

# **TPC 200**

POWERED BY CUMMINS OSB7 - G5





Genset Model	TPC 200
Engine Model	QSB7-G5
Alternator Model	UCI274H/TAL044H
Controller Model	Deep Sea 4520 MKII



#### **PRIME RATINGS**

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercial purchased power.

There is no limitation to the annual hours of operation and this model can supply 10% Overload power for 1hour in 12 hours operation.

#### STANDBY RATINGS

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

OUTPUT RATINGS		50Hz		60Hz	
		PRIME	STANDBY	PRIME	STANDBY
KVA POWER	KVA	200	220	225	250
KW POWER	KW	160	176	180	200
RATED SPEED	r.p.m	1500		1800	
VOLTAGE	V	230/400 240/415			0/220 0/380

### **ENGINE SPECIFICATIONS**



Three Phase



Diesel



Water Cooled



50/60Hz



100 Amps Battery Charging Alternator



12V Negative

Manufacturer	CUMMINS
Model	QSB7-G5
Engine Type	4-stroke
Cooling System	Water Cooled
Bore and Stroke	107 x 124 mm
Compression Ratio	17.2 : 1
Number of cylinders and arrangement	6/ Vertical in Line

Circuit Breaker Type 3Pole MCCB

Aspiration Type Turbo charged and Charge Air Cooled

Displacement

6.69 L







# **TPC 200**

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## **ALTERNATOR SPECIFICATIONS**

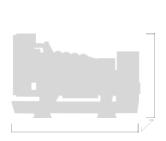
Manufacturer	Stamford/ Leroy Somer
Model	UCI274H/TAL044H
No of Bearings	1
Insulation Class	Н
Ingress Protection Rating	IP23
Excitation System	SHUNT
AVR Model	AS440/ R150

Over speed (rpm)	2250
Voltage Regulation(steady state)	+/- 1.0%
Wave from NEMA=TIF	50
Rated power factor	0.8
Winding Leads	12
Winding pitch	Two Thirds
Radio Interference	Supression is in line with European Standard EN61000-6

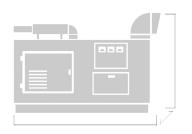
**■ IP23 Protection** 

**■** H Class Insulation

**■** SHUNT Excitation System



WEIGHT AND DIMENSIONS					
OPEN CLOSE					
LENGTH	mm	2750	3893		
WIDTH	mm	1050	1355		
HEIGHT	mm	1550	2209		
WEIGHT	kg	1960	2150		



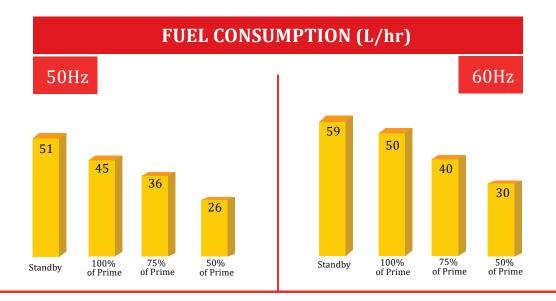






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QSB7 - G5





			50	Hz	60	Hz
	SILENCER TYPE			INDUS'	ΓRIAL	
ST	MAX. ALLOWABLE BACK PRESSURE	kPa	10	).2	10	.2
AUS	SILENCER NOISE REDUCTION LEVEL					
XH,			PRIME	STANDBY	PRIME	STANDBY
田田	EXHAUST GAS FLOW	cfm (litre/s)	1205(569)	1265(597)	1342(634)	1549(732)
	EXHAUST GAS TEMPERATURE	°C (°F)	544	561	487	532







# **TPC 200**

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	AIR FILTER TYPE		Dı w	ry Replace ith restrict	able Elemo ion Indica	ent tor
~4			50	OHz	60	)Hz
_ 			PRIME	STANDBY	PRIME	STANDBY
A	COMBUSTION AIR FLOW	cfm (litre/s)	434(205)	448(212)	541(256)	569(269)
	MAX. COMBUSTION AIR INTAKE RESTRICTION	in H20(kPa)	15 (3.7)		15 (3.7)	

LUBRICATION SYSTEM	[	
Oil Filter Type		Spin-on, Full Flow
Total Oil Capacity	L(US gal)	18.9 (5.0)
Oil Pan	L(US gal)	17.4 (4.6)
Oil Type		CH4 15W-40

COOLING SYSTEM			
		50Hz	60Hz
Water Pump Type		Cent	rifugal
Cooling System Capacity	L	26	26
Radiator Fan Load	kW	6.9	12.7
Radiator Cooling Airflow	m³/s	5.3	6.32
External Restriction to Cooling Airflow	Pa(mm H <sub>2</sub> O)	127(13)	127(13)













## DSE**4520 MKII**

## **AUTO START AND AUTO MAINS FAILURE** CONTROL MODULES

## (ALTERNATOR FREQUENCY & CAN SPEED SENSING)

DSE4520 MKII



#### **KEY FEATURES**

- Auto Start and AMF mode in one module (DSE4520 MKII only)
- J1939-75 support and CAN alarm ignore function
- Alternator frequency & CAN speed sensing in one variant
- Largest back-lit icon display in its class (configurable as text display)
- Heated display option
- Real time clock provides accurate event logging
- Fully configurable via the fascia or PC using USB communication
- Extremely efficient power save mode
- 3 phase generator sensing
- 3 phase mains (utility) sensing (DSE4520 MKII only)
- · Compatible with 600 V ph to ph nominal systems
- Generator/load power monitoring (kW, kV A, kV Ar, pf)
- · Accumulated power monitoring (kW h, kVA h, kVAr h)
- Generator overload protection (kW)
- Generator/load current monitoring and protection
- Fuel and start outputs (configurable when using CAN)
- 4 configurable DC outputs
- 5 V output
- Configurable fuel & crank outputs
- 3 configurable analogue/digital inputs

- 4 configurable digital inputs
- Configurable staged loading outputs
- 3 engine maintenance alarms
- Engine speed protection
- Engine hours counter
- Engine pre-heat
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Tier 4 engine instrumentation screens
- Battery voltage monitoring
- Start on low battery voltage
- Configurable remote start input
- 1 alternative configuration
- Comprehensive warning, electrical trip or shutdown protection upon fault condition
- LCD alarm indication
- Coolant temperature pre-alarm
- Event log (50)
- Fuel solenoid pulling circuit
- On-screen line diagram on/off functionality
- Configurable CAN instrumentation
- Water in fuel digital input
- Tank bund alarm digital input
- Generator at rest output
- ECU periodic wake-up for information retrieval
- Back-light power-save mode
- Adjustable delay crank timer
- Pre/post heat functionality

- Overload protection
- Mains/generator A/C system selection
- Output timer for external audible
- Accommodates a wide range of senders and temperatures

#### **KEY BENEFITS**

- Ultimate size to feature ratio
- Automatically transfers between mains (utility) and generator (DSE4520 MKII only)
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button lavout for ease of use
- Multiple parameters are monitored simultaneously which are clearly displayed on the largest back-lit icon display in its class
- The module can be configured to suit a wide range of applications
- Uses DSE Configuration Suite PC Software for simplified configuration
- Compatible with a wide range of CAN engines including Tier 4
- Licence-free PC software
- IP65 rating (with optional gasket) offers increased resistance to water ingress

#### SPECIFICATIONS

CONTINUOUS VOLTAGE RATING

8 V to 35 V Continuous

#### CRANKING DROPOUTS

Able to survive 0 V for 50 mS, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries LEDs and backlight will not be maintained during cranking

MAXIMUM OPERATING CURRENT 85 mA at 12 V, 96 mA at 24 V

MAXIMUM STANDBY CURRENT 51 mA at 12 V. 47 mA at 24 V

MAXIMUM SLEEP CURRENT

MAXIMUM DEEP SLEEP CURRENT <10 uA at 12 V, <10 uA at 24 V

#### MAINS (UTILITY) DSE4520 MKII ONLY

VOLTAGE RANGE 15 V to 415 V AC (Ph to N) 26 V to 719 V AC (Ph to Ph)

FREQUENCY RANGE 3.5 Hz to 75 Hz

**OUTPUT A (FUEL)** 10 A short term, 5 A continuous, at supply voltage

#### OUTPUT B (START)

10 A short term, 5 A continuous, at supply voltage

AUXILIARY OUTPUTS C, D, E & F 2 A DC at supply voltage

#### GENERATOR

#### VOLTAGE RANGE

15 V to 415 V AC (Ph to N) 26 V to 719 V AC (Ph to Ph)

FREQUENCY RANGE 3.5 Hz to 75 Hz

#### OVERALL

140 mm x 113 mm x 43 mm 5.5" x 4.4" x 1.7"

PANEL CUT-OUT 118 mm x 92 mm 4.6" x 3.6"

MAXIMUM PANEL THICKNESS

STORAGE TEMPERATURE RANGE

-40 °C to +85 °C -40 °F to +185 °F

OPERATING TEMPERATURE RANGE -30 °C to +70 °C -22 °F to +158 °F

-40 °C to +70 °C (for heated display variant) -40 °F to +158 °F (for heated display variant)







# **TECHNOPOWER**









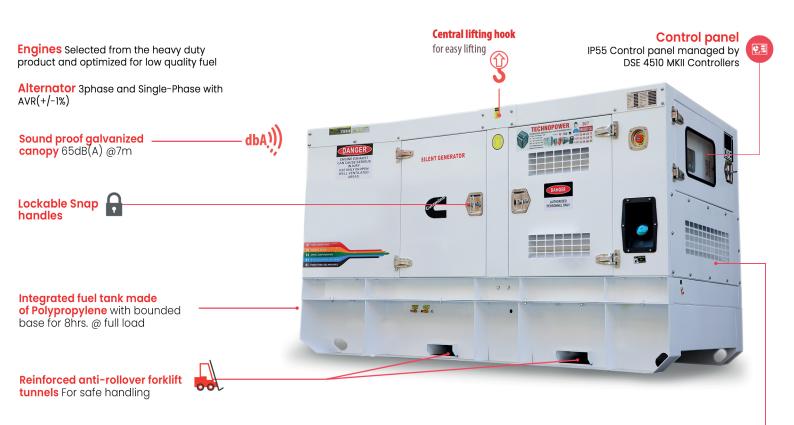
Fuel Inlet/Outlet



**Document holder**Protects documents



Diesel filling with key lock



Easy to service





**Galvanized metal sheet** to increase strength and durability



**Exhaust terminal pipe** with tilting
cap rain over



**Exhaust pipes** with exhaust heat wrap for high-perfomance and security



Emergency stop button It shuts down the generating set immediately



Anti-vibration pads attenuate the vibrations caused by the unit



Oil and Coolant Drain