Doc No:	T01000105
Release Date:	05/02/2019
Revision	A

GENERATOR SPECIFICATION

1785kVA / 1430kW
NGG Generator (420E MCPD Compliant)

ELECTRICAL OUTPUT	50 Hz
CONTINUOUS POWER	1433kW (1791kVA)
VOLTAGE	380-440V

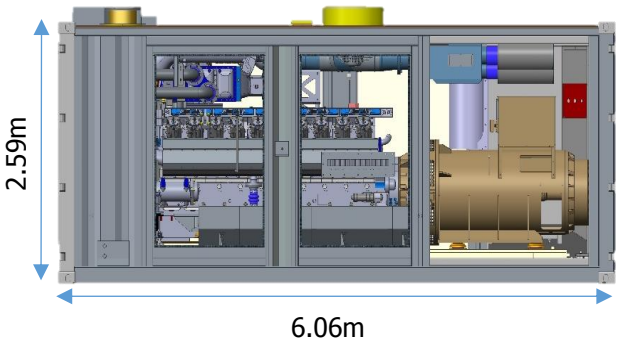
Generator Set Component Data

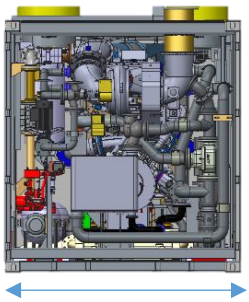
(a) MODEL INFORMATION

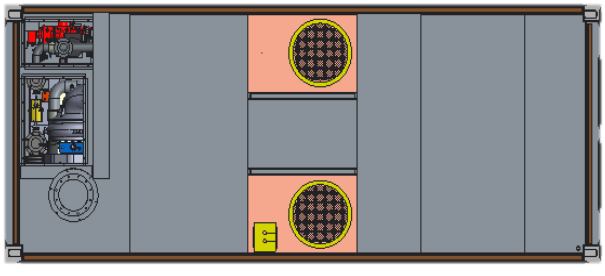
GENERATOR SET MODEL REFERENCE	GG1875GASCSK
GENERATOR SET B.O.M. REFERENCE	AP0000GCMCSK

(b) PHYSICAL CHARACTERISTICS

DIMENSIONS (L x W x H)	6.06m x 2.44m x 2.59m (19.88ft x 8ft x 8.5ft)
WET WEIGHT (LOWER CONTAINER)	22895kg (50475lb)
WET WEIGHT (UPPER CONTAINER)	7455kg (16436lb)
WET WEIGHT (TOTAL PACKAGE)	30350kg (66910lb)







(c) ENGINE

MAKE & TYPE	GE JENBACHER 420E602
CYLINDERS & FORM	V20
BATTERY VOLTAGE	24V
BORE	145mm (5.7in.)
STROKE	185mm (7.3 in.)
ASPIRATION	TURBOCHARGED & LOW TEMPERATURE AFTERCOOLED
SPEED	1500 RPM
BMEP	20bar (290.1psi)

(d) ALTERNATOR

MAKE & TYPE	CGT PE734H
DESIGN	BRUSHLESS, 4 POLE, 6 ENDS OUT, DRIP PROOF REVOLVING FIELD
STATOR	2/3 PITCH
ROTOR	DIRECT COUPLED BY FLEXIBLE DISK
EXCITATION	PERMANENT MAGNET (PMG)
AC HARMONIC DISTORTION	NO LOAD <1.5%; NON-DISTORTING BALANCED LINER LOAD <5%
NO. OF BEARINGS	2
INSULATION CLASS	H
TELEPHONE INFLUENCE FACTOR	< 50
TELEPHONE HARMONIC FACTOR	< 2%
F TEMP RISE (105°C @40°C AMBIENT)	1720kW (2150kVA)

(e) CONTROLLER

ENGINE GOVERNOR MAKE & TYPE	GE DIA.NE XT4 ELECTRONIC
STEADY STATE FREQUENCY BAND	+/-0.5%
AVR	DEIF DVC310
VOLTAGE REGULATION	+/- 0.5%
FEATURES:	• Rated IP65 (front) & IP20 (rear) • 15" touch display. • Graphical data display. • Command buttons for all control commands. • Parameter management & diagnosis.

(f) CIRCUIT BREAKER

MAKE & TYPE	SCHNEIDER NW32
NO. OF POLES	4
RATING	3200A
TRIP UNIT TYPE	MICROLOGIC 5.0
OVERLOAD PROTECTION RANGE	1280A – 3200A
SHORT CIRCUIT PROTECTION RANGE	1920A – 32000A

(g) COOLING SYSTEM SPECIFICATION

(for LTA de-rate values see Performance Datasheet)

- 2 separate cooling loops (High Temp & Low Temp).
- 2 sets of 'V' cooling coils. 1 HT and 1 LT per side.
- Air cooling of generator from two roof-mounted fans. External air drawn through cargo door louvers and noise attenuation baffles.
- Air cooling of gas cooling module (GCM) coils from 8 motorised fans located on GCM roof.
- Low Temp. coils have 3 integral fans which draw cooling air from mesh side panels in GCM.
- Fans controlled by VSD's.

(h) CONTAINER SPECIFICATION

- CSC certified for 9 high stacking and racking capability;
- ISO668 20ft standard height container.
- Corner castings and fork pockets rated for maximum gross weight.
- Attenuated cargo doors with louvers and air filters on both ends of containers.
- Air filter elements provided with an adjustable differential pressure transducer to provide alarm on filter restriction.
- Can be shipped with oil and coolant without spillage.
- Stoppa fall arrest system fitted on GCM container roof.

(i) EXHAUST SYSTEM

SILENCER MAKE	UNIVERSAL SILENCERS OR INDUSTRIAL MARINE SILENCERS
SILENCER BACK PRESSURE	6.35mm Hg (3.4iwc)
ATTENUATION	-16dB
CERTIFICATION	DNV Certified, spark arrestor
EXHAUST GAS FLOW (100% LOAD)	7257 kg/hr, dry (15999 lb/hr, dry)
EXHAUST GAS TEMP (100% LOAD)	409°C (779°F)
MAX PERMISSIBLE BACK PRESSURE	60mbar (24iwc)

(j) GAS TRAIN SPECIFICATION

- Manual shut off valve
- Gas filter
- Pressure regulator

(k) GAS FUEL SPECIFICATION

- Please see document 'TA 1000-0300' for typical gas fuel specification.

Basic Performance Data

For detailed performance data, please see Technical Performance datasheet.

(l) NOISE DATA [1]

SOUND POWER (EEC)	105.5dBA
SOUND PRESSURE at 1m/3ft	84dBA

[1] Data refers to average values as measured in our test facilities in free field measurement per Outdoor Noise Directive (2000/14/EC).

(m) EMISSIONS @100% LOAD

NOx (Oxides of Nitrogen)	250mg/Nm^3 (@5% O2) (1.18g/kWh)
CO (Carbon Monoxide)	1000mg/Nm^3 (@5% O2) (4.74 /kWh)

(n) PERFORMANCE DATA

NET ELECTRICAL EFFICIENCY (100% LOAD) [2]	40.14% (+/- 2.5%)
MAX AMBIENT BEFORE DERATE (@500m)	35°C (95°F)
MAX ALTITUDE BEFORE DERATE (@25°C)	1500m (49212ft)
MINIMUM ACCEPTABLE LOADING	40%
SINGLE STEP LOAD APPLICATION [3]	*TBC*
TRANSIENT PERFORMANCE CLASS	G4
POWER FACTOR OPERATING RANGE	-0.95 (LEADING / CAPACITIVE) TO 0.8 (LEADING / INDUCTIVE)

[2] Parasitic losses at standard reference conditions are 38.75kW. However, this can vary based on ambient conditions.

[3] This testing was completed under ISO testing conditions, actual performance may vary. For increased transient performance see genset with Turbo Nozzle Ring change - specification T02000103.

(o) GAS SPECIFIC DATA

MINIMUM METHANE NUMBER (WITHOUT DERATE)	70
MINIMUM METHANE NUMBER (WITH DERATE)	34 (40% DERATE)
MAXIMUM REGULATED GAS FLOW RATE	400Nm^3/hr (249 SCFM)
GAS ENERGY INPUT (100% LOAD)	347.5m^3/hr (3571kW)
MINIMUM GAS SUPPLY PRESSURE @50 LHV (MJ/kg)	25mbar 0.36psi

Machine Certification and Compliance

Outdoor Noise Directive (2000/14/EC)
Medium Combustion Plant Directive (2015/2193/EC)
BS EN ISO 8528: 2017 Reciprocating Internal Combustion Engine Driven Alternating Current Generating Set
BS EN ISO 13857: 2008 Safety of machinery. Safety distances to prevent hazard zones being reached by upper and lower limbs
BS EN ISO 13850: 2008 Safety of machinery. Emergency stop. Principles for design
BS EN ISO 13849-1: 2008 Safety of machinery. Safety-related parts of control systems. General principles for design
BS EN ISO 12100: 2010 Safety of machinery. General principles for design. Risk assessment and risk reduction
BS EN 60204-1: 2006+A1: 2009 Safety of machinery. Electrical equipment of machines. General requirements
EC Machinery Directive (2006/42/EC)
EMC Directive (2004/108/EC)
Low Voltage Directive (2006/95/EC)
LV Breaker (IEC 60947-1)
Alternator (IEC 60034-1)