TJUG200PS

Industrial Gaseous Generator Sets

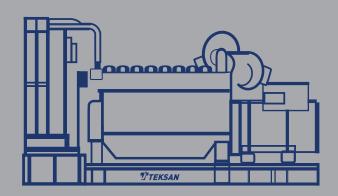












Genset Standby Power Rating Voltage 208/120V 240/120V 480/277V 600/347V 240/120V **Phase** 3 3 3 3 Pf 8.0 8.0 0.8 0.8 Standby kWe (NG) 200kW 200kW 200kW 200kW 200kW Standby Amps (NG) 693A 601A 300A 240A 833A Standby kWe (LP) 140kW 140kW 140kW 140kW 140kW Standby Amps (LP) 485A 420A 210A 168A 583A **Alternator Model** TAL046C TAL046C TAL044M TAL046C TAL046F

Continuous Power

Temp Rise

Connection

The maximum power which a generating set is capable of delivering continuously whilst supplying a constant electrical load. Average load can be 100%. The generator must not be overloaded.

Prime Power

125 / 40 °C

12 Leads Delta

The maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load. Average load should be 70%. The generator can be overloaded 10% for 1 hour per 12

125 / 40 °C

12 Leads WYE

Standby Power

125 / 40 °C

6 Leads WYE

The max power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hrs of operation per year under average of 70% load. Overloading isn't permissible.

125 / 40 °C

12 Leads DD

Certifications & Standards

The Generator set is designed and manufactured in a facility certified to ISO9001:2015, ISO14001:2015, ISO45001-2018 and ISO10002:2014 standards.

Generator set is UL2200, cUL listed and meets ISO 8528-5

125 / 40 °C

12 Leads WYE

The generator set, with its components, are **prototype tested**, factory-built and production tested per UL standards.

The generator set meets **NFPA110 Level 1** when equipped with the necessary accessories and installed per NFPA standards.



Application Data - Engine

Engine	
Manufacturer	PSI
Model	10L TURBO
Number of Cylinders	6, Inline
Cycle	4
Cubic Capacity	9.73 liters
Bore x Stroke	126 mm
Stroke	130 mm
Aspiration	Turbocharged Charge Air Cooled
Combustion Ratio	10.5:1
Gross Standby Power Rating at the Flywheel - NG	236 kW
,	
Gross Standby Power Rating at the Flywheel - LP	168 kW
Gross Standby Power Rating at the	168 kW 1800
Gross Standby Power Rating at the Flywheel - LP	

Electrical System	
Starting Motor Voltage	24V
Battery Charging Alternator	70A
Battery Oty, CCA Rating	2 x 102Ah, 860A

Fuel System	
Fuel Type	NG, LP Vapor or Dual Fuel
Maximum EPR Rated Pressure	1 psi (6.9 kPa)
Fuel Supply Pressure to EPR	6.8 - 10.9 inH20
Minimum NG Supply Pipe Size	1-1/4" NPT
Minimum LPG Supply Pipe Size	1-1/4" NPT

Air Induction System	
Combustion Air Required	396 cfm
Max. Allowable Intake Air Restriction - Clean	12.1 inH20
Max. Allowable Intake Air Restriction - Dirty	24.9 inH20

Fuel Consumption - NG	
Standby Power (100%)	113 lb/hr
At 75% of Standby	
At 50% of Standby	

Fuel Consumption - LP	
Standby Power (100%)	95 lb/hr
At 75% of Standby	
At 50% of Standby	

Cooling System	
Ambient Capacity of Radiator	122 °F (50 °C)
Coolant Capacity - Engine Only / Total	27 liters / 59 liters
Max External Coolant Friction Head	50 kPa
Fan Power	9.2 kW
Engine Coolant Flow	400 liters/min
Cooling Fan Air Flow	399 m3/min
Cracking Temperature	76 °C
Full Open Temperature	2° 88

Exhaust System	
Туре	Water Cooled Manifold
Turbine Outlet Temperature	1107 °F (597 °C)
Catalyst Dp	8.6 kPa
Maximum allowable Back pressure	15 kPa
Exhaust Flow at Turbine Outlet Conditions	35.4 m3/min

Lubrication System	
Oil Specification	SAE 15W-40 Low Ash Gas engine oil, API CD/CF or higher
Maximum Allowable Oil Temperature	105 °C
Engine Oil Capacity	20.0 liters



Standard Features - Alternator

Brushless Single Bearing

125/40 °C Temperature Rise

Class H Insulation

Low waveform distortion with non-linear loads

EC 60034-1; CEI EN 60034-1; NEMA MG 1.22, NF 51- 100,111

AREP Excitation

300% Short Circuit Capability

Low reactance 2/3 pitch windings

Self-ventilated and drip-proof construction

BS 4999-5000; VDE 0530, OVE M-10

Application Data - Alternator

Manufacturer					Leroy Somer
Туре				4 F	Poles, Brushless
Protection					IP 23
Voltage Regulation					± 0.25%
One Step Load Acceptance				10	0% of rated load
Bearing					Single
THD in Linear Load					< 5%
Waveform: NEMA TIF					< 50
Altitude					≤1000 meters
Over Speed					2250 rpm
AVR					D350
Genset Voltage	208/120V	240/120V	480/277V	600/347V	240/120V
Alternator Model	TAL046C	TAL046C	TAL044M	TAL046C	TAL046F
Leads	12 - WYE	12 - Delta	12 - WYE	6 - WYE	12 – DD
P.F.	0,8	0,8	0,8	0,8	1
Power @ Continuous 40 °C	250kVA / 200kW	250kVA / 200kW	250kVA / 200kW	260kVA / 208kW	200kVA / 200kW
skVA @ 30% Voltage Dip (P.F. $= 0.6$)	830kVA	830kVA	640kVA	400kVA	-
Efficiency @ 100% load	91,60%	91,60%	93,40%	92,36%	87,96%
Short Circuit Current @ 1000ms	840A	1455A	700A	840A	-

Application Data - Circuit Breaker

Genset Voltage	208/120V	240/120V	480/277V	600/347V	240/120V
ABB (80% Rated) Breaker Model	T6N 800	T5N 600	T5N 400 - 300	XT4N 250	T7S 1000
Current Rating (In)	800A	600A	300A	250A	1000A
Trip Unit	LS/I	LS/I	LS/I	TMF	LS/I



Control Panel

Manufacturer	DSE - Deep Sea Electronics
Model	7310 MKII
DC Supply	8 to 35V Continuous
Generator Voltage Range (Ph-Ph)	26V to 719V AC
Generator Frequency Range	3,5Hz to 75Hz
	BS EN 61000-6-2, BS EN 61000-6-4,
	BS EN 60950, BS EN 60529
Standards	BS EN 60068-2-1, BS EN 60068-2-2
	BS EN 60068-2-6, BS EN 60068-2-30
	BS EN 60068-2-78, BS EN 60068-2-27



Key Features

License free PC software

4-Line back-lit LCD text display

Five key menu navigation

LCD Alarm Indication

DSENet expansion compatibility

Internal PLC editor

Protection disable feature

Data logging facility

Fully configurable via PC

Front panel configuration

Power safe mode

6 configurable DC outputs

2 configurable volt free relay outputs

6 configurable analogue/digital inputs

8 configurable digital inputs

Configurable 5 stage dummy load and load shedding outputs

Backed up real time clock

Fuel usage monitor and low fuel level alarms

Remote SCADA monitoring via DSE Configuration Suite PC Software

Advanced SMS messaging (additional external model required)

Start & Stop capability via SMS messaging

Configurable event log (250)

Multiple date and time scheduler

Protections

√ Gen. Voltage – under / over

√ Gen. Freq. – under / over

√ Engine Speed – under / over

√ Engine Oil Pressure – low

√ Engine Temp – low / high

√ Battery Voltage – low / high

√ Weak Battery

√ Fail to Start / Stop

√ Charge Alternator Fail

√ Over Current & Load (kW/kVAr)

√ Unbalanced Load

√ Independent Earth Fault

√ Reverse Power

√ Loss of Speed Signal

Instruments

√ Gen. Voltage (L-L/L-N)

√ Gen. Frequency

√ Engine speed

√ Oil Pressure

√ Water Temperature

√ Battery Voltage

✓ Run Time

√ Phase Sequence

✓ Power monitoring (kWh/kVAh/kVArh)

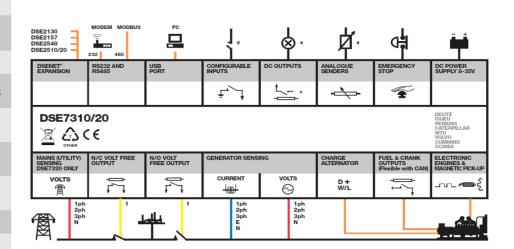
✓ Power (kWh/kVAh/kVArh)

✓ Power Factor

√ Generator Current

√ Generator Load (%)

√ Earth Current





Standard Features - General

Heavy duty structural steel base frame

Battery charger

Jacket Water Heater

Oil & Coolant Drain Extensions

Operations Manual

Critical grade silencer

Battery tray and cables

Heater Isolation Valves

Rubber vibration Isolator

Standby Limited Warranty

Battery Charger

Manufacturer	DSE
Model	9470 MKII
Operation Voltage (L-N)	90V to 305V
Output Current	10A

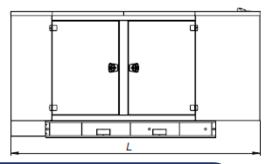
Jacket Water Heater

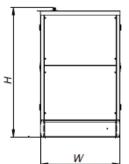
Manufacturer	Hotstart
Model	CTM25210-N00
Operation Voltage	240V
Power	2500W

Dimensions, Weights & Sound Levels

	L x W x H (inches)	Weight (lbs)	Sound Level *
Open Skid	TBA	TBA	-
Level 2 Enclosure	ТВА	TBA	TBA
Level 3 Enclosure	TBA	TBA	TBA

^{*}All measurements are approximate and for estimation purposes only. * Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at stand-by power rating





Sound Attenuated Enclosure (Option)

Compatible with 2000/14/EC directives,

Factory built, UL Certified

Amplified paint against corrosion and rust

Exceeds 2000hours salt spray test

Level 2 / 3 Sound Level Compliant

Heavy Duty Steel / Aluminum Structure

High performance sound absorb material

Vertical air discharge

Exhaust muffler inside the canopy



TJUG200PS

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Available Options

Circuit Brakers	Control System	Enclosures	
□ Magnetic Trip	☐ Remote Annunciator Panel — 8 lights	□ Sound Attenuated Level 2	
☐ Thermal Magnetic Trip	□ Remote Annunciator Panel – 16 lights	□ Sound Attenuated Level 3	
□ Electronic Trip LS/I	□ Remote Annunciator Panel – 24 lights	☐ Enclosure DC light w/timer	
□ Electronic Trip LSI	□ Common Alarm Relay – V free contact	☐ Enclosure AC light	
□ Electronic Trip LSIG	☐ Generator Run Relay – V free contact	□ Enclosure Space Heater	
□ 80% Rating	□ Control Panel Heater	☐ Motorized Air Inlet Damper	
□ 100% Rating	☐ Dry Contacts Expansion Relay	☐ Gravity Radiator Louver	
□ Electrically Operated CB (paralleling)	□ Remote E-Stop Switch		
☐ Shunt Trip — wired to controller	□ Remote E-Stop Switch – Break Glass	Fuel Tank	
☐ Auxiliary Contact — volt free contact	□ Remote Monitoring (DSE892 SNMP)	☐ Dual Fuel Operation	
	□ Remote Monitoring (DSE890 Webnet)	☐ Fuel Pressure Low, Alarm	
Alternator	□ Paralleling System Upgrade	□ Fuel Filter	
□ Upsize Alternator	☐ Manual Voltage Adjust	☐ Gas Regulator	
□ Space Heater	☐ Manual Speed Adjust		
□ RTD Sensors		Battery System	
	Miscellaneous	☐ Starting Batteries	
Electrical	□ ATS Panel	☐ Battery Charger (NFPA110 Compliant)	
☐ GFCI Receptacle Outlet	□ Rated Power Factor Factory Testing	□ Battery Wrap Heater	
□ Load Center	□ Enclosure Heater	□ Battery Restraint	
□ Power Outlet (14-50R, 120/240V, 50A)	□ Oil Pan Heater	☐ Battery Disconnect Switch	
□ Power Outlet (TT30R, 120V, 30A)	□ Spring Isolators		
Power Outlet Panel (120/240V, 80A) NEMA5-20R, NEMA14-50R, TT-30R	☐ Crankcase Ventilation Filter	Warranty	
□ Surge Protector	□ Critical Silencer Set w/Open Skid Unit	☐ 5 Years Extended Limited Warranty	

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