

## POWER SYSTEMS & SERVICES



### SPECIFICATION & APPLICATION DATA



### **DESCRIPTION:**

POWERFORCE® Oil & Gas industry generators are designed to meet the rugged demands of the Oil & Gas industry environment, from exploration to production. Each model has been designed to provide reliable continuous power for typical Oil & Gas industry electrical loads. All models are extensively tested to ensure they meet the performance requirements of the industry.

POWERFORCE® generators are packaged in our purpose-built generator assembly and test facility. Each set goes through a fully documented test procedure before leaving our plant.

POWERFORCE® models utilize the PSI Natural Gas engines governed to run at 1800 rpm for long life and durability.

All Oil & Gas industry generators are designed and packaged as Prime Power Rated sets. See rating below for prime power kW.

### STANDARD FEATURES:

- · Oil Makeup Tank 16 Gallon Kenco
- · Air Filter System Single Stage Replaceable Filter
- · Gas Treatment Scrubber
- Dual Fuel LPG, NG, Wellhead NG Compatible with Auto Switch
- Exhaust System Dual: Catalyst and USFS Spark Arrestor
- · Lubrication Murphy/Kenco Oil Replenishment
- · Safety Shutdown Low Oil Pressure; Low Coolant Level, High Oil Temp

## **OPTIONAL EQUIPMENT:**

- · Block Heater Kim Hotstart 6000W; 7.2A; 480V
- · Cold Weather Options CCV, Fuel Train

### **ENGINE ELECTRICAL SYSTEM:**

Starting Motor Voltage	24DCV
Charger Amps	45
Battery Ampere Hours	200AH/1000CCA

#### POWER RATINGS: STANDBY: PRIME:

GASEOUSE FUEL	kW I kVA I Amp	kW I kVA I Amp		
LPG	315   394   474A	266   333   401A		
NATURAL GAS (NG)	444   555   668A**	390   488   587A		
AMPERAGE	480V	@480V		

### **ENGINE SPECIFICATION:**

Manufacturer	PSI
Model	D21.9L
Emissions	US EPA Certified
Engine Speed (RPM)	1800
Max. HP Power 1800 RPM	684 IS03046
Cylinder Arrangement	V-12
Combustion System	Stoichiometric
Aspiration	Turbocharged
Engine Type	Diesel Derivative
Fuel	Natural Gas / LPG
Number of Cylinders	12
Displacement in3 (liters)	21.9
Bore & Stroke inches (mm)	5.04x5.59
Cooling	Coil and Tube
Starting Aids	None
Compression Ratio	10.5:1
Air Cleaner Type	Dry
Exhaust Silencer dBA	USFS Spark Arrestor
Fuel Switch	Automatic

### **ALTERNATOR:**

Configuration	4 Pole 3 Phase/NEMA Class H Insulation
Frequency	60HZ
Voltage Regulation	Automatic
No Load to full load regulation	
Coupling	Direct
Bearing	Single
Manufacturer	STAMFORD
Model	S4L1D-F41
Load Acceptance	-
Compliance	-
Construction	-

# CONTROL PANEL: DGC-2020HD, DIGITAL GENSET CONTROLLER



The DGC-2020HD is a is equipped with a proven generator digital controller for rugged environments such as C&I applications, drill platforms, pump jack sites, and landfills. The premium control box has the capability to control the generator set manually, remotely or automatically.

- NFPA-110 compliant
- User friendly, fully-configurable, programmable, microprocessor-based logic controller
- Off-line Simulator Best-logic ™ helps identify and troubleshoot the logic
- · High contrast display is easy to

### WARRANTY / DISCLAIMER:

Except as may be expressly covered under applicable manufacturer(s) parts/product warranty, Central Power Systems & Services (CPS&S) liability arising out of service, repairs, or workmanship shall not exceed the cost of the original repair or service. Further, under no circumstances shall CPS&S be liable for incidental, consequential or other economic loss damages to customer. This includes but may not be limited to loss of use of equipment or vehicle, down time, inconvenience, cargo damage, overtime or any other costs or expenses resulting from services, repairs or workmanship.

### ARRANGEMENT:

Coupling	Flexible	
Enclosure	Yes	
Base Arrangement	Generator & Containment	
Spill Containment	110%	

## LUBRICATING SYSTEM:

Total Lubricating Capacity quarts (liter)	42.25/40
Recommended lubricating oil grade	SAE 15W-40
Oil Pressure minimum 1800RPM- psi (bars)	43.5/3
Max. allowable Oil Temp F (C)	250/121

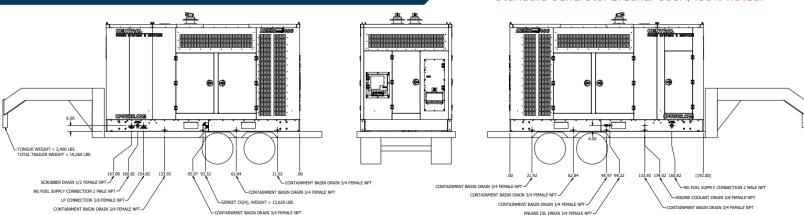
### COOLING SYSTEM FOR OPERATING AT 120° AMBIENT

Cooling System	Radiator CAC Combo
Engine Coolant Capacity quarts. (liters)	50.1 Gallon
Fan	Pusher
Radiator	PSI
Cooling Air Flow	40,000

# DIMENSIONS, WEIGHTS & SOUND LEVELS

Engine Data: PSI Spec Sheet 56100041, Rev 1.

\*\* Standard Generator Breaker 600A, 100% Rated.



#### **FUEL DATA:**

### GENERATOR SET ENCLOSURE DEMENSIONS\* (ALL ARE IN INCHES & ARE APPROXIMATED)

Type	Consumptions (cu. Ft./ hour)	Length	Width	Height	Weight LBS	dBA
Natural Gas/LPG	4230 NG (1480 LPG)	192"	90.5"	117.75 " I 9.8'	14,540 dry	86

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