## WEBER



# WBS 65







### **WBS 65**



## WEBER

#### **GENERATING SET MODEL WBS 65**

Output Ratings	Prime	Standby
400 V,3 ph,50 Hz,1500 rpm	65 kVA	72 kVA
	52 kW	57 kW

Power Factor: 0.8

#### **ENGINE / TECHNICAL DATA**

Engine Make	Baudouin
Engine Model	4M11G70/5
Governing Type	Electronic
Number of Cylinders	4
Cylinder Arrangement	In Line
Bore and Stroke mm	105 x 130
Displacement / Cubic Capacity ltrs	4.5
Aspiration	Turbocharged
Cycle	4 stroke
Cooling System	Liquid (water + 50% antifreeze)
Injection System	Direct
Fuel System	Mechanical Pump
Compression ratio	18:1

#### STANDARD SPECIFICATIONS

Baudouin four stroke heavy duty high performance industrial type diesel engine

#### 2. ENGINE FILTRATION SYSTEM

- Cartridge type dry air filterTwo cartridge type fuel filters
- Full flow lube oil filter

All filters have replacable elements

#### 3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures(consult your dealer for deration factors)

#### 4 FXHAUST SYSTEM

Heavy duty Industrial Exhaust Silencer

Silencer noise reduction level 20 (dB) 10.2(kPa) Maximum allowable back pressure

#### 5. CIRCUIT BREAKER TYPE

ABB 3 pole MCCB.(4 pole is optional)

#### 6. FUEL SYSTEM

On Generating sets upto 700kVA, the baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at full load. The tank is supplied complete with fill cap breather, fuel speed and return lines to the engine and drain plug.

#### 7. ALTERNATOR

#### 7.1 INSULATION SYSTEM

• Insulation : Class H

• All windings are impregnated in either a triple dip thermosetting liquid,oil and acid resisting polyester varnish or vaccum pressure impregnated with a special polyester resin.

• Heavy coat of antitracking varnish additional protection against moisture or condenasation.

#### 7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed AVR maintains the voltage regulation at  $\pm 0.5\%$ . Nominal adjustment by means of a trim pot incorporated on the AVR.

#### 7.3 MOTOR STARTING

An overload capacity equivalent to 300% of the full load impedance at zero power factor can be sustained for 10 sec., when AREP or PMG option is fitted.

#### 8. MOUNTING ARRANGEMENT 8.1 BASE FRAME

The complete generating set is mounted as a whole on a heavy duty fabricated steel baseframe.

#### 8.2 COUPLING

The engine and alternator are directly coupled by means of an SAE flange. The engine flywheel is flexibly coupled to the alternator rotor.

#### 8.3 ANTI-VIBRATION MOUNTING PADS

Anti-vibration pads are affixed between the engine / alternator feet and the baseframe thus ensuring complete vibration isolation of the rotating assembly.

#### Powered by:



#### **ENGINE / TECHNICAL DATA (continued)**

Frequency and Engine Speed		50Hz & 1500rpm		m	
			Prime		Standby
Gross Engine Output kWm			60		66
Fuel Consumption @50%load L	./hr		7.8		-
@75%load L	_/hr		11		-
@100%load	L/hr		14.6		16.1
Flywheel housing			SAE 3		
Flywheel			11.5"		
Recommended air flow (m³/min)			3.94		4.12
Exhaust flow (m³/min)			9.17		9.92
Coolant capacity of radiator and p	oipes (L)		11.7		11.7
Coolant capacity of the engine (L)			5.3		5.3
Fuel supply flow (L/hr)			92		92
Dimension (mm) & Weight (Kg)	Length	Width	Height	Weight	
Open	1980	900	1350	1150	

1770

1690

#### **ALTERNATOR DATA**

Soundproof

Make	Leroy Somer TAL / Stamford		
Model	TAL 044A / UCI224F		
No. of bearings	1		
Insulation Class	Н		
Total Harmonic Content	on load < 5%		
Wires	6 / 12		
Ingress Protection	IP23		
Excitation System	Shunt / Slef Excited		
Winding Pitch	2/3(n°6)		
AVR Model	R120 / SX460		
Overspeed	2250 mn <sup>-1</sup>		
Voltage Regulation	±1% / ±1.5%		
Short Circuit Capacity	-		
AREP & PMG Excitation System Available as optional			

2800

1110

#### STANDARD SPECIFICATIONS

#### 8.4 SAFETY GUARDS

The fan and fan drive along with the battery charging alternator are safety guard protected for personnel protection.

#### 9. FACTORY TESTS

- The generating set is load tested before dispatch.
- All protective devices control functions and site load conditions are simulated. The generator and it's systems are checked before dispatch.

#### 10. EQUIPMENT FINISHING

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

#### 11. DOCUMENTATIONS

Operation and Maintenance manual, circuit wiring diagrams and commissioning/fault finding instruction leaflets are accompanied with the generator.

#### CONTROL PANEL

Deep Sea DSE4510

The DSE4510 is an Auto Start Control Module for single genset applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be programmed using the front panel or by using the DSE configuration suitr PC software.

#### Metering and Alarm Indications:

- Generator Frequency
- Underspeed, Overspeed
- Generator volts(L-L,L-N)
- Generator Current
- Engine Oil Pressure • Engine Coolant Temperature • Fuel Level
- Hours Run Counter
- Battery Volts
  Fail to start/stop
- Emergency Stop Failed to reach loading voltage/frequency
- Charge failLoss of magnetic pick-up signal-Optional
- Low DC Voltage
- CAN diagnostics and CAN fail/error





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