

PRECISION

INDUSTRIES ®

PI 169 P/60Hz

PI 150 P/50Hz THE POWER OF DUBAI

| Output Power Ratings | | Prim | e* | Standby** | | | |
|----------------------|---------------------------------|---------|-----|-----------|-----|-----|--|
| rpm | Frequency | Voltage | kVA | kW | kVA | kW | |
| 1500 | 50Hz | 400 | 135 | 108 | 150 | 120 | |
| 1800 | 0 60Hz 480 152 122 169 135 | | | | | 135 | |
| Generator co | Generator speed @ 1900/1500 rpm | | | | | | |

The above KW ratings are at 0.8 pf

Guarantied 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-70TG1 |
| Cylinders | 6 Vertical In-Line |
| Aspiration | Turbocharged, Air-to-Air After cooled |
| Combustion System | Direct Injection |
| Displacement | 7.01liters |
| 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 | | 50 Hz | 60 Hz | | | |
| m³/min (cfm) | Prime | 7.64 (269.8) | 10.95 (386.6) | | | |
| III /IIIIII (CIIII) | Standby | 8.09 (285.6) | 11.48 (405.4) | | | |
| Maximum Air Filter Intake Restriction | | 5.0 kPa | 5.0 kPa | | | |

| Fuel System | Fuel System | | | | | | |
|--------------------|--------------------|--|--------------|--|--|--|--|
| Fuel Filter Type | | Spin-On Full Flow and Pre-Filter (Replaceable) | | | | | |
| Recommended Fu | el | Class A2 Diesel | | | | | |
| | Engine Speed | 1500 rpm | 1800 rpm | | | | |
| Fuel | Standby | 8.92 (33.8) | 10.24 (38.8) | | | | |
| Consumption | Prime Power | 7.99 (30.2) | 35.2 (9.29) | | | | |
| I/hr (US gal/hr) | %75 of Prime Power | 22.7 (5.99) | 26.0 (6.86) | | | | |
| | %50 of Prime Power | 4.20 (15.9) | 4.62 (17.5) | | | | |
| 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 |
| Oil Pan | 14.9 |
| 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 m3/mir | (cfm) | 6427 (182) | 6427) 182) | | | |
| | | 50 Hz | 60 Hz | | | |
| Heat Radiation to Room | Prime | 12.5 kW | 13.7 kW | | | |
| | Standby | 15 2 L/M | 14.0 kW | | | |

| Exhaust System | | | | | | |
|---------------------------|---------|-----------------|----------------|--|--|--|
| | Grade | Industrial | | | | |
| Silencer | Size | 3.5" | | | | |
| | Qty | 1 | | | | |
| Exhaust Gas Flow | Prime | 20.75 (732.7) | 27.16 (959.1) | | | |
| m ³ /min (cfm) | Standby | 22.66 (800.2) | 29.05 (1025.8) | | | |
| Maximum Allowable Backpre | ssure | 6.0 kPa 6.0 kPa | | | | |
| Full and Care & American | | 50 Hz | 60 Hz | | | |
| Exhaust Gas Maximum | Prime | 576°C | 526°C | | | |
| Temp | Standby | 576°C | 526°C | | | |

| Alternator Technical Data | Alternator Technical Data | | | Stamford | | | | | | |
|---|-----------------------------|--------------|---------|----------|-------|-------|-------|-------|-------|--|
| Model Number | | UCI274 | UCI274E | | | | | | | |
| No. of Poles | | 4 | | | | | | | | |
| Number of Terminals (Leads) | | 12 | | | | | | | | |
| A.V.R. & Excitation | | AS 460 | | | | | | | | |
| Regulation | | ±1.0% | | | | | | | | |
| Ingress Protection | | IP-23 | | | | | | | | |
| Insulation Class | | Н | Н | | | | | | | |
| TIF | TIF | | | <50 | | | | | | |
| THD at Full Load % | | <5% | | | | | | | | |
| THD at No Load % | | <1.5% | | | | | | | | |
| Cooling Air Flow- @ 50 Hz m ³ /r | nin (cfm) | 30.84 (1090) | | | | | | | | |
| Cooling Air Flow- @ 60 Hz m3/r | nin (cfm) | 37.02 (1308) | | | | | | | | |
| Output Voltages | | 50Hz | | | | 60Hz | | | | |
| V | | 380 | 400 | 415 | 440 | 415 | 440 | 460 | 480 | |
| kVA | kVA | | | 150 | N/A | 175.0 | 181.3 | 181.3 | 193.8 | |
| Kw | 120 | 120 | 120 | N/A | 140.0 | 145.0 | 145.0 | 155.0 | | |
| Alternator Performance Data | Alternator Performance Data | | | | | | | | | |
| Danatana (61 al 5) | Xd % | 265.9 | 240 | 223 | 165.3 | 267.6 | 269.8 | 261.3 | 240 | |
| Reactance (f.l.cl.F) | Xd′ % | 16.4 | 14.8 | 13.7 | 10.2 | 16.5 | 16.6 | 16.1 | 14.8 | |











THE POWER OF DUBAI

PI 150P/50Hz PI 169P/60Hz

| | - 11 | | | | | | | | | |
|--|------|---|-----|-----|-----|-----|-----|-----|-----|-----|
| | 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 | - 6 | 250 | 325 | 400 | 480 |

| Controller Features | DSE 4520 or Eq. | 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 | Oil pressure Coolant temperature Goolant level | | | | | |
| Generator Protections | Over / Under voltage Over/Under frequency Phases Sequence | Over current Charging Alternator Fault | | | | |
| Inputs and Outputs | 3 No's Configurable analog inputs4 No's binary inputs | 4 No's binary outputs D + Pre-Excitation terminal | | | | |
| Event and Performance Log | 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 | | | | |
|---------------|-------------|------------|-------------|-------------|
| Туре | 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



Dubai I Abu Dhabi I Qatar I Oman I CIS Countries

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