

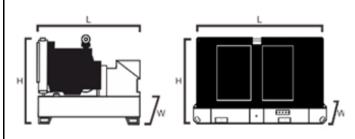
Technical Data

Termical bata							
Engine		Alternator			Generator Model		
DCEC Cummins 6BTAA5.9-G12		FPA27-1205			PC150-C / Silent		
Frequency	Pha	se		Power Factor		Emissions	
50Hz/1500rpm	3-Ph	ase	Factor Cos Φ = 0.8			N/A	
RATINGS	Prime Power		Standby Power		Rated Current		Fuel Consumption @100% Load
	(PRP)		(ESP)		Amps		
Voltage (V)	kWe	kVA	kWe	kVA	(A)		L/h
380/220	120	150	132	165	227,9		34,0
400/230	120	150	132	165	216,5		34,0
415/240	120	150	132	165	208,7		34,0



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.



Silent	
3200	
1130	
1650	
1675	
8	
N/A	

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. (1)PRP (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.

(2)ESP (Standby Power):

Emergency Standby Power in variable load applications in accordance with ISO8528-1 in the event of a utility power failure. (3)STD:Standard Alternator.

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



Engine Frequency / Speed	Engine	DCEC Cummins 6BTAA5.9-G12					
Aspiration Charge Air Cooled		Engine Frequency / Speed	Hz / r/min	50 / 1500			
Compression Ratio		No. of Cylinders / Type	6 cyl / 4-stroke				
Governor Type		Aspiration	Charge Air Cooled				
Bore		Compression Ratio	17.3:1				
Storke	General Performance	Governor Type	Electronic				
Displacement		Bore	mm 102				
Piston Speed		Storke	mm 120				
Fuel System Fuel Consumption at 110% Prime Power Litres/hour 34,0		Displacement	Litres	5,9			
Type Injection System		Piston Speed	m/s	6,0			
Fuel Consumption at 110% Prime Power Litres/hour 38		Gross Engine Power OutputPrime / Standby	kWm	140 155			
Fuel Consumption at 100% Prime Power Litres/hour 34,0		Type Injection System	BYC P7100				
Fuel Consumption at 75% Prime Power Litres/hour 26		Fuel Consumption at 110% Prime Power	Litres/hour	38			
Fuel Consumption at 75% Prime Power Litres/hour 17,0	Final Contains	Fuel Consumption at 100% Prime Power	Litres/hour	34,0			
Fuel Consumption at 25% Prime Power Litres/hour 10	Fuel System	Fuel Consumption at 75% Prime Power	Litres/hour	26			
Engine Oil Pressure for Engine Protection Devices		Fuel Consumption at 50% Prime Power	Litres/hour	17,0			
Oil System		Fuel Consumption at 25% Prime Power	Litres/hour	10			
Oil System — Governed Speed(Maximum) kPa 345 Maximum Oil Temperature °C 121 Minimum Required Capacity - Sump plus Filters Litres 16,4 Cooling System Coolant Capacity - Engine Only Litres 10 Standard Thermostat (Modulating) Range °C 82-95 Minimum Pressure Cap kPa 69 Maximum Top Tank Temperature for Standby / Prime °C 104 / 100 Maximum Intake Air RestrictionDirty Element kPa 6,2 Maximum Intake Air RestrictionClean Elemen kPa 3,7 Intake / Exhaust Intake Air Flow Litre/sec. 137 150 Maximum Exhaust Back Pressure kPa 10 Exhaust Gas FlowPrime / Standby Litre/sec. 321 357 Exhaust Gas TemperaturePrime / Standby °C 495 507 Electric System Battery Maintenance-free Radiated Heat to Ambient kW 17 19 Energy Balance Heat Rejection to Coolant kW 57 58		Engine Oil Pressure for Engine Protection Devices					
Maximum Oil Temperature		— Idle Speed (Minimum)	kPa	207			
Minimum Required Capacity - Sump plus Filters	Oil System	— Governed Speed(Maximum)	kPa	345			
Coolant Capacity - Engine Only Litres 10 Standard Thermostat (Modulating) Range °C 82-95 Minimum Pressure Cap kPa 69 Maximum Top Tank Temperature for Standby / Prime °C 104 / 100 Maximum Intake Air RestrictionDirty Element kPa 6,2 Maximum Intake Air RestrictionClean Elemen kPa 3,7 Intake / Exhaust System Intake Air Flow Litre/sec. 137 150 Maximum Exhaust Back Pressure kPa 10 Exhaust Gas FlowPrime / Standby Litre/sec. 321 357 Electric System Cranking Motor (Heavy Duty, Positive Engagement) V 24 Battery Maintenance-free Radiated Heat to Ambient kW 17 19 Heat Rejection to Coolant kW 57 58		Maximum Oil Temperature	°C	121			
Cooling System Standard Thermostat (Modulating) Range °C 82-95 Minimum Pressure Cap kPa 69 Maximum Top Tank Temperature for Standby / Prime °C 104 / 100 Maximum Intake Air RestrictionDirty Element kPa 6,2 Maximum Intake Air RestrictionClean Elemen kPa 3,7 Intake / Exhaust Maximum Exhaust Back Pressure kPa 10 Exhaust Gas FlowPrime / Standby Litre/sec. 321 357 Electric System Cranking Motor (Heavy Duty, Positive Engagement) V 24 Battery Maintenance-free Radiated Heat to Ambient kW 17 19 Energy Balance Heat Rejection to Coolant kW 57 58		Minimum Required Capacity - Sump plus Filters	Litres 16,4				
Cooling System Minimum Pressure Cap kPa 69 Maximum Top Tank Temperature for Standby / Prime °C 104 / 100 Maximum Intake Air RestrictionDirty Element kPa 6,2 Maximum Intake Air RestrictionClean Elemen kPa 3,7 Intake / Exhaust System Maximum Exhaust Back Pressure kPa 10 Exhaust Gas FlowPrime / Standby Litre/sec. 321 357 Exhaust Gas TemperaturePrime / Standby °C 495 507 Electric System Cranking Motor (Heavy Duty, Positive Engagement) V 24 Battery Maintenance-free Radiated Heat to Ambient kW 17 19 Energy Balance Heat Rejection to Coolant kW 57 58		Coolant Capacity - Engine Only	Litres	10			
Maximum Top Tank Temperature for Standby / Prime °C 104 / 100	0 1" 0 1	Standard Thermostat (Modulating) Range	°C	82-95			
Maximum Intake Air RestrictionDirty Element kPa 6,2 Maximum Intake Air RestrictionClean Elemen kPa 3,7 Intake / Exhaust System Intake Air Flow Litre/sec. 137 150 Maximum Exhaust Back Pressure kPa 10 Exhaust Gas FlowPrime / Standby Litre/sec. 321 357 Exhaust Gas TemperaturePrime / Standby °C 495 507 Electric System Battery Maintenance-free Radiated Heat to Ambient kW 17 19 Energy Balance Heat Rejection to Coolant kW 57 58	Cooling System	Minimum Pressure Cap	kPa	69			
Maximum Intake Air RestrictionClean Elemen kPa 3,7		Maximum Top Tank Temperature for Standby / Prime	°C	104 / 100			
Intake / Exhaust System Intake Air Flow Litre/sec. 137 150 Maximum Exhaust Back Pressure kPa 10 Exhaust Gas FlowPrime / Standby Litre/sec. 321 357 Exhaust Gas TemperaturePrime / Standby °C 495 507 Cranking Motor (Heavy Duty, Positive Engagement) V 24 Battery Maintenance-free Radiated Heat to Ambient kW 17 19 Heat Rejection to Coolant kW 57 58		Maximum Intake Air RestrictionDirty Element	kPa 6,2				
System Maximum Exhaust Back Pressure kPa 10 Exhaust Gas FlowPrime / Standby Litre/sec. 321 357 Exhaust Gas TemperaturePrime / Standby °C 495 507 Cranking Motor (Heavy Duty, Positive Engagement) V 24 Battery Maintenance-free Radiated Heat to Ambient kW 17 19 Heat Rejection to Coolant kW 57 58		Maximum Intake Air RestrictionClean Elemen	kPa	3,7			
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Exhaust Gas TemperaturePrime / Standby °C 495 507 Cranking Motor (Heavy Duty, Positive Engagement) V 24 Battery Maintenance-free Radiated Heat to Ambient kW 17 19 Heat Rejection to Coolant kW 57 58		Maximum Exhaust Back Pressure	kPa	10			
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Electric System Battery Maintenance-free Radiated Heat to Ambient Energy Balance Heat Rejection to Coolant KW 17 19 KW 57 58		Exhaust Gas TemperaturePrime / Standby	°C	495 507			
Radiated Heat to Ambient kW 17 19 Energy Balance Heat Rejection to Coolant kW 57 58	Electric System	Cranking Motor (Heavy Duty, Positive Engagement)	V	24			
Energy Balance Heat Rejection to Coolant kW 57 58		Battery	Maintenance-free				
	Energy Balance	Radiated Heat to Ambient	kW	17 19			
		Heat Rejection to Coolant	kW	57 58			
Heat Rejection to Fuel kW 113 125		Heat Rejection to Fuel	kW	113 125			

- Alternator	50Hz/1500rpm					
	Manufacture / Brand	Tide				
General Data	Model	FPA27-1205				
	Coupling / No. of Bearings	Direct / Single Bearing				
	Phase / Poles	3-Phase / 4-Pole				
	Power Factor	Cos Φ = 0.8				
	AVR Regulation	Yes				
	Voltage Regulation	±0.5%				
	Insulation Class	Н				
	Drip Proof	IP23				
	Voltage Regulator	AVR				
	Altitude	≤1000 m				