

Output Power Rating			Prime		Standby	
rpm	Frequency	Voltage	kVa	Kw	Kva	Kw
1500	50Hz	400	1250	1000	1385	1108
1800	60Hz	480	1250	1000	1375	1100

Switch able speed 1500/1800 rpm

the above KW rating are at 0.8 pf

Guarantied 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 4012-46TWG2A
Cylinders	12 - 60° Vee form
Aspiration	Turbocharged and air-to-water charge cooled
Combustion System	Direct injection
Displacement	45.842 liters
Governor	Electronic - Digital
Emissions Regulations	TA Luft (1986)
Electrical Starting System	24 volt starter motor and 24 volt/40 amp 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
	103 (3637.41)	TBC
	109 (3849.29)	TBC
Max air filter intake restriction	0.40 kpa	

Fuel System

Recommended fuel	Class A2 Diesel		
Fuel Consumption l/hr(US gal/hr)	Engine Speed	1500 rpm	1800 rpm
	Standby	288 (76.1)	298 (78.7)
	Prime Power	259 (68.4)	266 (70.3)
	75% of Prime Power	196 (51.8)	TBC
	50% of Prime Power	143 (37.8)	TBC
Fuel Tank Capacity: Open / Close	NIL/NIL		

Lubrication System

Lube Oil	API CH4, SAE 15 W-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	201 L	
Cooling System	Water Cooled	
Cooling Fan Air Flow m ³ /min (cfm)	1680 (59328.64)	
Heat Radiation to Room	50 Hz	60 Hz
	Prime 81 kw	TBC
	Standby 89 kw	TBC

Exhaust System

Silencer	Grade	Industrial	
	Size	10"	
	Qty	2	
Exhaust Gas Flow m ³ /min (cfm)	Prime	180 (6356.64)	TBC
	Standby	180 (6356.64)	TBC
Max Allowable Backpressure	0.5 kpa		
Exhaust Gas Max Temp	50 Hz	60 Hz	
	Prime 422 `c	TBC	
	Standby 422 `c	TBC	

Alternator Technical Data		Stamford / or LS						
Model Number	Leroy Somer LSA 50.2 M6							
No. of Poles	4 Poles							
Number of Terminals (leads)	6							
A.V.R & Excitation	R 450 (AREP or PMG)							
Regulation	±0.5%							
Ingress Protection	IP23							
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								
V	380	400	415	440	380	416	440	480
KVA	1250	1250	1250	1190	1285	1405	1455	1560
KW	1000	1000	1000	952	1028	1124	1164	1250

Alternator Performance Data								
Reactance (f.l.c.l.F)	Xd %		392					
	Xd' %		19.4					
	Xd'' %		16.5					
Motor Starting Capability Based on 30% voltage dip and 0.8 PF (KVA)			427.9					

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			
	coolant temperature				coolant level optional			
Generator Protections	over/under voltage		over current		charging alternator fault			
	over under frequency				phases sequence			
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	High quality spray painted
Access Doors	6
Drainage	Fuel & Water Drainage Provision
Transportation	ISO Standard 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	As per customer requirement
Chassis RAL Color	As per customer requirement

Shipping Data				
Type	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
Open	4950	1870	2310	9000
Enclosed	9000	2440	2790	13450