

60Hz/1800 r.p.m-P.F.0.8					Prime Power	Standby Power	Standby Current
Genset	Engine	Alternator	Voltage (V)	PH	kW/kVA	kW/kVA	Amps
PGCLS600	KTAA19-G6A	LSA49.1M6 HCI544F EPA35-5006	380/220	3	N/A	600/750	1139.5
		LSA49.1M5 HCI544F EPA35-4805	208/120	3	N/A	600/750	2081.9
		LSA49.1M5 HCI544E EPA35-4805	220/127	3	N/A	600/750	1968.3
		LSA47.2L9 HCI544E EPA35-4805	230/132	3	N/A	600/750	1882.7
		LSA47.2L9 HCI544E EPA35-4805	480/277	3	N/A	600/750	902.1

Ratings: All three Phase generator sets are rated at 0.8 power factor. All single-phase generator sets are rated at 0.8 or 1.0 power factor. POWERGEN reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

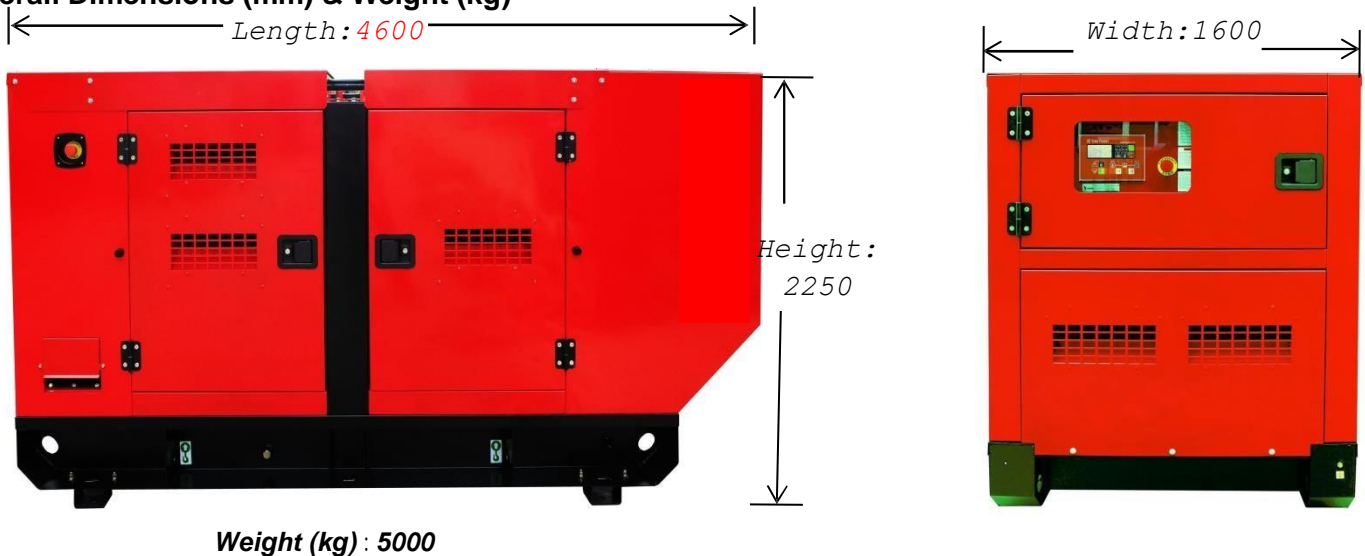
Prime Power:

Available continuously at variable load in lieu of commercially purchased power for an unlimited number of hours per year in accordance with ISO8528-1, and an overload of 10% permitted for one hour in every twelve hours of operation in accordance with ISO 3046-1.

Standby Power:

Emergency Standby Power in variable load applications in accordance with ISO8528-1 in the event of a utility power failure. No overload available for this service as relevant alternators are peak continuous rated at 27°C.

Overall Dimensions (mm) & Weight (kg)



Standard and optional accessories

System	Standard	Optional
Air Intake System	<ul style="list-style-type: none"> • Standard air filter • Air filter overload alarm 	<ul style="list-style-type: none"> ○ Air prefilter ○ Heavy air filter
Cooling System	<ul style="list-style-type: none"> • 50°C radiator • Low water level alarm • Fan and belt guard 	<ul style="list-style-type: none"> ○ Antifreeze ○ Water jacket heater
Exhaust System	<ul style="list-style-type: none"> • Discharge valve • Stainless steel bellow • Residential silencer • Complete exhaust pipe 	<ul style="list-style-type: none"> ○ Stainless steel silencer ○ Stainless steel exhaust pipe
Fuel System	<ul style="list-style-type: none"> • Rain cap • 8 Hours integrated base fuel tank • Standard fuel filter • Fuel level gauge 	<ul style="list-style-type: none"> ○ 6 Hours double wall base fuel tank ○ Fuel-water separator ○ Oil level sensor ① ②
Lubrication System	<ul style="list-style-type: none"> • Fuel filling cap • Fuel hose • Standard oil filter • Manual oil pump and drain 	<ul style="list-style-type: none"> ○ Automatic fuel top up system ① ○ Oil heater ○ Lube oil level indicator
Alternator and Electric Switch	<ul style="list-style-type: none"> • Shunt or self excited • Class H insulation • H class temperature rise • DELIXI MCCB • Terminal connection lugs (L1, L2, L3, LN) 	<ul style="list-style-type: none"> ○ Oil temperature indicator ① ○ PMG or AREP (Leroy-Somer only) ○ Alternator space heaters ○ PT100 winding temperature sensors ○ Weaver AVR ○ Weaver prolapse transformer <ul style="list-style-type: none"> ○ F class temperature rise ○ 4 Pole circuit breaker with leakage protection ○ Circuit breaker - 4 pole <ul style="list-style-type: none"> ○ ABB MCCB
Control System	<ul style="list-style-type: none"> • Comap Nano Plus for 4 cylinders engine • Comap IntelliLite AMF20 for 6 cylinders or ECU engine 	<ul style="list-style-type: none"> ○ MCCB auxiliary contact and shunt tripping device ○ Panel lighting
Silent / Base	<ul style="list-style-type: none"> • 67-72 db(A) @ 3 meters • 4mm -6mm Steel base • Transportation support leg • Single hook • Power coating enclosure • Anti-vibration mounting between engine /alternator and baseframe • Emergency stop mounted outside the 	<ul style="list-style-type: none"> ○ Forklift holes ○ Enclosure color: ○ Trailer for off road or on road
Start / Charge	<ul style="list-style-type: none"> • canopy • Standard color: Ral 3020 • Battery with bracket and cables • Engine battery charger • 3A Mains charger 	<ul style="list-style-type: none"> ○ Low temperature starting batteries ○ Battery switch ○ High current charger (10A, 20A)
Remark:		

- ① When you need the automatic oil top up system, you have to use the electrical oil level sensor.
- ② You can choose either electrical oil level sensor or oil temperature sensor.

Engine

Engine specifications		Lubrication System	
Manufacture	CCEC Cummins	Oil capacity (high - low)	38-32 Litre
Engine model	KTAA19-G6A	Maximum allowable oil temperature	121°C
Engine type	4 cycle, in-line, 6-cylinder	Total System Capacity	
Engine speed	1800 r.p.m	- Sump plus filters	50 Litres
Prime power	N/A	Fuel System	
Standby power	664kW/890hp	Type injection system	Direct injection cummins PT
Governor type	Electronic	Minimum Allowable Fuel Tank Vent Capabili	425 Litres/hou
Aspiration:	Turbocharged and air to air aftercooled	Fuel consumption at 100% standby power	161 Litres/hou
Displacement	19 L	Fuel consumption at 100% prime power	140 Litres/hou
Bore * Stroke	159mm x 159mm	Fuel consumption at 75% prime power	106.5 Litres/hou
NO. of cylinders	6	Fuel consumption at 50% prime power	73.3 Litres/hou
Compression ratio	13.9:1	Fuel consumption at 25% prime power	41.2 Litres/hour
Brake mean effective pressure	725-775 r/min	Fuel tank capacity	6 hours
Piston speed	9.5 m/s	Cooling System	
Firing order	1- 5-3 -6 -2 -4	Coolant capacity - engine only	30 Litre
Noise level @7m	78 dBA	Standard thermostat (modulating) range	82 - 93°C
Exhaust System		Maximum allowable top tank temperature	
Maximum back pressure	10 kPa	- Standby power	104 °C
Exhaust pipe size normally acceptable	127 mm	- Prime power	100 °C
Exhaust gas temperature	502°C	Electric System	
Exhaust gas flow	2657 Litres/sec.	Electrical system voltage	24V
Air Intake System		Battery	Maintenance-free
Maximum intake air restriction with heavy duty air cleaner		Connecting cables	Available
- Dirty element	6.23 kPa	Thermal Data	
- Clean element	3.73 kPa	Radiated heat to ambient	76 kW
Recommended intake piping size	N/A	Heat rejection to coolant	479 kW
Intake air flow	968 Litres/sec.	Heat rejection to exhaust	376 kW

Alternator

60Hz/1800R.P.M

General Data		Insulation class	
Power factor	Cos φ = 0.8	Bearing	Single
Excitation	Shunt / Brushless	Altitude	≤ 1000 m
Ratings		Prime Power	Standby Power

Brand	Alternator	Number of wires	AVR Model	PH	Voltage (V)	kW/kVA	kW/kVA
Leroy-Somer	LSA49.1M6	6	R450			624/780	655/819
Stamford	HCI544F	12	AS440	3	380/220	660/825	700/875
Tide	FPA35-5006	6	SX440			550/688	605/756
Leroy-Somer	LSA49.1M5		R450			632/790	664/830
Stamford	HCI544F	12	AS440	3	208/120	590/738	625/781
Tide	FPA35-4805		SX440			576/720	634/793
Leroy-Somer	LSA49.1M5		R450			664/830	698/872
Stamford	HCI544E	12	AS440	3	220/127	570/713	600/750
Tide	FPA35-4805		SX440			576/720	634/793
Leroy-Somer	LSA47.2L9		R250			574/717	600/750
Stamford	HCI544E	12	AS440	3	230/132	585/731	624/780
Tide	FPA35-4805		SX440			576/720	634/793
Leroy-Somer	LSA47.2L9	6	R250			600/750	624/780
Stamford	HCI544E	12	AS440	3	480/277	600/750	640/800



Comap Nano Plus



Comap IntelliLite



Comap IntelliLite AMF25

Viewable parameters	Phase voltage	3	3	3
	Wire voltage	3	3	3
	Current	Instrument	3	3
	Frequency	●	●	●
	Active power	×	●	●
	Reactive power	×	●	●
	Apparent power	×	●	●
	Power factor	×	●	●
	Electric energy metering	×	×	●
Generator protection	Abnormal voltage	●	●	●
	Over-current warning	×	●	● Over
	current protection	×	●	● Over
	Frequency protection	●	●	● Short
	circuit protection	MCCB	MCCB+○	MCCB+○
Engine figure	Oil pressure	●	●	●
	Water temperature	●	●	●
	Fuel level	○	○	○
	Speed	●	●	●
	Battery voltage	●	●	●
	Elapsed time	●	●	● Low
Engine protection	oil pressure warning	●	●	● Low oil
	pressure protection	●	●	● High
	temperature warning	●	●	●
	High temperature protection	●	●	●
	Overspeed warning	●	●	●
	Overspeed protection	●	●	●
	Charge fault	●	●	●
Function	Remote start-stop	●	●	●
	AMF	●	●	●
	Programmable input	3	7	7
	Programmable output	6	7	7
	Port extension	USB	○	○
	Remote monitoring	×	○	○
	Communication port	×	○	○ CAN
	● ○ ● Start/Stop time control			×
	×	● Maintenance tips	×	×
	● Fault record	×	×	●
	Multi-language function	×	●	●
Remark:	● Standard	○ Optional	×	

(Safety Installation: Detect - Control – Switch System)

POWERGEN offers not only a changeover switch but also an integrated mains detection and switch system for your 24 Hour Power Protection. The system enables automatic start-up and operation of the generating set in the event of a mains power failure, overvoltage or loss of phase; and also mains automatic re-transfer once it come back.

The system has a wide application such as hospital, bank, telecom, airport, broadcasting station and hotels.

System Advantages

- Automatically transfer and re-transfer load from main power to gen-power without operator intervention operation. (Both automatic and manual)
- ATS Controller (AMF function), seamless integration with Intelligent 5.0
- Available from 32 – 3200A, better protection for 4 pole switch.
- Available in standard, bypass isolation and service-entrance configurations.
- Configurable in open, closed and programmed transition operating modes.
- Designed to interface seamlessly with POWERGEN generators and switchgear.
- Drip Proof IP23 Enclosure.
- Easy Installation: Wall-mounted & Floor standing
- Comes fully loaded with the technology to do the job.



Rated Current	Breakey Type			
	A	Chinese	ABB	Socomec
32	x		B	x
63	A		B	B
80	x		x	B
100	A		B	B
125	x		B	B
160	B		B	B
200	x		B	x
250	C		B	B
300	x		x	x
315	x		C	x
400	C		C	C
630	C		D	D
800	D		D	D
1000	D		D	D
1250	D		D	D
1600	D		D	E
2000	E		E	E
2500	E		E	E
3200	E		x	E

Dimensions : mm

A : 400x200x500

B : 500x300x650

C : 600x400x1200

D : 800x600x1400

E : 1000x800x1600

Controller

StandardParameters

- Gen phase voltage
- Generator frequency
- Engine speed
- Battery voltage
- Engine running hours counter
- Engine temperature
- Oil pressure



WarningandShutdownAlarms

- Low oil pressure
- High engine temperature
- Over speed
- Under speed
- Start failure
- Stop failure
- Emergency stop
- High/low battery voltage
- Aux. shutdown alarm
- Aux. Warning