

| Output Power Rating | | Prime | | | Standby *** | |
|---------------------|-----------|---------|-----|-----|-------------|-----|
| rpm | Frequency | Voltage | Kva | Kw | Kva | Kw |
| 1500 | 50 Hz | 400 | 200 | 160 | 220 | 176 |
| 1800 | 60 Hz | 480 | 245 | 196 | 269 | 215 |

Switch able speed 1500/1800 rpm

The above kW rating are at 0.8 pf

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

* 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 hours period.

Nothing 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 up to 500 hours is applied, with 300 hours of which may be continuous running. Noting that no overload is permitted

Engine Technical Data

| | | | | | | |
|----------------------------|--|--|--|--|--|--|
| Engine Make and Model | Perkins 1506A - E88TAG1 | | | | | |
| Cylinder | 6 Vertical In-Line | | | | | |
| Aspiration | Turbo Charged, After Cooled | | | | | |
| Combustion System | Direct Injection | | | | | |
| Displacement | 8.8 Liters | | | | | |
| Governor | Electronic | | | | | |
| Emissions Regulation | EU Stage II | | | | | |
| Electrical Starting System | 24 V starter motor and 24V, 45 Amp Alternator with DC Output | | | | | |

Air System

| | | | | | | |
|------------------------------------|-----------------------------|---------------|---------------|---------|--|--|
| Air Filter Type | Paper Element (Replaceable) | | | | | |
| Combustion Air Flow Cm/min(cfm) | Prime Standby | 50 Hz | 60 Hz | | | |
| | | 11.3 (399.05) | 13.3 (469.68) | | | |
| | | 11.7 (413.18) | 13.4 (473.21) | | | |
| Max Air Filter Intake Restriction | 8.0 kpa | | | 8.0 kpa | | |

Fuel System

| | | | | | | |
|-------------------------------------|---------------------------|--------------|--|--|--------------|--|
| Fuel Filter Type | Fuel Filter (Replaceable) | | | | | |
| Recommended Fuel | Class A2 Diesel | | | | | |
| Fuel Consumption l/hr(US gal/hr) | Engine Speed | 1500 rpm | | | 1800 rpm | |
| | Standby | 44.0 (11.62) | | | 50.5 (13.34) | |
| | Prime Power | 40.2 (10.62) | | | 41.3 (10.91) | |
| | 75% of Prime Power | 31.0 (8.19) | | | 36.8 (9.72) | |
| | 50% of Prime Power | 20.5 (5.42) | | | 25.5 (6.74) | |
| Fuel Tank: Open / Close | 405 L / 435 L | | | | | |

Lubrication System

| | | | | | | |
|--------------------|--|--|--|--|--|--|
| Lube Oil | API-CH4 / C14 SAE 15W-40 (-10°C to 50°C Ambient Temperature) | | | | | |
| Lube Oil Capacity | 41 L | | | | | |
| Oil Pan | 15.5 L | | | | | |
| Oil Filter Type | Oil Filter (Replaceable) | | | | | |
| Oil Cooling Method | Water | | | | | |

Cooling System

| | | | | | | |
|-----------------------------------|------------------|---------|---------|----------------|--|--|
| Coolant Capacity | 21 L | | | | | |
| Cooling System | Liquid | | | | | |
| Cooling Fan Air Flow m3/min (cfm) | 281 (9923.42) | | | 314 (11088.81) | | |
| Heat Radiation to Room | Prime Standby | 50 Hz | 60 Hz | | | |
| | | 12.5 kW | 14.5 kW | | | |
| | | 13.7 kW | 15.7 kW | | | |

Exhaust system

| | | | | | | |
|----------------------------------|------------------|----------------|-------|----------|----------------|--|
| Silencer | Grade | Industrial | | | | |
| | Size | 2" | | | | |
| | QTY | 1 | | | | |
| Exhaust gas flow m3/min (cfm) | Prime | 29.4 (1038.25) | | | 33.4 (1179.51) | |
| | Standby | 21.0 (1094.75) | | | 34.8 (1228.95) | |
| Max Allowable Backpressure | 10.0 kpa | | | 15.0 kpa | | |
| Exhaust Gas Max Temperature | Prime Standby | 50 Hz | 60 Hz | | | |
| | | 480°C | 485°C | | | |
| | | 499°C | 509°C | | | |

| Alternator Technical Data | | Stamford / or L.S | | | | | | | |
|--|--------------|-------------------|-----|-----|-------|-----|-----|-----|-----|
| Model Number | UCI274H | | | | | | | | |
| No. of Poles | 4 | | | | | | | | |
| Number of terminals (leads) | 12 | | | | | | | | |
| A.V.R & Excitation | SX 460 | | | | | | | | |
| Regulation | ± | | | | | | | | |
| Ingress Protection | IP-23 | | | | | | | | |
| Insulation Class | H | | | | | | | | |
| TIF | <40 | | | | | | | | |
| THD at Full Load % | 2.8 / 2.7 | | | | | | | | |
| THD at No Load % | 3.1 / 3.0 | | | | | | | | |
| Cooling Air flow-@50 Hz m3 / min (cfm) | 32 (1130.00) | | | | | | | | |
| Cooling Air flow-@60 Hz m3 / min (cfm) | 39 (1377.27) | | | | | | | | |
| Output Voltage | 50 Hz | | | | 60 Hz | | | | |
| V | 380 | 400 | 415 | 440 | 415 | 440 | 460 | 480 | |
| kVA | 180 | 180 | 180 | 165 | 210 | 220 | 220 | 220 | 220 |
| kW | 144 | 144 | 144 | 132 | 168 | 176 | 176 | 176 | 176 |

| Alternator performance data | | | | | | | | | |
|---|-------|-------|-----|-----|-------|-------|-------|-------|-----|
| Reactance (f.l.c.l.f) | xd % | 218.3 | 197 | 183 | 149.2 | 251.6 | 234.4 | 214.5 | 197 |
| | xd' % | 10.7 | 9.7 | 9.0 | 7.3 | 12.4 | 11.5 | 10.6 | 9.7 |
| | xd" % | 6.1 | 5.5 | 5.1 | 4.2 | 7.0 | 6.5 | 6 | 5.5 |
| Motor starting capacity based on 30% voltage dip and 0.8 pf (kVA) | 360 | 440 | 525 | - | 315 | 380 | 450 | 525 | |

| Controller features | | DSE | | | | | | | |
|---------------------------|--|-----|--|--|---|--|--|--|--|
| 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 wire / 3ph 3 wire/ Mono ph | | | | | | | | |
| Engine Protection | * Oil Pressure * Coolant Temperature | | | | * Fuel Level (Optional) | | | | |
| Generator Protection | * Over / Under Voltage * Over / Under Frequency * Phases Frequency | | | | * Over Current * Charging Alternator Fault | | | | |
| Inputs and Outputs | * 3 No's Configurable Analog Inputs * 4 No's Binary Inputs | | | | * 6 No's Binary Outputs * D+ Pre-Excitation Terminal | | | | |
| Event and Performance Log | * Gen-set text Alarm Log * For More Features we can use High Controller | | | | * Engine Hours History Log | | | | |

| Gen-set Enclosure specification (optional) | |
|--|---|
| Enclosure Type | Acoustic and Weatherproof |
| Anticorrosive Protection | Polyester Powder Coated Galvanized Sheet |
| Access Doors | 6 |
| Drainage | Fuel and Water Drainage Provision |
| Transportation | Tested Single Point Lifting Facility & Forklift Pockets |
| Noise Level (@ Free-Field Conditions) | 72 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 | 2248 | 900 | 1560 | 1560 |
| Enclosed | 3562 | 1155 | 1832 | 2201 |

Notes:

All Generators carry a one year or (1,000) hour's manufacturer's warranty