



PRECISION INDUSTRIES®

PI 165P/50Hz THE POWER OF DUBAI
PI 188P/60Hz

Output Power Ratings			Prime*		Standby**	
rpm	Frequency	Voltage	Kva	kW	Kva	kW
1500	50Hz	400	150	120	165	132
1800	60Hz	480	169	135	188	150

Switchable speed @ 1800/1500 rpm

The above KW ratings are at 0.8 pf

Guaranteed within conditions equivalent to those specified in ISO 8528-1, ISO 3046-1 and BS 5514-1.

Engine Technical Data	
Engine Make and Model	Perkins 1106A-70TAG2
Cylinders	6 Vertical In-Line
Aspiration	Turbocharged, Air-to-Air After cooled
Combustion System	Direct Injection
Displacement	7.0liters
Governor	Electronic / Mechanical
Emissions Regulations	TA luft
Electrical Starting System	12 Volt Starter Motor And 55 Amp Alternator With Dc Output

Air Systems			
Air Filter Type	Dry Element (Replaceable)		
Combustion Air Flow m ³ /min (cfm)	50 Hz	60 Hz	
	Prime	10.20 (360)	14.41 (499)
	Standby	10.67 (376)	14.97 (528)
Maximum Air Filter Intake Restriction	5.0kPa	5.0kPa	

Fuel System			
Fuel Filter Type	Spin-On Full Flow and Pre-Filter (Replaceable)		
Recommended Fuel	Class A2 Diesel		
Fuel Consumption l/hr (US gal/hr)	Engine Speed	1500 rpm	1800 rpm
	Standby	36.1 (9.53)	41.7 (11.01)
	Prime Power	8.12 (33.4)	38.2 (10.09)
	%75 of Prime Power	24.7 (6.52)	29.1 (7.68)
	%50 of Prime Power	9.1 (4.33)	19.1 (5.04)
Fuel Tank Capacity: Open / Close	405 L / 435 L		

Lubrication System	
Lube Oil	API CD/SE or CCMC D4 SAE 15W-40 (-10 C to 50 C Ambient Temperature)
Lube Oil Capacity	16.5 L
Oil Pan	14.9 L
Oil Filter Type	Spin-On Full Flow (Replaceable)
Oil Cooling Method	Water

Cooling System			
Coolant Capacity	21 L		
Cooling System	Mounted Radiator, Water Cooled		
Cooling Fan Air Flow m ³ /min (cfm)	282 (9958.73)	282 (9958.73)	
	50 Hz	60 Hz	
Heat Radiation to Room	Prime	11.0kW	11.3kW
	Standby	12.2 kW	12.3 kW

Exhaust System			
Silencer	Grade	Industrial	
	Size	3.5"	
	Qty	1	
Exhaust Gas Flow m ³ /min (cfm)	Prime	23.78 (839)	30.53 (1078)
	Standby	25.53 (901)	32.29 (1140)
Maximum Allowable Backpressure		6.0 kPa	6.0 kPa
Exhaust Gas Maximum Temp	50 Hz	484°C	407°C
	Prime Standby	484°C	407°C

Alternator Technical Data		Stamford							
Model Number		UCI274F							
No. of Poles		4							
Number of Terminals (Leads)		12							
A.V.R. & Excitation		AS 460							
Regulation		±1.0%							
Ingress Protection		IP-23							
Insulation Class		H							
TIF		<50							
THD at Full Load %		<5.0%							
THD at No Load %		<1.5%							
Cooling Air Flow- @ 50 Hz m ³ /min (cfm)		30.84 (1090)							
Cooling Air Flow- @ 60 Hz m ³ /min (cfm)		37.02 (1308)							
Output Voltages		50Hz				60Hz			
V		380	400	415	440	415	440	460	480
kVA		175	175	175	N/A	192.5	206.3	206.3	218.8
Kw		140	140	140	N/A	154	165	165	175
Alternator Performance Data									
Reactance (f.l.l.c.f)	Xd %	265.9	240	223	165.3	267.6	269.8	261.3	240
	Xd' %	16.4	14.8	13.7	10.2	16.5	16.6	16.1	14.8



Made in UAE



ISO 9001 : 2008 Certified



THE POWER OF DUBAI

PI 165P/50Hz

PI 188P/60Hz

	Xd'' %	6.9	6.2	5.8	4.3	6.9	7.0	6.8	6.2
Motor Starting Capability Based on %30 voltage dip and 0.8 PF (KVA)		325	400	480	-	250	325	400	480

Controller Features	DSE 4520 or Eq.
Controller Make and Model	Auto Mains Failure (AMF) applications including remote communication , User configuration and complete gen-set monitoring and protection. Ready for generators with 3 ph 4 wires / 3 ph 3 wires / Mono ph
Engine Protections	<ul style="list-style-type: none"> Oil pressure Coolant temperature Fuel level (Optional) Coolant level
Generator Protections	<ul style="list-style-type: none"> Over / Under voltage Over/Under frequency Phases Sequence Over current Charging Alternator Fault
Inputs and Outputs	<ul style="list-style-type: none"> 3 No's Configurable analog inputs 4 No's binary inputs 4 No's binary outputs D + Pre-Excitation terminal
Event and Performance Log	<ul style="list-style-type: none"> Gen-set text alarm log For More Features We Can Use Higher Controller Engine hours history log

Genset Enclosure Specification (optional)	
Enclosure Type	Acoustic and Weather Proof
Anticorrosive Protection	Polyester Powder Coated Galvanized Sheet
Access Doors	6
Drainage	Fuel & Water Drainage Provision
Transportation	Tested Single Point Lifting Facility & Forklift Pockets
Noise Level (@Free-Field Conditions)	71 dBA @ 7 meter
Water Fill	Radiator Water Filling Provision
Cable Access	Cable Inlet and Outlet Provision
Emergency Stop	External Emergency Push Button
Canopy RAL Color	RAL 2000
Chassis RAL Color	RAL 9011

Shipping Data				
Type	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
Open	2760	900	1560	1515
Enclosed	3562	1155	1832	2156

Notes:

*Prime power rating of the generating set is where a variable load and unlimited hours usage are applied on the generating set with an average load factor of 80% of the prime rating over each 24 hour period. Noting that a 10% overload is available for 1 hour in every 12 hours operation

**Standby power rating of the generating set is where a variable load limited to an annual usage upto 500 hours is applied, with 300 hours of which may be continuous running. Noting that no overload is permitted

All generators carry a one year or (1000) hours' manufacturer's warranty

In line with our policy of continuous development, PI reserves the right to change specification without notice

PRECISION
INDUSTRIES®

Dubai | Abu Dhabi | Qatar | Oman | CIS Countries

Head Office Dubai | Tel: +971 4 338 4033 | Fax: +971 4 338 3997
 Abu Dhabi | Tel: +971 2 645 0107 | Fax: +971 2 645 0167
 Qatar | sales.qatar@pi-dubai.com
 Oman | sales.oman@pi-dubai.com

info@pi-dubai.com | www.pi-dubai.com

GPS: 25° 7' 50" N , 55° 14' 53" E



GENSETS