D.E.S.S. POWER
Diesel Engine Services & Spares
Proudly 100% Australian owned since 1989
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DPA66CR Diesel Genset

General Technical Data

Model	DPA66CR
Standby rating kVA	66
Standby rating kW	52.8
Prime Rating kVA	60
Prime Rating kW	48
Engine Make	Cummins
Engine Model	4BTA3.9G2
Frequency	50Hz
Cylinders	6
Aspiration	Turbocharged & aftercooled
Governor	Electronic

General Features

- Industry leading Cummins diesel engine and Stamford alternator
- Sound attenuating / weatherproof canopy
- Forklift slots for easy transportation
- Central lift point for crane mobility
- Deep Sea Electronics control panel
- 50ºC radiator as standard
- 24 hour bunded fuel tank (330 litres)

- Direct injection fuel system
- 70dBA @ 7m
- Emergency stop push button installed outside of the canopy
- Skid-mount base with anti-vibration pads
- ISO 9001:2000 certified
- Painted by electrostatic polyester powder paint

Standby Rating: Standby duty, operation under variable load without overload. **Prime Rating:** Continuous duty, operation under variable load with a maximum mean load factor of 70% of rated prime power over 24hrs of operation, with 1/12 hours accumulated peak overload to 110%

Dimensions and Weights

Sound Attenuated Type

Overall size L x W x H, mm	2882 x 1063 x 1835
Dry Weight, net, kg	1,745kg

Diesel Engine Specifications

CUMMINS is a world leader in the manufacture of high quality, high reliability diesel engines.

- Four stroke, water-cooled, turbocharged
- Direct fuel injection system

Technical Data

Engine Model	4BTA3.9G2
Engine Manufacturer /Brand	Cummins
Type and Cylinder	4 - inline
Induction System	Turbocharged & aftercooled
Bore x Stroke mm	102 x 120
Compression Ratio	16.5:1
Displacement L	3.9
Engine Speed rpm	1500
Engine power output at rated rpm	74 hp
Oil Capacity L	10.9
Coolant Capacity L	19.9
Fuel Tank Capacity L	330
Fuel consumption at full load	12.9 L/hr
Governing Type	Electronic

AC Alternator Specifications

STAMFORD ALTERNATOR STAMFORD has a long history of producing high quality and reliable generator alternators for the global market. Their portfolio of high quality alternators is recognised internationally as an industry standard.

- Brushless, self exciting
- Self regulating
- Class 'H' insulation
- Standard degree of protection is IP21 (IP22/IP23 is available)
- Solid state Automatic Voltage Regulator
- Stator winding with 2/3 pitch for improved harmonics

Technical Data

Design	Brushless single bearing, revolving field
Stator	2/3 pitch
Rotor	Single bearing, flexible disc
Insulation System	Class H
Standard Temperature Rise	125-163^{o}C Continuous
Exciter Type	Self Excited
Phase Rotation	A (U), B (V), C (W)
Alternator Cooling	Direct drive centrifugal blower fan
AC Waveform Total Harmonic Distortion	No load < 1.5%. Non distorting balanced linear load <5%
Telephone Influence Factor (TIF)	<50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	<2%

Control System

The Control system is a Deep Sea Electronics DSE6020

Auto Mains Failure Control Panel
Panel equipment:

- Control with AMF module
- Static battery charger
- Emergency stop push button

Generating set control module DSE 6020 features:

- The module is used to monitor main supply and starts and stops of a standby generating set
- Micro-processor based design
- Monitors engine performance and AC power output LED alarm indication
- Automatic control of main and generator contactors
- Front panel configuration of timers and alarm trip points
- CAN and magnetic pick-up versions(specify on ordering)
- 4 digital inputs/3 analogue inputs
- 6 outputs(4 configurable on Magnetic Pick-up, 6 configurable on CANbus version)
- Easy push button control

Alarms:

- Over and Under Speed
- Low and High Battery Volt.
- Start and Stop Failure
- Charge fail
- Over Current
- Under / Over Generator Voltage
- Low Oil Pressure
- Emergency stop
- High engine temperature

LED Indications:

- Mains on load
- Generator on load
- Mains available
- Generator available

Metering via LED display:

- Generator Volts (L-L / L-N)
  Generator kVA
- Engine oil pressure (PSI-Bar)
  Generator kW
- Generator Ampere (L1,L2,L3)
  Generator Cos (σ)
- Engine temperature (° C &° F)
- Generator Frequency (Hz)
- Plant battery volts
- Engine hours run
- Mains Volts (Ph-Ph/Ph-N)