

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
FC270X-F	6126-42D2	LSA46.2L6 UCDI 274J FPA27-18010	380/220	3	216/270	240/300	379.8
		LSA46.2L6 UCDI 274J FPA27-18010	208/120	3	216/270	240/300	694.0
		LSA46.2L6 UCI274H FPA27-18010	220/127	3	216/270	240/300	656.1
		LSA46.2L6 UCI274H FPA27-18010	230/132	3	216/270	240/300	627.6
		LSA46.2M5 UCI274H FPA27-18010	480/277	3	216/270	240/300	300.7

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) : 3000

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 ● 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 ①② ○ Automatic fuel top up system ①
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 ① ○ 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 	<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"> ● Standard color: Ral 3020 ● Battery with bracket and cables 	<ul style="list-style-type: none"> ○ Low temperature starting batteries
Remark:	<ul style="list-style-type: none"> ● Engine battery charger ● 3A Mains charger 	<ul style="list-style-type: none"> ○ Battery switch

①When you need the automatic oil top up system, you have to use the electrical oil level sensor②You can choose either electrical oil level sensor or oil temperature sensor.

Engine



Engine specifications

Fuel System

Manufacture	Kofo	Injection system	Indirect Injection
Engine model 42D2	6126-	Fuel consumption at 100% standby power	66.7 Litres/hou
Engine type	4 cycle, in-line	Fuel consumption at 100% prime power	60.7 Litres/hou
Engine speed	1800 r.p.m	Fuel consumption at 75% prime power	48.6 Litres/hou
Prime power	240 kW	Fuel consumption at 50% prime power	36.4 Litres/hou
Standby power	264 kW	Fuel consumption at 25% prime power	18.2 Litres/hour
Governor type Mechanical		Fuel tank capacity	8 hours
Steady speed adjusting ratio at rated condition	≤5	Lubrication System	
Aspiration:	Turbocharged, air-to-air charge cooling	Oil sump capacity	30 Litres
Displacement	9.73 L Bore	Oil pressure	0.35-0.55 Mpa
* Stroke	126 x130 mm NO. o	Oil pressure at idle speed	≥0.08 Mpa
cylinders	6	Lubricating method	Pressure lubrication
Compression ratio	17.0:1	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	136	Total system capacity	39 Litre
Noise level @7m	76 dBA	Thermostat operation range	76-85 °C
Exhaust system		Maximum top tank temperature	96°C
Exhaust gas temperature	≤600°C	Electric System	
Exhaust outlet size	75 mm	Starting method	Electric motor star
Air intake system		Electrical system voltage	24V Battery
Maximum air intake restriction		Maintenance-free Connecting cables	Available
- Standard filter	≤2.5 kPa		
- Air filter type	Dry		

Alternator

60Hz/1800R.P.M

General Data	
Power Factor	Cos φ = 0.8
Excitation	Shunt / Brushless

Insulation Class	H
Bearing	Single
Altitude	≤ 1000 m

Ratings

	Brand	Alternator	Number	of wires	AVR Model kW/kVA	PH	Prime Power		Standby Power	
							Voltage (V)	kW/kVA	kW/kVA	kW/kVA
Leroy-Somer Stamford Tide	LSA46.2L6 UCDI 274J FPA27-18010	12	R250 AS440 SX460	3	380/220	206/257 240/300 200/250	228/285 260/325 220/275			
Leroy-Somer Stamford Tide	LSA46.2L6 UCDI 274J FPA27-18010	12	R250 AS440 SX460	3	208/120	221/276 215.2/269 216/270	243/304 235.2/294 238/297.5			
Leroy-Somer Stamford Tide	LSA46.2L6 UCI274H FPA27-18010	12	R250 AS440 SX460	3	220/127	231/289 196/245 216/270	254/317 212/265 238/297.5			
Leroy-Somer Stamford Tide	LSA46.2L6 UCI274H FPA27-18010	12	R250 AS440 SX460	3	230/132	235/294 196/245 216/270	262/328 212/265 238/297.5			
Leroy-Somer Stamford Tide	LSA46.2M5 UCI274H FPA27-18010	12	R250 AS440 SX460	3	480/277	200/250 204/255 216/270	218/273 224/280 238/297.5			

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	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