

TP975LS 60Hz POWERED BY PERKINS SERIES





TECHNICAL SPECIFICATIONS

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

Model	TP975LS	
Power(ESP)	kVA/kw	975/780
Power(PRP)	kVA/kw	884/707
Starter Voltage	v	24
Rated Current	А	1481
Rated rotation speed	r/min	1800
Power Factor		0.8
Fuel Consumption	L/h	201L/h
Fuel Tank Capacity	L	
Noise level	dB(A)@1m	≤85

WEIGHT AND DIMENSIONS

GEN-Set	Dimension (L*W*H)	Weight
Open Type	4690mm*2070mm*2395mm	8852 Kg
Silent Type	6058mm*2438mm*2591mm	11931 Kg

STANDARDS:

Genset: GB/T2820-2009,ISO8528

Alternator: LEROY SOMER, TAL-A49-D

Diesel Engine: PERKINS, 4008TAG1

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

Model 4008TAG1 Engine speed Rated 1800 RPM Cylinder /Arrangement 8/L Displacement 30.561L Bore and Stroke 160mm × 190mm Compression ratio 13.6:1 Max. stand by power at rated RPM 899KW Frequency regulation, steady state ± 0.25% Governor: type Electronic Exhaust System 207L/mins Exhaust gas flow 207L/mins Exhaust spesure 3kPa- Fuel consumption100% (of the Prime Power) 201L/h Fuel consumption50% (of the Prime Power) 201L/h Fuel consumption10% (of the Prime Power) 224L/h Oil system 324L/h Coll consumption10% (of the Prime Power) 224L/h Coll consumption10% (of the Prime Power) 224L/h Coll consumption10% (of the Prime Power) 324L/h Coll consumption10% (of the Prime Power) 324L/h	Manufacturer: PERKINS	
Cylinder /Arrangement 8/ L Displacement 30.561L Bore and Stroke 160mm × 190mm Compression ratio 13.6: 1 Max. stand by power at rated RPM 899KW Frequency regulation , steady state ± 0.25% Governor : type Electronic Exhaust System 207L/min- Exhaust gas flow 207L/min- Exhaust gas flow 207L/min- Exhaust system 3kPa- Fuel System 3kPa- Fuel consumption100% (of the Prime Power) 201L / h Fuel consumption50% (of the Prime Power) 145 L / h Fuel consumption100% (of the Prime Power) 97 L / h Fuel consumption110% (of the Prime Power) 224L / h Oil system 10t oil capacity wfilters Ma Air intake NA Air intake 10k Engine air flow 74L/min- Coolant System 162L	Model	4008TAG1
Displacement 30.561L Bore and Stroke 160mm × 190mm Compression ratio 13.6:1 Max. stand by power at rated RPM 899KW Frequency regulation , steady state ± 0.25% Governor : type Electronic Exhaust System Electronic Exhaust System 490 °C Max back pressure 3kPa- Fuel System 201L/h Fuel consumption100% (of the Prime Power) 2024L/h Oil system 71/h Total oil capacity w/filters NA Air intake Engine air flow Coolant System 741/min- Coolant System 162L	Engine speed Rated	1800 RPM
Bore and Stroke 160mm × 190mm Compression ratio 13.6: 1 Max. stand by power at rated RPM 899KW Frequency regulation , steady state ± 0.25% Governor : type Electronic Exhaust System Electronic Exhaust System 490 °C Max back pressure 3kPa- Fuel System 201L/h Fuel consumption100% (of the Prime Power) 204L/h Oil system 01 system Total oil capacity w/filters NA Air intake 161 capacity milters Engine air flow 74L/min- Coolant System 162L	Cylinder /Arrangement	8/ L
Compression ratio 13.6: 1 Max. stand by power at rated RPM 899KW Frequency regulation, steady state ± 0.25% Governor: type Electronic Exhaust System 207L/min- Exhaust gas flow 207L/min- Exhaust gas flow 207L/min- Exhaust temperature 490 °C Max back pressure 3kPa- Fuel Consumption100% (of the Prime Power) 201L/h Fuel consumption50% (of the Prime Power) 201L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption100% (of the Prime Power) 97 L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption100% (of the Prime Power) 224L/h Oil system 101 capacity w/filters Max 74L/min- Coolant System 162L	Displacement	30.561L
Max. stand by power at rated RPM 899KW Frequency regulation , steady state ± 0.25% Governor : type Electronic Exhaust System 207L/min- Exhaust gas flow 207L/min- Exhaust gas flow 207L/min- Exhaust temperature 490 °C Max back pressure 3kPa- Fuel System 201L/h Fuel consumption100% (of the Prime Power) 201L/h Fuel consumption50% (of the Prime Power) 145 L/h Fuel consumption100% (of the Prime Power) 97 L/h Fuel consumption100% (of the Prime Power) 97 L/h Fuel consumption100% (of the Prime Power) 97 L/h Fuel consumption100% (of the Prime Power) 224L/h Oil system 224L/h Coil system NA Air intake Engine air flow Radiator & engine capacity 162L	Bore and Stroke	160mm ×190mm
Frequency regulation , steady state ± 0.25% Governor : type Electronic Exhaust System 207L/min- Exhaust gas flow 3kPa- Fuel System 201L/h Fuel consumption100% (of the Prime Power) 201L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 224L/h Oil system NA Air intake Engine air flow Coolant System 162L Radiator & engine capacity 162L	Compression ratio	13.6: 1
Governor : type Electronic Exhaust System 207L/min- Exhaust gas flow 207L/min- Exhaust temperature 490 °C Max back pressure 3kPa- Fuel System 201L/h Fuel consumption100% (of the Prime Power) 201L/h Fuel consumption75% (of the Prime Power) 201L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 224L/h Oil system NA Air intake NA Engine air flow 74L/min- Coolant System 162L	Max. stand by power at rated RPM	899KW
Exhaust System Exhaust gas flow 207L/min- Exhaust temperature 490 °C Max back pressure 3kPa- Fuel System 201L/h Fuel consumption100% (of the Prime Power) 201L/h Fuel consumption75% (of the Prime Power) 145 L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption10% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 224L/h Oil system 101 capacity w/filters Air intake 145 L/min- Engine air flow 74L/min- Coolant System 162L	Frequency regulation , steady state	± 0.25%
Exhaust gas flow 207L/min- Exhaust temperature 490 °C Max back pressure 3kPa- Fuel System 201L/h Fuel consumption100% (of the Prime Power) 201L/h Fuel consumption75% (of the Prime Power) 145 L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption10% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 224L/h Oil system NA Air intake NA Air intake 74L/min- Coolant System 162L	Governor : type	Electronic
Exhaust temperature 490 °C Max back pressure 3kPa- Fuel System 201L/h Fuel consumption100% (of the Prime Power) 201L/h Fuel consumption55% (of the Prime Power) 145 L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 97 L/h Oil system 224L/h Oil system NA Air intake NA Engine air flow 74L/min- Coolant System 162L	Exhaust System	
Max back pressure 3kPa- Fuel System 201L/h Fuel consumption100% (of the Prime Power) 201L/h Fuel consumption75% (of the Prime Power) 145 L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 224L/h Oil system 224L/h Total oil capacity w/filters NA Air intake 74L/min- Coolant System 162L	Exhaust gas flow	207L/min-
Fuel System Fuel consumption100% (of the Prime Power) Fuel consumption75% (of the Prime Power) 145 L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 224L/h Oil system Total oil capacity w/filters NA Air intake Engine air flow 74L/min- Coolant System Radiator & engine capacity	Exhaust temperature	490 °C
Fuel consumption100% (of the Prime Power) 201L/h Fuel consumption75% (of the Prime Power) 145 L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption10% (of the Prime Power) 924L/h Oil system 224L/h Air intake NA Engine air flow 74L/min- Coolant System 162L	Max back pressure	3kPa-
Fuel consumption75% (of the Prime Power) 145 L/h Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 224L/h Oil system 101 capacity w/filters Total oil capacity w/filters NA Air intake 74L/min- Coolant System 162L	Fuel System	
Fuel consumption50% (of the Prime Power) 97 L/h Fuel consumption110% (of the Prime Power) 224L/h Oil system 1000000000000000000000000000000000000	Fuel consumption100% (of the Prime Power)	201L/h
Fuel consumption110% (of the Prime Power) 224L/h Oil system 1000 mmm Total oil capacity w/filters NA Air intake 1000 mmm Engine air flow 74L/min- Coolant System 162L	Fuel consumption75% (of the Prime Power)	145 L / h
Oil system Total oil capacity w/filters NA Air intake Engine air flow 74L/min- Coolant System Radiator & engine capacity 162L	Fuel consumption50% (of the Prime Power)	97 L/h
Total oil capacity w/filters NA Air intake NA Engine air flow 74L/min- Coolant System 162L	Fuel consumption110% (of the Prime Power)	224L/h
Air intake Engine air flow 74L/min- Coolant System Radiator & engine capacity 162L	Oil system	
Engine air flow 74L/min- Coolant System 162L	Total oil capacity w/filters	NA
Coolant System Radiator & engine capacity 162L	Air intake	
Radiator & engine capacity 162L	Engine air flow	74L/min-
	Coolant System	
	Radiator & engine capacity	162L
Max water temperature 93 °C	Max water temperature	93 °C
Thermostat 71 - 85 °C	Thermostat	71 - 85 °C



- Perkins engines with fast and reliable cold boost.
- Advanced technology on burning Combustion optimization, low fuel consumption and low noise, emission meets German TALuft standard.
- Reasonable coupling creates best compounding function, provides reliable and high-performance power products.
- Integrated structure of generator with fuel tank and base frame and Note: All data sheets are for reference only and subject to change without prior notice.



ALTERNATOR Specification

Manufacturer: LEROY SOMER

Туре	TAL-A49-D	
Number of phase power	3	
Factor (Cos Phi)	0.8	
Pole	4	
Bearing	1	
Coupling	Direct	
Exciter type	SHUNT	
Insulation : class , temperature rise	H / H	
Degree of protection	IP23	
AVR model	R150	
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.





Excellent Power Solution



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

