



## Model C690 Ground Power Unit 90,100 and 140kVA output, with optional 28V DC

The C690 is a low noise Ground Power Unit suitable for servicing 400Hz AC and 28V DC electrical systems on all types of aircraft. Powered by a 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 and is designed for maximum access.

The company's quality procedures are certified to: BS EN ISO 9001:2000

▶ 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

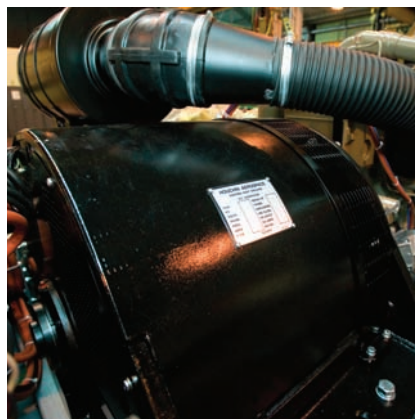
A complete list of options is available upon request.

### Performance

Model Type	kVA Rating	Continuous Peak Overload kVA	Engine	Cylinders	Engine Type	Fuel Type	Electrical System	Cooling System	Coolant
C690 C690	90 100	112 112	Cummins QSB 160BHP	6	4 Stroke Turbo Charged	Diesel	24 Volt	Tropical Radiator and Fan	Water
C690	140	154	Cummins QSB 215BHP	6					

### Features Applying To All Models

Voltage Range	115/200 Volts
Phase	3
Hz	400
Power Factor	0.8 cos Ø
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	110% continuous at 0.8 p.f



# Technical Specification

## Electrical Standards

BS 5000 pt, 99, BS 2G219 (ISO 6858), Insulation class 'H' throughout and varnished to provide a moisture-proof protection.

## Operating Equipment

Provides rated output at temperatures of between -25° and +40°c and altitudes of up to 1000m 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.

## Electrical Controls

ON/OFF Pushbuttons  
Power 'ON' lamp  
Digital instrumentation to read – volts, amps and frequency.  
Interlock-bypass switch with indicator  
Excite pushbutton  
Panel lamps with switch

## Engine Controls

Start keyswitch  
Idle/service switch  
Hours counter

## Digital Cam-bus Reader

Displaying:  
Engine temperature  
Oil pressure  
Engine hours  
Battery voltage  
Engine fault coder

## Protection

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

## 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 160BHP	84
Cummins QSB 215BHP	87

## 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.

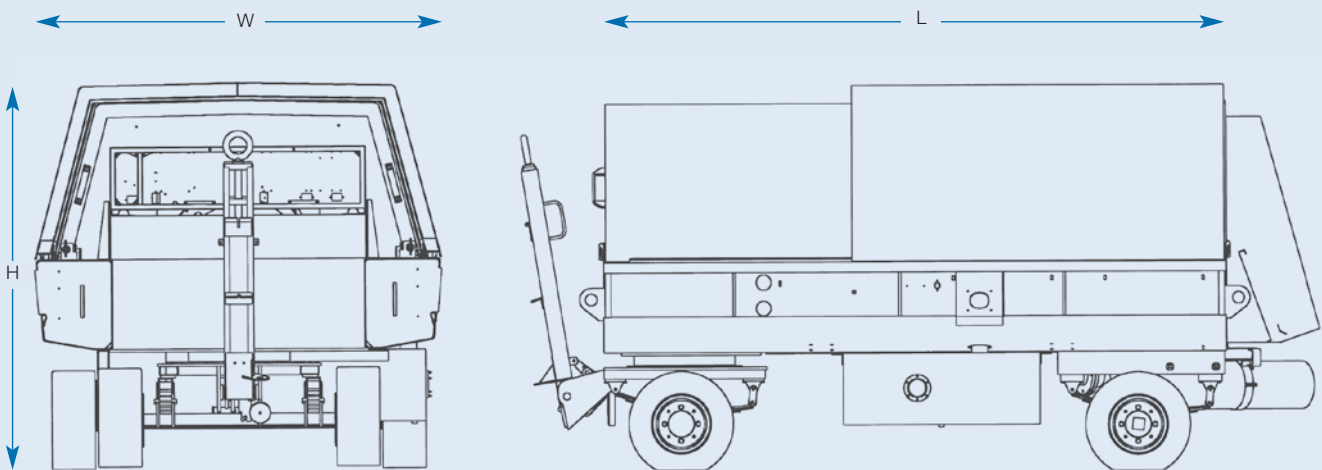
## Servicing

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.

Overall Size: Height: 1693mm Length: 3681mm (towbar raised) Width: 1755mm Weight: 2800Kg



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ISO 9001:2000  
FM 31652

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

www.houchin.co.uk