

PRODUCT CATALOGUE PASSENGER RAIL



Traction Controller

- Controls the Train Motor Coach Acceleration and Direction
- Impact Sensors transfer info onto a recording device at time of collision i.e. HT voltage; MA/MG output voltage; Train line pressure; breaking time; break distances



Coach Controller

- Provides for passenger safety and comfort, fault diagnostics, provides network
- Motor-coach: control of battery system; aux compressor; pantograph; main compressor; and exhauster
- Trailer Coach: control passenger side-doors; ventilation system; lighting



Sinewave Inverter

- Portable 5KVA pure sinewave inverter
- Used mainly in the Metrorail Business Express Trains
- Settable initial start-up delay plus soft-start of input capacitors
- Allows for a smooth start-up sequence



Shaft Encoder

- Outputs a bi-phase signal proportional to the rotational speed of a train axle
- A full rotation equals 512 pulses



Plastic Shaft Encoder

Replaces old machined housing.

- SMD technology.
- Delivery time shorter.
- UV protected.
- Corrosive substance resistant.



Plastic Hub for Shaft Encoder

- Replaces old metal casting.
- Cost effective.
- Delivery time shorter.
- Easier to install.
- UV protected.
- Corrosive substance resistant.



Metal Casting



Current Balance Relay

- Compares two DC currents, and if they are unbalanced will operate a potentially free contact



10M Door Warbler

- Door Control System for opening and closing doors
- With audible alarm
- For suburban trains



DC to DC Wiper Power Supply

- Power supply is optimised for rolling stock applications.
- This product is used as a power supply to wiper systems on Metro trains.



Bill Light - Door Open Indicator (Gautrain)

- Completely sealed unit.
- UV stable material.



HVAC Fan Units Repair (Gautrain)

- Able to replace worn bearings.
- Balance final unit.





10M Charger Module

- 110v Battery Charger up to 50A at the regulated output voltage
- Includes Input and Output over-voltage protector



Circuit Breaker Monitor

- Monitor if circuit breakers are closed
- Alarm output if circuit breaker trips
- Up to 10 Circuit Breakers are monitored
- All inputs are electrically insulated



Fan Inverter

- Controls the speed of the fans according to the Temperature
- Includes a 110V to 230Vac 50W inverter with isolated output



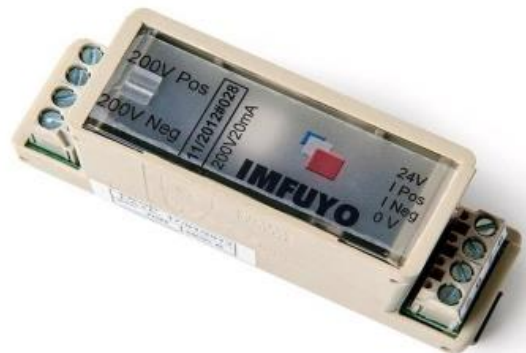
10M Blocking Diode

- Prevents back-emf (*electro-magnetic-force*) from overhead-line and short-circuit conditions



110V – 24V DC to DC Converter

- DC to DC converter with isolated output up to 50W



200V 20A Voltage Transducer

- Converts an input voltage of 0v to 200v DC into a proportional 0v to 20mA output current signal



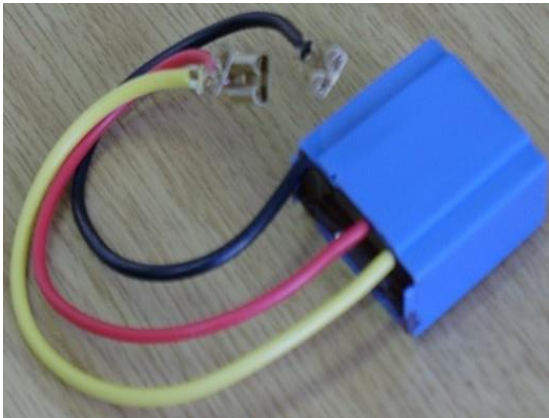
Fire Suppression

- Commercial fire detection transducers used
- Fire alarm output
- Suppressant cylinder discharge output



Pre Charge

- Pre charge high capacitive devices before supply feed is connected to specific product



Battery Equaliser

When 2 batteries are charged simultaneously, it keeps the charge series equal



Lubricants

– Synthetic Oil



Vacuum Pump



Auxiliary Compressor

– for Lifting Pantographs



Exhauster – with IME10 Air-End

- Vacuum of up to 63 Psi possible.
- Screw type air end.
- Over temperature protection.
- Low air end maintenance.



3Phase Drive

- DC to 3-Phase AC convertor for AC Motor Drive applications
- Unit used for vacuum generation for the braking system on Metropolitan Trains



Air Horn



Wiper System



Blocking Diode Circuit

Provides protection from the overhead line



DC to DC converter

Uses 110v dc input supply and converts it to 24v DC output



Driver Indication Panel

- Up to 12 indications can be displayed to the driver.
- Lamps can be tested.



Wiper Motor Controller

- Provides a 12v auxiliary power supply and also provides over current protection



100A Current Shunt

- Converts current reading into 0 to 20mA output signal.
- A pre-set current trip level can be configured.



Vacuum Transducer

- Vacuum levels in braking system reflected on a 4 – 20mA current loop output



5M/10M VR with No Battery

- Controls the output obtained by a MA or MG on 10M or 5M motor coaches.
- No battery present in the design that previously assisted with start-up.



HV Transducer (3000VDC)

- Converts the voltage that is incoming to the coach to a 4-20mA current loop.
- Improved input resistor voltage detection circuit.