

TECHNICAL DATA SHEET



Comply With Standards:

- Manufactured in facilities certified with ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, UKAS, & TUV
- Manufactured in accordance to 8528-1 to 12.
- Engine performance according to ISO 3046, BS 5514, DIN 6271.
- Alternator performance according to NEMA-MG1, BS 5000, DIN EN, relevant ISO, IEC60034.
- Breaker complies with IEC - 60947-2.



Silent / Closed Type
Image for illustration purposes only.

PT33

GENERATING SET

Powered By:

ENGINE



ALTERNATOR



CONTROL PANEL



Diesel Generator Set:

Engine Make /Model	PERKINS 1103A-33G
Alternator Make /Model	Leroy Somer TAL-042-C
Control Panel	DSE 4520
Base Frame / Silent Canopy	Robust Structure/ Corrosion Resistant
Circuit Breaker Type	3 Pole MCB (4P Available as Optional)
Built in Base Fuel Tank Capacity	90L
Battery	Maintenance Free Lead Acid

GenSet Dimensions & Weight:

GenSet Type:	Length (mm):	Width (mm):	Height (mm):	Weight (KG):
Close Type	2322	972	1260	914
Open Type	1700	700	1345	683
Prime Power:	Standby Power:	Voltage/Ph:	Hz/RPM:	PF:
30 kVA/24 kWe	33 kVA/26 kWe	400/3Ph	50/1500	0.8

Prime Power Rating (PRP)

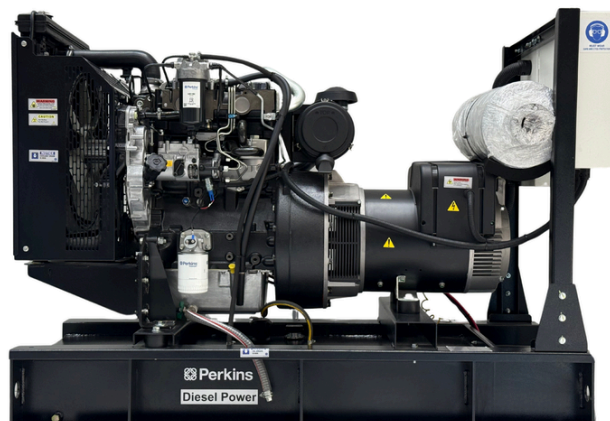
PRP is defined as the maximum power which a Generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year. The permissible average power output over 24 hours shall not exceed 70% of PRP unless otherwise agreed by RIC engine manufacturer. An overload capability of 10% of 100% of the prime rated electrical power is permitted for emergency use for a period of 1 hour within 12 hours of operation

Standby Power

Limited to 500 hours annual usage with an average load factor of 80% of the published Standby power rating over each 24 hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on Standby power. Available in 60HZ for all voltage ratings.

Standard Reference Conditions

Note: Output ratings are presented at 25°C air inlet temperature, barometric pressure 100 kPa, relative humidity 30%. This generating set is designed to operate at high ambient temperatures (up to 55°C), humidity (up to 99%) and higher altitudes. Deration may apply, please consult your dealer for specific site ratings.



Open Type
Image for illustration purposes only.

Engine Specifications:

Engine Make Model	PERKINS 1103A-33G
No. of Cylinders	3 Vertical In-line
Cycle	4 Stroke
Aspiration	Naturally Aspirated
Cooling Method	Water Cooled
Governing Type	Mechanical
Governing Class	G2 - ISO 8528 Part 1
Compression Ratio	19.25:1
Displacement	3.3 L
Bore/Stroke	105 x 127 mm
Dynamic Charging Alternator	65AMP, 12V

Cooling System:

Total Coolant Capacity (L)	10.2 L
Cooling Fan Air Flow	53 m3/ min
Radiator Fan Load	0.4 kW
Cooling System design	50°C
Heat Radiation to Room (PRP)	6 kW

Lubrication System:

Oil Filter Type	Spin-On Full Flow
Total Oil Capacity	8.3 L
Oil Type	API-CH-4 or ACEA E5

Air System:

Air Filter Type	Dry Element
Combustion Air Flow (PRP)	2.16 m3/min
Combustion Air Flow (ESP)	2.15 m3/min
Max Air Filter Intake Restriction	3kPa

Exhaust System:

Muffler Type	Residential Grade
Max. Back Pressure	8 kPa
Exhaust Gas Flow (PRP/ESP)	5.7/5.8 m3/ min
Exhaust Gas Temperature (PRP/ESP)	< 520 °C

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Engine Fuel System:

Recommended Fuel	Class A2 Diesel
Fuel Consumption 100% PRP	7.33 L/hr
Fuel Consumption 75% PRP	5.6 L/hr
Fuel Consumption 50% PRP	4.0 L/hr

Alternator Specifications:

Alternator Make /Model	Leroy Somer TAL-042-C
AVR Model	R120
Number of Poles	4
Number of Winding Leads	6
Type of Bearing	Single Bearing
Insulation Class - Temp Rise	Cont. H - 125/40°C
Ingress Protection Rating	IP 23
Excitation System	Self Excited
Voltage Regulation	+/- 1%
Harmonic Coefficient THF	< 2%
Tel. Influence TIF	< 50
Cooling Air Flow	0.10 m ³ / sec

Controller Specifications

Controller Make & Model	Deep Sea 4520
Operation Mode	AMF
Display	Graphic Back-lit LCD (128x64) Pixels
Ingress Protection Rating	IP65
Binary Inputs/Outputs	4/4
Analog Inputs	3
Measurement	Vac, A, Hz, kVA, kW, Vdc
Event Log	Alarms Log, Hrs Log
Communication	USB

Please refer to Controller Data Sheet for more details.

Enclosure Specifications

Enclosure Type	Acoustic & Weather Proof
Drainage	Fuel & Water Drainage Provision
Transportation	Tested Single point lifting facility from on base frame & Forklift Pockets
Ingress Protection	IP 23
Lifting	ISO Standard Lifting
Canopy RAL Color	RAL 9010 Powder Coated
Base frame RAL Color	RAL 9011 Powder Coated
Anticorrosive Protection	Polyester Powder Coated Galvanized Sheet
Noise Pressure Level @	70.5db(A)/-3 db @ 7 mt



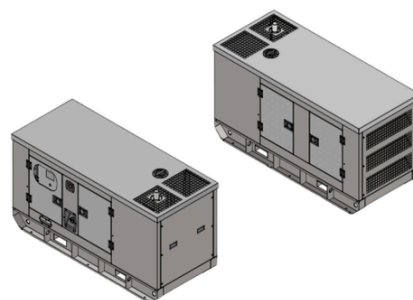
PERKINS ENGINE
1103A-33G



LEROY SOMER
TAL-042-C



DSE4520 MKII
Auto Start & Auto Mains



PT ENCLOSURE / CANOPY

WHY POWERTECH?

When you are running a business every competitive advantage counts, choosing a right Generator Set can make all the difference to bottom line.

Key Features & Benefits:



PT Genset is powered by Perkins Engine, the world leader having over 85 years of innovation and excellence, with customers support in 182 countries from 3500 outlets.



PT Genset is powered by Leroy Somer France Alternator, the Global number 1 in Alternators, with over 99 years of Experience, Having 120+ active patents, in over 40 countries and over 80 service centers.



PT Genset is equipped with DSE controller, one of the world's top manufacturers in UK, having over 40 years of excellence, the most advanced and user friendly controller.



Compact and rugged design, saving on transport and storage cost



Low fuel consumption, saving on fuel spend



Designed to occupy less space considering critical applications and cities where space is at a premium.



Low noise and vibration, considering critical applications where noise level matters



Easy maintenance and long service intervals, saving on maintenance cost



Subject to rigorous tests including load acceptance, cooling, vibration and noise level prior shipment to customer.



Simple to operate and environment friendly in worst ambient conditions

Warranty Policy:

- POWERTECH products has a warranty for all prime equipment, limited to 2000 running hours or 12 months warranty & For Standby equipment, Limited to 500 running hours or 12 months warranty whichever occur first against manufacturing defect.
- Wearing parts (filters), incorrect man-made operation, Back up Genset maintenance failures are excluded from the warranty policy.
- For more details please refer to <https://powertechme.com>

Optional Features:

Alternator

- Anti Condensation Heater
- PMG + AVR
- Double Bearing Alternator
- RTDs For Bearing and Winding

Control System

- AMF / Parallel
- Remote Annunciators
- 4 p manual/Motorized
- Circuit Breaker

Automatic Transfer Switch (ATS)

- Contractor or Breaker Type ATS
- Motorized Changeover Type ATS

Start Battery

- Nickel-cadmium Battery
- Maintenance-free Battery
- Battery Charger and Selector Switch
- Charging Current Meter

Exhaust Muffler

- Residential Grade
- Critical Grade
- Hospital Grade

Available for voltages

- 400/230V, 480/277V, 380/220V, 40/254V, 416/240V, 220/127V, 208/120V