
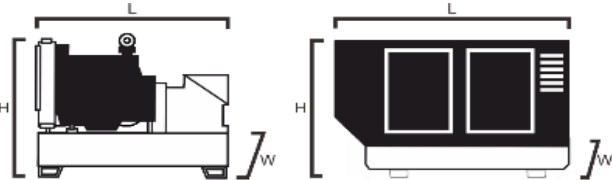


Technical Data						
Engine		Alternator			Generator Model	
Fawde 4DX23-78D		Werna WR224E			FB60-G / Silent	
Frequency	Phase		Power Factor		Emissions	
50Hz/1500rpm	3-Phase		Factor Cos $\Phi = 0.8$		Stage II	
RATINGS	Prime Power		Standby Power		Rated Current	Fuel Consumption @100% Load
	(PRP)		(ESP)		Amps	
Voltage (V)	kWe	kVA	kWe	kVA	(A)	L/h
380/220	48	60	53	66	91,2	14,3
400/230	48	60	53	66	86,6	14,3
415/240	48	60	53	66	83,5	14,3
				Key Features:		
				<ul style="list-style-type: none"> - 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 ($\leq 650\text{kVA}$). - 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. 		
				Dimensions & Weights		Silent
				Length (L)-mm:		2400
Width (W)-mm:		1050				
Height (H)-mm:		1210				
Dry Weight-kg:		1060				
Fuel tank (h)		16hours(225L)				
(dBA)@7m no load		≤ 85				
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		Fawde 4DX23-78D			
General Performance	Frequency	Hz	50		
	Engine Speed	r/min	1500		
	Cylinders / Type	4 cyl	4-stroke		
	Aspiration	Turbo/ Intercooling			
	Governor Type	Electronic			
	Bore / Stroke	mm	102*118		
	Displacement	Litres	3,86		
	Compression Ratio	17:1			
	Brake Mean Effective Pressure	MPa	1,18		
	Rotation Direction (from flywheel)	Anti-clockwise			
	Engine Power	kWm	57	63	
	Fuel System	Fuel Consumption at 110% Prime Power	Litres/hour	17,16	
Fuel Consumption at 100% Prime Power		Litres/hour	14,3		
Fuel Consumption at 75% Prime Power		Litres/hour	11,44		
Fuel Consumption at 50% Prime Power		Litres/hour	8,6		
Fuel Consumption at 25% Prime Power		Litres/hour	4,29		
Standard Fuel Tank Capacity		Hours	8		
Oil System	Total Oil System Capacity	Litres	13		
	Oil consumption	L/h	0,05		
	Oil consumption (as % of fuel consumption)	0,29%			
	Maximum Oil Temperature	°C	115		
Cooling System	Coolant Capacity - Engine Only	Litres	6,5		
	Standard Thermostat (Modulating) Range	°C	82-95		
	Maximum Coolant Temperature - Engine Out	°C	97		
Electric System	Electrical System Voltage	V	24		
	Battery	Maintenance-free			
Energy Balance	Heat Rejection of Exhaust	kW	44		
	Heat Rejection from Engine	kW	5,1		
	Heat Rejection to Coolant	kW	41,6		
Alternator		50Hz/1500rpm			
General Data	Manufacture / Brand	Werna			
	Model	WR224E			
	Coupling / No. of Bearings	Direct / Single Bearing			
	Phase / Poles	3-Phase / 4-Pole			
	Power Factor	Cos Φ = 0.8			
	AVR Regulation	Yes			
	Voltage Regulation	±1 %			
	Insulation Class	H			
	Drip Proof	IP23			
	Voltage Regulator	AVR			
	Altitude	≤1000 m			