





DESCRIPTIVE

- Mechanic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for core 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
- 12 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 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.

T25C3M

Engine ref. S4S-Z361SD
Alternator ref. KH00500T
Performance class G2

GENERAL CHARACTERISTICS

Frequency (Hz) 50 Hz

Voltage (V) 230 single phase

Standard Control Panel APM303

Optional control panel TELYS

Optional Control Panel M80

Optional control panel NA

POWER					
Voltago	ES	ESP		RP	Standby Amps
Voltage	kWe	kVA	kWe	kVA	Starioby Arrips
240 MONO	25	25	22,7	22,7	104
230 MONO	25	25	22,7	22,7	109
220 MONO	25	25	22,7	22,7	114

DIMENSIONS COMPACT VERSION	
Length (mm)	1700
Width (mm)	896
Height (mm)	1144
Dry weight (kg)	710
Tank capacity (L)	100

DIMENSIONS SOUNDPROOFED VERSION M127 Type soundproofing 2080 Length (mm) Width (mm) 960 Height (mm) 1415 Dry weight (kg) 940 Tank capacity (L) 100 Acoustic pressure level @1m in dB(A) 74 Sound power level guaranteed (Lwa) 92 Acoustic pressure level @7m in dB(A) 62



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ENGINE CHARACTERISTICS

GENERAL ENGINE DATA	
Engine brand	MITSUBISHI
Engine ref.	S4S-Z361SD
Air inlet system	Athmo
Cylinders configuration	L
Number of cylinders	4
Displacement (L)	3,33
Charge Air coolant	
Bore (mm) x Stroke (mm)	94 x 120
Compression ratio	22 : 1
Speed (RPM)	1500
Pistons speed (m/s)	6
Maximum stand-by power at rated RPM (kW)	31,30
Frequency regulation, steady state (%)	+/- 2.5%
BMEP (bar)	6,80
Governor type	Mechanical

COOLING SYSTEM	
Radiator & Engine capacity (L)	8,50
Fan power (kW) Fan air flow w/o restriction (m3/s) Available restriction on air flow (mm H2O)	0,80
Type of coolant	Glycol-Ethylene

EMISSIONS		
Emission PM (g/kW.h)	0,60	
Emission CO (g/kW.h)	5,50	
Emission HC+NOx (g/kWh) Emission HC (g/kW.h)	0	

EXHAUST	
Exhaust gas temperature @ ESP 50Hz (°C)	
Exhaust gas flow @ ESP 50 Hz (L/s)	
Max. exhaust back pressure (mm H2O)	680
FUEL	
Consumption @ 110% load (L/h)	10,10
Consumption @ 100% load (L/h)	8,60
Consumption @ 75% load (L/h)	6,20
Consumption @ 50% load (L/h)	4,30
Maximum fuel pump flow (L/h)	
OIL	
Oil capacity (L)	10
Min. oil pressure (bar)	1
Max. oil pressure (bar)	3,90
Max. oil pressure (bar) Oil consumption 100% ESP (L/h)	3,90 0,10
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Oil consumption 100% ESP (L/h)	0,10
Oil consumption 100% ESP (L/h)	0,10
Oil consumption 100% ESP (L/h) Oil sump capacity (L)	0,10
Oil consumption 100% ESP (L/h) Oil sump capacity (L) HEAT BALANCE	0,10

AIR INTAKE Max. intake restriction (mm H2O) 200 Intake air flow (L/s)



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ALTERNATOR CHARACTERISTICS

GENERAL DATA	
Alternator ref. Number of Phase Power factor (Cos Phi) Altitude (m) Overspeed (rpm) Number of pole Capacity for maintaining short circuit at 3 In for 10 s Insulation class T° class (H/125°), continuous 40°C T° class (H/163°C), standby 27°C Total Harmonic Distortion in no-load DHT (%) AVR Regulation Total Harmonic Distortion, on linear load DHT (%) Wave form: NEMA=TIF Wave form: CEI=FHT Number of bearing	KH00500T Single phase 1 0 à 1000 2250 4 Yes H H / 125°K H / 163°K 3,0 Yes 1,6 <45 <2
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OTHER DATA	
Continuous Nominal Rating 40°C (kVA) Standby Rating 27°C (kVA) Efficiencies 100% of load (%) Air flow (m3/s)	27 30 83,30 0,20
Short circuit ratio (Kcc) Direct axis synchro reactance unsaturated (Xd) (%) Quadra axis synchro reactance unsaturated (Xq) (%) Open circuit time constant (T'do) (ms) Direct axis transcient reactance saturated (X'd) (%) Short circuit transcient time constant (T'd) (ms)	0,55 211,70 68,90 1280 16,80 58
Direct axis subtranscient reactance saturated (X"d) (%) Subtranscient time constant (T"d) (ms) Quadra axis subtranscient reactance saturated (X"q) (%) Subtranscient time constant (T"q) (ms) Zero sequence reactance unsaturated (Xo) (%)	12,60 14 36,10 13 1,90
Negative sequence reactance saturated (X2) (%) Armature time constant (Ta) (ms) No load excitation current (io) (A) Full load excitation current (ic) (A)	27 30 0,83 3,30
Full load excitation voltage (uc) (V) Engine start (Delta U = 20% perm. or 30% trans.) (kVA) Transcient dip (4/4 load) - PF : 0,8 AR (%) No load losses (W) Heat rejection (W) Unbalanced load acceptance ratio (%)	35,20 101 12,60 935 5413 100

DIMENSIONS

Dimensions soundproofed version	
Type soundproofing	M127
Length (mm)	2080
Width (mm)	960
Height (mm)	1415
Dry weight (kg)	940
Tank capacity (L)	100
Acoustic pressure level @1m in dB(A)	74
Sound power level guaranteed (Lwa)	92
Acoustic pressure level @7m in dB(A)	62

Dimensions DW soundproofed version	
Type soundproofing	M127 DW
Length (mm)	2160
Width (mm)	966
Height (mm)	1582
Dry weight (kg)	1132
Tank capacity (L)	230
Acoustic pressure level @1m in dB(A)	74

Type soundproofing	
Length (mm)	2160
Width (mm)	966
Height (mm)	1311
Dry weight (kg)	902
Tank capacity (L)	230
Acoustic pressure level @1m in dB(A)	
Sound power level guaranteed (Lwa)	
Acoustic pressure level @7m in dB(A)	



T25C3M

CONTROL PANEL

APM303, comprehensive and simple



The APM303 is a versatile unit which can be operated in manual or automatic mode. It offers the following features: Measurements:

phase-to-neutral and phase-to-phase voltages, fuel level (In option : active power currents, effective power, power factors, Kw/h energy meter, oil pressure and coolant temperature levels)

Supervision:

Modbus RTU communication on RS485

Reports:

(In option: 2 configurable reports)

Safety features:

Overspeed, oil pressure, coolant temperatures, minimum and maximum voltage, minimum and maximum frequency (Maximum active power P<66kVA)

Traceability:

Stack of 12 stored events

For further information, please refer to the data sheet for the APM303.

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.

M80, transfer of information



The M80 is a dual-function control unit. It can be used as a basic terminal block for connecting a control box and as an instrument panel with a direct read facility, with displays giving a global view of your generating set's basic parameters.

Offers the following functions:

Engine parameters: tachometer, working hours counter, coolant temperature indicator, oil pressure indicator, emergency stop button, customer connection terminal block, CE.

Basic terminal block



The control unit can be used as a basic terminal block for connecting a control box.

Offers the following functions:

emergency stop button, customer connection terminal block, CE.