

60Hz/1800 r.p.m-P.F.0.8					Prime Power	Standby Power	Rated Current
Genset	Engine	Alternator	Voltage (V)	PH	kW/kVA	kW/kVA	Amps
PGPLS215	1506A-E88TAG1	LSA46.2L6 UCDI274J FPA27-18010	380/220	3	196/245	215/269	372.2
		LSA46.2L6 UCDI274J FPA27-1609	208/120	3	196/245	215/269	680.1
		LSA46.2L6 UCI274H FPA27-1609	220/127	3	196/245	215/269	643.0
		LSA46.2L6 UCI274H FPA27-1609	230/132	3	196/245	215/269	615.0
		LSA46.2M5 UCI274H FPA27-1609	480/277	3	196/245	215/269	294.7
		LSA46.2L6 UCI274H FPA27-1609					

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.

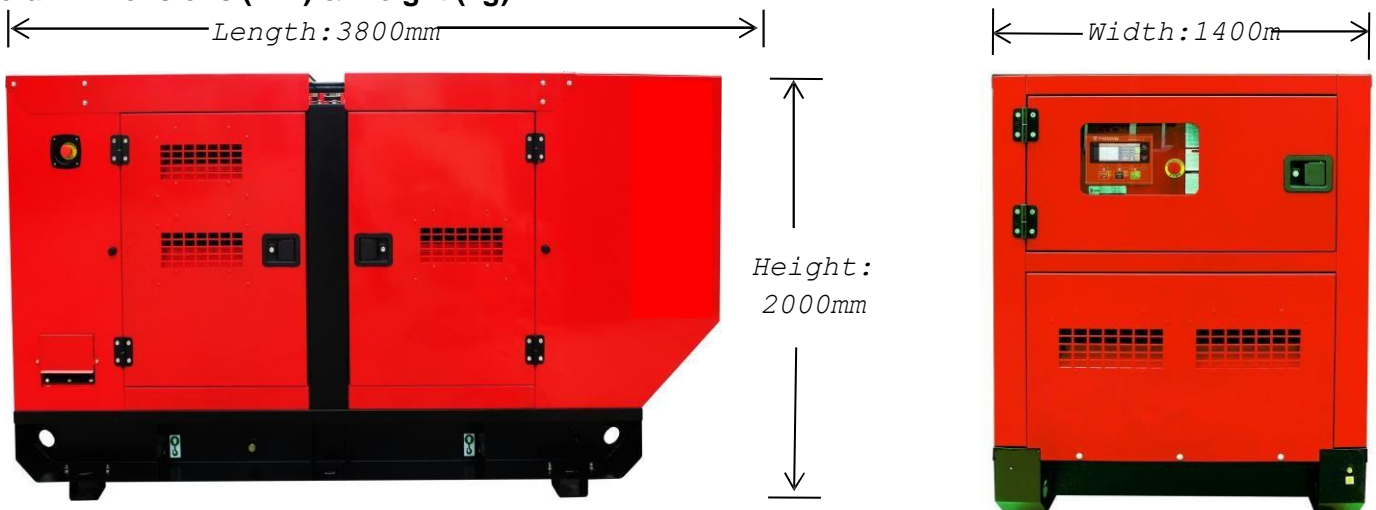
Prime Power:

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)



Weight (kg): 3450

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 ① ● 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 ● Rain cap 	<ul style="list-style-type: none"> ○ Stainless steel silencer ○ Stainless steel exhaust pipe
Fuel System	<ul style="list-style-type: none"> ● 8 Hours integrated base fuel tank ● Standard fuel filter ● Fuel level gauge ● Fuel filling cap 	<ul style="list-style-type: none"> ○ 6 Hours double wall base fuel tank ○ Fuel-water separator ○ Oil level sensor ② ③ ○ Automatic fuel top up system ②
Lubrication System	<ul style="list-style-type: none"> ● Fuel hose ● Standard oil filter ● Manual oil pump and drain 	<ul style="list-style-type: none"> ○ 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 ② ○ 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 ○ MCCB auxiliary contact and shunt tripping device
Control System	<ul style="list-style-type: none"> ● Comap Nano Plus for 4 cylinders engine ● Comap Intelilite AMF20 for 6 cylinders or ECU engine 	<ul style="list-style-type: none"> ○ 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 Not available for Perkins 400 series engines

- ② When you need the automatic oil top up system, you have to use the electrical oil level sensor.
- ③ You can choose either electrical oil level sensor or oil temperature sensor.

Engine

Engine specifications		Lubrication system	
Manufacture	Perkins	Total lubrication system capacity	41 Litres
Engine model	1506A-E88TAG1	Sump capacity only	36 Litre
Engine type	4 stroke, In-line, 6-cylinder	Oil temperature (in sump) maximum	120°C
Engine speed	1800 r.p.m	Oil temperature (in sump) normal continuous	115°C
Prime power	218 kW	Fuel system	
Standby power	239 kW	Type of injection	Direct injection
Governor type	Electronic	Fuel consumption at 100% standby power	59.2 Litres/hour
Air intake way	Air to air after cooled, turbocharged	Fuel consumption at 100% prime power	54.2 Litres/hour
Displacement	8.8 L	Fuel consumption at 75% prime power	41.8 Litres/hour
Cylinder bore * stroke	112mm x 149mm	Fuel consumption at 50% prime power	29.3 Litres/hour
NO. of cylinders	6	Fuel consumption at 25% prime power	16.3 Litres/hour
Compression ratio	16.1:1	Fuel tank capacity	6 hours
Brake mean effective pressure	1765-1932 kPa	Cooling system	
Mean piston speed	8.9 m/s	Total system capacity	29.6 Litres
Combustion air flow	17.7 m³/min	- Engine capacity	13.9 Litres
Noise level @7m	73 dBA	- With radiator	12.6 Litres
Exhaust system		Thermostat operation range	87-98 °C
Exhaust gas flow	40 m³/min	Maximum top tank temperature	107°C
Exhaust gas temperature	431 °C	Electric system	
Maximum back pressure	10 kPa	Electrical system voltage	24 V
Aftertreatment exhaust outlet connection	N/A	Battery	Maintenance-free
Air intake system		Connecting cables	Available
Maximum air intake restriction		Energy balance	
- Clean filter	3.7 kPa	Energy to radiation	14-14 kW
- Dirty filter	6.2 kPa	Energy to exhaust	101-107 kW
- Air filter type	Dry paper element	Energy to coolant	157-172 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	LSA46.2L6	12	R250	3	380/220	206/257	228/285
Stamford	UCDI274J		AS440			240/300	260/325
Tide	FPA27-18010		SX460			200/250	220/275
Leroy-Somer	LSA46.2L6	12	R250	3	208/120	221/276	243/304
Stamford	UCDI274J		AS440			215.2/269	235.2/294
Tide	FPA27-1609		SX460			196/245	215/269
Leroy-Somer	LSA46.2L6	12	R250	3	220/127	231/289	254/317
Stamford	UCI274H		AS440			196/245	212/265
Tide	FPA27-1609		SX460			196/245	215/269
Leroy-Somer	LSA46.2L6	12	R250	3	230/132	236/295	262/328
Stamford	UCI274H		AS440			196/245	212/265
Tide	FPA27-1609		SX460			196/245	215/269
Leroy-Somer	LSA46.2M5	12	R250	3	480/277	200/250	218/273
Stamford	UCI274H		AS440			204/255	224/280



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 × NA				

(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	Breaker 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 co
- 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