













- omply 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, accordance 180 IEC/AMC4.
- Alternator performance according t relevant ISO, IEC60034. Breaker complies with IEC 60947-2.



PT700

GENERATING SET









Diesel Generator Set:					
Engine Make /Model			PERKINS 2806A-E18TA	AG2	
Alternator Make /Model			Leroy Somer TAL-047-F	=	
Control Panel			DSE 7320		
Base Frame / Silent Canopy			Robust Structure/ Corro	sion Resistant	
Circuit Breaker Type			3 Pole MCCB (4P Availa	ble as Optional)	
Built in Base Fuel Tank Capacity			1100L		
Battery			Maintenance Free Lead	Acid	
GenSet Dimensions & Weight:					
GenSet Type:	Length (mm):	Width (mm):	Height (mm):	Weight (KG):	
Close Type	4822	2022	2430	6139	
Open Type	3500	1550	2290	4564	
Prime Power:	Standby Power:	Voltage/Ph:	Hz/RPM:	PF:	
650kVA/520 kWe	700kVA/560 kW <mark>e</mark>	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.



Powered By:









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Engine Specifications:						
Engine Make Model	PERKINS 2806A-E18TAG2					
No. of Cylinders	6 Vertical In-line					
Cycle	4 Stroke					
Aspiration	Turbocharged					
Cooling Method	Water Cooled					
Governing Type	Electronic					
Governing Class	G2 - ISO 8528 Part 1					
Compression Ratio	14.5:1					
Displacement	18.1 L					
Bore/Stroke	145 x 183 mm					
Dynamic Charging Alternator	70AMP, 24V					
	Cooling System:					
Total Coolant Capacity (L)	61 L					
Cooling Fan Air Flow	702 m3/ min					
Radiator Fan Load	9 kW					
Cooling System design	50°C					
Heat Radiation to Room (PRP)	45 kW					
	Lubrication System:					
Oil Filter Type	Spin-On Full Flow					
Total Oil Capacity	62 L					
Oil Type	API-CH-4 or ACEA E5					
	Air System:					
Air Filter Type	Dry Element					
Combustion Air Flow (PRP)	37 m3/min					
Combustion Air Flow (ESP)	40 m3/min					
Max Air Filter Intake Restriction	6.4 kPA					
	Exhaust System:					
Mufler Type	Residential Grade					
Max. Back Pressure	6.9 kPa					
Exhaust Gas Flow (PRP/ESP)	106 /114 m3/ min					
Exhaust Gas Temperature (PRP/ESP)	< 555°C					









Engine Fuel System:		
Recommended Fuel	Class A2 Diesel	
Fuel Consumption 100% PRP	132 L/hr	
Fuel Consumption 75% PRP	97 L/hr	
Fuel Consumption 50% PRP	66 L/hr	



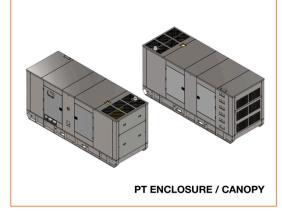
Alternator Specifications:				
Alternator Make /Model	Leroy Somer TAL-047-F			
AVR Model	R150			
Number of Poles	4			
Number of Winding Leads	6			
Type of Bearing	Single Bearing			
Insulation Class - Temp Rise	Cont. H - 125/40°C			
Ingress Protection Rating	IP 23			
Excitation System	Self Excited			
Voltage Regulation	+/- 1%			
Harmonic Coefficient THF	< 2%			
Tel. Influence TIF	< 50			
Cooling Air Flow	0.9 m3 / sec			



Controller Specifications	. Ĉ	
Controller Make & Model	Deep Sea 7320	
Operation Mode	AMF	
Display	Graphic Back-lit LCD (128x64) Pixels	
Ingress Protection Rating	IP65	
Binary Inputs/Outputs	9/8	
Analog Inputs	4	
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 and 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 @	75db(A)+/-3db @ 7 mt	











WHY POWERTECH?

When you are running a business 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.



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



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.



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



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.



Easy maintenance and long service intervals , saving on maintenance cost



Compact and rugged design, saving on transport and storage cost



Low fuel consumption, saving on fuel spend



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 + AVRDouble Bearing Alternator
- RTDs For Bearing and Winding

Start Battery

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

Control System

- AMF / Parallel
- Remote Annunciators4 p manual/Motorized
- Circuit Breaker

Exhaust Muffler

- Residential Grade
- Critical Grade Hospital Grade

Automatic Transfer Switch (ATS)

- · Contractor or Breaker Type ATS
- Motorized Changeover Type ATS

Available for voltages

400/230V,480/277V,380/220V,4 40/254V, 416/240V,220/127V, 208/120V

erTech Equipment and Machinery LLC WARSAN 3. Dubai. UAF

Tel: +971 4 3431358 P.O.Box 239719

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*Due to continuous research & product development, we reserve the right to change specification without notice.