

Output Power Rating		Prime		Standby ***		
rpm	Frequency	Voltage	Kva	Kw	Kva	Kw
1500	50 Hz	400	60.0	48.0	66.0	52.8.0
1800	60 Hz	480	68.1	54.5	75.1	60.1

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 1103A-33TG2
Cylinder	4 Vertical In-Line
Aspiration	Turbocharged
Combustion System	Direct Injection
Displacement	4.41 Liter
Governor	Mechanical (Optional Electronic)
Emissions Regulation	TA Luft
Electrical Starting System	12 Volt Starter Motor and 12 Volt 65 Amp Alternator DC Output

Air System

Air Filter Type	Dry Element (Replaceable)		
Combustion Air Flow Cm ³ /min(cfm)	Prime	50 Hz	60 Hz
		3.8 (134.1)	4.7 (165.9)
	Standby	3.9 (137.7)	4.9 (173.0)
Max Air Filter Intake Restriction	8.0 kpa	8.0 kpa	

Fuel System

Fuel Filter Type	Ecoplus (Replaceable)		
Recommended Fuel	Class A2 Diesel		
Fuel Consumption l/hr(US gal/hr)	Engine Speed	1500 rpm	1800 rpm
	Standby	20.3	18.2 (481)
	Prime Power	18.6	16.6 (4.39)
	75% of Prime Power	14.3	12.5 (3.30)
	50% of Prime Power	9.8	8.80 (2.32)
Fuel Tank: Open / Close	180 L / 167 L		

Lubrication System

Lube Oil	API CH4 / ACEA E5 (-10 ^o C to 50 ^o C Ambient Temperature)
Lube Oil Capacity	8.5 L
Oil Pan	7.8 L
Oil Filter Type	Spin-On (Replaceable)
Oil Cooling Method	Water

Cooling System

Coolant Capacity	12.6 L		
Cooling System	Water Cooled		
Cooling Fan Air Flow m ³ /min (cfm)	89.0 (3143.0)	111.0 (3919.9)	
Heat Radiation to Room	Prime	50 Hz	60 Hz
		10.0 kW	11.0 kW
	Standby	11.0 kW	11.0 kW

Exhaust system

Silencer	Grade	Industrial	
	Size	2.5"	
	QTY	1	
Exhaust gas flow m ³ /min (cfm)	Prime	10.1 (356.6)	11.8 (416.7)
	Standby	10.4 (367.2)	12.5 (441.4)
Max Allowable Backpressure	10 kpa	15 kpa	
Exhaust Gas Max Temperature	Prime	50 Hz	60 Hz
		557 ^o C	534 ^o C
	Standby	571 ^o C	564 ^o C

Alternator Technical Data		Stamford / or L.S							
Model Number	UC1224E								
No. of Poles	4								
Number of terminals (leads)	12								
A.V.R & Excitation	SX 460								
Regulation	± 1.5%								
Ingress Protection	IP-21								
Insulation Class	H								
TIF	<45								
THD at Full Load %	3.8 / 3.6								
THD at No Load %	3.0 / 2.9								
Cooling Air flow-@50 Hz m ³ / min (cfm)	11.8 (416.71)								
Cooling Air flow-@60 Hz m ³ / min (cfm)	14.5 (512.06)								
Output Voltage		50 Hz				60 Hz			
V		380	400	415	440	415	440	460	480
kVA		60	60	60	50	60	68	72	72
kW		48	48	48	40	48	54.4	57.6	57.6
Alternator performance data									
Reactance (f.l.c.l.f)	xd %	299.2	270	250.8	186	301	303.5	294.0	270
	xd' %	14.18	18.8	11.89	8.82	14.27	14.39	13.94	12.5
	xd'' %	7.53	6.8	6.32	4.68	7.58	7.64	7.4	6.8
Motor starting capacity based on 30% voltage dip and 0.8 pf (kVA)		127	160	190	-	95	130	160	190
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)		69 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		1950	775	1175	900				
Enclosed		2260	1100	1500	1450				

Notes:

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