

Output Power Rating		Prime		Standby		
rpm	Frequency	Voltage	kVa	Kw	Kva	Kw
1500	50Hz	400	1505	1204	1656	1325
1800	60Hz	480	1510	1208	1669	1329

Switch able speed 1500/1800 rpm

the above KW rating are at 0.8 pf

Guaranted 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.

Note: 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. Note that no overload is permitted.

Engine Technical Data

Engine Make And Model	PERKINS 4012-46TAG2A
Cylinders	12 - 60° Vee form
Aspiration	Turbocharged and air-to-air charge cooled
Combustion System	Direct injection
Displacement	45.842 liters
Governor	Electronic - Digital
Emissions Regulations	½ TA Luft
Electrical Starting System	24 volt starter motor and 24 volt alternator with integral regulator and DC output

Air System

Air Filter Type	Paper Element (Replaceable)	
Combustion Air Flow m ³ /min(cfm)	50 Hz	60 Hz
	120 (4237.76)	TBC
	178 (4570.77)	TBC
Max air filter intake restriction	4.0 kpa	TBC

Fuel System

Fuel Filter Type	Full-flow spin-on (replaceable)		
Recommended fuel	class A2 Diesel		
Fuel Consumption l/hr(US gal/hr)	Engine Speed	1500 rpm	1800 rpm
	Standby	335 (88.5)	251 (66.3)
	Prime Power	301 (79.5)	319 (84.3)
	75% of Prime Power	237 (62.5)	195 (51.5)
	50% of Prime Power	162 (42.8)	171 (45.2)
Fuel Tank Capacity: Open / Close	NIL /NIL		

Lubrication System

Lube Oil	API CH4, SAE 15W-40 (-10°C to 50 °C ambient temperature)	
Lube Oil Capacity	177 L	
Oil Pan	159 L	
Oil Filter type	Full-flow spin-on (replaceable)	
Oil Cooling Method	water	

Cooling System

Coolant Capacity	210 L	
Cooling System	Water Cooled	
Cooling Fan Air Flow m ³ /min (cfm)	1944 (116640)	TBC
Heat Radiation to Room	50 Hz	60 Hz
	96 kw	TBC
	107 kw	TBC

Exhaust System

Silencer	Grade	Industrial	
	Size	10"	
	Qty	2	
Exhaust Gas Flow m ³ /min (cfm)	Prime	320 (19200)	TBC
	Standby	320 (19200)	TBC
Max Allowable Backpressure	5 kpa		TBC
Exhaust Gas Max Temp	50 Hz	60 Hz	
	455 °C	TBC	
	455 °C	TBC	

Alternator Technical Data		Stamford / or LS						
Model Number	Leroy Somer LSA 50.2 L8							
No. of Poles	4							
Number of Terminals (leads)	6							
A.V.R & Excitation	R448 V50							
Regulation	±0.5%							
Ingress Protection	IP-23							
Insulation Class	H							
Total harmonic TGH/THC	<3.5%							
TIF	<50							
Cooling Air Flow-@50 Hzm ³ /min (fcm)	108 (3813.98)							
Cooling Air Flow-@60 Hzm ³ /min (fcm)	132 (4661.53)							

Output Voltage	50 Hz				60 Hz			
	V	380	400	415	440	380	416	440
KVA	1450	1500	1500	1440	1485	1625	1720	1875
KW	1160	1200	1200	1152	1188	1300	1376	1500

Alternator Performance Data								
Reactance (f.l.c.l.F)	Xd %		378					394
	Xd' %		17.4					18.1
	Xd'' %		14.8					15.4
Motor Starting Capability on 30% voltage dip and 0.8 PF (KVA)	Based		410.2					4295.7

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/3 ph 3 wire/ mono ph							
Engine Protections	oil pressure				fuel level optional			
	over under voltage				phases sequence			
Generator Protections	over/under frequency		over current		charging alternator fault			
	coolant temperature				coolant level optional			
Inputs and Outputs	3 No`s configuration analog inputs					6 No`s binary outputs		
	4 No`s binary inputs					D+pre-excitation terminal		
Event and Performance Log	Gen-set text alarm log					Engine hours history log		
	for more features we can use higher controller							

Gen-set 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)	80 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	4950	1870	2310	10300
Enclosed	9000	2440	2790	14800