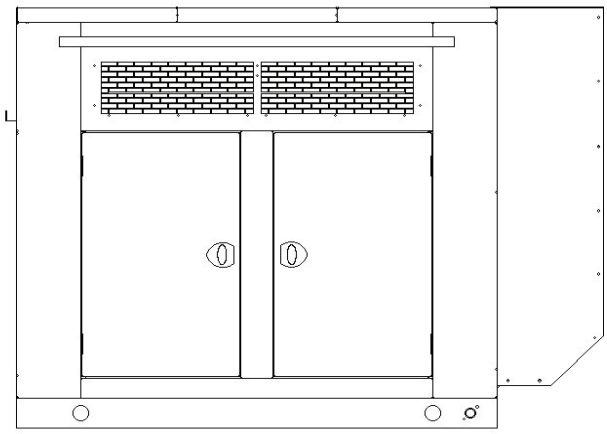
SOMMERS

Generator Systems

3YR or 3000Hr Limited Parts, Travel & Labour warranty

60Hz **PSI 8.8LT CAC-NG**

NPWAS150ST

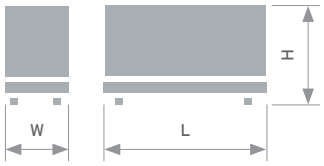


Measures:

L: 3251 mm H: 2184 mm
W: 1321 mm

Weight (dry):

5390 lbs / 2445 kg



60Hz | N/G | Water cooled | Soundproofed | 1800 | CSA Approved or Equivalent

1 Genset General Description

› Soundproof generator sets equipped with controllers to protect equipment and allow for manual of auto start up signals.

General Technical Data			
Engine	PSI 8.8LT CAC-NG		
Alternators	240/120V	Wdg. ·06	STAMFORD UCI274F-w06
	208/120V	Wdg. 311	STAMFORD UCI274G
	600/347V	Wdg. 17	STAMFORD UCI274F
Performance Class	N/A		
Frequency	60Hz		
Control Panel	240/120V		DSE 7310 MKII
	208/120V		DSE 7310 MKII
	600/347V		DSE 7310 MKII
Noise level (dBA@7m)	73 dB(A)		

Voltage (V)	PRP (KW)	ESP (KW)	PRP/ESP (A)
240/120V	134	150	568/625
208/120V	134	150	465/520
600/347V	134	150	161/180

PRP: Continuous power (“Prime Power”) ISO 8528-1 standard.
ESP: Emergency power (“Emergency Standby Power”) ISO8528-1 standard.

Sommers Motor Generator Sales Ltd.
www.sommersgen.com
1-800-690-2396

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70 Packham Avenue
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2 Engine Specifications

› PSI 8.8LT CAC-NG N/G engine, 8-cylinders, 4-stroke. Forced Induction aspiration, air intake system. Electronic regulation. **Complying N/A emissions.**

Engine General Data			
Manufacturer/Model	PSI 8.8LT CAC-NG	Number of Cylinders	8 cylinders
R.P.M.	1800	Engine Capacity	8,8
Max. Power (kWm) (net)	195	Cooling System	Water cooled
Power PRP (Kwm) (net)	N/A	Regulation Type	Electronic
Fuel	N/G	Engine Type/Injection/ Suction	N/G /Mixer/Forced Induction

2.1 Fuel Feed System

› A fuel inlet valve mounted in frame. An approved flexible fuel line is then connected to the Mixer injection system for vibration isolation.

50% PRP	1103 ft^3/hr
100% PRP	1965 ft^3/hr
Fuel inlet size	1.25" NPT
75% PRP	1529 ft^3/hr
inlet Pressure	7-11" H_2O

2.2 Cooling System

› Cooling provided by a pusher fan across an industrial radiator. A belt driven water pump circulates coolant throughout the engine.

- **340** — Fan Airflow (m3/min)
- **N/A (N/A)** — Fan Power Consumption, hp (kW)
- **28,5** — Engine + Radiator Capacity (l)
- **1500W 120V** — Blockheater (W/V)

2.3 Lubricating System

› Lubrication system is driven by the crankshaft driven oil pump. Full flow cartridge style filter is engine mounted. Original parts from the engine manufacture.

Total Oil Capacity 8,5L

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2.4 Air Intake System

Mixer air intake system including two-stage filter. Original parts from the engine manufacturer.

Combustion Air Volume 10,3 m3/min

2.5 Start System

Start system by electric starter. A maintenance free battery is included. The belt driven battery charging alternator provides a charging circuit for the battery while the engine runs.

Number of Batteries	1	Battery Features	925CCA	Starting Voltage	12V

2.6 Exhaust System

Exhaust System	
Exhaust Gas Volume	30,1 m3/min
Exhaust Gas Temperature	704 ºC
Exhaust External Diameter	3,5" (89mm)
Max. Exhaust Backpressure	10,2kPa

3 Alternator Specifications

Alternator STAMFORD 4-poles, brushless, alternator with class H insulation wound at 2/3 pitch and self-excited automatic voltage regulator (AVR).

Alternator General Data	240/120V	208/120V	600/347V
Brand/Model	STAMFORD UCI274F-w06	STAMFORD UCI274G	STAMFORD UCI274F
Winding No.	·06	311	17
Voltage Regulator AVR	SX460	SX460	SX460
Voltage Regulator	±1%	±1%	±1%
ESP Power Rating 40ºC (kW)	150	164	165
PRP Power Rating 40ºC (kW)	137	154	150
Number of Phases	1	3	3
Power Factor (cos φ)	1	0,8	0,8
Efficiency at 100% Load	88,6%	92,2%	92,7%
Efficiency at 110% Load	88,2%	92,0%	92,6%

The alternator complies with the following standards:

- Class H temperature rise 105ºC (257ºF), continuous rating.
- Class H temperature rise 125ºC (302ºF), standby rating.
- AS 1359
- IEC 34-1
- BS EN 60034-1
- VDE 0530
- BS 5000
- CAN/CSA-C22.2-100
- NEMA MG1-32

Low wave distortion: THD (100% load) = 2%, THF < 2%, Complying with EN61000-6-3, EN61000-6-2 standards on radio interference.

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4 Frame Specifications

- Engine and alternator mounted on a high strength steel frame and painted with electrostatic epoxy polyester powder paint. Frame is tested in saline mist chamber to conform to ASTM B-117-09 for 500 hours. Engine and Alternator are mounted on rubber isolators to help dampen vibration while running.

5 Canopy Specifications

- Canopy made of high strength galvanized steel and is painted with electrostatic epoxy polyester paint. Canopy is lined with acoustical/fireproof rock wool. A critical exhaust muffler -30dB(A) is installed to dampen exhaust noise. All is tested in a saline mist chamber to conform with ASTM B-117-09 for 720 hour.

6 Control Panel

- The control panel protects the engine and generator and allows for manual and automatic control of the genset.

6.1 Main Line Breaker

- Main line circuit breaker: A thermo-magnetic breaker provides protection against short circuits and overloads.

240/120	800 Amps
208/120	600 Amps
600/347	200 Amps

6.2 Control Panel Features

- **Battery Charger**

  Permanently connected to the battery to keep the battery fully charged. Charger is equipped with a float feature to keep battery ready in a prime starting state.

- **Panel Fusing**

  Fusing to protect the control panel wiring and accessories.

6.3 Control Card

Control card for 600/347V:
DSE 7310 MKII

Features of the DSE 7310 MKII Card:

- 132X64 pixel illuminate LCD display
- Full engine/alternator parameter and alarm read out
- 5-button menu navigation
- One touch Auto-Manual-Test and Stop buttons
- 9 factory configurable outputs
- 8 factory configurable inputs
- Programmable PLC for custom application
- Remote communication through an RS232 or RS485 connection
- Utility sensing Option

The control card complies with the following environmental tests:

- BS EN 61000-6-2 (electromagnetic compatibility)
- BS EN 61000-6-4 (electromagnetic compatibility)
- BS EN 60950 (electrical safety)
- BS EN 61000-6-2 (Temperature)
- BS EN 60068-2-6 (Vibration)
- BS EN 60068-2-30 (Humidity)
- BS EN 60068--2-27 (Shock)

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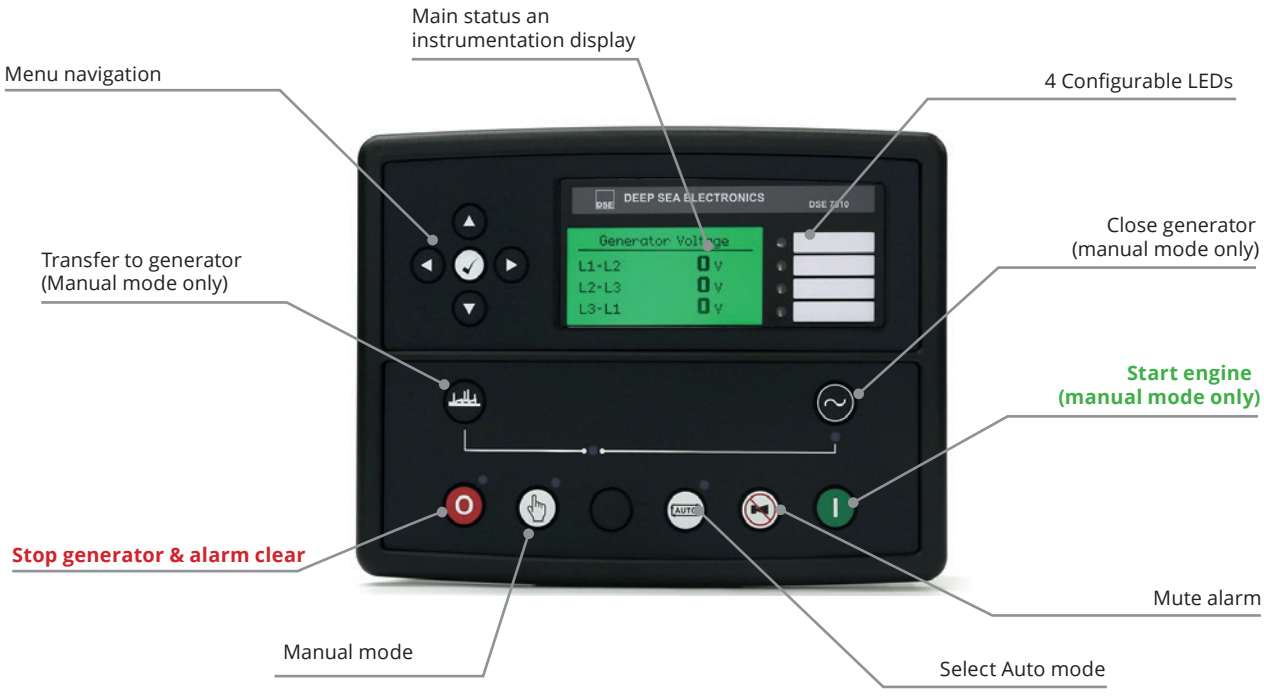
6.4 Display

Control card for all Voltages:
DSE 7310 MKII

Engine	
Engine Speed	Engine Hours
Oil Pressure	Number Engine Starts
Battery Voltage	Fuel Consumption
Fuel level	Engine Temperature

Generator	
Voltage (L-N)	Voltage (L-L)
Frequency	Amperage
Power Factor	Load (kW, kVA, kVah)

Alarm Detected	
Overcrank	High Engine Temp.
Low Oil Pressure	Low Engine Temp.
Low Coolant Level	Low Fuel Level
Low Plant Battery Voltage	Main Line Breaker
Over Voltage	Over Frequency
Under Voltage	Over Speed
Control Not In Auto	Lamp Test Features



Gensets rated for operational ambient temperature of 40 C, in compliance of CSA C282-15. If ambient temperature exceeds 40 C, please contact sales representative for derating information. Emergency standby power(ESP): the maximum power available for which a genset is delivering in the event of a utility power outage or under test conditions for up to 200hours per year. Prime Power(PRP): the maximum power which a genset is capable of delivering continuously for an unlimited number of hours per year.

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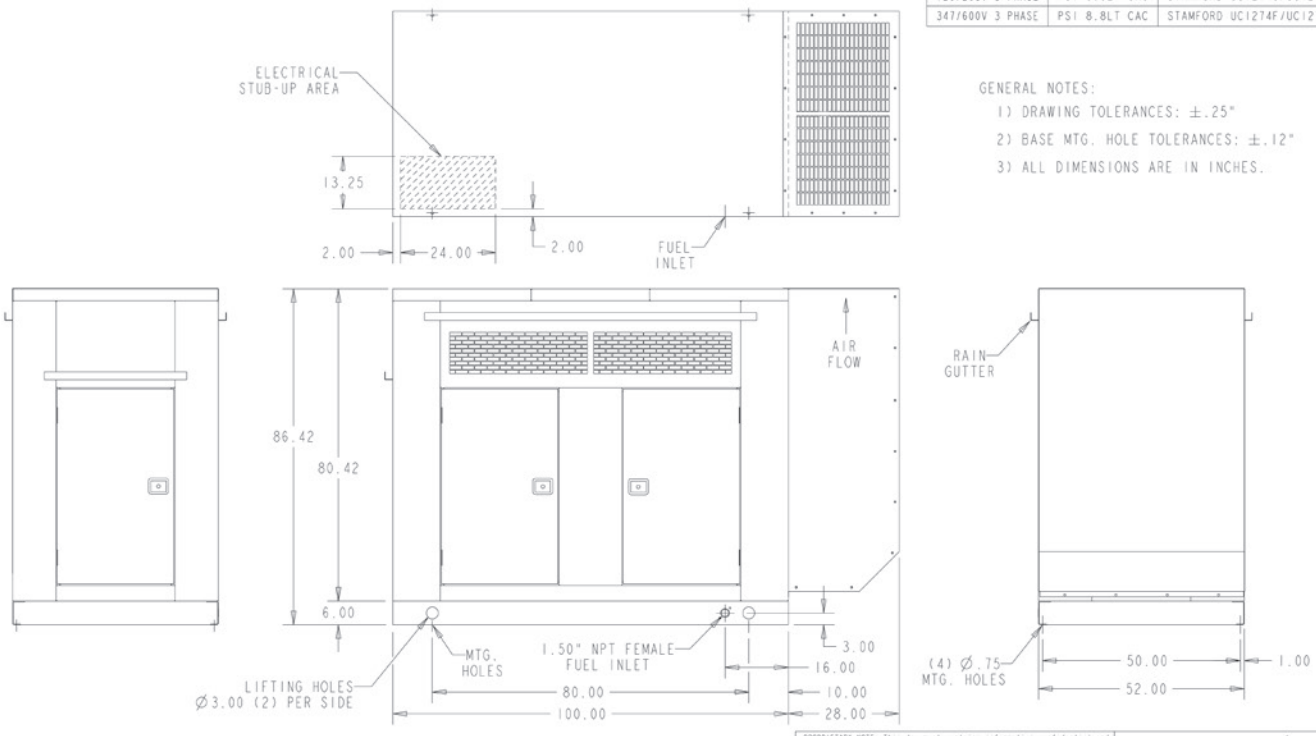
TITLE	150kWe NATURAL GAS GENSET ENCLOSED ASSEMBLY
	125kWe PROPANE GAS GENSET ENCLOSED ASSEMBLY

VOLTAGE/PHASE	ENGINE	GENERATOR 150kWe/125kWe
120/240V 1 PHASE	PSI 8.8LT CAC	STAMFORD UC1274G/UC1274F
120/208V 3 PHASE	PSI 8.8LT CAC	STAMFORD UC1274G/UC1274E
347/600V 3 PHASE	PSI 8.8LT CAC	STAMFORD UC1274F/UC1274E

GENERAL NOTES:
1) DRAWING TOLERANCES: ±.25"
2) BASE MTG. HOLE TOLERANCES: ±.12"
3) ALL DIMENSIONS ARE IN INCHES.



NOTES:
31" CLEARANCE REQUIRED ON BOTH SIDES AND REAR FOR DOOR SWING.
APPROX. WET WEIGHT: 5500 LBS.

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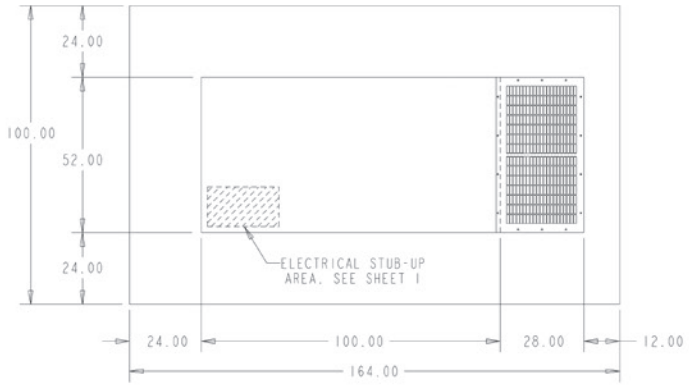
CUSTOMER	SITE	GEN SET MODEL #
	N/A	NPWAS150ST NG PPWAS125ST LP

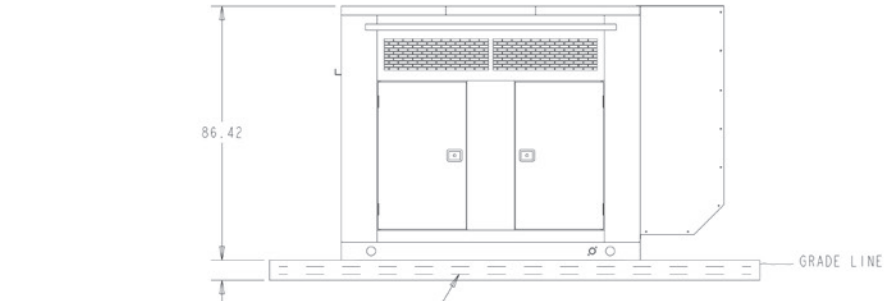
QUOTE #	PO #	PO DATE	FIRST USED	ESTIMATED WEIGHT	SIZE	DRAWING NUMBER
					B	SA10052H

REV	DESCRIPTION	DATE	REV BY	AS BUILT
1	NEW DRAWING	2/10/21	SAK	

DRAWN BY SAK	CHK BY	TOLERANCES:	SCALE NONE	FILE SA10052H	SHEET 1 OF 2

TITLE	150kWe NATURAL GAS GENSET ENCLOSED PAD
	125kWe PROPANE GAS GENSET ENCLOSED PAD





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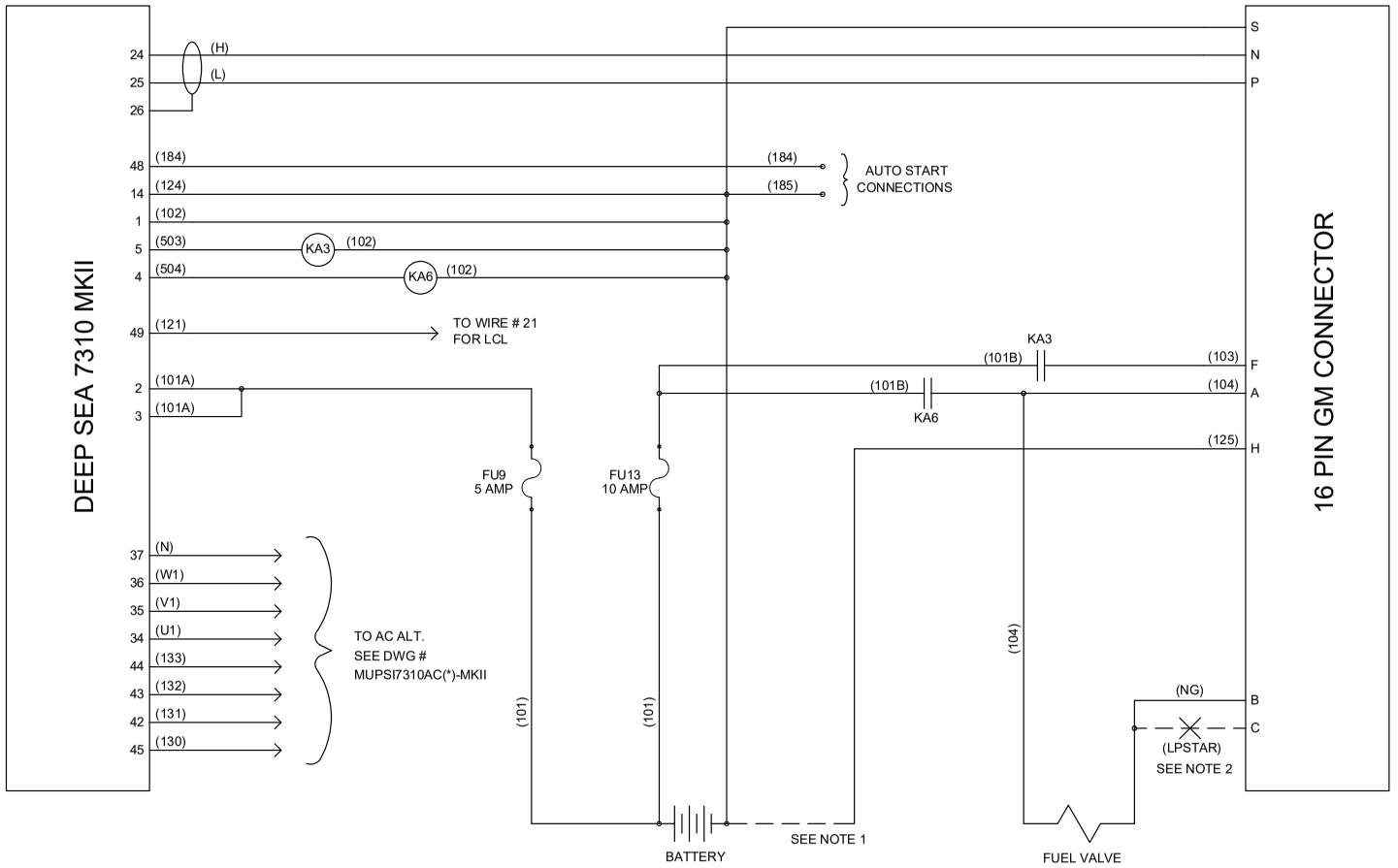
CUSTOMER	SITE	GEN SET MODEL #
	N/A	NPWAS150ST NG PPWAS125ST LP

QUOTE #	PO #	PO DATE	FIRST USED	ESTIMATED WEIGHT	SIZE	DRAWING NUMBER
					B	SA10052H

REV	DESCRIPTION	DATE	REV BY	AS BUILT
1	NEW DRAWING	2/10/21	SAK	

DRAWN BY SAK	CHK BY	TOLERANCES:	SCALE NONE	FILE SA10052H	SHEET 2 OF 2



LEGEND:

KA3	START SLAVE RELAY
KA6	ECM SLAVE RELAY
FU9	5A DC PANEL FUSE
FU13	10A DC PANEL FUSE

NOTE:

1. CONNECT WIRE TO GROUND FOR PROPANE UNITS ONLY.
2. CONNECT FUEL VALVE NEGATIVE TO PIN 'C' ON 16 PIN CONNECTOR IF SYSTEM IS RUNNING ON PROPANE.
3. ALL WIRE #'S ARE IN PARENTHESIS. USE #16 GAUGE FOR HARNESS.

BLUE	DC
BLACK	AC VOLTAGE SENSING
WHITE	NEUTRAL
ORANGE	CT'S & CT COMMON

SOMMERS
Generator Systems

AMMENDMENTS

DATE	TECHNICIAN	CHANGE
07/20/2012	ALK	INITIAL RELEASE
08/17/2016	MKG	MKII 7310 RELEASE

TITLE: GM NG/LP SERIES
DC CONNECTION DIAGRAM

DWG#: MUPSI7310DC-MKII		SIZE: A3	SHEET: 1 OF 1
SCALE: NTS	DRAWN BY: ALK	DATE: 07/19/2012	

COMMENTS: