

FPT 120

POWERED BY FPT FPT N45 TM3





Genset Model	FPT 120
Engine Model	FPT N45 TM3
Alternator Model	ECP34 1M4 C
Controller Model	Deep Sea 4520 MKII

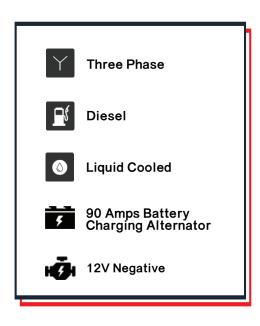
PRIME RATINGS

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	120.0	132.0	125.0	138.0
KW POWER	KW	96.0	106.0	100.0	110.0
RATED SPEED	r.p.m	1500		1800	
VOLTAGE	V	230/400 240/415		110/220 220/380	

ENGINE SPECIFICATIONS

Manufacturer	FPT
Model	FPT N45 TM3
Engine Type	4-stroke
Cooling System	Liquid Cooled
Bore and Stroke	104 x 132 mm
Compression Ratio	17.5:1
Number of cylinders and arrangement	4/ Vertical in Line
Circuit Breaker Type	3Pole MCB/MCCB
Aspiration	Turbocharged, after-cooled air to air
Displacement	4.5 L





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ALTERNATOR SPECIFICATIONS

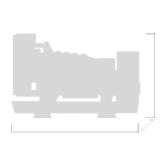
Manufacturer	Leroy Somer
Model	TAL044E
No of Bearings	1
Insulation Class	Н
Wires	6(12)
Ingress Protection Rating	IP 23
AVR Model	R120

Over speed (rpm)	2250
Voltage Regulation(steady	state) +/- 1.0%
Waveform: NEMA = TIF	< 50
Waveform: I.E.C. = FHT	< 2%
Winding pitch	2/3
Excitation System	SHUNT
Radio Interference	Supression is in line with European Standard EN61000-6

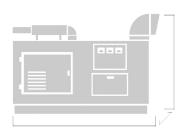
■ IP23 Protection

■ H Class Insulation

■ SHUNT Excitation System



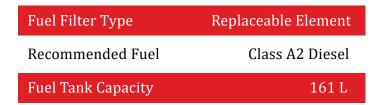
WEIGHT AND DIMENSIONS					
		OPEN	CLOSE		
LENGTH	mm	2500	2806		
WIDTH	mm	770	1100		
HEIGHT	mm	1410	1652.3		
WEIGHT	kg	1300	1728		

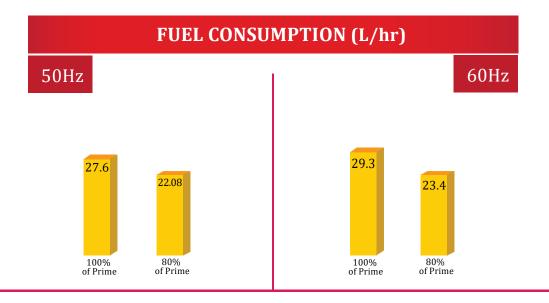






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			50	Hz	60	Hz	
	SILENCER TYPE		INDUSTRIAL				
JST	SILENCER NOISE REDUCTION LEVEL		22dB 17dB		dB		
XHAU	MAX. ALLOWABLE BACK PRESSURE	kPa(mbar)	5(50		5(!	5(50)	
EXF			PRIME	STANDBY	PRIME	STANDBY	
Щ	EXHAUST GAS FLOW	kg/hr	538	538	650	650	
	EXHAUST GAS TEMPERATURE	°C (°F)	540(1004)	540(1004)	582(1080)	582(1080)	



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	AIR FILTER TYPE	Dry				
~1			50	OHz	60	OHz
- X			PRIME	STANDBY	PRIME	STANDBY
A	COMBUSTION AIR FLOW	m³/hr(kg/hr)	427(512.5)	427(512.5)	507(609.3)	507(609.3)
	MAX. COMBUSTION AIR INTAKE RESTRICTION	kPa(mbar)	2.0(20)		2.0(20)	

LUBRICATION SYSTEM		
Oil Filter Type		Spin-on , Full Flow
Total Oil Capacity	L	12.8
Oil Pan	L	8.5
Oil Type		ACEA E3/E5

COOLING SYSTEM					
		50Hz	60Hz		
Water Pump Type		Centrifugal			
Cooling System Capacity	L	18.5	18.5		
Radiator Fan Load	kWm	1.8	2.8		
Radiator Cooling Airflow	m³/s	2.2	2.6		
External Restriction to Cooling Airflow	Pa	147	147		







AUTHORISED **GOLD DISTRIBUTOR**





DSE**4510/20**

AUTO START AND AUTO MAINS FAILURE CONTROL MODULES

(ALTERNATOR FREQUENCY & CAN SPEED SENSING)

FEATURES



DSE**4510**



KEY BENEFITS

- Ultimate size to feature ratio
- Automatically transfers between mains (utility) and generator (DSE4520 only)
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout 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
- Licence-free PC software
- IP65 rating (with optional gasket) offers increased resistance to water ingress

DSE**4520**



KEY FEATURES

- Alternator frequency & CAN speed sensing in one variant
- Largest back-lit icon display in its class
- 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 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 (2 for DSE4510)
- 3 configurable analogue/digital inputs
- 4 configurable digital inputs
- Configurable staged loading outputs
- 3 engine maintainance alarms
- Engine speed protection
- Engine hours counter
- Engine pre-heat
- Engine run-time scheduler
- Engine idle control for starting & stopping
- 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
- Event log (50)

SPECIFICATION

DC SUPPLY

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

35 mA at 12 V, 32 mA at 24 V MAXIMUM DEEP SLEEP CURRENT

<10 uA at 12 V, <10 uA at 24 V

MAINS (UTILITY) DSE4520 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

OUTPUTS

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 2 A DC at supply voltage

AUXILIARY OUTPUTS E & F DSE4520

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

DIMENSIONS **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 FZC



TECHNOPOWER

Silent Canopy



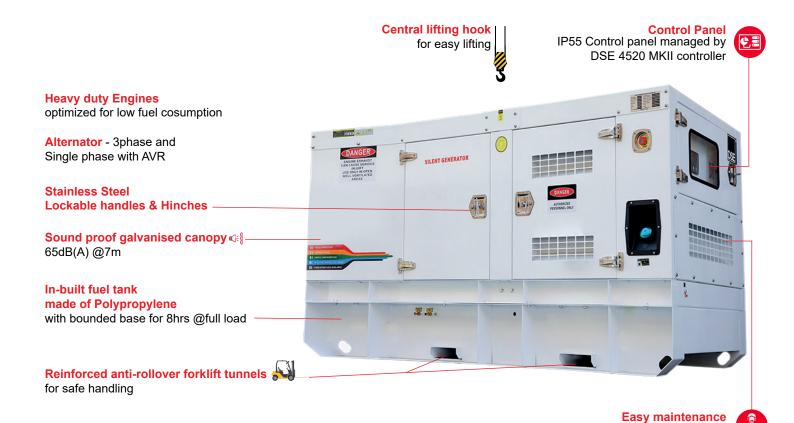
Fuel filling point with key lock



Document holder



Emergency stop button





Fuel Inlet/Outlet



Exhaust pipes with exhaust heat wrap for high-performance and security



Galvanized metal sheet to increase strength & durability



Oil and coolant drain



Anti-vibration pads attenuate vibrations caused by the unit



easily removable side part

Exhaust terminal pipe with tilting cap rain over