G25LTA

Liquid Cooled Gas Engine Generator Sets

Standby Power Rating
25 kW 60 Hz

2.4L ENGINE
Naturally Aspirated
Gaseous Fueled
G25LTA
Meets 2009 EPA Emission Regulations

STANDARD EQUIPMENT

- All input connections in one single area
- High coolant temperature shutdown
- Low oil pressure shutdown
- Low coolant level automatic shutdown
- Overspeed automatic shutdown
- Crank timer
- Exercise timer
- Oil drain extension
- Cool flow radiator
- Closed coolant recovery system
- UV/Ozone resistant hoses
- Watertight state of the art electrical connectors
- Mainline circuit breaker
- Radiator drain extension
- Battery charge alternator
- 10 Amp static battery charger
- Battery and battery cables
- Battery rack
- Fan and belt guards
- Isochronous governor
- Flex fuel line
- Coolant heater

FEATURES

- Innovative design and fully prototype tested
- UL2200 Listed
- Solid state frequency compensated voltage regulator
- Dynamic and static battery charger
- Sound attenuated acoustically designed enclosure
- Low noise level exercise mode
- Acoustically designed engine cooling system
- High flow low noise factory engineered exhaust system
- State of the art digital control system with H100 digital control panel
- Watertight electrical connectors
- Rodent proof construction
- High efficiency, low distortion alternator
- Vibration isolated from mounting base
- All components easily accessible for maintenance
- Electrostatically applied powder paint

OLYMPIAN™

APPLICATION & ENGINEERING DATA

G25LTA

GENERATOR SPECIFICATIONS

TYPE	Synchronous
ROTOR INSULATION	Class H
STATOR INSULATION	Class H
TOTAL HARMONIC DISTORTION	<5%
TELEPHONE INTERFERENCE FACTOR (TIF)	<50
ALTERNATOR OUTPUT LEADS 3 PHASE	4 wire
BEARINGS	Sealed Ball
COUPLING	Flexible Disc
LOAD CAPACITY (STANDBY RATING)	25 kW
EXCITATION SYSTEM	Direct

NOTE: Generator rating and performance in accordance with ISO8528-5, BS5514, SAE J1349, ISO3046, and DIN6271 standards.

VOLTAGE REGULATOR

TYPE	Full Digital
SENSING	3 Phase
REGULATION	± 1/4%
FEATURES	Built into H-100 Control Panel V/F Adjustable Adjustable Voltage and Gain

GENERATOR FEATURES

- ❒ Revolving field heavy duty generator
- ❒ Directly connected to the engine
- ❒ Operating temperature rise 120 °C above a 40 °C ambient
- ❒ Insulation is Class H rated at 150 °C rise
- ❒ All prototype models have passed three phase short circuit testing

CONTROL PANEL FEATURES

❒ TWO FOUR LINE LCD DISPLAYS READ:

- Voltage (all phases)
- Power factor
- kVAR
- Engine speed
- Run hours
- Fault history
- Coolant temperature
- Low oil pressure shutdown
- Overvoltage
- Low coolant level
- Not in auto position (flashing light)
- Current (all phases)
- kW
- Transfer switch status
- Low fuel pressure
- Service reminders
- Oil pressure
- Time and date
- High coolant temperature shutdown
- Overspeed
- Low coolant level
- Exercise speed

❒ INTERNAL FUNCTIONS:

- I^2T function for alternator protection from line to neutral and line to line short circuits
- Emergency stop
- Programmable auto crank function
- 2 wire start for any transfer switch
- Built-in 7 day exerciser
- Adjustable engine speed at exerciser
- RS232 port for GenLink® control
- RS485 port remote communication
- Canbus addressable
- Governor controller and voltage regulator are built into the master control board
- Temperature range -40 °C to 70 °C

ENGINE SPECIFICATIONS

ENGINE	Gaseous
TYPE	Inline
CYLINDERS	4
DISPLACEMENT	2.4 Liter
BORE	3.41
STROKE	3.94
COMPRESSION RATIO	8.5:1
INTAKE AIR SYSTEM	Naturally Aspirated
VALVE SEATS	Hardened
LIFTER TYPE	Hydraulic

GOVERNOR SPECIFICATIONS

TYPE	Electronic
FREQUENCY REGULATION	Isochronous
STEADY STATE REGULATION	± 0.25
ADJUSTMENTS FOR:	
Speed	Yes
Droop	Yes

ENGINE LUBRICATION SYSTEM

OIL PUMP	Gear
OIL FILTER	Full flow spin-on cartridge
CRANKCASE CAPACITY	4 Quarts

ENGINE COOLING SYSTEM

TYPE	Closed
WATER PUMP	Belt driven
FAN SPEED	2150
FAN DIAMETER	18 inches
FAN MODE	Pusher
COOLANT HEATER	1500W 120V

FUEL SYSTEM

FUEL TYPE	Natural gas, propane vapor
CARBURETOR	Down Draft
SECONDARY FUEL REGULATOR	Standard
FUEL SHUT OFF SOLENOID	Standard
OPERATING FUEL PRESSURE	5" - 14" H_2O

ELECTRICAL SYSTEM

BATTERY CHARGE ALTERNATOR	12V 30 Amp
STATIC BATTERY CHARGER	10 Amp
BATTERY	Group 26, 525CCA
SYSTEM VOLTAGE	12 Volts

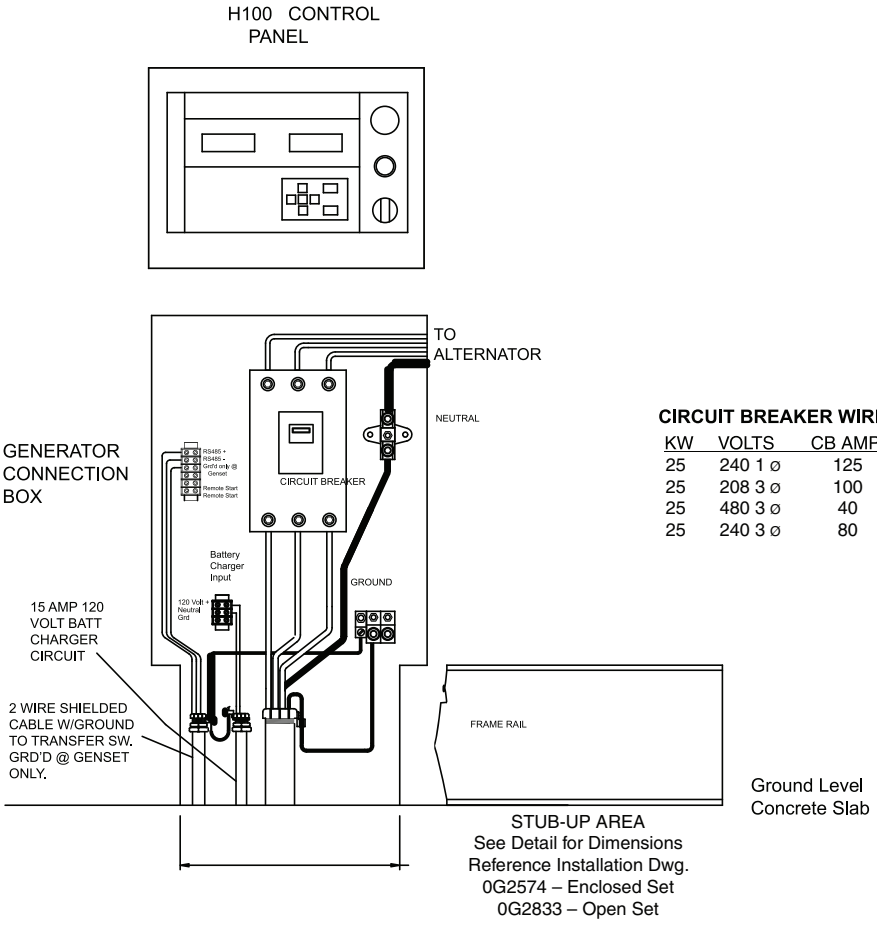
Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046, ISO8528 and DIN6271).

OPERATING DATA

	G25LTA		
KW RATING	25		
ENGINE SIZE	2.4 Liter 4 cylinder		
GENERATOR OUTPUT VOLTAGE/KW - 60Hz	**KW**	**AMP**	**CB Size**
120/240V, 1-phase, 1.0 pf	25	104	125
120/208V, 3-phase, 0.8 pf	25	87	100
277/480V, 3-phase, 0.8 pf	25	38	40
120/240V, 3-phase, 0.8 pf	25	75	80
GENERATOR LOCKED ROTOR KVA AVAILABLE @ VOLTAGE DIP OF 35%			
Single phase or 208 3-phase		43	
480V 3-phase		57	
ENGINE FUEL CONSUMPTION (Natural Gas) (Propane)	**Natural Gas** (ft^3/hr.)	**Propane** (gal/hr.)	cu ft/hr
Exercise cycle	60	0.65	24
25% of rated load	140	1.53	56
50% of rated load	220	2.40	87
75% of rated load	300	3.27	119
100% of rated load	380	4.15	151
ENGINE COOLING			
Air flow (inlet air including alternator and combustion air) ft^3/min.		1,500	
System coolant capacity US gal.		2.5	
Heat rejection to coolant BTU/hr.		95,000	
Max. operating air temp. on radiator °C (°F)		60 (150)	
Max. ambient temperature °C (°F)		50 (140)	
COMBUSTION AIR REQUIREMENTS			
Flow at rated power 60 Hz cfm		70	
SOUND EMISSIONS IN DBA			
Exercising at 7 meters		54	
Normal operation at 7 meters		60	
EXHAUST			
Exhaust flow at rated output 60 Hz cfm		220	
Exhaust temp. at muffler outlet °F		975	
ENGINE PARAMETERS			
Rated synchronous RPM 60 Hz		1800	
HP at rated KW 60 Hz		40	
POWER ADJUSTMENT FOR AMBIENT CONDITIONS			
Temperature Deration			
3% for every 10 °C above - °C		25	
1.65% for every 10 °F above - °F		77	
Altitude Deration			
1% for every 100 m above - m		183	
3% for every 1000 ft. above - ft.		600	

RATING: All three phases units are rated at 0.8 power factor. All single phase units are rated at 1.0 power factor. STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice. KW rating is based on LPG Fuel and may derate with natural gas.

INTERCONNECTIONS



CIRCUIT BREAKER WIRE AND CONDUIT SIZE

KW	VOLTS	CB AMPS	LUG SIZE
25	240 1 ø	125	#2 to 1/0
25	208 3 ø	100	#4 to 1/0
25	480 3 ø	40	#6 to 300 MCM
25	240 3 ø	80	#4 to 1/0

INSTALLATION LAYOUT