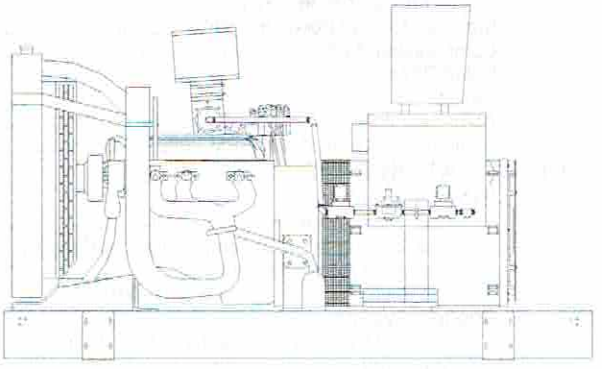
KATOLIGHT CORPORATION

30 kW @ 60 Hz.
Continuous Duty

VSNL30F*G4

Katolight's commitment to quality has been an industry standard since 1952. Katolight specializes in custom designing any application to meet the most difficult specifications. Each and every unit is factory tested. This can eliminate costly startup and installation delays. Katolight supplies a broad range of accessories to match any requirement worldwide. Katolight generator sets come standard with a 5 year, 1500 hour limited warranty. This model accepts 100% of nameplate rating, per NFPA 110. This model is a UL2200 generator set.



STANDARD EQUIPMENT

CONTROL PANEL

- Model #50 control panel
- AC voltmeter, $3^1/_2$, 2% accuracy
- AC ammeter, $3^1/_2$, 2% accuracy
- Combination VM/AM selector switch, 4 position
- Frequency meter, $3^1/_2$, 55-65 Hz.
- Vibration shock mounts (4)
- Engine control - KASSEC-12 VDC, with cyclic cranking timer
- 4 engine shutdowns with separate failure lights
  - * High water temperature / Low water level
  - * Low oil pressure
  - * Engine overspeed
  - * Engine overcrank
- Engine gauges - 2"
  - * Battery voltmeter
  - * Water temperature
  - * Oil pressure
  - * Running time meter - 5 digits
- 3 position mode switch (auto-off-manual)

ENGINE

- Air cleaner
- Oil pump
- Full flow oil filter
- Jacket water pump
- Thermostat
- Exhaust manifold – dry
- Blower fan & fan drive
- Radiator - unit mounted
- Vibration isolators - pad type
- Electric starting motor - 12V
- Turbocharged
- Governor – Electric Isochronous
- Base - formed steel
- Flywheel & Enclosure
- Charging alternator - 12V
- Battery box & cables
- Flexible fuel & exhaust connectors

GENERATOR

- A.C. Generator
- Brushless design
- Single bearing
- Direct connection with flex plate
- Class H insulation
- All models manufactured to meet NEMA MG1- 22.4 and CSA standards
- Telephone influence factor is well within NEMA standards
- Wave form deviation factor is no more than 5%, well within NEMA standards
- Harmonic content is 3.0% maximum
- Permanently lubricated ball type bearings
- Generator is self-ventilated
- Drip-proof construction

VOLTAGE REGULATOR

- Voltage adjust rheostat
- EMI filter (Internal Electromagnetic
- Interference)
- Underspeed protection
- Overexcitation protection
- Fully encapsulated
- Regulation - 1%

Model #	Volts	Hz	Phase	Power Factor	Natural Gas Continuous Duty 105°C Rise		LP Gas Continuous Duty 105°C Rise		Connection
					Amps	kVA/kW	Amps	kVA/kW	
30FRG4	277/480	60	3	0.8	45	30/37.5	45	30/37.5	12 LEAD HI WYE
30FPG4	120/208	60	3	0.8	104	30/37.5	104	30/37.5	12 LEAD LO WYE
30FJG4	120/240	60	3	0.8	90	30/37.5	90	30/37.5	12 LEAD HI DELTA
30FNG4	347/600	60	3	0.8	36	30/37.5	36	30/37.5	4 LEAD WYE
30FGG4	120/240	60	1	1.0	125	30/30	125	30/30	12 LEAD ZIG-ZAG
30FDG4	120/240	60	1	1.0	125	30/30	125	30/30	4 LEAD

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30 kW LP/NG Gen-Set

ENGINE TECHNICAL DATA

	60 Hz	
Model:	4.3L	
Type:	4-Cycle	
Aspiration:	Naturally	
Cylinder Arrangement: (Number, inline, V, etc.)	6-V	
Displacement - Cu. In. (lit)	262 (4.3)	
Bore - in. (cm) x stroke - in. (cm)	4.0 (10.2) x 3.5 (8.8)	
Compression Ratio:	9.2:1	
Rated RPM	1800	
Rating	**Standby**	**Prime**
BMEP: psi (kPa)	189 (613)	85 (586)
Maximum Power at Rated RPM - bhp (kW)	53 (40)	50 (38)

INSTALLATION DATA *

Exhaust System

Gas Temp. (Stack): °F (°C)	1,286 (697)	1,222 (661)
Gas Volume at Stack Temp.: CFM (m^3/min)	314 (8.9)	305 (8.6)
Maximum Allowable Back Pressure: in. H_2O (kPa)	40.7 (10.1)	40.7 (10.1)

Cooling System

Ambient Capacity of Radiator: °F (°C)	122 (50)	122 (50)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H_2O (kPa)	1.5 (0.37)	1.5 (0.37)
Water Pump Capacity: gpm (lit/min)	30.5 (116)	30.5 (116)
Heat Rejection to Coolant: BTUM (kW)	1,686 (29.6)	1,635 (28.7)
Heat Radiated to Ambient: BTUM (kW)	786 (13.8)	767 (13.5)

Air Requirements

Aspirating: CFM (m^3/min)	126 (3.6)	122 (3.5)
Air Flow Required for Rad. Cooled Unit: CFM (m^3/min)	4,911 (139)	4,665 (132)
Air Flow Required for Heat Exchanger/Remote Rad. based on 30°F Rise: CFM (m^3/min)	2,186 (61.8)	2,131 (60)

Fuel Consumption: (NG-1000 BTU/ft^3 / LP-2500BTU/ft^3)	**NG**	**LP**	**NG**	**LP**
At 100% of Power Rating: ft^3/hr (m^3/hr)	440 (12.5)	176 (5.0)	422 (11.9)	169 (4.8)
At 75% of Power Rating: ft^3/hr (m^3/hr)	330 (9.3)	132 (3.7)	314 (8.9)	126 (3.6)
At 50% of Power Rating: ft^3/hr (m^3/hr)	290 (8.2)	116 (3.3)	273 (7.7)	109 (3.1)

Sound Level Data ■

Sound level at:	**Full Load**
23 ft (7 m) opu w/ critical grade muffler (dBA)	76
23 ft (7 m) Crystal Quiet Enclosure (dBA)	65

Dimensions & Weight OPU

See Drawings
100-3501 for Indoor Model
100-3500 for Outdoor Model

Liquid Capacity

Total oil system: gal (lit)	1.1 (4.3)
Engine jacket water capacity: gal (lit)	1.9 (7.3)
System coolant capacity: gal (lit)	4.8 (18.1)

Electrical System

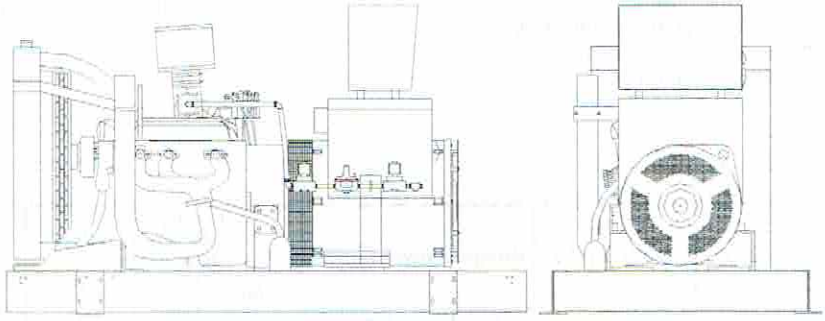
Electric volts DC	12
Cold cranking Amps under 0°F (-17.8°C)	600

Fuel System

Fuel Connection Size:	1" NPT
Fuel supply pressure in H_2O (mm H_2O)	7-11 (178-279)

Remote Radiator System

Connection sizes:	
Jacket water radiator inlet in. (cm)	2 (5.1)
Jacket water radiator outlet in. (cm)	2 (5.1)
Static head allowable above engine ft H_2O (kPa)	17 (50.8)



Drawing above for illustration purposes only, based on standard open power 240 volt generator. Lengths may vary with other voltages.

*Installation data based on 480 volt, 60 HZ. application and open power unit.
■ For sound level readings with other enclosures, please contact factory.
Sound level data acquired per Test Method SAE J1074. Installation factors and site conditions can affect sound levels.
Deration Factor: Altitude: Derate: 2% per 1,000 ft (305 m) above 10,500 ft (3,200 m). Temperature: Derate: 2% per 20°F (11°C) above 110°F (43°C)