

TSO55ZS

60Hz POWERED BY SDEC SERIES





TECHNICAL SPECIFICATIONS

DIESEL GENERATING SET 380/220V-60Hz-3Phase

Model	TSO55ZS		
Power(ESP)	kVA/kw	55/44	
Power(PRP)	kVA/kw	50/40	
Starter Voltage	V	24	
Rated Current	A	84	
Rated rotation speed	r/min	1800	
Power Factor		0.8	
Fuel Consumption	Litre/hour	13.8 L/h	
Fuel Tank Capacity	Litre	Open Type: 158 / Silent Type: 278	
Noise level	dB(A)@7m		

WEIGHT AND DIMENSIONS

GEN-Set	Dimension (L*W*H)	Weight
Open Type	1800mm*820mm*1247mm	844 Kg
Silent Type		

STANDARDS:

Genset: GB/T2820—2009,ISO8528 Alternator: SINOCOX, SMF225B Diesel Engine: SDEC, 4H4.3-G22

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: SDEC				
Model	4H4.3-G22			
Engine speed Rated	1800 RPM			
Cylinder /Arrangement	4/L			
Displacement	4.3 L			
Bore and Stroke	105 mm×l 24 mm			
Compression ratio	17.3:1			
Max. stand by power at rated RPM	56KW			
Frequency regulation , steady state				
Governor : type	Electrical			
Aspiration and Cooling	naturally aspirated			
Exhaust System				
Exhaust gas flow	12.4m 3 min			
Exhaust temperature	600 °C			
Max back pressure	6kPa			
Fuel System				
Fuel consumption 100% (of the Prime Power)	13.8 L/h			
Fuel consumption75% (of the Prime Power)	10.7 L/h			
Fuel consumption 50% (of the Prime Power)	7.8 L/h			
Fuel consumption110% (of the Prime Power)	15.5 L/h			
Oil system				
Total oil capacity w/filters	13 L			
Air intake				
Engine air flow	5.3m ³min			
Coolant System				
Radiator & engine capacity	6.8 L			
Max water temperature	104 ℃			
Thermostat	82-95 ℃			



- Powered by SDEC
- Engine with Modular Design .Standardized design of accessories ,patent design ,machine body with strengthened high-intensity and rigidity
- Four-Valve Mechanism high-accuracy speed regulator
- Strong environmental adaptability capability ,powerful cold boot capability

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





ALTERNATOR Specification

Manufacturer: SINOCOX

Туре	SMF225B
Number of phase power	3
Factor (Cos Phi)	0.8
Pole	4
Bearing	1
Coupling	Direct
Exciter type	Brushless SHUNT
Insulation : class , temperature rise	H/H
Degree of protection	IP23
Altitude	≤1000m
Winding Pitch	2/3
Winding Leads	12

FEATURES

- Class H insulation system
- selectable winding,To meet the demand of the bad
- 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

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