

TX1900LS

60Hz POWERED BY MTU SERIES



TECHNICAL SPECIFICATIONS

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

Model	TX1900LS	
Power(ESP)	kVA/kw	1925/1540
Power(PRP)	kVA/kw	1750/1400
Starter Voltage	V	24
Rated Current	A	2925
Rated rotation speed	r/min	1800
Power Factor		0.8
Fuel Consumption	g/kWh	196g/kWh
Fuel Tank Capacity	Litre	
Noise level	dB(A)@ 1m	≤92

WEIGHT AND DIMENSIONS

GEN-Set	Dimension (L*W*H)	Weight
Open Type	6350mm*2250mm*2500mm	14765 kg
Silent Type	12192mm×2438 mm×2896mm	21715 kg

STANDARDS:

Genset: GB/T2820—2009,ISO8528

Alternator: LEROY SOMER , LSA52.3 S5

Diesel Engine: MTU , 12V4000G14S

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: MTU

Model	12V4000G14S
Engine speed Rated	1800 RPM
Cylinder /Arrangement	12 / 90°V
Displacement	57.2 L
Bore and Stroke	170 mm×210 mm
Compression ratio	16.4: 1
Max. stand by power at rated RPM	1672KW
Frequency regulation , steady state	
Governor : type	Electronic
Aspiration and Cooling	Turbocharged & Aftercooled

Exhaust System

Exhaust gas flow	5.4m ³ /s
Exhaust temperature	390 °C
Max back pressure	85mbar

Fuel System

Fuel consumption100% (of the Prime Power)	196g/kWh
Fuel consumption75% (of the Prime Power)	199g/kWh
Fuel consumption50% (of the Prime Power)	212g/kWh
Fuel consumption25% (of the Prime Power)	247g/kWh

Oil system

Total oil capacity w/filters	260 L
------------------------------	-------

Air intake

Engine air flow	2.3m ³ /s
-----------------	----------------------

Coolant System

Radiator & engine capacity	160 L
Max water temperature	100 °C
Coolant flow	67m ³ /h



- MTU engines from Germany.
- High pressure common rail, Excellent Engine management Map control System, Excellent Engine Turbocharged and cooling technology, Excellent fuel efficiency and higher emission.
- Only MTU engine can operation under an altitude of 3000m without power Derating.

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



ALTERNATOR Specification

Manufacturer: LEROY SOMER

Type	LSA52.3 S5
Number of phase power	3
Factor (Cos Phi)	0.8
Pole	4
Bearing	1
Coupling	Direct
Exciter type	AREP+PMI
Insulation : class , temperature rise	H / H
Degree of protection	IP23
AVR model	R449
Altitude	≤1000m
Winding Pitch	2/3
Winding Leads	6/12

FEATURES

- Tight control of procedures right from the initial sales offering through to delivery to the customer, including the design process, manufacturing start-up and production.
- A total quality policy based on making continuous progress in improving operational procedures, involving all departments in the company in order to give customer satisfaction as regards delivery times, conformity and cost.
- Indicators used to monitor process performance.
- Corrective actions and advancements with tools such as FMECA, QFD, MAVP,
- MSP/MSQ and Hoshin type improvement workshops on flows, process re-engineering, plus Lean Manufacturing and Lean Office.
- Annual surveys, opinion polls and regular visits to customers in order to ascertain and detect their expectations.

STANDARDS

IEC 60034, NEMA MG 1.32 - 33, ISO 8528/3, CSA, UL 1446, UL 1004
on request and depending on voltages, marine.

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



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