



PI Model	Hz/rpm*	Voltage	Continuous	Prime	Standby
PI 44D	50/1500	400/230	40.6 kVA 32.5 kWe	42.7 kVA 34.3 kWe	44.7 kVA 35.9 kWe
PI 50D	60/1800	480/220	45.4 kVA 36.3 kWe	47.8 kVA 38.2 kWe	50.1 kVA 40 kWe

Applicable Standard and References: ISO 8528-1; ISO 3046-1; BS 5514-1
The above given ratings are at 0.8 power factor (PF)

Engine Technical Data				Alternator Technical Data			
Engine Make & Model		Deutz BF4M2011		Alternator Make & Model		Leroy Somer TAL 042F	
No. of Cylinders		4 In-line		No. of Poles		4	
Cycle		4		WINDING LEADS		12	
Aspiration		Turbocharged		No. of Bearings		Single	
Cooling Method		Oil		Insulation Class/ Temp Rise		Class H /163 ⁰ K-27 ⁰ C	
Governing Type		Mechanical		Winding Pitch		TWO THIRDS	
Governing Class		ISO 8528 Part 1 G2		Ingress Protection Rating		IP-23	
Compression Ratio		19.0:1		Excitation System		SHUNT	
Displacement (L)		3.1 L		AVR Model		R120	
Bore/Stroke (mm)		94/112		Alternator operating Data			
Battery Charger, Ampere		12 Volts DC, 55 Amp		Overspeed (RPM)		2250	
Air System				Voltage Regulation		± 1 %	
Air Filter Type		Dry Element (replaceable)		Wave Form NEMA = TIF		<50	
Combustion Air Flow m ³ /min (cfm)	Standby	N.A		Wave Form IEC = THF		<3.5%	
	Prime	3.18 (116.5)	3.18 (116.5)	Total Harmonic Content LL/LN		<5%	
Radiator Air Flowm ³ /min (cfm)		47.5 (1677)	47.5 (1677)	Radio Interference		Standard EN61000-6-2:2001	
Cooling System				Cooling Air Flow m ³ /sec(cfm)		0.10 (211)	0.13 (218)
Cooling System Capacity (L)		13.5		Controller Technical Data			
Water Pump Type		Centrifugal Engine Driven		Controller Make & Model		DSE 6120 or Eq.	
Radiator Fan Load kW (hp)		0.4 (0.5)	0.7 (0.9)	Operation mode		Auto Main Failure (AMF)	
Heat Radiation to Room kW (BTU/min)	Standby	N.A		Display		large back-lit LCD display	
	Prime	4.9 (278.6)	6.0 (341.2)	Ingress Protection Rating		Sealed front face(IP65)	
Lubrication system				Binary Inputs/Outputs		4 / 6	
Oil Filter Type		Spin on full flow filter		Analog inputs		4	
Total Oil Capacity I (US gal)		10 (2.64)		Measurement		Vac, A, Hz, kVA, kW, Vdc, kV Ar, pf	
Oil Pan I (US gal)		N.A		Event Log		Alarms log, Hours log	
Oil Type		TRO 199-99-1217		Communication (Optional)		USB, RS232, RS485, GSM, ETHERNET	
Cooling Method		N.A		Gen-set Enclosure Specification (optional)			
Fuel System				Enclosure Type		Acoustic and Weather Proof	
Fuel Filter Type		Spin on fuel filters with water separator		Anticorrosive Protection		Polyester Powder Coated Galvanized Sheet	
Recommended Fuel		Class A2 Diesel		Ingress Protection rating		Weather Proof IP23	
Fuel Consumption: l/hr (US gal/hr)		Prime	Standby	Prime	Standby	Transportation	
	110%	N.A	N.A	N.A	N.A	ISO standard lifting	
	100%	11.3 ()	N.A	12.2 ()	N.A	Noise level	
	75%	8.1 ()	N.A	9.0()	N.A	68 dbA @ 7 meters	
50%	5.3 ()	N.A	6.1 ()	N.A	Emergency		
						External Emergency Push Botton	
						Canopy RAL color	
						RAL 2000	
						Chassis RAL color	
						RAL 9011	
Exhaust System				Dimensions		Open Type	Enclosure
Silencer Size & Model		(2.5") Industrial		Length (mm)		1650	2100
Silencer Noise Reduction Level		11-15 dBA		Width (mm)		900	900
Max. Back Pressure kPa (in. Hg)		3.0 (0.88)		Height (mm)		1175	1660
Exhaust Gas Flow L/s (cfm)	Standby	N.A		Weight (kg)		737	1035
	Prime	129.7 (275.0)	155.7 (330.0)	Fuel Tank Capacity (L)		204	210
Exhaust Gas Temperature °C (°F)	Standby	N.A					
	Prime	611 (1131)	600 (1112)				

- Notes:
- 1) Warranty: one year or (1000) hours which comes first.
 - 2) Continuous Power: No time limitation, plus 10% additional power for governing purpose only.
 - 3) Prime Power: Average power output ≤ 80%, no time limitation, plus 5% additional power for governing purpose only.
 - 4) Limited Time Running Power: For up to 500 h/year, thereof a maximum of 300 h/year continuous running.
 - 5) The above rating is based on ISO 8528-5 standard ambient condition. Deration is applicable for higher temperature; Contact PI.
 - 6) Referring to our company policy of continuous development, PI reserves the right to change specification without notice.

N.A. - Not Available
N/A - Not Applicable to this Engine
TBD - To Be Determined