



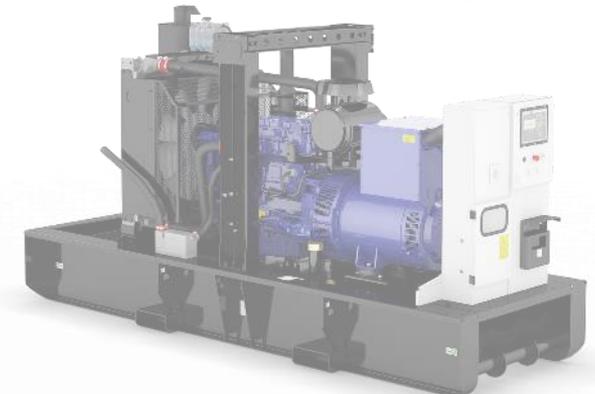
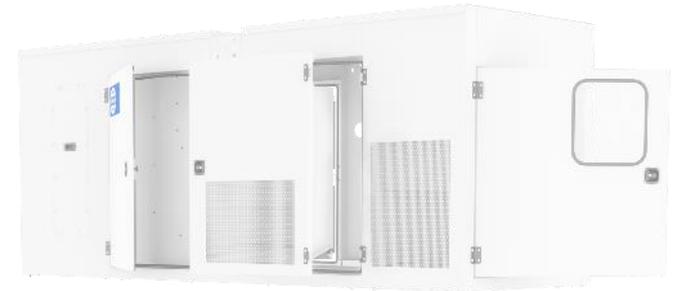
# Professional Rental Operator (PRO) Range



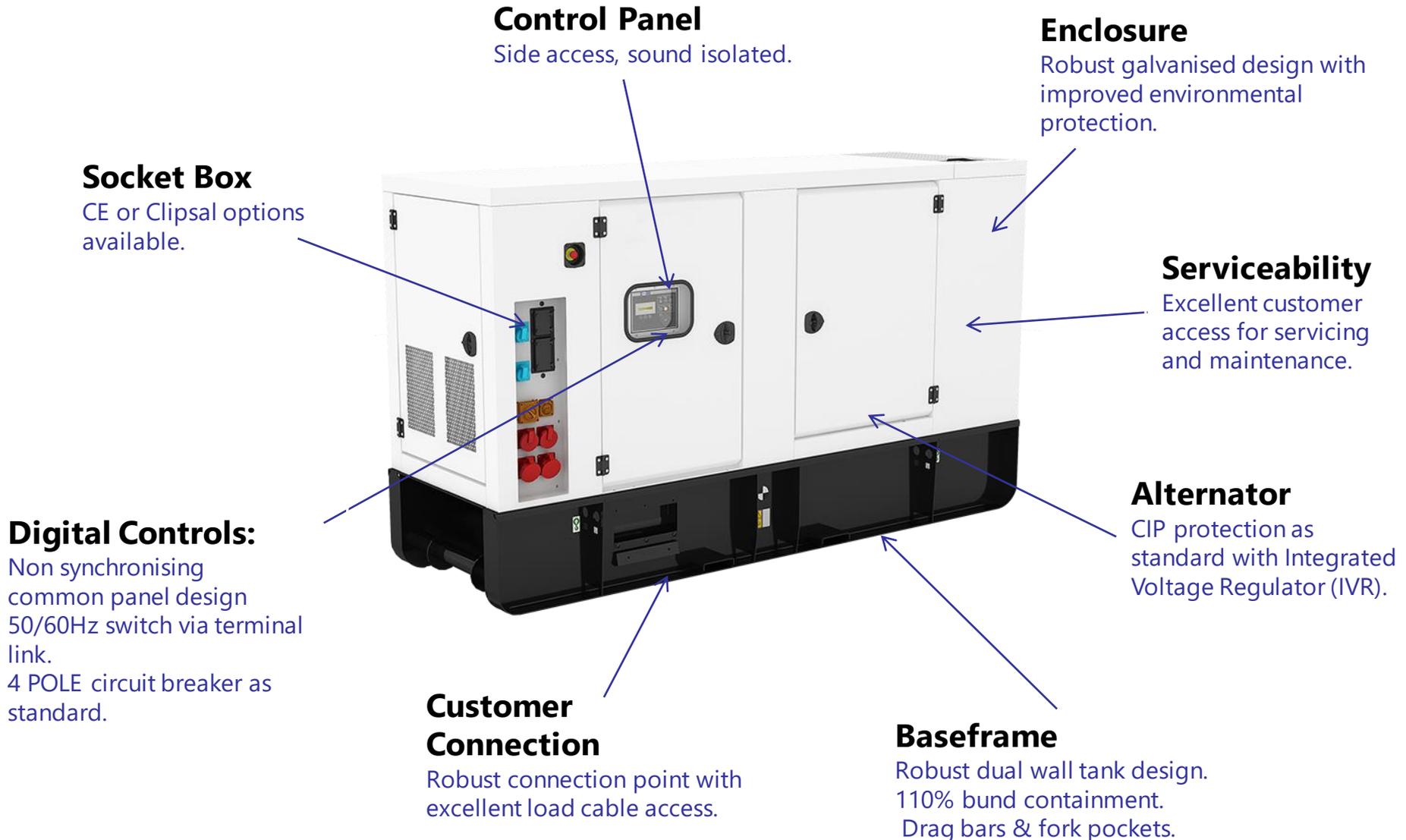
# Introduction



- Introducing the New **P**rofessional **R**ental **O**perator (PRO) Range
- EUV emissions compliant offering
- Fuel optimised offering
- Now available to order via Gensets Online
- EU Emissions legislation at both 50 & 60 Hz
- Full range of new digital control panels



# Rental Ready



**Control Panel**  
Side access, sound isolated.

**Enclosure**  
Robust galvanised design with improved environmental protection.

**Socket Box**  
CE or Clipsal options available.

**Serviceability**  
Excellent customer access for servicing and maintenance.

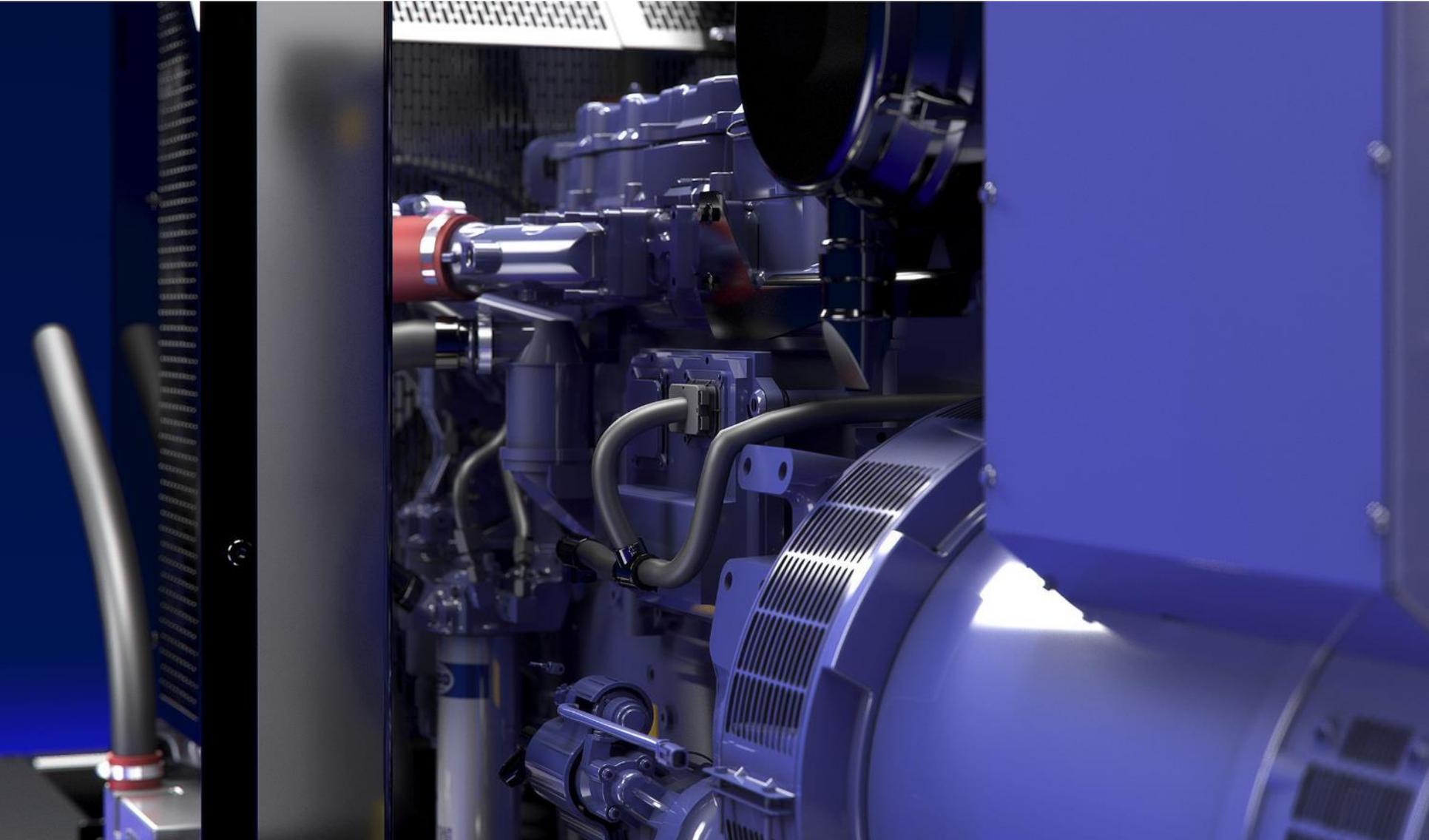
**Digital Controls:**  
Non synchronising common panel design  
50/60Hz switch via terminal link.  
4 POLE circuit breaker as standard.

**Alternator**  
CIP protection as standard with Integrated Voltage Regulator (IVR).

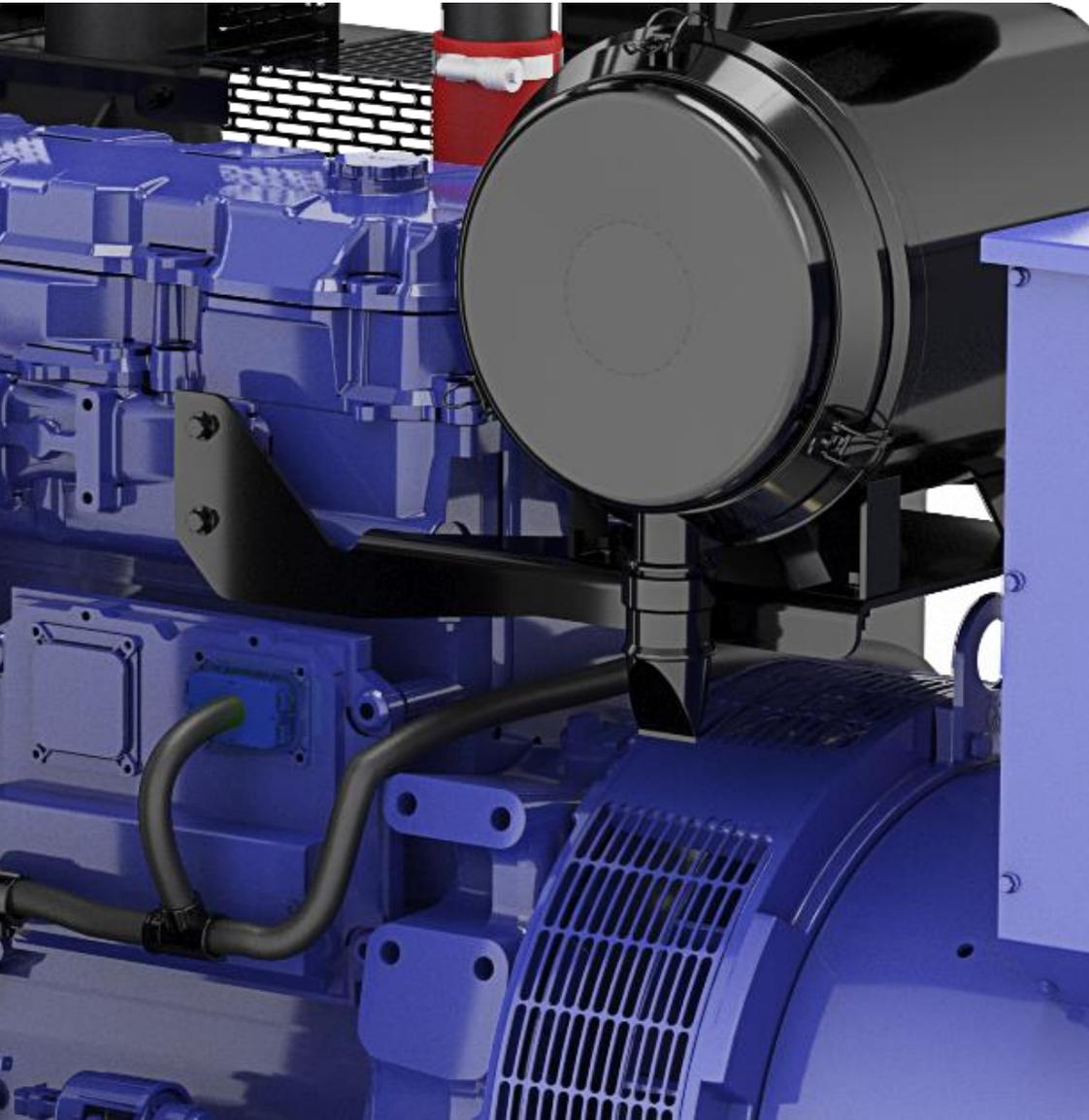
**Customer Connection**  
Robust connection point with excellent load cable access.

**Baseframe**  
Robust dual wall tank design.  
110% bund containment.  
Drag bars & fork pockets.

# Performance



# Engine



- Perkins engines delivering various emissions variants
  - 'A' Variants for non-emissions compliant requirements
  - 'J' Variants for EU stage V requirements
- 500 hours service interval

## Introducing a new Viscous clutch fan drive (275-550 kVA)

- Benefits including:
  - Improved fuel economy at part loads.
  - Lower package noise under part loads.
  - Reduce water, dust and snow ingress.
  - Reduce air flow in cold weather conditions.
  - No clutch maintenance required.



# Alternator

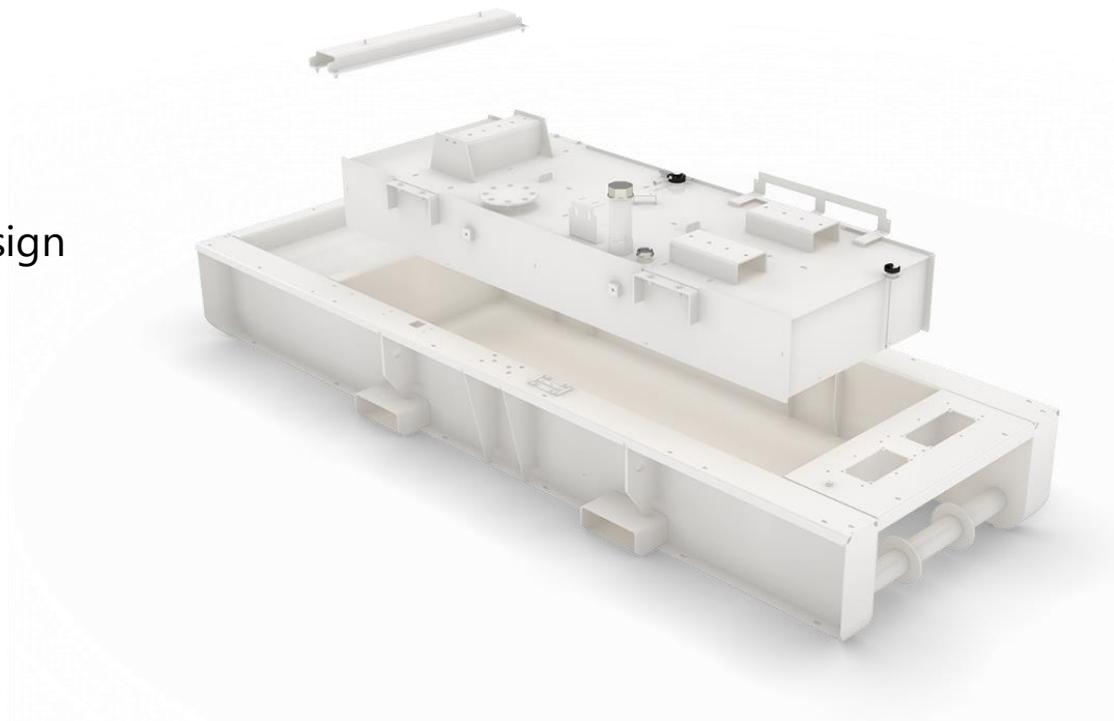


- Leroy Somer alternator standard on all models
  - Ingress protection IP23.
  - Insulation class and temperature rise class H.
- Integrated Voltage Regulator (IVR)
  - Three-phase sensing.
  - Adjustable volts-per-hertz regulation.
  - Provides precise control, excellent block loading and constant voltage in the normal operating range.

# Basetank



- 110% Open bund design
- Bund level alarm
- Bund level display

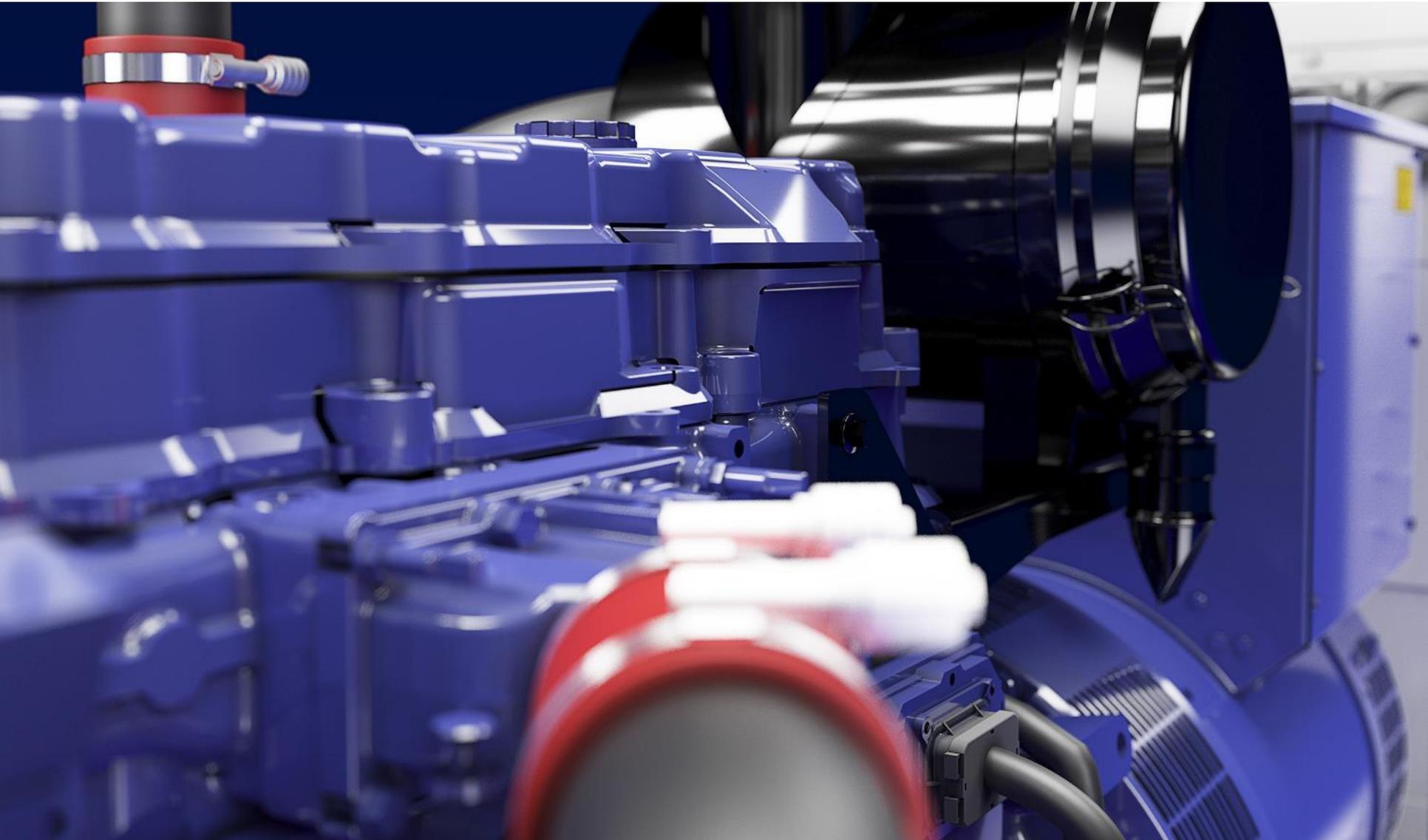


# Environment



- EUIIIa/EUV emissions compliant.
  - Limits particulate emissions from constant speed engines in off-road, transportable applications.
  - EUV has additional engine aftertreatment - **Diesel Oxidation Catalyst, Cooled Exhaust Gas Recirculation, Electronic Common Rail, Diesel Particulate Filter, Selective Catalytic Reduction.**
  - Applicable to rental / mobile applications within the EU, Norway, Switzerland and Turkey.
- Noise directive to EC/2006/14/EC
- CE Certification.
- Superior water ingress protection.
- ISO 8528 Governing.
- Alternators with System 4 / Coastal Ingress Protection (CIP).
- Cold Start:
  - Unaided = -10° C
  - Aided = -25° C

# EUV Enhancements



# EUV Technology



## Electronic Common Rail

Very high pressure fuel is delivered to electronically controlled injectors. This delivers a very fine diesel spray and enhances the combustion process.



## Cooled Exhaust Gas Recirculation

A small proportion of the exhaust gas is cooled and recirculated back into the engine. Thanks to a reduction of oxygen in the cylinder less NOX is created during combustion



## Diesel Oxidation Catalyst

A stainless-steel canister with a flow-through substrate coated with a high-performance catalyst. Exhaust gas from the engine passes over the catalyst where a chemical reaction takes place to oxidize carbon monoxide, hydrocarbons, and the soluble organic fraction (SOF) of particulate matter.



## Diesel Particulate Filter

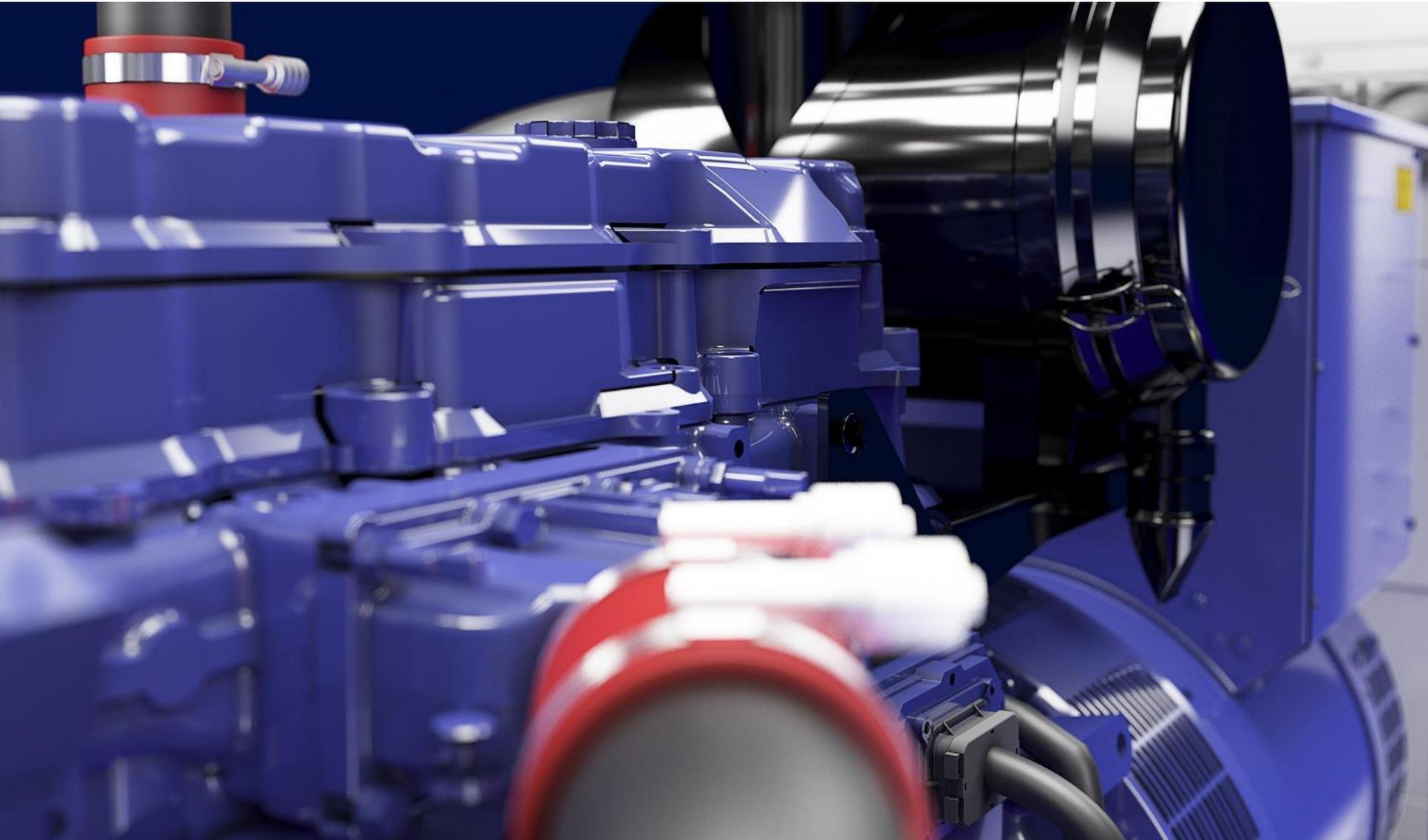
Exhaust gas passes through the walls of ceramic lattice, trapping soot particles (PM). These are then burned off through a process of regeneration



## Selective Catalytic Reduction

A fine spray of urea solution is mixed with exhaust gases. A special ceramic catalyst uses this urea to convert NOX into nitrogen and water. A separate tank is required for the diesel exhaust fluid (DEF also known as Adblue)

# Serviceability



# Installation



- Common component mounting positions.
- Cable access directly underneath control panel via side / rear of generator set.
- Grouped fuel connections, gauge and fill pipe.
- Base frame lifting points as standard.
- Customer connections isolated from main breaker.



# Maintenance



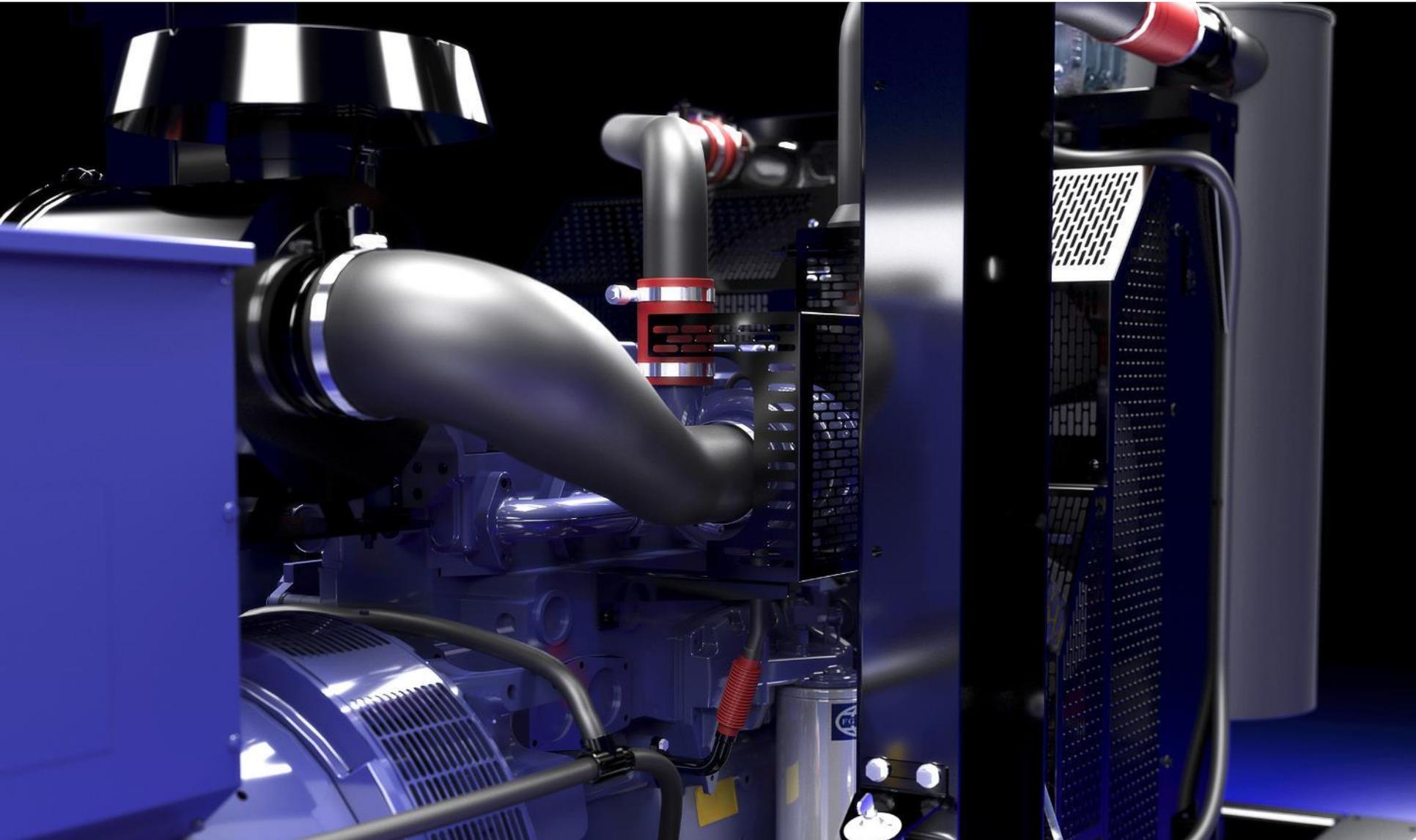
Rear/side mounted control panel tower provides full access to all components and wiring

High percentage commonality of serviceable parts



Lockable latches for added security

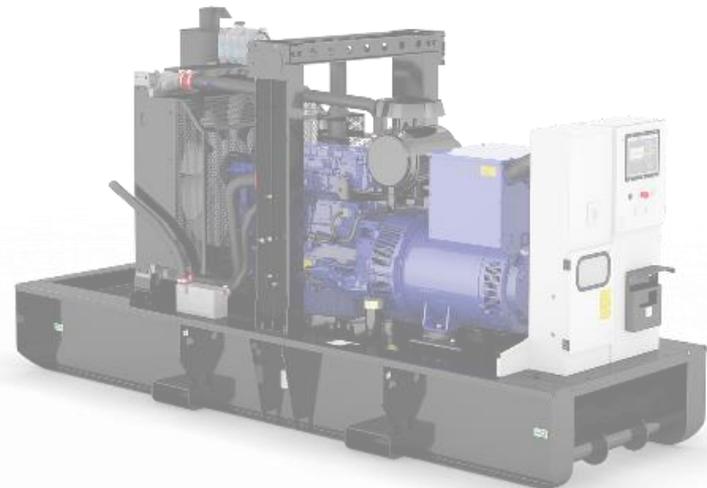
# Features



# Standard Features\*



- EUV emissions / Fuel Optimised offering
- CE Certification
- 50 & 60 Hz switchable
- Variable speed viscous clutch fan drive
- Extended capacity, dual wall bunded base tank
- Galvanised steel enclosure
- Fully lockable with latches on all doors
- Single & multi point lift
- Forklift pockets & drag bar
- Deepsea 7320 control panel
- Emergency stop pushbutton
- 500 hour service interval
- Remote monitoring
- Rental fuel filter - Fuel / water separator
- Air filter
- Busbar connections
- Battery isolator
- Spark arrestor / Residential silencer
- System 4 alternator
- 3-way fuel valve
- Removable radiator plate
- 4 POLE circuit breaker
- Blanking plate
- 12 month warranty (Prime)
- 24 month warranty (Standby 500 hrs/yr)
- Low coolant level shutdown
- Low fuel level shutdown
- Electronic governor
- Shunt Trip/UV Trip
- RFI filter
- Panel mounted fuel gauge
- Speed adjust potentiometer

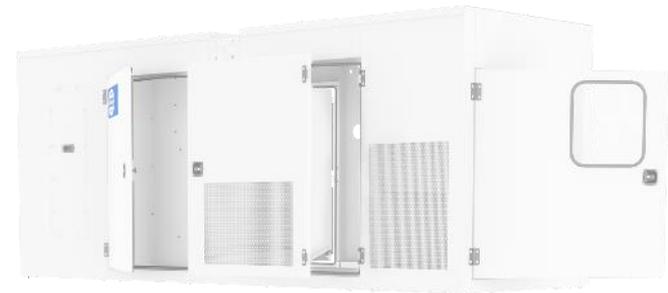


\* Please refer to the price books for specific features per model.

# Optional Features\*



- 1000 hour service interval.
- PowerWizard 4.1 Upgrade.
- Comap – Inteligen & Intelivision 5.
- Deif – AGC4.
- CEE form sockets.
- CLIPSAL sockets.
- Dual element air cleaner.
- Permanent magnet.
- Battery charger.
- Jacket water heaters.
- Alternator heater.
- Coolant heater & panel circuitry.
- Sump pump.
- Earth leakage relay.
- Lube oil drain pump.



**\* Please refer to the price books for specific option availability per model.**

# Enclosure



- Galvanised steel protected by powder coat paint.
- Corrosion resistant air inlet modules.
- Black finish stainless steel locks and hinges.
- Zinc plated / stainless steel fasteners.
- CEE form sockets.
- Socket box blanking plate.
- Lifting arch.
- 4 point lifting.
- Dedicated drag bar
- 3 way fuel valves.
- Fuel / water separators.
- Battery isolator switch.
- Breaker terminal extensions.
- Fork lift pockets.



# Enclosure



## Performance

- Complies with stage 2 noise levels of the European Community Directive 2000/14/EC .
- Ambient clearance of 42°C with no derate\*.

## Serviceability

- Side hinged doors removable at 90° providing ample access in confined spaces.
- Removable end panels facilitate radiator & alternator cleaning and maintenance.



**\* Power output derate will apply.**

# Control DeepSea DSE7320



- Large back-lit icon LCD display.
- 3-phase generator sensing.
- Generator & load power monitoring (kW, kVA, kV Ar, pf)
- Generator overload protection (kW).
- Configurable inputs & outputs.
- Fuel and start outputs (configurable on CAN).
- Configurable DC, volt-free and staged loading outputs.
- CAN & alternator speed sensing.
- Engine speed protection, engine hours counter, engine pre-heat, engine run-time scheduler, engine idle control for start/stop.
- Battery voltage monitoring.
- Configurable event log (50).
- Engine maintenance alarms (3)



# Control Panel Options



The PowerWizard 4.1 digital control panel.

## Key Features:

- PowerWizard 2.1+ functionality, including the additional features listed below:
  - 5.5" 480 x 320 pixel LCD display.
  - Generator set paralleling.
  - 12 configurable digital inputs.
  - 8 dedicated digital inputs.
  - 16 programmable digital outputs.
  - 4 dedicated digital outputs.
  - Three phase Bus sensing.



# Comap – Inteligen



- Genset controller for single/multiple generator sets operating in standby or parallel modes.
- Multiple communication options – easy remote supervising and servicing.
- Generator set performance log and Event-based history.
- Automatic synchronizing and power control.
- AMF function, Baseload, Import / Export, Peak shaving, Voltage and PF control (AVR).
- Generator set measurement, mains measurement.
- Inputs and outputs configurable for various customer needs.
- Integrated PLC programmable functions.
- Integrated fixed and configurable protections .



# Deif AGC4



- Automatic Genset Controller, AGC4.
- Multiple operating modes – backup power, start/stop, synchronisation and load sharing.
- Synchronisation of up to 56 breakers.
- Multi-master power management.
- Load-dependent start and stop.
- Load management.
- Emulation for Fast Training & I/O test.
- Hot Standby.





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