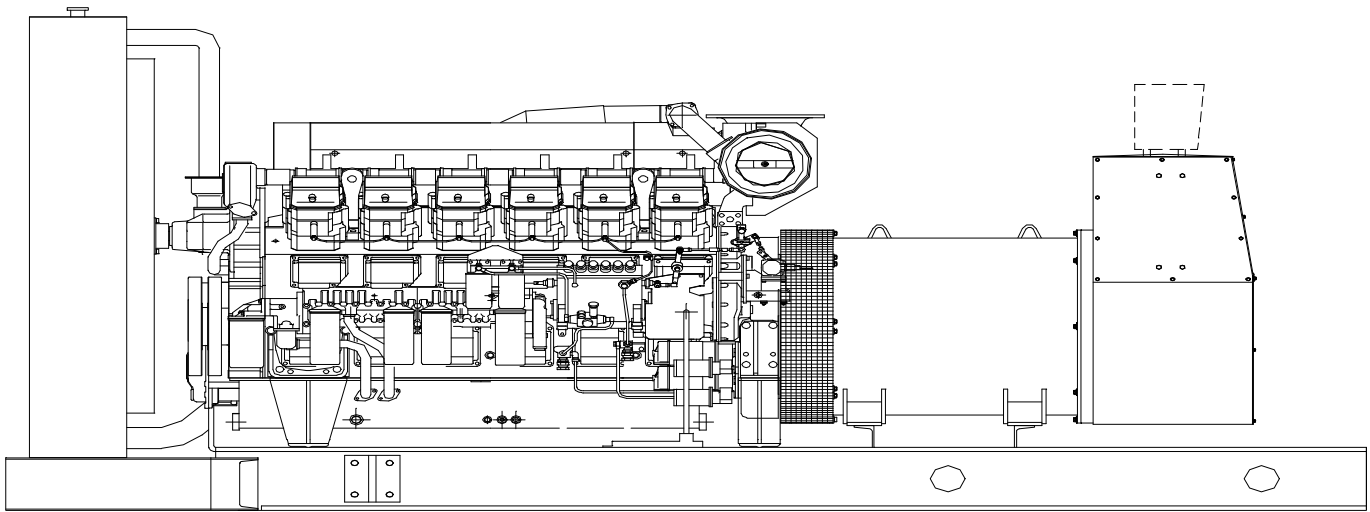


# DIESEL

# D1250F\*Y4

**1250 KW @ 60 Hz.**  
**Stand-By Power**

**1120 KW @ 60 Hz.**  
**Prime Power**



- Katolight's commitment to quality has been an industry standard since 1952.
- Katolight specializes in custom designing any application to meet the customers' 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, fully integrated to our generator sets, to match any requirement worldwide.
- Katolight generator sets come standard with a 2 year, 1500 hour limited warranty. Optional warranty periods are also available, contact factory for details.
- This model accepts 100% of nameplate rating, per NFPA 110.

Katolight Model	Volts	Hz	Phase	Power Factor	Standby Amps	Standby Ratings kW/kVA	Prime Ratings kW/kVA	Connection
D1250FRY4	277/480	60	3	0.8	1879	1250/1562.5	1120/1400	4 LEAD WYE
D1250F*Y4	220/380	60	3	0.8	2374	1250/1562.5	1120/1400	4 LEAD WYE
D1250FNY4	347/600	60	3	0.8	1504	1250/1562.5	1120/1400	4 LEAD WYE
D1250FSY4	2400/4160	60	3	0.8	217	1250/1562.5	1120/1400	6 LEAD WYE

Form 1250Y/0103

### STANDARD EQUIPMENT

#### CONTROL PANEL

- Model #45 control panel
- AC voltmeter, 3<sup>1</sup>/<sub>2</sub>, 2% accuracy
- AC ammeter, 3<sup>1</sup>/<sub>2</sub>, 2% accuracy
- Combination VM/AM selector switch, 4 position
- Frequency meter, 3<sup>1</sup>/<sub>2</sub>, 55-65 Hz.
- Vibration shock mounts (4)
- Engine control - KASSEC- 24 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
- Fuel pump
- Fuel filter
- Oil pump
- Full flow oil filter
- Jacket water pump
- Thermostat
- Exhaust manifold – dry
- Oil cooler
- Blower fan & fan drive
- Radiator - unit mounted
- Vibration isolators - pad type
- Electric starting motor - 24v

#### ENGINE (cont.)

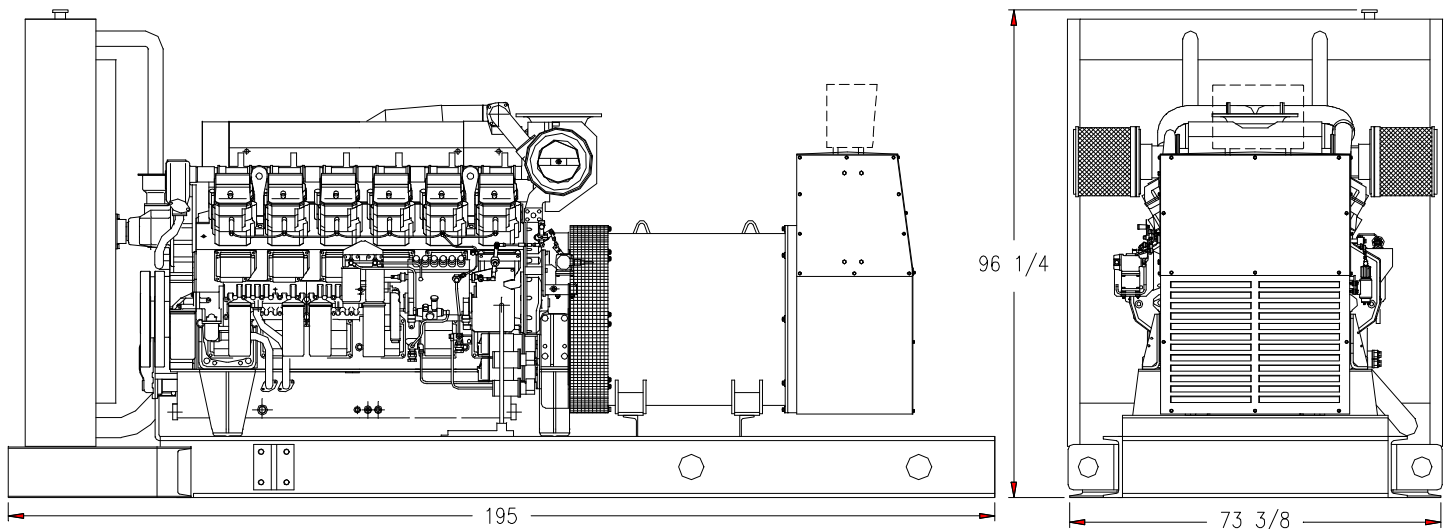
- Turbocharged
- Governor – Electric Isochronous
- Base - formed steel
- Housing & flywheel
- Charging alternator - 24v
- Battery box & cables
- Flexible fuel & exhaust connectors

#### 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
- Regreasable type ball 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 –  $\pm 0.25\%$



Drawing above for illustration purposes only, based on standard open power 480 volt generator. Lengths may vary with other voltages.

# KATOLIGHT

## D1250F\*Y4 Diesel Gen-Set

### ENGINE TECHNICAL DATA

Model:	60 Hz	S12R-PTA2
Type:	4-Cycle	
Aspiration:	Turbocharged - Aftercooled	
Cylinder Arrangement:		
(Number, inline, V, etc.):	12-V	
Displacement - Cu. In. (lit)	2,992 (49.0)	
Bore - in. (cm) x stroke - in. (cm)	6.7 (17.0) x 7.1 (18.0)	
Compression Ratio:	13.5:1	
Rated RPM	1800	
Rating	Standby	Prime
BMEP: psi (kPa)	290 (1,999)	264 (1,819)
Maximum Power at Rated RPM - bhp(kW)	1,972 (1,471)	1,798 (1,340)

### INSTALLATION DATA \*

Dimensions & Weight		
Length: in. (cm)	195 (495)	
Width: in. (cm)	73.4 (186)	
Height: in. (cm)	96.3 (245)	
Weight (dry): lb. (Kg)	18,505 (8,394)	
Liquid Capacity		
Total Oil System: gal (lit)	47.6 (180)	
Engine Jacket Water Capacity: gal (lit)	33.0 (125)	
System Coolant Capacity: gal (lit)	98.7 (374)	
Electrical System		
Electric Volts DC	24	
Cold Cranking Amps		
to 23°F (-5°C)	1,250	
Exhaust System		
Gas Temp. (Stack): °F (°C)	914 (490)	878 (470)
Gas Volume at Stack Temp.: CFM (m³/min)	10,847 (307)	10,240 (290)
Maximum Allowable Back		
Pressure: in. H <sub>2</sub> O (kPa)	23.6 (5.9)	23.6 (5.9)
Emissions - HC: g/hp-hr	0.28	C/F
Emissions - CO: g/hp-hr	1.0	C/F
Emissions - NO <sub>x</sub> : g/hp-hr	7.2	C/F
Cooling System		
Ambient Capacity of Radiator: °F (°C)	122 (50)	122 (50)
Maximum Allowable Static		
Pressure on Rad. Exhaust: in. H <sub>2</sub> O (kPa)	0.5 (.12)	0.5 (.12)
Water Pump Capacity: gpm (lit/min)	489 (1,850)	489 (1,850)
Heat Rejection to Coolant: BTUM (kW)	48,211 (847)	43,874 (771)
Heat Radiated to Ambient: BTUM (kW)	10,047 (177)	7,854 (138)
Air Requirements		
Aspirating: CFM (m³/min)	4,102 (116)	3,884 (110)
Air Flow Required for Rad.		
Cooled Unit: CFM (m³/min)	48,520 (1,374)	46,210 (1,309)
Air Flow Required for Heat		
Exchanger/Remote Rad.		
based on 20°F Rise: CFM (m³/min)	27,908 (790)	21,817 (618)
Fuel Consumption: gal/hr (lit/hr)		
At 100% of Power Rating:	83.0 (314)	89.2 (337)
At 75% of Power Rating:	62.3 (236)	59.6 (225)
At 50% of Power Rating:	43.1 (163)	45.1 (170)
Sound Level Data ♦		
Sound level at full load		
23 ft (7m) opu w/ critical grade muffler (dBA)	87.3	86.9
23 ft (7m) Sound Attenuated Housing (dBA)	83.1	82.7
Sound level at no load		
23 ft (7m) opu w/ critical grade muffler (dBA)	86.1	85.8
23 ft (7m) Sound Attenuated Housing (dBA)	82.4	82.0
Deration		
Altitude		
2.5% per 984 ft above	4,921 ft	
2.5% per 300 m above	1,500 m	
Temperature		
4% per 18°F above	104°F	
4% per 10°C above	40°C	

\* Installation data based on 480 volt, 60 Hz. application and open power unit.

♦ For sound level readings with other Katolight housings, please contact factory.

Sound level data acquired per Test Method SAE J1074. Installation factors and site conditions can affect sound levels.

# OPTIONS

## *Diesel Gen-Set*

### Control Panel

\*\* NOTE: #45 series control panel is standard on all units, see page 2 of spec sheet for standard features.

- Model #45 Series Control Panel Options
  - Emergency stop button
  - Alarm buzzer with silencing switch
  - Auxiliary relay for dry contacts (2 max.)
  - A separate low water level light is optional
  - Hooded panel lights (2) and on/off switch
  - NEMA 12 Panel Face
  - Additional LED lights (4 max.) One or two of the following conditions may be indicated:
    - ☐ unit not in auto
    - ☐ low fuel level
    - ☐ low water level
    - ☐ low water temp.
    - ☐ EPS supplying load
    - ☐ pre-alarm oil
    - ☐ pre-alarm temp.
    - ☐ charger malfunction
- Model #50 Series Control Panel

STANDARD FEATURES: same as #45 series control panel except for these added features:

  - Hooded panel lights (2) and on/off switch
  - 4 Engine shutdowns
  - 12 light engine control package meeting NFPA-110 requirement
  - Repetitive alarm buzzer and silencing switch
  - Light and alarm press to test
- #50 SERIES OPTIONS
  - Emergency stop button
  - Additional space for one 3<sup>1</sup>/<sub>2</sub> meter
  - Auxiliary relay for dry contacts (2 max.)
  - A separate low water level light is optional
  - Additional LED lights (4 max.) One to four additional conditions may be indicated: customer to specify
  - NEMA 12 Panel Face
- Model #60 and #80 Series Custom Control Panels
  - It may be necessary to use a 60 or 80 series control panel on certain units where numerous options are required.
- Microprocessor Control Panel – KDGC

## GEN-SET OPTIONS

### Cooling System

- Remote Radiator
- High Ambient Radiator
- Heat Exchanger Cooling
- Radiator Duct Flange

### Fuel System

- Fuel/Water Separator
- Day Tank
- Above Ground Fuel Tank
- Auxiliary Fuel Pump
- Sub-Base Mounted Fuel Tank
  - ☐ Single Wall
  - ☐ Double Wall
  - ☐ UL Listed

### Exhaust System

- Residential Grade Muffler
- Critical Grade Muffler
- Hospital Grade Muffler
- Rain Cap

### Engine Electrical System

- Battery
  - ☐ Lead-Acid
  - ☐ Nicad
- Battery Warmer Plate
- Battery Rack
- Battery Charger
  - ☐ Automatic
  - ☐ Trickle
  - ☐ Mounted & Wired

### Generator

- Main Line Circuit Breaker
  - ☐ Shunt trip
  - ☐ Auxiliary switch
- PMG Excitation & DVR 2000 Regulator
- Medium voltage available up to 4160 volt
- Space Heaters 120/240 volt
- Special Testing
- Additional Temperature Rise Generators Available (80°C, 105°C, & 130°C)

### Additional Optional Equipment

- Spring vibration isolators
- Oil Drain Extension
- Housings
  - ☐ Sound Attenuated
  - ☐ Weather Proof
  - ☐ Aluminum
  - ☐ Interior lights AC or DC
  - ☐ Floor Plate
- Jacket Water Heater
- Crankcase Oil Heater
- Remote Annunciator
- 12 Light Annunciator
  - ☐ Flush Mounted
  - ☐ Surface Mounted
  - ☐ 4 additional lights, if needed
- Export Boxing
- Warranties
  - ☐ 2 Year
  - ☐ 5 Year
- Operating instructions under plexi-glass
- Service indicator light