



PI Model	H <sub>z</sub> /rpm*	Voltage	Continuous	Prime	Standby
PI 21D	50/1500	400/230	19.1 kVA 15.2 kWe	20 kVA 16 kWe	21.0 kVA 16.8 kWe
PI 25.1D	60/1800	480/220	23.0 kVA 18.4 kWe	24.2 kVA 19.3 kWe	25.1 kVA 20.0 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 F3L2011		Alternator Make & Model		Leroy Somer TAL 040 F			
No. of Cylinders		3 In-line		No. of Poles		4			
Cycle		4		WINDING LEADS		12			
Aspiration		Natural		No. of Bearings		Single			
Cooling Method		Air		Insulation Class/ Temp Rise		Class H /163 <sup>0</sup> K-27 <sup>0</sup> 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)		2.3 L		AVR Model		R120			
Bore/Stroke (mm)		94/112		<b>Alternator operating Data</b>					
Battery Charger, Ampere		12 Volts DC, 60 Amp		Overspeed (RPM)		2250			
<b>Air System</b>				Voltage Regulation					
Air Filter Type		Dry Element (replaceable)		Wave Form NEMA = TIF					
Combustion Air Flow		N.A		Wave Form IEC = THF					
m <sup>3</sup> /min (cfm)		Prime 1.4 (71.66)		Standby 1.4 (71.66)		Total Harmonic Content LL/LN			
Cooling Air Flow		30.0 (1059)		36.0 (1271)		Radio Interference			
m <sup>3</sup> /min (cfm)						Standard EN61000-6-2:2001			
<b>Cooling System</b>				Cooling Air Flow m <sup>3</sup> /sec(cfm)					
Cooling System Capacity (L)		By Circulating Engine Oil		0.06 (127)					
Water Pump Type		N/A		<b>Controller Technical Data</b>					
Fan Load kW (hp)		0.12 (0.16)		0.1 (0.14)		Controller Make & Model			
Heat Radiation to Room		N.A		N.A		DSE 6120 or Eq.			
kW (BTU/min)		Prime 2.7 (153.5)		Standby 3.4 (193.3)		Operation mode			
						Auto Main Failure (AMF)			
<b>Lubrication system</b>				Display					
Oil Filter Type		Spin on full flow filter		large back-lit LCD display					
Total Oil Capacity I (US gal)		5.5 (1.45)		Ingress Protection Rating					
Oil Pan I (US gal)		N.A		Sealed front face(IP65)					
Oil Type		TRO 199-99-1217		Binary Inputs/Outputs					
Cooling Method		Air/Oil heat Exchanger		4 / 6					
<b>Fuel System</b>				Analog inputs					
Fuel Filter Type		Spin on fuel filters with water separator		Measurement					
Recommended Fuel		Class A2 Diesel		Vac, A, Hz, kVA, kW, Vdc, kV Ar, pf					
Fuel Consumption:		Prime Standby Prime Standby		Event Log					
I/hr (US gal/hr)		110% N.A N.A N.A N.A		Alarms log, Hours log					
		100% 5.3 (1.45) N.A 6.4 (1.68) N.A		Communication					
		75% 3.8 (1.05) N.A 4.7 (1.24) N.A		USB, RS232, RS485, GSM, ETHERNET					
		50% 2.7 (0.73) N.A 3.3 (0.87) N.A							
<b>Exhaust System</b>				<b>Gen-set Enclosure Specification (optional)</b>					
Silencer Size & Model		(2") Industrial		Enclosure Type					
Silencer Noise Reduction Level		11-15 dBA		Acoustic and Weather Proof					
Max. Back Pressure kPa (in. Hg)		3.0 (0.88)		Anticorrosive Protection					
Exhaust Gas Flow		Standby N.A N.A		Polyester Powder Coated Galvanized Sheet					
L/s (cfm)		Prime 65.4 (138.7) 81.9 (158.7)		Ingress Protection rating					
Exhaust Gas		Standby N.A N.A		Weather Proof IP23					
Temperature °C (°F)		Prime 510 (1131) 520 (968)		Transportation					
				ISO standard lifting					
				Noise level					
				66 dbA @ 7 meter					
				Emergency					
				External Emergency Push Botton					
				Canopy RAL color					
				RAL 2000					
				Chassis RAL color					
				RAL 9011					
				<b>Dimensions</b>		<b>Open Type</b>		<b>Enclosure</b>	
				Length (mm)		1650		2100	
				Width (mm)		900		900	
				Height (mm)		1175		1660	
				Weight (kg)		608		906	
				Fuel Tank Capacity (L)		204		210	

- 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 conditions.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