



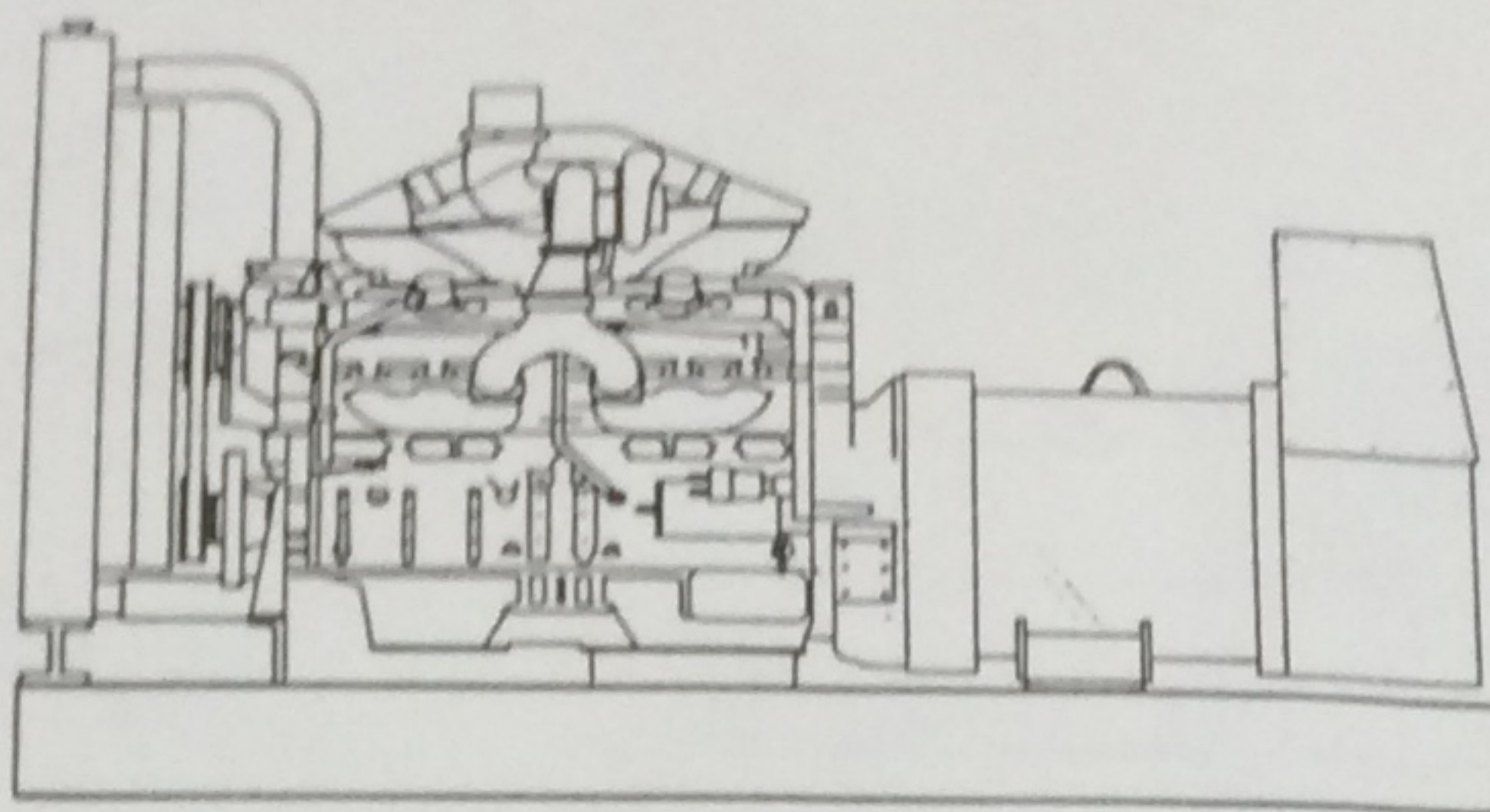
# KATOLIGHT® Diesel ENGINE GENERATOR SETS

## 600 KW

60 Hz

## 500 KW

50 Hz



### Model Selection / Rating Chart

MODEL NO. @ 60 Hz	STANDBY RATINGS & CHARACTERISTICS					
	KW*	RPM	VOLTS	KVA	PHASE	WIRE
D600FRX4	600	1800	277/480	750	3	12
D600FPX4	600	1800	120/208	750	3	12
D600FJX4	600	1800	120/240	750	3	12

MODEL NO. @ 50 Hz	STANDBY RATINGS & CHARACTERISTICS					
	KW*	RPM	VOLTS	KVA	PHASE	WIRE
D500FRX5	500	1500	220/380	625	3	12
D500FPX5	500	1500	110/190	625	3	12
D500FJX5	500	1500	110/220	625	3	12

### General Specifications

ENGINE	
TYPE: Vee Multi-Cylinder, Turbocharged Aftercooled	
CYCLE: 2	CYLINDER: 12
H.P.: 947 @ 1800 RPM	KW: 706 @ 1800 RPM
747 @ 1500 RPM	557 @ 1500 RPM
BORE: 4.8 in. (9.8 cm.)	STROKE: 5 in. (12.7 cm.)
PISTON DISPLACEMENT: 1104 in. <sup>3</sup> (18.1 lit.)	
BMEP: 103 psi (172 kPa)	
ASPIRATING: 2740 CFM @ 60 Hz (77.6 m <sup>3</sup> /m @ 60 Hz)	
2240 CFM @ 50 Hz (63.4 m <sup>3</sup> /m @ 50 Hz)	
FUEL CONSUMPTION: 49 gal/hr (185 lit/hr)	

GENERATOR	
TYPE: Revolving Field-Brushless-Direct Connected Exciter	
CONSTRUCTION: Single Bearing-Shielded-Close Coupled	
REGULATION: Static Regulator Maintains 1/2% of rated voltage	
INSULATION: Class F (Epoxy Vacuum Impregnated)	
CONNECTION: WYE or DELTA	
AMBIENT TEMPERATURE: 40° C.	

### Installation Facts

DIMENSION & WEIGHT	60 Hz Standby		50 Hz Standby	
Length	130 in.	(330 cm.)	130 in.	(330 cm.)
Width	56 in.	(143 cm.)	56 in.	(143 cm.)
Height	80 in.	(203 cm.)	80 in.	(203 cm.)
Weight	9,255 lb.	(6,928 kg.)	9255 lb.	(6,928 kg.)
LIQUID CAPACITY (Refill)				
Oil Sump	9.5 gal.	(36 lit.)	9.5 gal.	(36 lit.)
Jacket Water, engine only	13 gal.	(49 lit.)	13 gal.	(49 lit.)
Radiator, including eng., jacket water system & lines-standard cap.	40 gal.	(151 lit.)	40 gal.	(151 lit.)
EXHAUST SYSTEM				
Gas Temperature (stack)	765° F	(401° C)	750° F.	(399° C.)
Gas Volume at Stack Temperature	6,250 CFM	(177 m <sup>3</sup> /m)	5,050 CFM	(143 m <sup>3</sup> /m)
Maximum allowable back pressure	27 in. H <sub>2</sub> O	(50.4 mm. Hg)	19 in. H <sub>2</sub> O)	(35.5 mm. Hg)
COOLING SYSTEM				
Ambient Capability of Radiator	100° F.	(38° C.)	100° F.	(38° C.)
Maximum allowable static pressure on exhaust side of radiator	0.5 in. H <sub>2</sub> O	(12.7 mm. H <sub>2</sub> O)	0.5 in. H <sub>2</sub> O	(12.7 mm. H <sub>2</sub> O)
Heat rejection to engine jacket water (dry exhaust)	29,357 BTUM	(516 KW)	23,157 BTUM	(407 KW)
Water pump capacity	232 GPM	(878 lit/m)	189 GPM	(715 lit/m)
STARTING SYSTEM				
Electric volt DC	24 volt		24 volt	
Battery recommendation - Minimum temperature 0° F. (-17.7° C.)	220 Amp-Hr.		220 Amp-hr.	
AIR REQUIREMENTS				
Air flow required for Radiator Cooled unit	39,100 CFM	(1,107 m <sup>3</sup> /m)	32,300 CFM	(915 m <sup>3</sup> /m)
Air flow required for Heat Exchanger or Remote Radiator	16,822 CFM	(476 m <sup>3</sup> /m)	14,922 CFM	(423 m <sup>3</sup> /m)
Generator set radiated heat	7,570 BTUM	(133 KW)	6,715 BTUM	(118 KW)

ratings are at 1,000 feet (305 m.) and 85° F. (29° C.) ambient, Prime Power Rating 520 KW  
 er voltages available up to 600 volts AC.  
 ted in the USA