

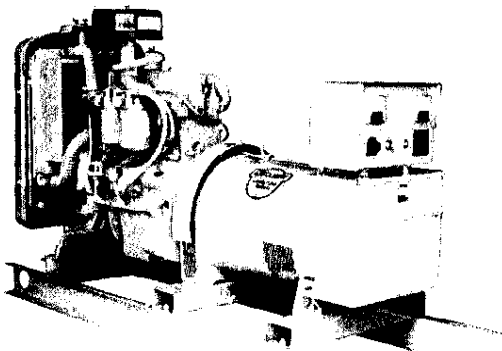
1989 Sept 2016



# KATOLIGHT® Diesel ENGINE GENERATOR SETS

**35 KW**  
60 Hz

**29 KW**  
50 Hz



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## Model Selection / Rating Chart

MODEL NO. @ 60 Hz	STANDBY RATINGS & CHARACTERISTICS					
	KW*	RPM	VOLTS	KVA @ .8 P.F.	PHASE	WIRE
D35FRH4	35	1800	277/480	43.75	3	12
D35FPH4	35	1800	120/208	43.75	3	12

MODEL NO. @ 50 Hz	STANDBY RATINGS & CHARACTERISTICS					
	KW*	RPM	VOLTS	KVA @ .8 P.F.	PHASE	WIRE
D29FRH5	29	1500	220/380	36.25	3	12
D29FPH5	29	1500	110/190	36.25	3	12

## General Specifications

ENGINE	
TYPE: Inline Multi-Cylinder, Naturally aspirated	
CYCLE: 4	CYLINDER: 4
H.P.: 61.5 @ 1800 RPM	KW: 45.8 @ 1800 RPM
53.5 @ 1500 RPM	40 @ 1500 RPM
BORE: 4 in. (10.1 cm.)	STROKE: 4.5 in. (11.4 cm.)
PISTON DISPLACEMENT: 226 in. <sup>3</sup> (3.7 lit.)	
BMEP: 107 psi (738 kPa)	
ASPIRATING: 105 CFM @ 60 Hz (49.5 lit/sec @ 60 Hz)	
88 CFM @ 50 Hz (41.5 lit/sec @ 50 Hz)	
FUEL CONSUMPTION: 3.1 gal/hr (12 lit/hr)	

GENERATOR	
TYPE: Revolving Field-Brushless-High Frequency Exciter	
CONSTRUCTION: Single-Bearing-Shielded-Close Coupled	
REGULATION: Static Regulator Maintains 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	78 in.	(198 cm.)	78 in.	(198 cm.)
Width	26 in.	(66 cm.)	26 in.	(66 cm.)
Height	45 in.	(114 cm.)	45 in.	(114 cm.)
Weight	1,800 lb.	(816 kg.)	1,800 lb.	(816 kg.)
LIQUID CAPACITY (Refill)				
Oil Sump	2 gal.	(7.6 lit.)	2 gal.	(7.6 lit.)
Jacket Water, engine only	2 gal.	(7.6 lit.)	2 gal.	(7.6 lit.)
Radiator, including eng., jacket water system, & lines-standard cap.	4 gal.	(15 lit.)	4 gal.	(15 lit.)
EXHAUST SYSTEM				
Gas Temperature (stack)	1,100° F.	(593° C.)	1,100° F.	(593° C.)
Gas Volume at Stack Temperature	308 CFM	(145 lit/sec)	308 CFM	(145 lit/sec)
Maximum allowable back pressure	35 in. H <sub>2</sub> O	(889 mm. H <sub>2</sub> O)	35 in. H <sub>2</sub> O	(889 mm. H <sub>2</sub> O)
COOLING SYSTEM				
Ambient Capability of Radiator	120° F.	(49° C.)	120° F.	(49° C.)
Maximum allowable static pressure on exhaust side of radiator	.61 in. H <sub>2</sub> O	(15.5 mm. H <sub>2</sub> O)	.61 in. H <sub>2</sub> O	(15.5 mm. H <sub>2</sub> O)
Heat rejection to engine jacket water (dry exhaust)	1,836 BTUM	(32.2 KW)	1,836 BTUM	(32.2 KW)
Water pump capacity	30 gpm	(1.9 lit/sec)	30 gpm	(1.9 lit/sec)
STARTING SYSTEM				
Electric volt DC	12 volt		12 volt	
Battery recommendation—Minimum temperature 0° F. (-17.7° C.)	54 Amp-hr.		54 Amp-hr.	
AIR REQUIREMENTS				
Air flow required for Radiator Cooled unit	7,200 CFM	(3,400 lit/sec)	6,400 CFM	(3,022 lit/sec)
Air flow required for Heat Exchanger or Remote Radiator	2,253 CFM	(1,064 lit/sec)	1,868 CFM	(881 lit/sec)
Generator set radiated heat	814 BTUM	(14 KW)	675 BTUM	(11.8 KW)

\* Derate 3% per 1,000 feet (305 m.) above 500 feet (152 m.) and 1% per 10° F. (5.5° C.) above 100° F. (38° C.)  
Other voltages available up to 600 volts AC.