



PI Model	Hz/rpm*	Voltage	Continuous	Prime	Standby
PI 107D	50/1500	400/230	96.9 kVA 77.5 kWe	103.5 kVA 82.8 kWe	107 kVA 85.6 kWe
PI 114D	60/1800	480/220	75.0 kVA 60.0 kWe	79.4 kVA 63.5 kWe	89.4 kVA 71.5 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)

*Note: The Engine is not switchable for 50 & 60 Hz.

Engine Technical Data				Alternator Technical Data			
Engine Make & Model		Deutz BF4 M1013 EC		Alternator Make & Model		Leroy Somer TAL 044 D	
No. of Cylinders		4 In-line		No. of Poles		4	
Cycle		4		WINDING LEADS		12	
Aspiration		Turbocharged, Charged Air Cooled		No. of Bearings		Single	
Cooling Method		Water		Insulation Class/Temp Rise		Class H/ 163 ⁰ k/27 ⁰ c	
Governing Type		Mechanical (Std)/Electronic (Opt.)		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)		4.76		AVR Model		R120	
Bore/Stroke (mm)		108/130		Alternator operating Data		50Hz	60Hz
Battery Charger, Ampere		12 Volts DC, 55 Amp		Overspeed (RPM)		2250	
Air System		50Hz	60Hz	Voltage Regulation		± 1 %	
Air Filter Type		Dry Element (replaceable)		Wave Form NEMA = TIF		<50	
Combustion Air Flow m ³ /min (cfm)	Standby	N.A	N.A	Wave Form IEC = THF		<3.5%	
	Prime	10.6 (374.3)	13.3 (469.6)	Total Harmonic Content LL/LN		<5%	
Radiator Air Flow		180 (6356)	191 (6766)	Radio Interference		Standard EN61000-6-2:2001	
Cooling System		50Hz	60Hz	Cooling Air Flow m ³ /sec(cfm)		0.06 (127)	N.A
Cooling System Capacity (L)		19.7		Controller Technical Data			
Water Pump Type		Centrifugal Engine Driven		Controller Make & Model		DSE 6120 or Eq.	
Radiator Fan Load kW (hp)		5.9 (7.9)	10.2 (11.6)	Operation mode		Auto Main Failure (AMF)	
Heat Radiation to Room kW (BTU/min)	Standby	N.A	N.A	Display		large back-lit LCD display	
	Prime	13.1 (1056)	11(909)	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)		20 (5.28)		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		50Hz	60Hz	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%	25.8(6.80)	N.A	26.7(16.6)	N.A	Noise level	
	75%	19.3(5.0)	N.A	20.1(12.4)	N.A	Emergency	
	50%	13.1(3.4)	N.A	13.8(8.5)	N.A	External Emergency Push Botton	
Exhaust System		50Hz	60Hz	Canopy RAL color		RAL 2000	
Silencer Size & Model		(4") Industrial		Chassis RAL color		RAL 9011	
Silencer Noise Reduction Level		11-15 dBA		Dimensions		Open Type	Enclosure
Max. Back Pressure kPa (in. Hg)		3.0 (0.88)		Length (mm)		2111	3350
Exhaust Gas Flow m ³ /hr (cfm)	Standby	N.A	N.A	Width (mm)		1143	1150
	Prime	1102 (648.1)	1316 (774.5)	Height (mm)		1473	1760
Exhaust Gas Temperature °C (°F)	Standby	N.A	N.A	Weight (kg)		1317	1819
	Prime	560 (860)	520 (968)	Fuel Tank Capacity (L)		390	390

- 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