

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
FC125X-F	R6105AZLDS2	N/A UCI274F N/A	240 (220-240)	1	100/125	110/138	520.8
		LSA 44.3 M6 UCI 274D FPA27-902	380/220	3	100/125	110/138	189.9
		LSA 44.3 M6 UCI 274D FPA27-902	208/120	3	100/125	110/138	347
		LSA 44.3 M6 UCI 274D FPA27-902	220/127	3	100/125	110/138	328
		LSA 44.3 M6 UCI 274D FPA27-902	230/132	3	100/125	110/138	313.8
		LSA 44.3 S5 UCI 274C FPA27-902	480/277	3	100/125	110/138	150.4

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)

← LENGTH 3300 →

← WIDTH 1100 →



↑
HEIGHT
1500
↓



Weight (kg): 2200

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 ● Discharge valve 	<ul style="list-style-type: none"> ○ Antifreeze ○ Water jacket heater
Exhaust System	<ul style="list-style-type: none"> ● 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 ● Fuel hose 	<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"> ● Standard oil filter ● Manual oil pump and drain 	<ul style="list-style-type: none"> ○ Oil heater ○ Lube oil level indicator ○ Oil temperature indicator ②
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"> ○ PMG or AREP (Leroy-Somer only) ○ Alternator space heaters ○ PT100 winding temperature sensors ○ Weaver AVR ○ Weaver prolapse transformer ○ F class temperature rise ○ 4 Pole circuit breaker with leakage protection ○ Circuit breaker - 4 pole ○ 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 IntelliLite 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 canopy ● Standard color: Ral 3020 	<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"> ● 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		Fuel System	
Manufacture	Kofo	Type injection system	Indirect Injection
Engine model	R6105AZLDS2	Fuel consumption at 100% standby power	34.5 Litres/hour
Engine type	4 cycle, in-line	Fuel consumption at 100% prime power	31.4 Litres/hour
Engine speed	1800 r.p.m	Fuel consumption at 75% prime power	25.1 Litres/hour
Prime power	115.5 kW	Fuel consumption at 50% prime power	18.8 Litres/hour
Standby power	127 kW	Fuel consumption at 25% prime power	9.4 Litres/hour
Governor type	Mechanical	Fuel tank capacity	8-12 hours
Steady speed adjusting ratio at rated condition	≤5	Lubrication System	
Aspiration:	Turbocharged, air-to-air charge cooling	Oil sump capacity	18 Litres
Displacement	6.75 L	Oil pressure	0.3-0.5 Mpa
Bore * Stroke	105 x130 mm	Oil pressure at idle speed	≥0.1 Mpa
NO. of cylinders	6	Lubricating method	Pressure lubrication
Compression ratio	16.0:1	Oil consumption rate	1.63 g/kW.h
Engine idle speed	≤650 rpm	Max continuous oil temperature	105°C
Fring order	1-5-3-6-2-4	Cooling system	
Flywheel ring gear teeth number	130	Total system capacity	23 Litres
Noise level @7m	74 dBA	Thermostat operation range	76-85 °C
		Maximum top tank temperature	96°C
Exhaust system		Electric System	
Exhaust gas temperature	≤600°C	Starting method	Electric motor start
Exhaust outlet size	57 mm	Electrical system voltage	24V
Air intake system		Battery	Maintenance-free
Maximum air intake restriction		Connecting cables	Available
- Standard filter	≤2.5 kPa		
- Air filter type	Dry		

Alternator

General data		60Hz/1800R.P.M	
Power factor	Cos φ = 0.8	Insulation class	H
Excitation	Shunt / Brushless	Bearing	Single
		Altitude	≤ 1000 m

Ratings

Brand	Alternator	Number of wires	AVR Model	PH	Voltage (V)	Prime Power	Standby Power
						kW/kVA	kW/kVA
Leroy-Somer	N/A						
Stamford	UCI274F	4	AS440	1	240 (220-240)	108/135	N/A
Tide	N/A						
Leroy-Somer	LSA 44.3 M6		R250			99/124	109/136
Stamford	UCI 274D	12	AS440	3	380/220	105/131	114/142.5
Tide	FPA27-902		SX460			100/125	110/137.5
Leroy-Somer	LSA 44.3 M6		R250			108/135	119/149
Stamford	UCI 274D	12	AS440	3	208/120	105/131	114/142.5
Tide	FPA27-902		SX460			108/135	120/150
Leroy-Somer	LSA 44.3 M6		R250			114/143	126/158
Stamford	UCI 274D	12	AS440	3	220/127	110/138	120/150
Tide	FPA27-902		SX460			108/135	120/150
Leroy-Somer	LSA 44.3 M6		R250			96/120	105/131
Stamford	UCI 274D	12	AS440	3	230/132	110/138	120/150
Tide	FPA27-902		SX460			96/120	106/132.5
Leroy-Somer	LSA 44.3 S5		R250			100/125	110/138
Stamford	UCI 274C	12	AS440	3	480/277	100/125	110/137.5
Tide	FPA27-902		SX460			108/135	120/150

Control System



Comap Nano Plus

Comap IntelliLite AMF20

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	●	●	●
Engine protection	Low 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, air port, 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