



## Model C490

**Ground Power Unit  
90 and 100kVA output,  
with optional 28V DC**

The C490 is a low noise Ground Power Unit suitable for servicing 400Hz AC and 28V DC electrical systems on a range of aircraft. Powered by a QSB 4.5L diesel engine, coupled to a Houchin alternator, the unit is mounted on a monocoque chassis with integral cable trays. It is protected by our unique sliding weatherproof canopy, ensuring maximum access.

This GPU features the latest Houchin control panel, designed for ease of use and improved reliability.

The company's quality procedures are certified to:  
BS EN ISO 9001: 2008

**EU STAGE III A EMISSIONS COMPLIANT**

## Configuration

### Trailer Mounted

A rugged monocoque construction in fabricated sheet steel with extensive corrosion protection. Fifth wheel steering, fitted with leaf springs and four 18x7 pneumatic tyred wheels.

### Truck Mounted

The unit can be supplied without undergear for mounting on to the customer's choice of vehicle.

### Optional Equipment

A complete list of options is available upon request.

## Performance

Model Type	kVA Rating	Continuous Peak Overload kVA	Engine	Cylinders	Engine Type	Fuel Type	Electrical System	Cooling System	Coolant
C490	90 100	112 112	Cummins QSB 4.5L 160BHP	4	4 Stroke Turbo Charged	Diesel	24 Volt	Tropical Radiator Cooling Pack	Water

## Features Applying To All Models

Voltage	115/200 Volts
Phase	3
Hz	400
Power Factor	0.8 cos $\phi$
Voltage Regulation	+/- 1% (steady state)
Voltage Transient	+/- 20% (100% load change)
Transient Recovery	0.2 secs.
Frequency Regulation	+/- 2Hz (steady state)
Frequency Transient	+/- 10Hz (100% load change)
Transient Recovery	1.0 secs.
Peak Load	118% continuous at 0.8 p.f



# Technical Specification

## Electrical Standards

BS 2G219 (ISO 6858), Insulation class 'H' throughout and varnished to provide a moisture-proof protection.

## Operating Environment

Provides rated output at temperatures of between -25° and +50°c and altitudes of up to 1500m ASL. Contact manufacturer for appropriate de-ratings for higher values than those stated.

## Generator

Houchin designed and manufactured brushless, synchronous alternator. Revolving field salient pole type with a single bearing. Coupled to the engine flywheel by means of a spring steel disc.

## Engine Controls

Start keyswitch  
Fault lamp  
Warning lamp  
Emergency stop button

## Electrical Controls

On/off pushbutton(s)  
Power on lamp(s)  
Interlock-bypass switch with indicator

## Digital Display

Volt meter  
Amp meter  
Engine hours  
Oil pressure  
Coolant temperature  
Fault history  
Power meter  
Fuel level

## Protection

Over voltage  
Under voltage  
Over frequency  
Under frequency  
Overload  
Low oil pressure  
High engine temperature  
Low fuel warning

## Fuel Tank

With sufficient capacity to give approximately 10 hours full load running. Complete with contents gauge.

## Output Cable

AC output cable 7.6m long, complete with a standard 6-pin socket. DC output cable 10m long, complete with a standard 3-pin socket.

## Noise Attenuation

Engine	dBA@3m
Cummins QSB 4.5L	84

## Testing

All equipment is fully tested before leaving our works, and test certificates are available upon request.

## Publications

A comprehensive manual is included, containing sections covering general description and operating instructions, service/maintenance, fault diagnosis and overhaul procedures and illustrated parts list.

## Servicing

The equipment is designed for ease of maintenance and inspection.

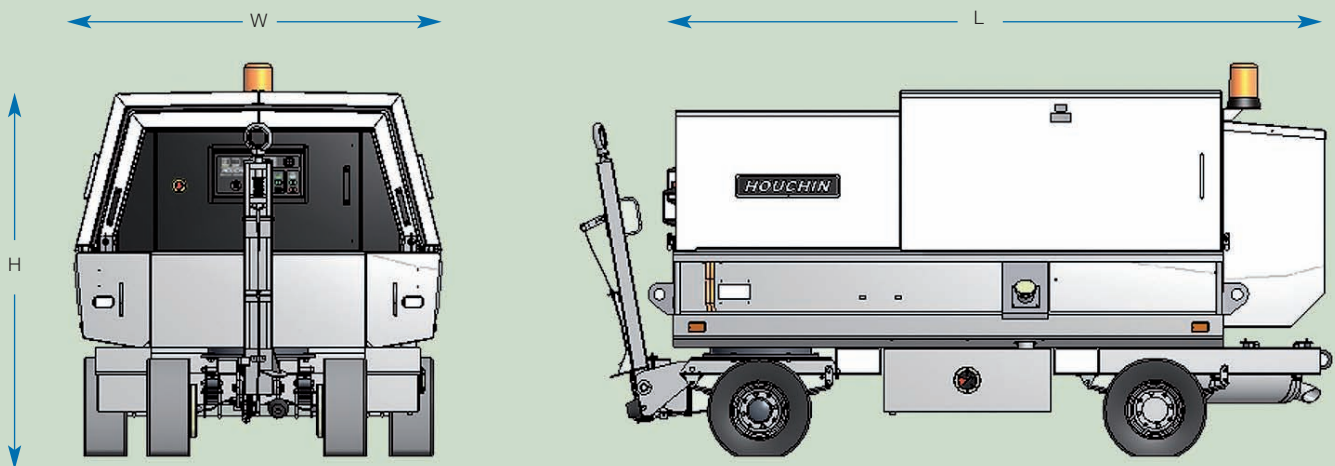
## Training

Training courses on the equipment are held at regular intervals, details and costs available on application.

## After Sales

A dedicated team is available to assist with customers 'After Sales' requirements.

Overall Size: Height: 1630mm Length: 3350mm (towbar raised) Width: 1605mm Weight: 2240Kg



# HOUCHIN

Houchin Aerospace  
Hilton Road, Ashford, Kent TN23 1DZ, UK

tel: +44 (0) 1233 648636  
fax: +44 (0) 1233 638403  
email: sales@houchin.co.uk  
web: www.houchin.co.uk

ITW **GS GROUP**



ISO 9001:2008  
FM 31652

All information is correct at the time of printing and is subject to alteration without notice

www.houchin.co.uk