



#### DESCRIPTIVE

- Water cooled
- Fuel
- Industrial engine
- 3000 RPM
- Mechanic governor
- Mechanically welded chassis with antivibration suspension
- 12 V charge alternator and starter
- Protective grille for fan and rotating parts
- Mobile plastic fuel tank
- Modys with automatic start
- Voltmeter
- Hours meter
- Main line circuit breaker
- Automatic voltage regulator
- Manual for use and installation

#### POWER DEFINITION

**PRP** : Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1.

**ESP** : The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1.

Overload is not allowed

#### TERMS OF USE

According to the standard, the nominal power assigned by the genset is given for 25°C Air Inlet Temperature, of a barometric pressure of 100 kPA (100 m A.S.L), and 30 % relative humidity. For particular conditions in your installation, refer to the derating table.

#### ASSOCIATED UNCERTAINTY

For the generating sets used indoor, where the acoustic pressure levels depends on the installation conditions, it is not possible to specify the ambient noise level in the exploitation and maintenance instructions . You will also find in our exploitation and maintenance instructions a warning concerning the air noise dangers and the need to implement appropriated preventive measures.

## S7H

Engine type	KDW502
Alternator type	ET20FS-130/A
Performance class	G2

#### GENERAL CHARACTERISTICS

Frequency (Hz)	50
Reference voltage (V)	400/230
Max power ESP (kVA)	7
Max power ESP (kWe)	5.6
Max power PRP (kVA)	N/A
Max power PRP (kWe)	N/A
Intensity (A)	10
Standard Control Panel	MODYS STORM
Optional control panel	Kit brouette pour STORM 502
Optional Control Panel	Pack prises triphasé 50hz

#### DIMENSIONS AND NOISE LEVELS

##### DIMENSIONS COMPACT VERSION

Length (mm)	N/A
Width (mm)	N/A
Height (mm)	N/A
Dry weight (kg)	N/A

##### DIMENSIONS SOUNDPROOFED VERSION

Canopy	K502
Length (mm).	1138
Width (mm).	680
Height (mm).	786
Dry weight (kg).	235
Tank capacity (L).	30
Acoustic pressure level @1m in dB(A) ( )	77 (0.7)
Sound power level guaranteed (Lwa)	93

#### GENERAL CHARACTERISTICS

Voltage	ESP		PRP		Standby Amps
	kWe	kVA	kWe	kVA	
400/230	5.6	7	-	-	10

# S7H

## ENGINE SPECIFICATIONS

### GENERAL ENGINE DATAS

Engine model	KOHLER KDW502 , 4- temps, Athmo , Air/Water DC 2 X
Cylinder arrangement	L
Displacement (C.I.)	0.5
Bore (mm) x Stroke (mm)	72 x 62
Compression ratio	22,8 : 1
Speed (RPM)	3000
Pistons speed (m/s)	6.2
Maximum stand-by power at rated RPM (kW)	7.3
Frequency regulation (%)	N/A
BMEP (bar)	5.23
Governor type	Mechanical

### COOLING SYSTEM

Radiator & Engine capacity (L)	2.5
Max water temperature (°C)	110
Outlet water temperature (°C)	N/A
Fan power (kW)	N/A
Fan air flow w/o restriction (m3/s)	N/A
Available restriction on air flow (mm EC)	N/A
Type of coolant	Gencool
Thermostat (°C)	80

### EMISSIONS

Emission PM (g/kW.h)	N/A
Emission CO (g/kW.h)	N/A
Emission HCNOx (g/kWh)	N/A
Emission HC (g/kW.h)	N/A

### EXHAUST

Exhaust gas temperature (°C)	N/A
Exhaust gas flow (L/s)	N/A
Max. exhaust back pressure (mm EC)	N/A

### FUEL

Consumption @ 110% load (L/h)	N/A
Consumption @ 100% load (L/h)	N/A
Consumption @ 75% load (L/h)	N/A
Consumption @ 50% load (L/h)	N/A
Maximum fuel pump flow (L/h)	N/A

### OIL

Oil capacity (L)	1.4
Min. oil pressure (bar)	0.4
Max. oil pressure (bar)	N/A
Oil consumption 100% load (L/h)	N/A
Carter oil capacity (L)	1.4

### HEAT BALANCE

Heat rejection to exhaust (kW)	N/A
Radiated heat to ambient (kW)	N/A
Heat rejection to coolant (kW)	N/A

### AIR INTAKE

Max. intake restriction (mm EC)	714
Intake air flow (L/s)	N/A

### GENERAL DATAS

Alternator brand	MECC ALTE
Alternator type	ET20FS-130/A
Number of phase	3
Power factor (Cos Phi)	N/A
Altitude (m)	0 à 1000
Overspeed (rpm)	N/A
Number of pole	2
Excitation system	AVR
Insulation class / T° class, continuous 40°C	H / H / 125°K
Regulation	N/A
Harmonic factor, no load TGH/THC (%)	N/A
Wave form : NEMA=TIF-(TGH/THC)	N/A
Wave form : CEI=FHT-(TGH/THC)	N/A
Number of bearing	1
Coupling	Direct
Voltage regulation at established rating (%)	N/A
Recovery time (Delta U = 20% transient) (ms)	N/A

### OTHER DATAS

Continuous Nominal Rating 40°C (kVA)	9
Standby Rating 27°C (kVA)	N/A
Efficiencies 4/4 load (%)	81.9
Air flow (m3/s)	N/A
Short circuit ratio (Kcc)	0.58
Direct axis synchro reactance unsaturated (Xd) (%)	353
Quadra axis synchro reactance unsaturated (Xq) (%)	109.3
Open circuit time constant (T'do) (ms)	650
Direct axis transient reactance saturated (X'd) (%)	39.2
Short circuit transient time constant (T'd) (ms)	54
Direct axis subtransient reactance saturated (X''d) (%)	22.4
Subtransient time constant (T''d) (ms)	11
Quadra axis subtransient reactance saturated (X''q) (%)	109.3
Zero sequence reactance unsaturated (Xo) (%)	8.8
Negative sequence reactance saturated (X2) (%)	24
Armature time constant (Ta) (ms)	N/A
No load excitation current (io) (A)	N/A
Full load excitation current (ic) (A)	N/A
Full load excitation voltage (uc) (V)	N/A
Recovery time (Delta U = 20% transient) (ms)	N/A
Engine start (Delta U = 20% perm. or 50% trans.) (kVA)	N/A
Transient dip (4/4 load) - PF : 0,8 AR (%)	N/A
No load losses (W)	N/A
Heat rejection (W)	N/A

**MODYS control panel**

MODYS control panel with a start kit.

Securité for :

- Water temperature
- Oil pressure
- Overspeed
- Failure to start
- Emergency stop button

- Voltmeter
- Hours meter
- Circuit breaker

**Trolley kit**

Trolley kit

**Three phaseplugs pack**

Three phaseplugs pack