

### **TP200**

POWERED BY PERKINS 1106A-70TAG4

### **Serkins**®



Genset Model	TP200
Engine Model	1106A-70TAG4
Alternator Model	TAL044M / 046B
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	Hz
		PRIME	STANDBY
KVA POWER	KVA	200.0	220.0
KW POWER	KW	160.0	176.0
RATED SPEED	r.p.m	15	500
VOLTAGE	V		/400 /415

### **ENGINE SPECIFICATIONS**

[Y]	Three Phase
	Diesel
	Liquid Cooled
50нz	50Hz
5	65 Amps Battery Charging Alternator
HØH	12V Negative

Manufacturer	PERKINS
Model	1106A-70TAG4
Engine Type	4-stroke
Aspiration Type	Turbo Charged after cooled
Bore and Stroke	105 x 135 mm
Cooling System	Liquid
Number of cylinders and arrangement	6/ Vertical in Line
Compression Ratio	16:1
Circuit Breaker Type	3Pole MCCB
Displacement	7.01 L







## **TP200** POWERED BY PERKINS

# 1106A-70TAG4



### **ALTERNATOR SPECIFICATIONS**

Manufacturer	Leroy Somer
Model	TAL044M/046B
No of Bearings	1
Insulation Class	Н
Wires	6
Ingress Protection Rating	IP23
Excitation System	SHUNT
AVR Model	R150

Over speed (rpm)	2250
Voltage Regulation(steady state)	+/- 0.5%
Wave from NEMA=TIF	50
Wave From IEC=THF	2.0%
Total Harmonic Content LL/NN	2.5%
Radio Interference	Supression is in line with European Standard EN55011
Radiant Heat kW/min	50Hz 15.0(853)

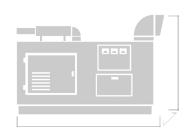
■ IP23 Protection

**■** H Class Insulation

**■** SHUNT Excitation System



WEIGHT AND DIMENSIONS			
		OPEN	CLOSE
LENGTH	mm	2860	3306
WIDTH	mm	990	1100
HEIGHT	mm	1690	1752.3
WEIGHT	kg	1380	1950









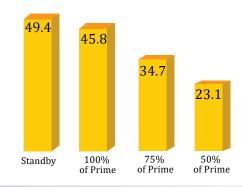


# TP200 POWERED BY PERKINS 1106A-70TAG4

Fuel Type Replaceable Element
Recommended Fuel Class A2 Diesel
Fuel Tank Capacity 340L

### FUEL CONSUMPTION (L/hr)

50Hz



			50Hz	
	SILENCER TYPE		INDUSTRIAL	
ST	MAX. ALLOWABLE BACK PRESSURE	kPa(in Hg)	6.0(1.8)	
AU	SILENCER NOISE REDUCTION LEVEL		14dB	
XH.			PRIME	STANDBY
盘	EXHAUST GAS FLOW	m³/min(cfm)	34.9(1232.5)	36.8(1299.6)
	EXHAUST GAS TEMPERATURE	°C (°F)	550(1022)	550(1022)







# TP200 POWERED BY PERKINS 1106A-70TAG4

	AIR FILTER TYPE	Replaceable Element (50Hz)	
		PRIME	STANDBY
IR	COMBUSTION AIR FLOW m³/min(cfm)	12.6(445)	13.2(466)
<b>A</b>	MAX. COMBUSTION AIR INTAKE RESTRICTION kPa(in H20)	3.0(12.1)	

### **LUBRICATION SYSTEM**

Oil Filter Type		Spin-on, Full Flow
Total Oil Capacity	L(US gal)	16.5 (4.4)
Oil Pan	L(US gal)	15.5 (4.1)
Oil Type		CH4 15W-40

	50Hz
	Centrifugal
L	21
kW(hp)	5(6.7)
m <sup>3</sup> /min(cfm)	222(7839.9)
Pa(in H <sub>2</sub> O)	125(0.5)
	kW(hp)  m³/min(cfm)













## 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 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 (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 inaress

#### 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 V

MAXIMUM SLEEP CURRENT

35 mA at 12 V, 32 mA at 24

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**









Fuel Inlet/Outlet



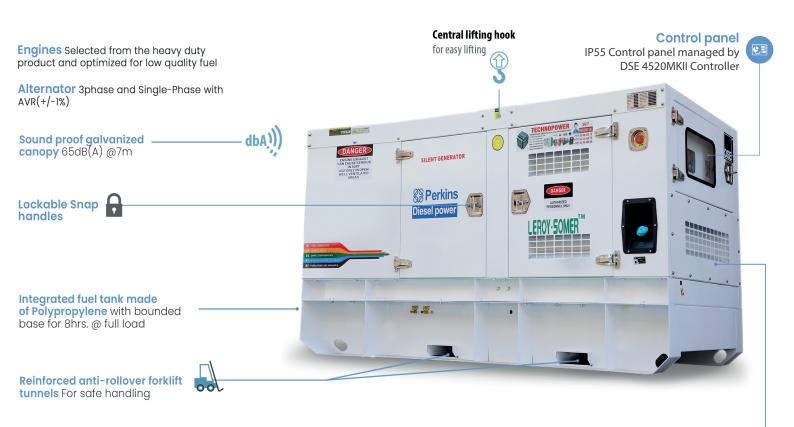
**Document holder**Protects documents



Diesel filling with key lock



Fuel/water seperator filter









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