



### DESCRIPTIVE

- Electronic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for wiring temperature of 48/50°C max with mechanical fan
- Protective grille for fan and rotating parts (CE option)
- 9 dB(A) silencer supplied separately
- Charger DC starting battery with electrolyte
- 24 V charge alternator and starter
- Delivered with oil and coolant -30°C
- 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 Intlet 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 UNCERTAINLY**

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.

# **D750U**

Engine ref. DP222LC
Alternator ref. AT03540T
Performance class G2

### **GENERAL CHARACTERISTICS**

Frequency (Hz) 60
Voltage (V) 480/277
Standard Control Panel TELYS
Optional control panel APM802

<b>POWER</b>						
Voltago	ESP		PRP		Standby Amps	
Voltage	kWe	kVA	kWe	kVA	Standby Amps	
480/277	750	938	682	852	1128	
208/120	743	929	676	845	2579	

DIMENSIONS COMPACT VERSION	
Length (mm)	3470
Width (mm)	1630
Height (mm)	2185
Dry weight (kg)	4080
Tank capacity (L)	610

<b>DIMENSIONS SOUNDPROOFED</b>	VERSION
Commercial reference of the enclosure	M230
Length (mm)	5031
Width (mm)	1690
Height (mm)	2662
Dry weight (kg)	5670
Tank capacity (L)	610
Acoustic pressure level @1m in dB(A)	0
Sound power level guaranteed (Lwa)	0
Acoustic pressure level @7m in dB(A)	0



# **D750U**

# **ENGINE CHARACTERISTICS**

GENERAL ENGINE DATA	
Engine model	DOOSAN
Engine ref.	DP222LC
Air inlet	Turbo
Cylinders arrangement	V
Number of cylinders	12
Displacement (C.I.)	21.93
Air coolant	Air/Air DC
Bore (mm) x Stroke (mm)	128 x 142
Compression ratio	15 : 1
Speed (RPM)	1800
Pistons speed (m/s)	8.52
Maximum stand-by power at rated RPM (kW)	828
Frequency regulation (%)	+/- 0.5%
BMEP (bar)	22.90
Governor type	Electronic

COOLING SYSTEM	
Radiator & Engine capacity (L)	115
Max water temperature (°C)	103
Outlet water temperature (°C)	
Fan power (kW)	38
Fan air flow w/o restriction (m3/s) Available restriction on air flow (mm Water Column)	17.50
Type of coolant	Glycol-Ethylene
Thermostat (°C)	71 - 85

ΕM	ISSI	О	NS
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Emission PM (g/kWh)

Emission CO (g/kW.h)

Emission HCNOx (g/kWh)

Emission HC (g/kW.h)

EXHAUST	
Exhaust gas temperature (°C)	493
Exhaust gas flow (L/s)	2166
Max. exhaust back pressure (mm EC)	600
FUEL	
Fuel consumption 110% load (L/hr)	203.80
Fuel consumption 100% load (L/hr)	183.20
Fuel consumption 75% (L/h)	134.40
Fuel consumption 50% (L/h)	91.30
Maximum fuel pump flow (L/h)	
OIL	
Oil capacity (L)	40
Min. oil pressure (bar)	0.50
Max. oil pressure (bar)	10
Oil consumption 100% load (L/h)	
Carter oil capacity (L)	40
LIEAT DALANCE	
HEAT BALANCE	
Heat rejection to exhaust (kW)	754
Radiated heat to ambiant (kW)	77
Haet rejection to coolant (kW)	361
ALD INTAKE	
AIR INTAKE	
Max. intake restriction (mm EC)	077
Intake air flow (L/s)	977

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# **ALTERNATOR CHARACTERISTICS**

GENERAL DATA		ОТН
Alternator ref.	AT03540T	Cont
Number of Phase	Three phase	Stand
Power factor (Cos Phi)	0.80	Effici
Altitude (m)	0 to 1000	Air flo
Overspeed (rpm)	2250	Shor
Number of pole	4	Direc
Capacity for maintaining short circuit at 3 In for 10 s	Yes	Quad
Insulation class	Н	Oper
T° class, continuous 40°C	H / 125°K	Direc
T° class, standby 27°C	H / 163°K	Shor
AVR Regulation	Yes	Direction (%)
Total Harmonic Distortion in no-load DHT (%)	2.5	Subti
Total Harmonic Distortion, on load DHT (%)	2.2	Quad (%)
Wave form : NEMA=TIF	<40	Subti
Wave form : CEI=FHT	<2	Zero
Number of bearing	1	Nega
Coupling	Direct	Arma
Voltage regulation at established rating (+/- %)	+/- 1%	No Id Full le
Recovery time (Delta U = 20% transcient) (ms) Indication of protection Technology	IP 21 Without collar or brush	Full le Engir (kVA Trans No lo

OTHER DATA	
Continuous Nominal Rating 40°C (kVA)	900
Standby Rating 27°C (kVA)	
Efficiencies 100% of load (%)	96.60
Air flow (m3/s)	1.08
Short circuit ratio (Kcc)	0.59
Direct axis synchro reactance unsaturated (Xd) (%)	170
Quadra axis synchro reactance unsaturated (Xq) (%)	118
Open circuit time constant (T'do) (ms)	3700
Direct axis transcient reactance saturated (X'd) (%)	16.40
Short circuit transcient time constant (T'd) (ms)	180
Direct axis subtranscient reactance saturated (X"d) (%)	8.70
Subtranscient time constant (T"d) (ms)	15
Quadra axis subtranscient reactance saturated (X"q) (%)	14.30
Subtranscient time constant (T"q) (ms)	
Zero sequence reactance unsaturated (Xo) (%)	2.20
Negative sequence reactance saturated (X2) (%)	12.10
Armature time constant (Ta) (ms)	71
No load excitation current (io) (A)	
Full load excitation current (ic) (A)	
Full load excitation voltage (uc) (V)	
Engine start (Delta U = 20% perm. or 50% trans.) (kVA)	
Transcient dip (4/4 load) - PF: 0,8 AR (%)	
No load losses (W)	
Heat rejection (W)	
Unbalanced load acceptance ratio (%)	

## **DIMENSIONS**

Containment DW	
Commercial reference of the enclosure	M230 DW
Length (mm)	5083
Width (mm)	1690
Height (mm)	2922
Dry weight (kg)	6370
Tank capacity (L)	1950
Acoustic pressure level @1m in dB(A)	0
Sound power level guaranteed (Lwa)	0
Acoustic pressure level @7m in dB(A)	0

# **D750U**



## **CONTROL PANEL**

### TELYS, ergonomic and user-friendly



The highly versatile TELYS control unit is complex yet accessible, thanks to the particular attention paid to optimising its ergonomics and ease of use. With its large display screen, buttons and scroll wheel, it places the accent on simplicity and communication.

The TELYS offers the following functions:

Electrical measurements: voltmeter, frequency meter, ammeter.

Engine parameters: working hours counter, oil pressure, coolant temperature, fuel level, engine speed, battery voltage.

Alarms and faults: oil pressure, coolant temperature, failure to start, overspeed, alternator min./max., battery voltage min./max., emergency stop, fuel level.

Ergonomics: wheel for navigating around the various menus.

Communication: remote control and operation software, USB connections, PC connection.

For more information on the product and its options, please refer to the sales documentation.

### APM802 dedicated to power plant management



The new APM802 command/control system is specifically designed for operating and monitoring power plants for markets including hospitals, data centres, banks, the oil and gas sector, industries, IPP, rental and mining.

This unit is available as standard on all generating sets from 275 Kva designed for coupling. It is optional on the rest of our range.

The Human Machine Interface, designed in collaboration with a company specialising in interface design, facilitates operations with a large 100% touch screen. The preconfigured system for power plant applications features a brand new customisation function which complies with the international standard IEC 61131-3. New communication functions (PLC and regulation), improve the high level of equipment availability in the installation.

#### Advantages:

Dedicated to power plant management. Specially researched ergonomics. High level of equipment availability. Modularity and long service life guaranteed. Making it easy to extend the installation

For more information, please refer to the sales documentation.