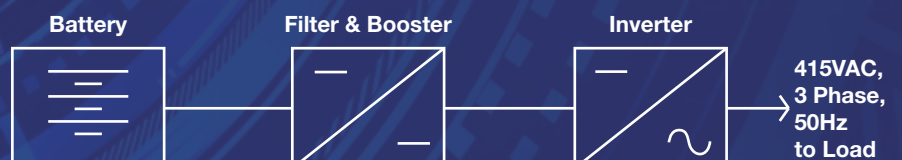
About 25kVA Under Slung Inverter

The new IGBT based PWM under slung Inverter for Railway AC Coaches from Hitachi Hi-Rel Power Electronics using latest technology 8-bit microcontroller is successful development of energy supply system for Railway rolling stock application. The Under Slung Inverter provided by us is used for supplying power to the AC Package Unit for air conditioning of AC Coaches. The unit consists of the following basic section:

- I/P Switch Gear
- Booster and Filter
- Inverter
- Protections
- 25kVA Under Slung Inverter
- Metering and Indication

This 25 kVA Under Slung Inverter has been specially developed for supplying power to the AC Package Unit for air conditioning of Railway AC Coaches. The design and development of these compact and rugged power supply units was carried out, in-house at Hitachi Hi-Rel Power Electronics. These units have undergone rigorous test for vibration (3 Dimension), damp heat and dry heat conditions and stand out for their extreme reliability under roughest environmental conditions.

Block Diagram



Registration Certificate,
RCF, Kapurthala



Features

- Fully controlled, IGBT based inverter
- Efficiency 93%
- LED indications for faults
- Log facility for last ten faults and RS-232 communication port provided for downloading
- On board display panel with IP 20 degree of protection and Fault Reset Push button to clear fault
- Input withstanding capacity up to 200 V without any damage
- Operating temperature up to 55° C
- Natural cooling

Protections

- Input Reverse Polarity
- Input Over Voltage
- Input Under Voltage
- Pre charge fail
- Inverter O/P Short circuit
- Inverter Overload
- Earth Fault
- Over temperature(Heat sink)

Advantages

- Fast response
- High reliability
- Reduced hardware and maintenance-friendly device design
- Excellent operator interface as well as fault storage

Specification

Input Data

Input voltage : 90 -140VDC
Max. Input current : 250 Amps.

Output Data

Rated O/p Voltage : 415 VAC \pm 5%
Frequency : 50Hz \pm 3%
Continuous Output KVA : 25 kVA, (20KW @ 0.8 p.f)
Overload Capacity : 120 % for 60 sec

Metering and Indications

- Input DC supply ON
- Inverter ON
- Booster Fault
- Inverter Fault
- Input Fuse Failure
- Earth Fault
- Reverse Polarity
- Input over voltage
- Input under voltage < 90V DC
- Alarm indication for input < 100 V

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In the spirit of innovation, specifications and features are subject to change without notice.



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