

ENGINE

PERKINS		
Model		4012-46TWG2A
Engine Power Output at rated rpm	kWm	1224
	HP	1641
Aspiration and Cooling		turbocharged
Total Displacement	Litre	45.842
No. of Cylinders and Build		12; Vee 60°
Engine Speed	rpm	1500
Bore and Stroke	mmxmm	160×190
Compression Ratio		13:1
Governor		Electronic
Fuel Consumption at full load	L/hr	259
Fuel Tank Capacity	Litre	open: N/A / canopy:1900
Oil Capacity	Litre	177
Coolant Capacity	Litre	194.9
Radiator Cooling Air	m ³ /min	1680
Air Intake – Engine	m ³ /min	109
Exhaust Gas Flow	m ³ /min	235

- ✓ Heavy duty Perkins diesel engine
- ✓ Four stroke, water cooled, turbocharged & aftercooled
- ✓ Direct injection fuel system
- ✓ Electronic Governor system
- ✓ 12/24 V D.C. starter and charge alternator
- ✓ Replaceable fuel filter, oil filter and dry element air filter
- ✓ Cooling radiator and fan
- ✓ Starter battery (with lead acid) including Rack and Cables
- ✓ Flexible fuel connection hoses and manual oil sump drain valve
- ✓ Industrial capacity exhaust silencer and steel bellows
- ✓ Jacket water heater(at automatic models)
- ✓ Operation manuals and circuit diagram documents

ALTERNATOR

Design	Brushless single bearing, revolving field
Stator	2/3 pitch
Rotor	Single bearing, flexible disc
Insulation System	Class H
Standard Temperature Rise	125 - 163°C Continuous
Exciter Type	Self Excited
Phase Rotation	A (U), B (V), C (W)
Alternator Cooling	Direct drive centrifugal blower fan
AC Waveform Total Harmonic Distortion	No load < 1.5%. Non distorting balanced linear load < 5%
Telephone Influence Factor (TIF)	<50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	<2%

- ✓ Brushless, single bearing system, flexible disc, 4 poles
- ✓ Insulation class H
- ✓ Standard degree of protection IP21 (*IP22/IP23 is available.)
- ✓ Self-exciting and self-regulating
- ✓ Impregnation with tropicalised epoxy varnish
- ✓ Solid state Automatic Voltage Regulator
- ✓ Stator winding with 2/3 pitch for improved harmonics