

FPT 50 POWERED BY FPT NEF45 AM2



LEROY-SOMER

Genset Model	FPT 50
Engine Model	NEF45 AM2
Alternator Model	TAL042G
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 1 hour in 12 hours operation.

STANDBY RATINGS

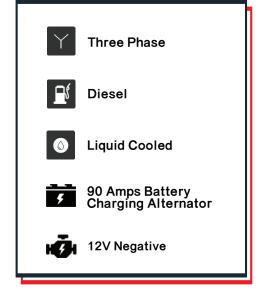
These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.



OUTPUT RATINGS		501	łz
		PRIME	STANDBY
KVA POWER	KVA	50.0	55.0
KW POWER	KW	40.0	44.0
RATED SPEED	r.p.m	15	00
VOLTAGE	V	230, 240,	/400 /415

ENGINE SPECIFICATIONS

Manufacturer	FPT
Model	NEF45 AM2
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	Naturally Aspirated
Displacement	4.5 L









ALTERNATOR SPECIFICATIONS

Manufacturer	Leroy Somer
Model	TAL042G
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	I
	LENGTH	mm	1710	2306	
	WIDTH	mm	770	1010	
· · · · · ·	HEIGHT	mm	1250	1277	
	WEIGHT	kg	852	1290	



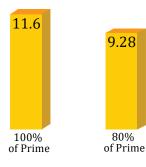


FPT 50 POWERED BY FPT NEF45 AM2

Fuel Filter Type	Replaceable Element
Recommended Fuel	Class A2 Diesel
Fuel Tank Capacity	125 L

Fuel Tank Capacity

FUEL CONSUMPTION (L/hr)



			501	Iz	
	SILENCER TYPE	INDUSTRIAL			
JST	SILENCER NOISE REDUCTION LEVEL		20dB		
XHAU	MAX. ALLOWABLE BACK PRESSURE	kPa	10.0		
			PRIME	STANDBY	
ш	EXHAUST GAS FLOW	kg/hr	211	211	
	EXHAUST GAS TEMPERATURE	⁰ C (⁰ F)	504(939.2)	504(939.2)	

FUEL SYSTEM







	AIR FILTER TYPE		D	ry
			501	Ηz
IR			PRIME	STANDBY
A	COMBUSTION AIR FLOW	m³/hr(kg/hr)	170(200)	170(200)
	MAX. COMBUSTION AIR INTAKE RESTRICTION	kPa(mbar)	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
Water Pump Type		Centrifugal
Cooling System Capacity	L	18.5
Radiator Fan Load	kW(hp)	-
Radiator Cooling Airflow	m ³ /min(cfm)	-
External Restriction to Cooling Airflow	Pa(in H ₂ O)	46(0.2)







AUTHORISED GOLD DISTRIBUTOR



DSE4510/20 **AUTO START AND AUTO MAINS FAILURE** CONTROL MODULES

(ALTERNATOR FREQUENCY & CAN SPEED SENSING)



DSE4520

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DSE Deep Sea Electronics

230V L1N 230V

230V L2N 230V

230VL3N 230V 🖴

DSE4510



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

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 8 mm 0.3"

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 Q4-94, SHARJAH INT'L AIRPORT FREEZONE (SAIF ZONE), SHARJAH, UAE. CALL: +971 6557 9794, Fax: +971 6557 9792, EMAIL: sales@technopowergroup.com, WEBSITE: www.technopowergroup.com



TECHNOPOWER





Fuel filling point with key lock



Document holder

Emergency stop button



Heavy duty Engines optimized for low fuel cosumption

Alternator - 3phase and Single phase with AVR

Stainless Steel Lockable handles & Hinches

Sound proof galvanised canopy 65dB(A) @7m

In-built fuel tank made of Polypropylene with bounded base for 8hrs @full load

Reinforced anti-rollover forklift tunnels for safe handling

> **Easy maintenance** easily removable side part



e,





Fuel Inlet/Outlet



Exhaust pipes with exhaust heat wrap for high-



Galvanized metal sheet to increase strength & durability



Oil and coolant drain



Anti-vibration pads attenuate



Exhaust terminal pipe with tilting