

Output Power Rating		Prime			Standby ***	
rpm	Frequency	Voltage	Kva	Kw	Kva	Kw
1500	50 Hz	400	180	144	200	160
1800	60 Hz	480	200	160	219	175

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 1106C-E66TAG4
Cylinder	Vertical In-Line Turbo
Aspiration	Charged, After Cooled Direct
Combustion System	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 m ³ /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 m ³ /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 m ³ / min (cfm)	32 (1130.00)
Cooling Air flow-@60 Hz m ³ / 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