



TMC2000Z

50Hz POWERED BY MITSUBISHI SERIES



TECHNICAL SPECIFICATIONS

DIESEL GENERATING SET 400/230V-50Hz-3Phase

Model	TMC2000Z	
Power(ESP)	kVA/kw	2000/1600
Power(PRP)	kVA/kw	1875/1500
Rated Voltage	V	400
Rated Current	A	2887
Rated rotation speed	r/min	1500
Power Factor		0.8
Fuel Consumption	Litre/hour	416
Fuel Tank Capacity	Litre	
Noise level	dB(A)@ 1m	≤85

WEIGHT AND DIMENSIONS

GEN-Set	Dimension (L*W*H)	Weight
Open Type	5335mm×2180mm×2880mm	13600kg
Silent Type	12000mm×3200mm×3670mm	21880kg

STANDARDS:

Genset: GB/T2820—2009,ISO8528

Alternator: SINOCOX, SMF450F

Diesel Engine: SME , S16R-PTA2-C

Standby Power: Continues running at variable load for duration of an emergency. No overload is permitted on these ratings.

Prime Power: Continues running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period.

CONFIGURATION:

Standard: Engine, alternator, cooling system, Base frame (excluding fuel tank), shock absorber, air inlet system, control box (including mains floating charge), plastic fan blades (when the engine and water tank do not bring).

Optional: Base frame (including fuel tank), water jacket heater, fuel water separator, fuel heater, fuel level sensor (only supporting underframe tank), switch box (with switch), power switch, the water level sensor, motor anti condensation heater, automatic fueling system (only supporting base frame including fuel tank), battery frame.

Accessories: Silencer, bellow, exhaust silencing system accessories (with the matching engine), regular battery, starting cord assembly, data of gen-set, random tool (with the matching engine).





ENGINE Specification

Manufacturer: SME

Model	S16R-PTA2-C
Engine speed Rated	1500 RPM
Cylinder /Arrangement	16 / 60°V
Displacement	65.37 L
Bore and Stroke	170 mm×180 mm
Compression ratio	13.5 : 1
Max. stand by power at rated RPM	1760 KW
Frequency regulation , steady state	±0.25 %
Governor : type	Electrical
Aspiration and Cooling	Turbo-charged , After cooler

Exhaust System

Exhaust gas flow	415 m³/min
Max back pressure	600mm H2O

Fuel System

Fuel consumption100% (of the Prime Power)	416 L / h
Fuel consumption75% (of the Prime Power)	
Fuel consumption50% (of the Prime Power)	
Fuel consumption110% (of the Prime Power)	458 L / h

Oil system

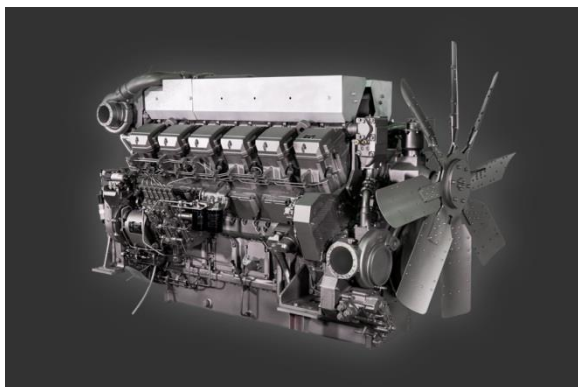
Total oil capacity w/filters	230 L
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Air intake


Engine air flow	157 m³/min
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Coolant System

Engine capacity	170 L
Max water temperature	98°C
Thermostat	71-85°C
Coolant flow	1650L/min



- SME engines with high-strength design, working durably, stably and reliably.
- Tolerance for impact resistance and output sufficient.
- Low fuel consumption, low vibration and noise, simple and low cost maintenance.

Note: All data sheets are for reference only and  subject to change without prior notice.



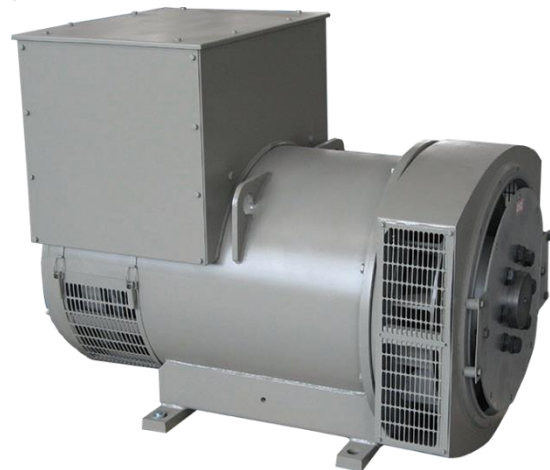
ALTERNATOR Specification

Manufacturer: SINOCOX

Type	SMF450F
Number of phase power	3
Factor (Cos Phi)	0.8
Pole	4
Bearing	1
Coupling	Direct
Exciter type	PMG
Insulation : class , temperature rise	H / H
Degree of protection	IP23
Altitude	≤1000m
Winding Pitch	2/3
Winding Leads	6

FEATURES

- Class H insulation system
- selectable winding, To meet the demand of the bad environment
- 12 Lead Reconnect, able for different voltage, meet the demand of different countries and regions
- 2/3 pitch windings restrain the content of harmonious
- Different Excitation Systems for different load demand
- Ip23 standard protection, IP44 for option
- Provide single bearing or double bearing



STANDARDS

-IEC60034, NEMA MG1-32, ISO8528, CSA
C22.2-100, VDE 0530, GB755

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Control Panel

Model: SGC 420

SINGLE GENSET CONTROLLERS.

DIMENSIONS

OVERALL

233mm x 173mm x 38.5mm

PANEL CUTOUT

219mm x 158mm



KEY FEATURES

- Auto, manual and remote start/stop modes with night restriction option
- 17 inputs, configurable
- 5 resistive
- 2 analogue I/V
- 1 differential
- 9 digital
- 7 digital outputs, configurable
- Modbus over RS-485
- Manually configurable from the controller front buttons or from a PC using DEIF Smart Connect utility software
- Backlit full graphics LCD with power saving feature for extended battery lifetime
- Supports the battery charging alternator I/O interface
- Supports Auto mode (site battery monitoring, AMF, remote start/stop, auto exercise and cyclic) and manual running modes
- Magnetic Pickup Unit (MPU) interface for engine speed measurement
- Auto exercise mode (2 events) to start and stop the genset for a preconfigured time
- Monitors 1-phase/3-phase voltage, frequency, load current generator or mains. Mains Generator
- Line voltage (UAB, UBC, and UCA)
- Line voltage (UAB, UBC, and UCA)
- Phase voltage (UA, UB, and UC)
- Phase voltage (UA, UB, and UC)
- easYgen-1800 only: For Mains, controller has over and under
- voltage, over and under frequency, loss of phase and phase sequence wrong detection functions
- 3 fixed analog sensors: Engine temperature, oil pressure, and fuel level
- Protection: automatic start/stop of
- and power factor for generator
- Monitors engine safety parameters like lube oil pressure, engine temperature, fuel level and more
- Monitors telecom site battery backup level and shelter temperature to reduce engine running and fuel consumption at telecom tower sites
- Controls start relay, fuel relay, alarm horn and more as digital outputs
- Event log for 100 events with real time clock (RTC) stamps and engine running hours information
- Counters for engine starts, engine trips, engine running hours, genset and Mains kWh, kVAh, kvarh
- Measures mains kW, kVA
- CANbus for engine communication with support for Stage 5/ Tier 4 Final

KEY FUNCTIONS

- LCD display
- True RMS voltage and current monitoring
- RS-485 base communication
- Monitoring of engine and alternator parameters
- Fully configurable inputs and outputs for a wide range of functions
- the genset, ATS (Auto Transfer Switch) control with perfect failure indication and protection function
- All output ports are relay-out
- Logon wallpaper and display time are user-defined
- With maintenance function. Actions



- (warning or shutdown) can be set when maintenance time out
- Waterproof security level IP55 due to rubber seal installed between the controller enclosure and front panel
- Can be used on pumping units and as an indicating instrument (indicate and alarm are enable only, relay is inhibited)
- Accumulation of total run time and total electric energy of A and B. Users can reset it for convenience
- Metal fixing clips enable perfect in high temperature environment
- **KEY FUNCTIONS**
- Protection: automatic start/stop of the genset, ATS (Auto Transfer Switch) control with failure indication and protection function
- All output ports are relay-out
- Curves of temperature, oil pressure, fuel level can be used directly and users can define the sensor curves by themselves
- Multiple crank disconnect conditions (generator frequency, speed sensor, oil pressure) are optional
- Event log, real-time clock, scheduled start & stop generator (can be set as start genset once a day/week/month whether with load or not)
- Logon wallpaper and display time are user-defined
- Maintenance function: Actions (warning or shutdown) can be set when maintenance time out

WESTINPOWER