PRECISION INDUSTRIES®

LIGHTING THE WORLD

PI Model	Hz/rpm*	Voltage	Continuous	Prime	Standby
PI 13.1D	50/1500	400/230	12.1 kVA 9.6 kWe	12.8 kVA 10.2 kWe	13.1 KVA 10.4 kWe
PI 15D	60/1800	480/220	14.2 kVA 11.3 kWe	14.9 kVA 11.9 kWe	15.7 KVA 12.5 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)

Engine Technical Data			
Engine Make & Model		Deutz F2M2011	
No. of Cylinders		2 In-line	
Cycle		4	
Aspiration		Natural	
Cooling Method		Oil	
Governing Type		Mechanical	
Governing Class		ISO 8528 Part 1 G2	
Compression Ratio		19.0:1	
Displacement (L)		1.55 L	
Bore/Stroke (mm)		94/112	
Battery Charger, Ampere		12 Volts DC, 55 Amp	
Air System			
Air Filter Type		Dry Element (replaceable)	
Combustion Air Flow m³/min (cfm)	Standby	N.A	
	Prime	0.95 (33.54)	
Radiator Air Flowm³/min (cfm)		30.0 (1059)	
Cooling System		50Hz	60Hz
Cooling System Capacity (L)		8	
Water Pump Type		Centrifugal Engine Driven	
Radiator Fan Load kW (hp)		0.4 (0.5)	0.7 (0.93)
Heat Radiation to Room kW (BTU/min)	Standby	N.A	N.A
	Prime	2.2 (1.251)	2.5 (1.421)
Lubrication system			
Oil Filter Type		Spin on full flow filter	
Total Oil Capacity l (US gal)		5.5 (1.45)	
Oil Pan l (US gal)		N.A	
Oil Type		TRO 199-99-1217	
Cooling Method		Oil	

Fuel System		50Hz		60Hz	
Fuel Filter Type		Replacable Element			
Recommended Fuel		Class A2 Diesel			
Fuel Consumption: l/hr (US gal/hr)		Prime	Standby	Prime	Standby
	110%	N.A	N.A	N.A	N.A
	100%	3.4(0.91)	N.A	4.1(1.08)	N.A
	75%	2.5(0.66)	N.A	3.1(0.82)	N.A
	50%	1.8(0.48)	N.A	2.2(0.58)	N.A

Exhaust System		50Hz	60Hz
Silencer Size & Model		(2") Industrial	
Silencer Noise Reduction Level		11-15 dBA	
Max. Back Pressure kPa (in. Hg)		3.0 (0.88)	
Exhaust Gas Flow L/s (cfm)	Standby	N.A	
	Prime	46.9 (138.7)	
Exhaust Gas Temperature °C (°F)	Standby	N.A	N.A
	Prime	540 (1131)	611 (1131)

Alternator Technical Data	
Alternator Make & Model	Leroy Somer TAL 040C
No. of Poles	4
WINDING LEADS	12
No. of Bearings	Single
Insulation Class/ Temp Rise	Class H /163^{0}K-27^{0}C
Winding Pitch	TWO THIRDS
Ingress Protection Rating	IP-23
Excitation System	SHUNT
AVR Model	R120
Alternator operating Data	
Overspeed (RPM)	2250
Voltage Regulation	± 0.5 %
Wave Form NEMA = TIF	<100
Wave Form IEC = THF	<3.5%
Total Harmonic Content LL/LN	<5%
Radio Interference	Standard EN61000-6-2:2001
Cooling Air Flow m³/sec(cfm)	0.06 (2.11)
Controller Technical Data	
Controller Make & Model	DSE 6120 or Eq.
Operation mode	Auto Main Failure (AMF)
Display	large back-lit LCD display
Ingress Protection Rating	Sealed front face(IP65)
Binary Inputs/Outputs	4 / 6
Analog inputs	4
Measurement	Vac, A, Hz, kVA, kW, Vdc, kV Ar, pf
Event Log	Alarms log, Hours log
Communication (Optional)	USB, RS232, RS485, GSM, ETHERNET
Gen-set Enclosure Specification (optional)	
Enclosure Type	Acoustic and Weather Proof
Anticorrosive Protection	Polyester Powder Coated Galvanized Sheet
Ingress Protection rating	Weather Proof IP23
Transportation	ISO standard lifting
Noise level	65 dbA @ 7 meters
Emergency	External Emergency Push Botton
Canopy RAL color	RAL 2000
Chassis RAL color	RAL 9011

Dimensions	Open Type	Enclosure
Length (mm)	1650	2100
Width (mm)	900	900
Height (mm)	1175	1660
Weight (kg)	549	847
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 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

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