

Technical Data

June 2018

Engine	Alternator	Generator Model				
DOOSAN P126TI-II	Leroy-Somer LSA 46.3 M8	FB300-K / Open	FC300-K / Silent			

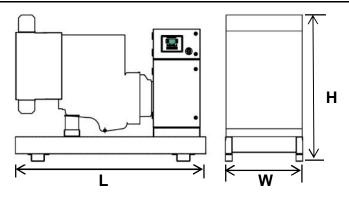
50Hz/1500R.P.M	3-Phase	Power Factor	Emissions
JUI 12/ 1 JUUN.F . IVI	J-Filase	Factor Cos Φ = 0.8	N/A

RATINGS	Prime P	ower	Standby	y Power	Rated Current	Fuel Consumption @100% Load		
RATINGS	(PR	P)	(E:	SP)	Amps			
Voltage (V)	kWe	kVA	kWe	kVA	(A)	L/h		
380/220	240	300	264 330		455.8	63.1		
400/230	240	300	264	330	433.0	63.1		
415/240	240	300	264	330	417.4	63.1		



Key Features:

- High efficient water cooled diesel engine.
- Single bearing with brushless alternators (Class H, with AVR).
- Radiator with pressure cap and drain point.
- Fully guarded engine-driven fan.
- Fully welded steel skid base with lifting holes and fork lift legs.
- Integral fuel tank with filler cap and gauge (≤650kVA).
- Heavy duty rubber anti-vibration mountings.
- 12V or 24V maintenance free starter battery and connecting cables.
- Separate engine-driven battery charging alternator.
- Spin on oil and fuel filters and dry type air filter element.
- Industrial silencer (15dBA reduction) supplied loose.
- Auto start control system with LCD show.
- Battery charger provided.
- Main line 3P circuit breaker.
- Rigorous factory test wiring with IEC standard.
- Operation & Maintenance manual & Wiring diagrams.
- Wide range of optional extra features available.



Overall Dimensions	& Weights - Open Set	
Length (L)-mm:	3000	
Width (W)-mm:	1050	
Height (H)-mm:	1600	
Dry Weight-kg:	2200	

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.

Prime Power: Available continuously at variable load in lieu of commercially purchased power for an unlimited number of hours per year 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.

TIDE Power reserves the right to change the design or specifications without notice and without any obligation or liability.

Engine DOOSAN P126TI-II

		Units	Prime	Standby				
	Frequency	Hz	50					
	Engine Speed	r/min	1500					
	Cylinders / Type		4-stroke					
	Aspiration		Turbo Charged & Intercoole					
	Governor Type		overnor					
General Performance	Bore / Stroke	mm	123/15	5				
Periormance	Displacement	Litres	11.051					
	Compression Ratio		17.1:1					
	Mean Piston Speed	m/s	7.75					
	Engine Power (Net)	kWm	258	287				
	Brake Mean Effective Pressure	kPa	1920	2130				
	Fuel Consumption at 110% Prime Power	Litres/hour	77.6					
	Fuel Consumption at 100% Prime Power	Litres/hour	63.1					
5 10 (Fuel Consumption at 75% Prime Power	Litres/hour	47.0					
Fuel System 	Fuel Consumption at 50% Prime Power	Litres/hour	31.3					
	Fuel Consumption at 25% Prime Power	Litres/hour	16.9					
	Standard Fuel Tank Capacity	Hours / Litres	8 / 500					
	Maximum Air Intake Restriction							
A: 0	- Clean Filter	kPa						
Air System	- Dirty Filter	kPa						
	Intake Air Flow	m³/min	20.68	22.33				
F 1	Exhaust Gas Flow	m³/min	47.4	51.2				
Exhaust System	Exhaust Gas Temperature	°C	590	650				
System	Maximum Back Pressure	kPa	5.9					
	Minimum Oil Pan Capacity	Litres	20					
Oil System	Maximum Oil Pan Capacity	Litres	23					
	Maximum Continuous Oil Temperature (In Rail)	°C	120					
	Total System Capacity - With Radiator	Litres	51					
Cooling	Coolant Capacity - Engine Only	Litres	19					
System	Thermostat Operation Range	°C	5					
	Maximum for Standby and Prime	°C	103					
- 1	Electrical System Voltage	V	24					
Electric	Battery		Maintenand	e-free				
System	Connecting Cables		Auailab	le				
F	Radiated Heat to Ambient	kW	22.6	27.7				
Energy Balance	Heat Rejection to Coolant	kW	96.7	118.9				
Daidille	Heat Rejection to Exhaust	kW	222.4	273.5				

Alternator			50Hz/1500R.P.M
		Units	
	Manufacture / Brand		Leroy-Somer
	Model		LSA 46.3 M8
	Coupling / No. of Bearings		Direct / Single Bearing
	Phase / Poles Power Factor AVR Regulation		3-Phase / 4-Pole
			$Cos \Phi = 0.8$
General Data			Yes
General Data	Voltage Regulation		± 0,5 %
	Insulation Class		Н
	Drip Proof		IP23
	Excitation		Shunt
	Altitude	m	≤1000
	Overspeed	min -1	2250

Controller Medal / Com An	EC 2.0 /	EC 3.0 /	EC 4.0 /	EC 5.0 /	
Controller Model / ComAp	Nano Plus	AMF20	AMF25	IG-NT	
Controller Photos	bricklasor one	Intellitie 200 20 Cooks	Intellitte JEES Cords	Inteliden"	
Standard Supply	×	•	0	0	
Viewable Parameters					
Phase Voltage	×	3	3	3	
Current	Instrumentation	•	•	•	
Frequency	•	•	•	•	
Active Power	×	•	•	•	
Reactive Power	×	•	•	•	
Apparent Power	×	•	•	•	
Power Factor	×	•	•	•	
Electric Energy Metering	X	•	•	•	
Generator Protection					
Abnormal Voltage	•	•	•	•	
Over-current Warning	×	•	•	•	
Over current Protection	•	•	•	•	
Over Frequency Protection	•	•	•	•	
Short Circuit Protection	MCCB / ●	MCCB / ●	MCCB / ●	MCCB / ●	
Engine Figure				_	
Oil Pressure	•	•	•	•	
Water Temperature	•	•	•	•	
Fuel Meter / Fuel Sensor	●/○	●/○	●/○	●/○	
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	×	•	•	•	
Alternator Charger	•	•	•	•	
Functions					
Remote Start	•	•	•	•	
AMF (Auto Main Failure)	•	•	•	•	
Programmable Intput	•	•	•	•	
Programmable Output	•	•	•	•	
Expand Module	×	0	0	0	
Communication Function	×	0	0	●/ RS232 / 485	
Communication Port	USB	0	0	RS232 / 485	
CAN	•	×	•	•	
Service Indicate	×	×	•	•	
Fault History	•	•	•	•	
Gen-Gen Synchronising	×	×	×	•	
Gen-Mains Synchronising	×	×	×	•	

Remark:

Standard Supply

Available as Optional

× Not Available

"Ensure a quieter life with our sound attenuation system." Features:

Extremely Rugged & Highly Corrosion Resistant Construction

- Body made from 2.0mm sheet steel components with powder coating
- 6-8 hours built-in fuel tank integrated into the skid-mount base
- Excellent design and craftmanship
- Compact structure and longer service life
- Residential silcencer to made sure the sound level.
- Zinc alloy with black powder coated locks and hinges and proven to withstand corrosive conditions.

J. Iftle Power

Easy Commissioning and Maintenance

- Separate & Standing control room at end side, easy reachable electrical power connections board.
- Side doors allowing 180° opening rotation .
- Radiator fill access through cover in canopy roof.
- · Lube oil drain and radiator drain.
- Manual lube oil pump provided.

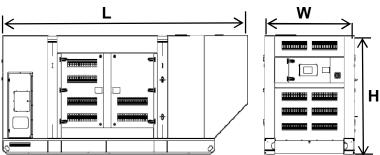
Security and Safety

- Earth leakage protection.
- 40-50mm non-inflammable sponge inside.
- Control panel viewing window in a lockable access door.
- Emergency stop button mounted on canopy exterior.
- Fuel fill and battery can only be reached via lockable access doors.
- Exhaust silencing system enclosed for operator safety
- Efficient management of cooling air to avoid high water temperature, reliable operation under harshest conditions.



Transportability

- Lifting points on top to move genset easily.
- Fork lift legs provided and easy to loose to fix the genset.



Overall Dimensions & Weight & Noice											
Dimensions	Weight	Noice Level	Base Tank @100% Load								
(L x W x H) mm	kg	dB(A) at 7m	Hours	Litres							
4200x1400x1950	3700	65-78	11	800							

Automatic Transfer Switch A.T.S - 4 Poles

Tide Power 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 a mains automatic re-transfer once it come back.

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 AMF25
- Available from 32 4000A, 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 TIDE POWER generators and switchgear.
- Drip proof IP42 enclosure.
- Easy installation: wall-mounted & floor standing
- Comes fully loaded with the technology to do the job.

50/60 Hz, 32-4000 Amps

Rated Current	Amps	32	63	80	100	125	160	200	250	300	315	400	630	800	1000	1250	1600	2000	2500	3200	4000A
	Chinese	×	Α	×	Α	×	В	×	С	×	×	С	С	D	D	D	D	E	E	E	×
Breaker Type	ABB	В	В	×	В	В	В	В	В	×	С	С	D	D	D	D	D	E	E	×	×
	Socomec	×	В	В	В	В	В	×	В	×	×	С	D	D	D	D	Е	E	E	E	Е

Dimensions: mm

A: 400×200×500

B: 500×300×650

C: 600×400×1200

D: 800×600×1400

E: 1000×800×1600

Optionals (All depends)

Genset: Genset:

Materials & Miscellaneous

- Marine class painting and other special painting
- Standard accoustic enclosure genset
- Extended warranty
- Extended factory test
- Additional sensors
- Off road trailer type
- Standard ATS
- Mounted fire extinguisher
- Additional vibration isolation
- Wooden case packaging
- Tide Power tool kit
- Additional operation manual
- Nylon canvas wrapped packaging
- Iron shelf for double stack shipping
- Water jacket heater
- Additional CE features selection.

_

Materials & Miscellaneous

Custom-Made solutions

- On road trailer (EU) type
- Rental type genset
- Mining type genset
- Marine type genset
- High temp. Radiator for silenttype genset
- EPA series gensets



Optionals (All depends)

Custom-Made solutions

Diesel Engine/ Baseframe Mounted Accessories:

Diesel Engine/ Baseframe Mounted Accessories:

Cooling System

- Engine heat guards
- Low coolant level alarm & shutdown (Depends on engine series)
- High temp. & Anti-erosion radiator upgrade for open type genset
- 50% antifreeze @-36°C

Cooling System

- Anti-erosion radiator for silent type genset
- Remote radiator with heat exchanger
- Remote cooling tower with heat exchanger

Filters

- Extra air filters for time-maintenance
- Double heavy duty air filters
 - Extra fuel filters for time-maintenance
 - Extra oil filters for time-maintenance

Filters

Mounted heavy duty air filter

Exhaust

- Residential silencer for open type genset
- Stainless steel silencer and kits
- Heat protection guard

Exhaust

- Mounted heavy duty air filter

Fuel & Oil

- Separated / External fuel tank
- Water fuel separator
- 3 way fuel valve
- Manual bypass valve
- Lub oil make up tank
- Lub oil drain pump
- Fuel level sensor
- Fuel cooler
- Automatic remote fuel supply with fuel level switch
- & low fuel level alarmshutdown.
- Coolant heater 220/240V
- Lub-oil heater for severe cold weather

Fuel & Oil

- Bulk base fuel tank
- Bunded base fuel tank

Starting & Charging

- Bulk starting battery -17°C below
- Battery removal switch
- Battery heater

Starting & Charging

- None

Control System & Power Termination:

Control System & Breakers

- Different functional modules with
- Tide Easycon refer to other table
 - Mounted audible and visable llighting
 - Control panel cover (80kva or below)
 - Motorized circuit breaker 3 Poles
 - Motorized circuit breaker 4 Poles
 - ACB 3 Poles
 - MCCB 4 poles
 - Different breaker brands, like ABB etc
 - Leakage protection switch

Control System & Power Termination:

Control System & Breakers

Various standard sockets mounted outside the enclosure

Optionals (All depends)

Custom-Made solutions

Brushless Alternator:

Brushless Alternator:

- 12 Lead stator (change voltage depends)
 - Temperature rise class F Marine type alternator IP upgrade HV
- Interchangeable S.A.E flanges and drive discs - Convenient filters on air inlets and outlets
 - Coastal type [] Alternator painting color P.M.G or auxiliary
 - AREP for Leroy-Somer only
 - Shunt trip
 - Exterior potentiometer
 - Auxiliary contacts and double bearing
- Anti-condensation heater
 - Stator thermal protection
 - Quadrature droop kits

Enclosure & Canopy:

Enclosure & Canopy:

Weather protective & Sound proof

Weather protective & Sound proof

- R series
- ISO 20ft containerized
 - ISO 40ft containerized
- Stainless steel locks and hinges

- Super silent enclosure
- Weather proof enclosure
- Flat sponge sound absorber enclosure
- Porous sheet with rockwool sound absorber enclosure

Please refer to Tide Power sales department for full details of the above options.

Warranty

Tide Power distributor, dealer, or authorized representative performs startup within 6 months of the date of shipment from the factory, warranty coverage will begin on the startup date (Register the startup date to Tide with in 6 month is essential and can be enforced). This warranty does not apply to malfunctions caused by damages, unreasonable use, misuse, repair or service by unauthorized persons, or normal wear and tear.

Warranty Coverage

Generators used to commercial utility source: One (1) year or 1000 hours (whichever occurs first) from date of shipment from the factory or registered startup date.