

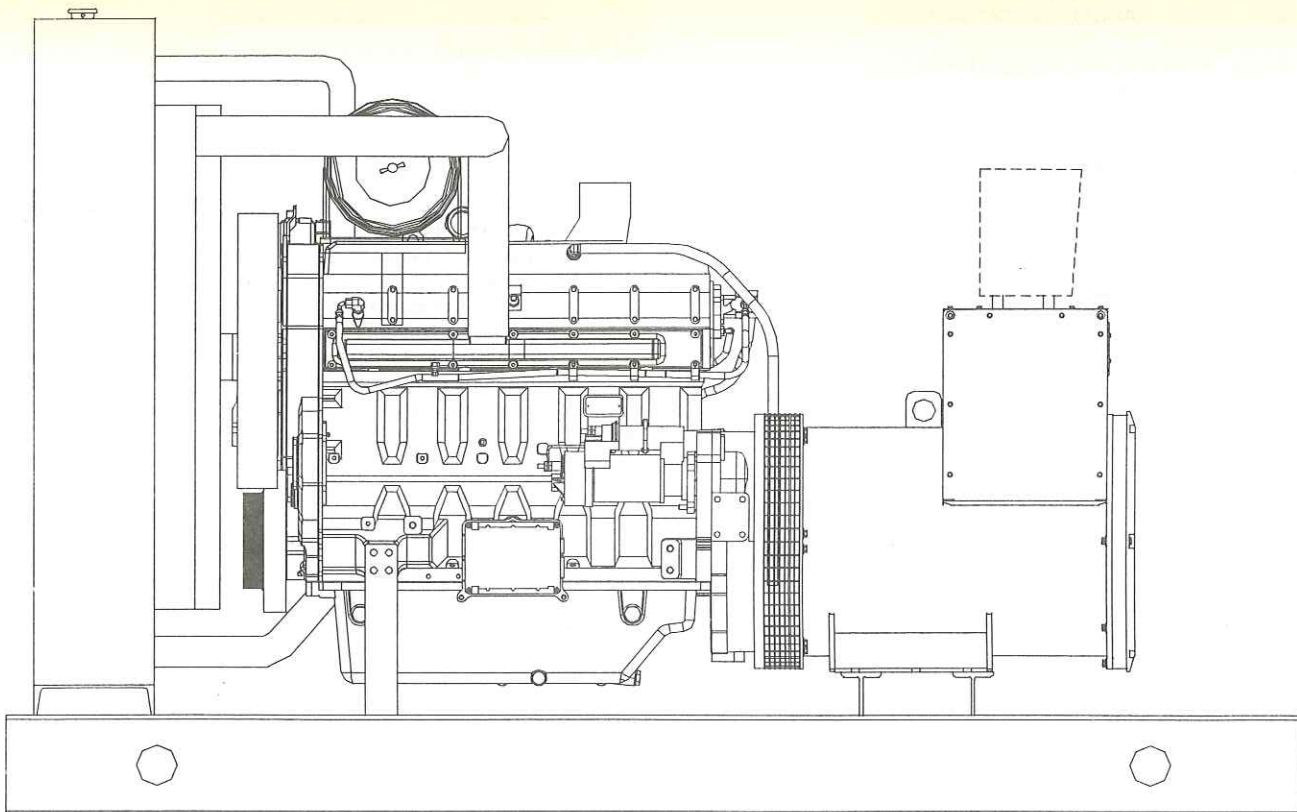
DIESEL

D415F*J4



415 KW @ 60 Hz.
Stand-By Power

345 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.

Model	Volts	Hz	Phase	Power Factor	Standby Ratings		Prime Ratings		Connection
					Amps	kW/kVA	Amps	kW/kVA	
D415FRJ4	277/480	60	3	0.8	624	415/518.75	519	345/431.25	12 LEAD HI WYE
D415FPJ4	120/208	60	3	0.8	1440	415/518.75	1197	345/431.25	12 LEAD LOW WYE
D415FJJ4	120/240	60	3	0.8	1248	415/518.75	1037	345/431.25	12 LEAD HI DELTA
D415FNJ4	347/600	60	3	0.8	499	415/518.75	415	345/431.25	4 LEAD WYE
D415FGJ4	120/240	60	1	1.0	1729	415/415	1438	345/345	12 LEAD ZIG-ZAG

STANDARD EQUIPMENT

CONTROL PANEL

- Model #45 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-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.)

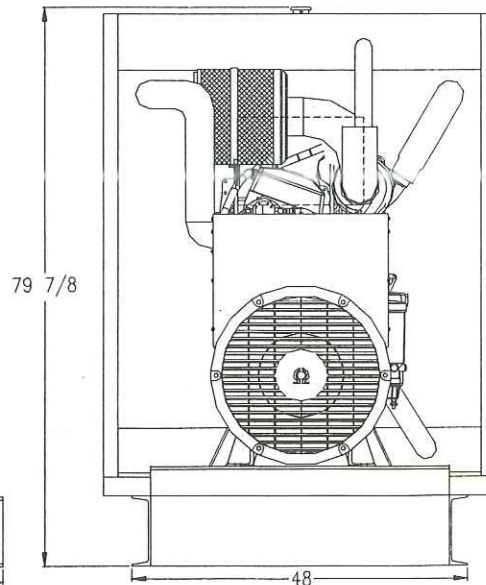
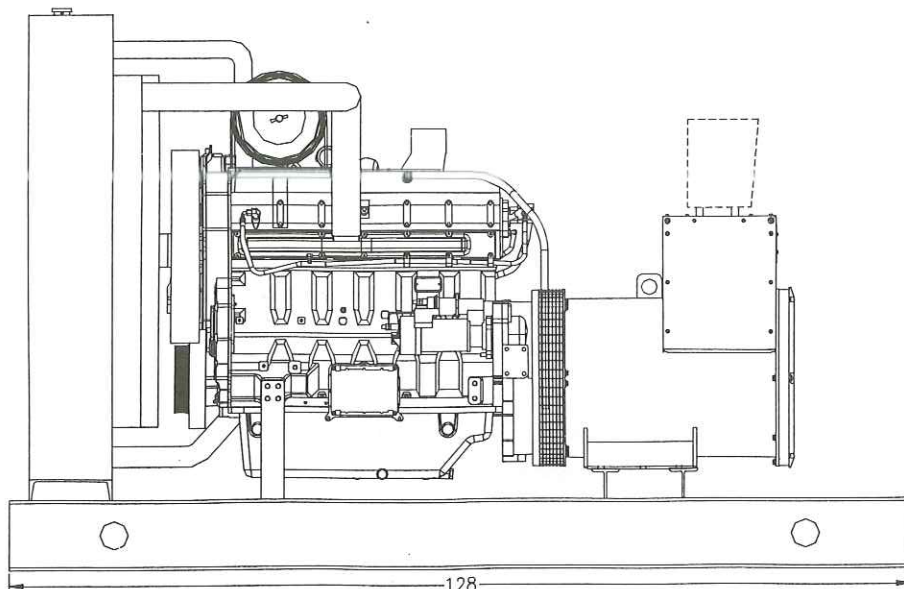
- Turbocharged - Air to Air
- Governor - JDEC
- Base - formed steel
- Housing & flywheel
- Charging alternator - 24v
- Battery box & cables
- Flexible fuel & exhaust connectors

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
- 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 - $\pm .25\%$



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

KATOLIGHT

D415F*J4

Diesel Gen-Set

ENGINE TECHNICAL DATA

Model:	60 Hz
Type:	6125HF070
Aspiration:	4 - Cycle
Cylinder Arrangement:	Turbocharged - Air to Air Intercooled
(Number, inline, V, etc.):	6 - Inline
Displacement - Cu. In. (lit)	766 (12.5)
Bore - in. (cm) x stroke - in. (cm)	5.0 (12.7) x 6.5 (16.5)
Compression Ratio:	16:1
Rated RPM	1800
Rating	Standby Prime
BMEP: psi (kPa)	353 (2,436) 294 (2,027)
Maximum Power at Rated RPM - hp(kW)	617 (460) 512 (382)

INSTALLATION DATA *

Dimensions & Weight

Length: in. (cm)	128 (325)
Width: in. (cm)	48 (122)
Height: in. (cm)	79.9 (203)
Weight (dry): lb. (Kg)	5,745 (2,606)

Liquid Capacity

Total Oil System: gal/(lit)	11 (42)
Engine Jacket Water Capacity: gal/(lit)	4.3 (16.2)
System Coolant Capacity: gal/(lit)	27.6 (104.5)

Electrical System

Electric Volts DC	24
Cold Cranking Amps	
under 0°F (-17.8°C)	900

Exhaust System

Gas Temp. (Stack): °F (°C)	936 (502)	752 (400)
Gas Volume at Stack Temp.: CFM (m³/min)	3,069 (87)	2,365 (67)
Maximum Allowable Back Pressure:		
in. H2O (kPa)	30 (7.5)	30 (7.5)
Emissions - HC: g/hp-hr	0.20	C/F
Emissions - CO: g/hp-hr	0.68	C/F
Emissions - NOx: g/hp-hr	4.32	C/F

Cooling System

Ambient Capacity of Radiator: °F (°C)	118 (48)	118 (48)
Maximum Allowable Static Pressure on Rad. Exhaust:		
in. H2O (kPa)	0.5 (.12)	0.5 (.12)
Water Pump Capacity: gpm (lit/min)	73 (276)	73 (276)
Heat Rejection to Coolant: BTUM (kW)	9,502 (167)	8,338 (147)
Heat Rejection to Air/Air Exchanger: BTUM (kW)	7,554 (133)	4,173 (73)
Heat Radiated to Ambient: BTUM (kW)	5,239 (92)	3,772 (66)

Air Requirements

Aspirating: CFM (m³/min)	1,280 (36.2)	1,059 (30)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	18,100 (513)	17,200 (487)
Air Flow Required for Heat Exchanger/Remote Rad. based on 20°F Rise: CFM (m³/min)	N/A	N/A

Fuel Consumption: gal/hr (lit/hr)

At 100% of Power Rating:	30.9 (117.4)	20.3 (77.2)
At 75% of Power Rating:	20.5 (78)	15.6 (59.2)
At 50% of Power Rating:	14.4 (54.5)	11.2 (42.5)

Sound Level Data ♦

Sound level at full load		
23 ft (7m) opn w/ critical grade muffler (dBA)	91.5	91.1
23 ft (7m) Sound Attenuated Housing (dBA)	85.1	84.6
Sound level at no load		
23 ft (7m) opn w/ critical grade muffler (dBA)	89.6	89.0
23 ft (7m) Sound Attenuated Housing (dBA)	84.1	84.3

Deration

Altitude	
5% per 1,000 ft above	9,000 ft
5% per 305 m above	2,745 m
Temperature	
.5% per 10°F above	77°F
.5% per 5.5°C above	25°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 1/2 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

- ☐ 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 (2-pole or 3-pole)
 - ☐ 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
- ☐ Trailer Mounting
- ☐ 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

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