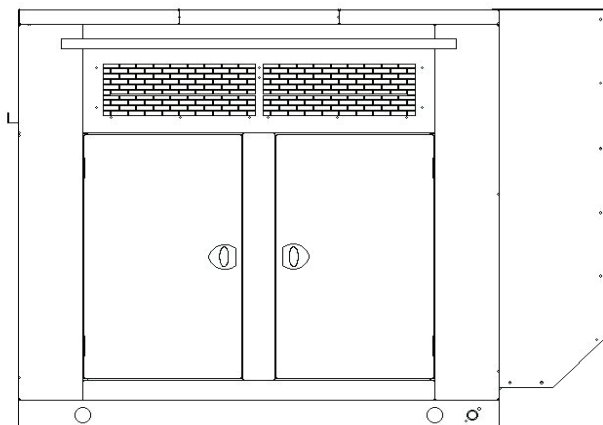




Measures:

L: 3048 mm H: 2184 mm
W: 1321 mm

Weight (dry):

4134 lbs / 1875 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 or auto start up signals.

General Technical Data			
Engine	PSI 5.7LT CAC-NG		
Alternators	240/120V	Wdg.	STAMFORD UCI274D-w06
		·06	
	208/120V	Wdg.	STAMFORD UCI274D
		311	
	600/347V	Wdg.	STAMFORD UCI274D
		17	
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)	72 dB(A)		

Voltage (V)	PRP (KW)	ESP (KW)	PRP/ESP (A)
240/120V	89	100	371/408
208/120V	89	100	309/347
600/347V	89	100	107/125

PRP: Continuous power ("Prime Power") ISO 8528-1 standard.

ESP: Emergency power ("Emergency Standby Power") ISO8528-1 standard.

2 Engine Specifications

➤ PSI 5.7LT CAC-NG N/G engine, 8-cylinders, 4-stroke. Turbocharged aspiration, air intake system. Electronic regulation. Complying N/A emissions.

Engine General Data

Manufacturer/Model	PSI 5.7LT CAC-NG	Number of Cylinders	8 cylinders
R.P.M.	1800	Engine Capacity	5,7
Max. Power (kWm) (net)	122	Cooling System	Water cooled
Power PRP (Kwm) (net)	N/A	Regulation Type	Electronic
Fuel	N/G	Engine Type/Injection/Suction	N/G /Mixer/ Turbocharged

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 686 ft³/hr

100% PRP 1212 ft³/hr

Fuel inlet size 1.25" NPT

75% PRP 990 ft³/hr

inlet Pressure 7-11" H₂O

2.2 Cooling System

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

306

Fan Airflow (m3/min)

N/A
(N/A)

Fan Power Consumption, hp (kW)

28,5

Engine + Radiator Capacity (l)

1000W
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 8L

2.4 Air Intake System

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

Combustion Air Volume 7,4 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	24 m ³ /min
Exhaust Gas Temperature	677 °C
Exhaust External Diameter	3" (75mm)
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 UCI274D-w06	STAMFORD UCI274D	STAMFORD UCI274D
Winding No.	·06	311	17
Voltage Regulator AVR	SX460	SX460	SX460
Voltage Regulator	±1%	±1%	±1%
ESP Power Rating 40°C (kW)	100	105	117
PRP Power Rating 40°C (kW)	87	96	108
Number of Phases	1	3	3
Power Factor (cos φ)	1	0,8	0,8
Efficiency at 100% Load	86,1%	90,5%	91,3%
Efficiency at 110% Load	87,2%	90,2%	91,1%

The alternator complies with the following standards:

- Class H temperature rise 105°C (257°F), continuous rating.
- Class H temperature rise 125°C (302°F), 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

400 Amps

208/120

350 Amps

600/347

125 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)

6.4 Display

Control card for all Voltages: DSE 7310 MKII

Engine

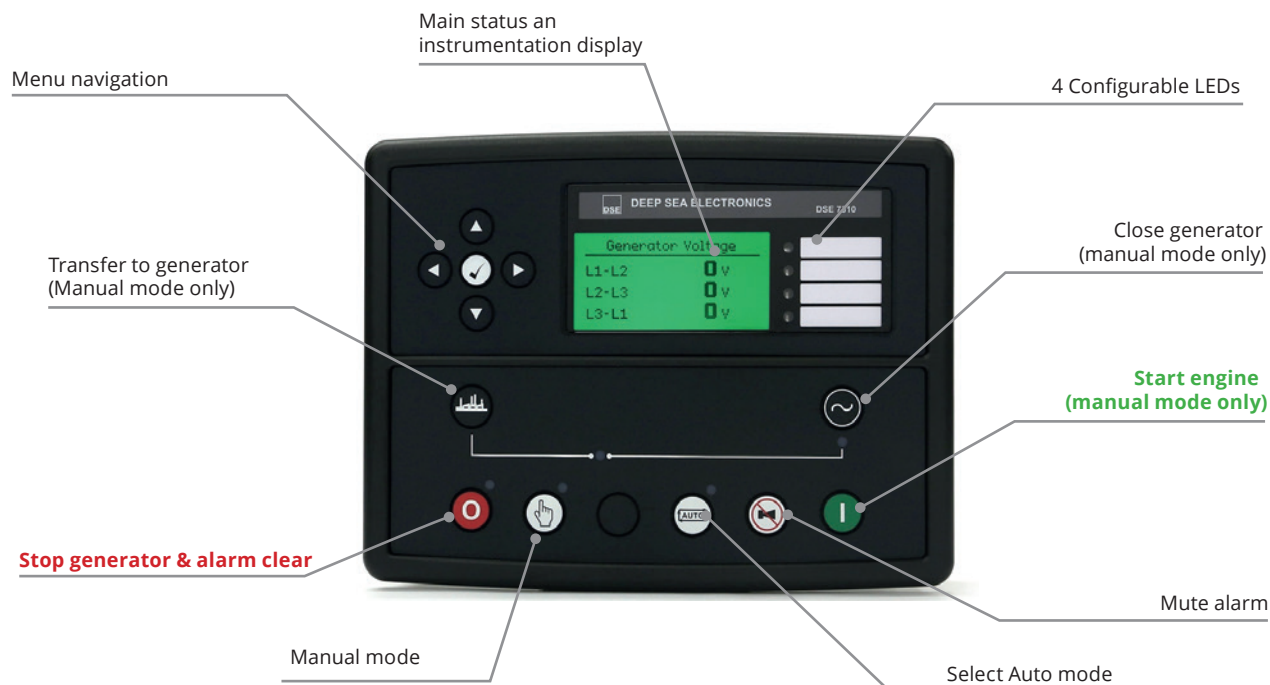
Engine Speed	Engine Hours
Oil Pressure	Number Engine Starts
Battery Voltage	Fuel Consumption
Fuel level	Engine Temperature

Generator

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

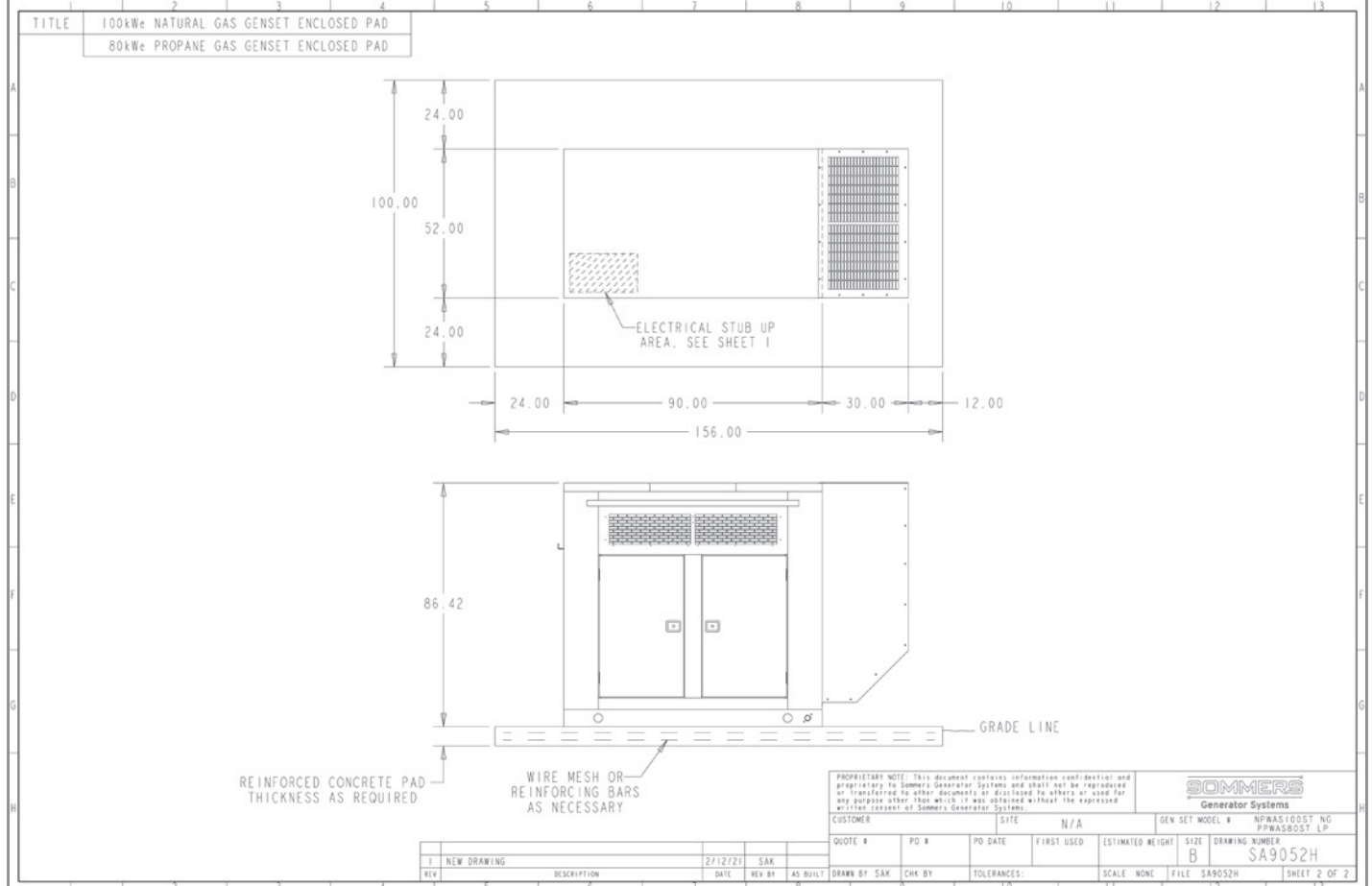
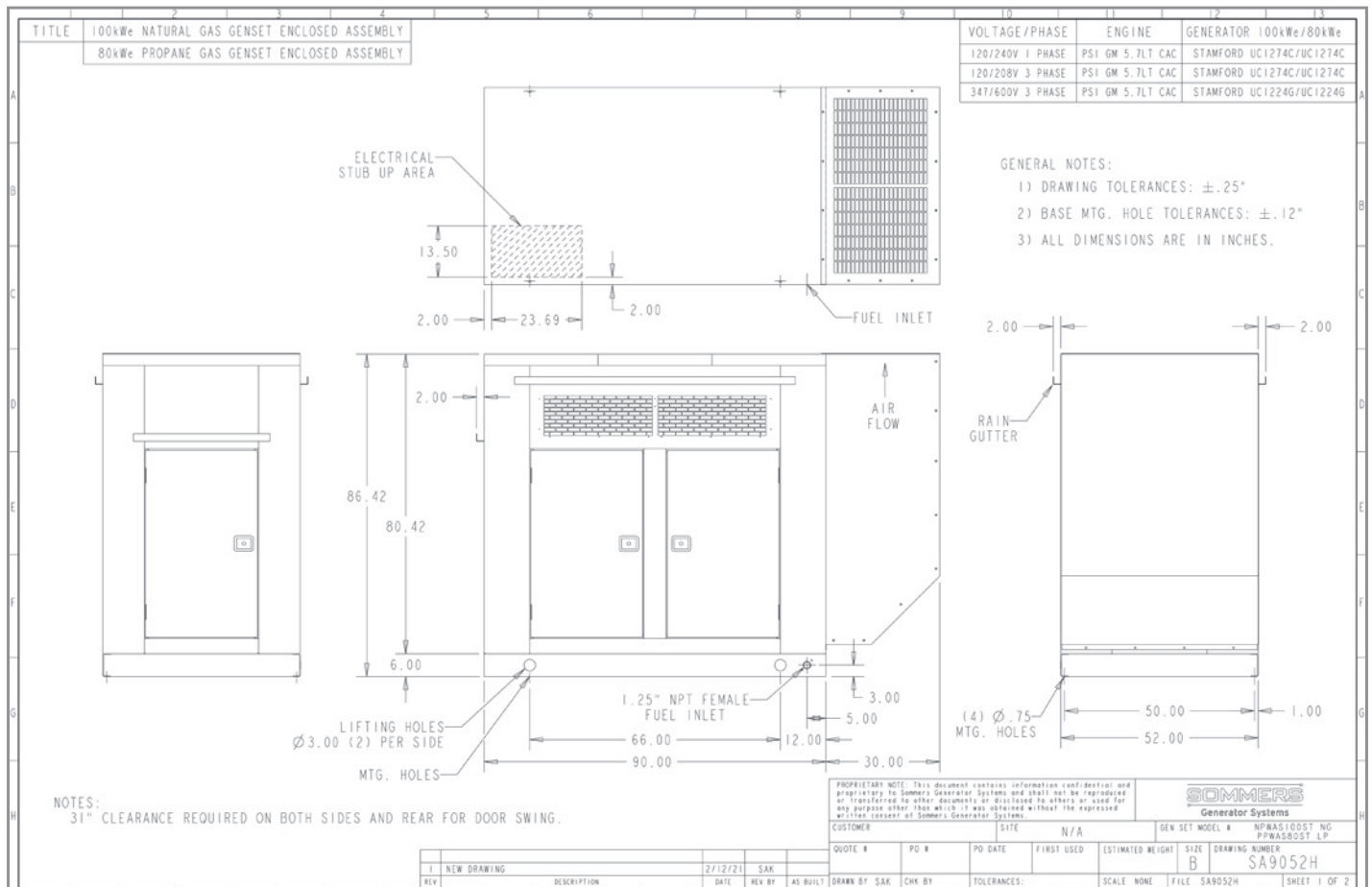
Alarm Detected

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



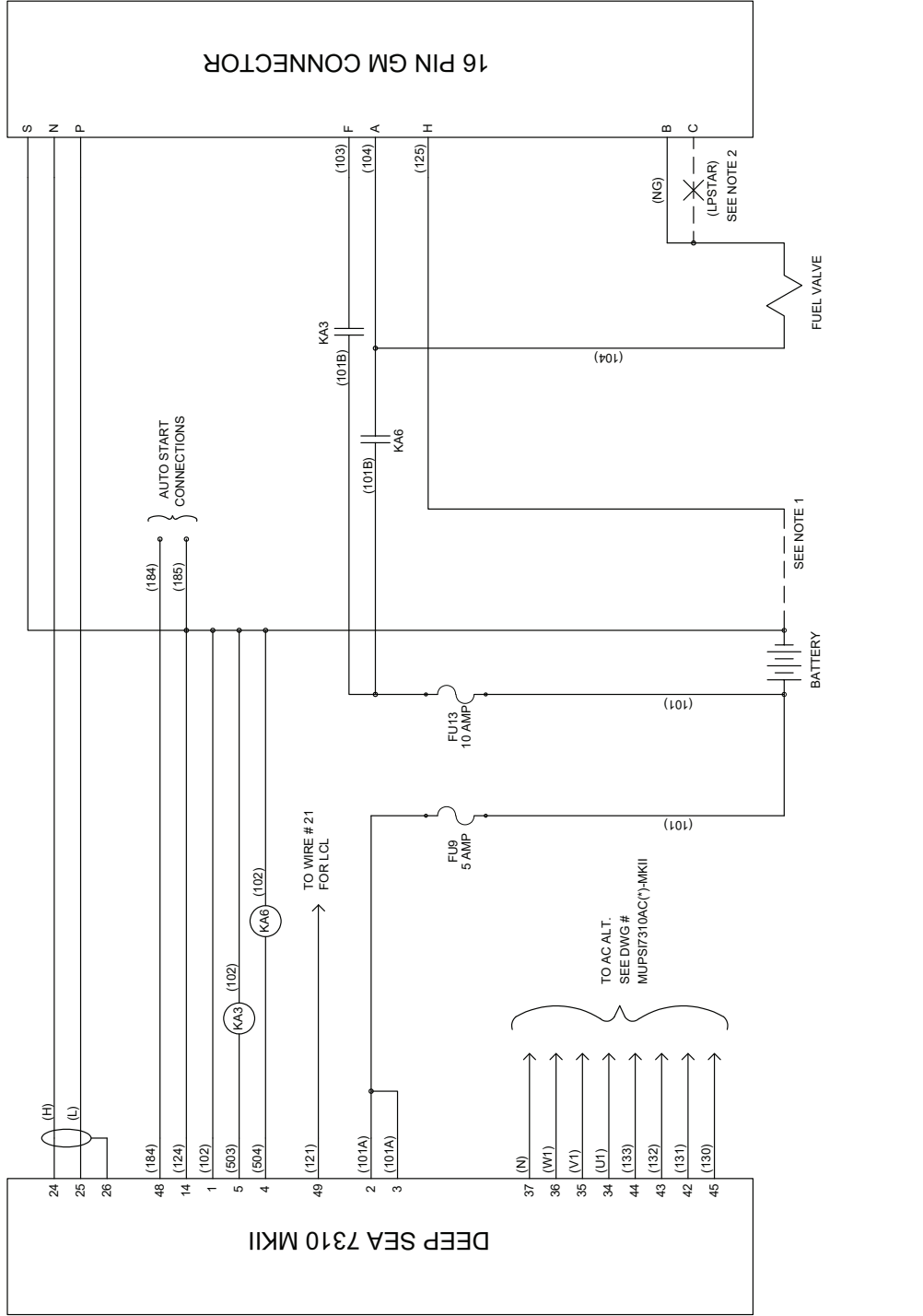
Gensets rated for operational ambient temperature of 40 C, in compliance of CSA C282-15. If ambient temperature exceeds 40 C, please contact sales representative for derating information. Emergency standby power(ESP): the maximum power available for which a genset is delivering in the event of a utility 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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LEGEND:

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



TITLE				GM NG/LP SERIES			
AMMENDMENTS				DC CONNECTION DIAGRAM			
DATE	TECHNICIAN	CHANGE	SCALE	DATE	ENGINEER	DATE	SHEET
07/20/2012	ALK	INITIAL RELEASE	1/1	07/20/2012	ALK	07/20/2012	1 OF 1
08/17/2016	MKG	MKG 7310 RELEASE	1/1				
COMMENTS							