

TP 15

POWERED BY PERKINS 403A-15G2

Perkins®



Genset Model	TP15
Engine Model	403A-15G2
Alternator Model	TAL040D
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.

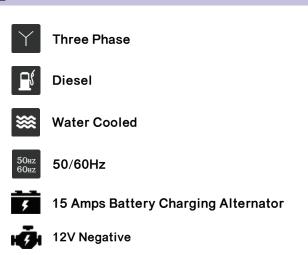
LEROY-SOMER



OUTPUT RATINGS		50	OHz	6	0Hz
		PRIME	STANDBY	PRIME	STANDBY
KVA POWER	KVA	15.0	17.0	17.5	19.5
KW POWER	KW	12.0	13.0	14.0	15.6
RATED SPEED	r.p.m	15	500	1	800
VOLTAGE	V	230/400 240/415		110/220 220/380	

الحث

ENGINE SPECIFICATIONS



Manufacturer	PERKINS
Model	403A-15G2
Engine Type	4-stroke
Aspiration Type	Naturally Aspirated
Bore and Stroke	84 x 90 mm
Cooling System	Water Cooled
Number of cylinders and arrangement	4/ Vertical in Line
Compression Ratio	22.5 : 1
Circuit Breaker Type	3Pole MCB / MCCB
Displacement	1.496 L







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ALTERNATOR SPECIFICATIONS

Manufacturer	Leroy Somer
Model	TAL040D
No of Bearings	1
Insulation Class	Н
Wires	6(12)
Ingress Protection Rating	IP23
Excitation System	SHUNT
AVR Model	R120

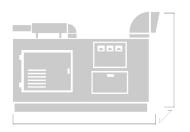
Over speed (rpm)		2250	
Voltage Regulation(steady state)	+/- 1.0%	
Wave from NEMA=TIF		50	
Wave From IEC=THF		2.0%	
Total Harmonic Content LL/NN		3.5%	
Radio Interference	Supression is in line with European Standard EN61000-6		
Radiant Heat kW	50Hz	2.1	
	60Hz	2.5	

► IP23 Protection

► SHUNT Excitation System



WEIGHT AND DIMENSIONS		OPEN	CLOSE
LENGTH	mm	1510	1800
WIDTH	mm	630	920
HEIGHT	mm	1100	1302
WEIGHT	kg	400	480



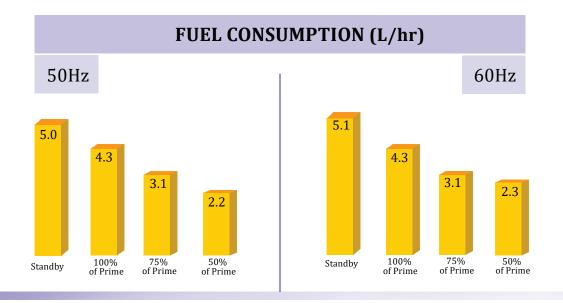






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Fuel Filter Type	Replaceable Element
Recommended Fuel	Class A2 Diesel
Fuel Tank Capacity	78.2L



			50)	Hz	60	Hz
	SILENCER TYPE			INDUS'	TRIAL	
ST	MAX. ALLOWABLE BACK PRESSURE	kPa(in Hg)	10.2	(3.0)	10.2	(3.0)
	SILENCER NOISE REDUCTION LEVEL		30	dB	18.	6 dB
XHAU			PRIME	STANDBY	PRIME	STANDBY
盘	EXHAUST GAS FLOW	m³/min	2.2	ТВА	2.6	TBA
	EXHAUST GAS TEMPERATURE	οС	470	TBA	480	590







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AIR FILTER TYPE REPLACEABLE ELEMENT 50Hz 60Hz 2 PRIME **STANDBY** PRIME STANDBY COMBUSTION AIR FLOW 1 TBA 1.2 **TBA** ⋖ m³/min MAX. COMBUSTION AIR kPa(in H20) 3.0(12.0) 3.0(12.0) INTAKE RESTRICTION

LUBRICATION SYSTEM

Oil Filter Type		Spin-on, Full Flow
Total Oil Capacity	L	6
Oil Pan	L	4.5
Oil Type		CH4 15W-40

COOLING SYSTEM			
		50Hz	60Hz
Water Pump Type		Centr	rifugal
Cooling System Capacity	L	6	6
Radiator Fan Load	kW	0.2	0.23
Radiator Cooling Airflow	m³/min	41.4	48.6
External Restriction to Cooling Airflow	Pa	83	125













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 ianore 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

- 4 configurable digital inputs
- Configurable staged loading
- 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 (10)
- 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 alarm
- 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 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 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

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 \

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 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

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 46" x 36"

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 Silent Canopy













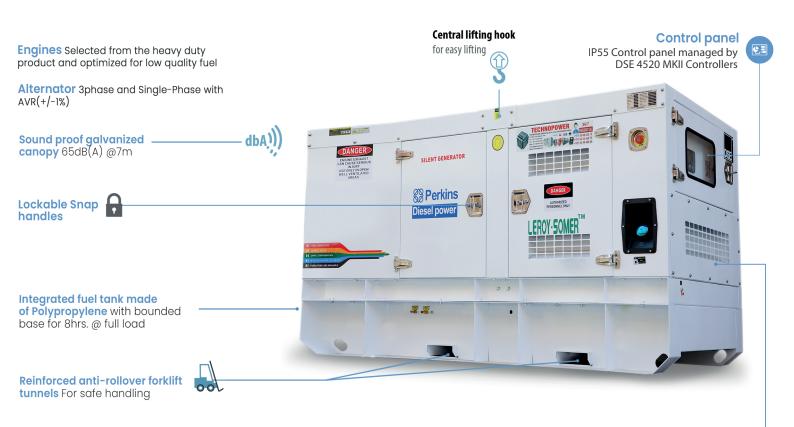
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Diesel filling with key lock



Fuel/water seperator filter



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