

1988 Orenda OT-F-3

YEAR 1988 **CLASS**

MAKE Orenda **CATEGORY**

MODEL OT-F-3

LOCATION Vernon, B.C, Canada

LOW HOUR ORENDA OT-F-3 SERIES PORTABLE POWER PLANT

9500KW +(9.5 MEGA WATT +)

The Orenda OT-F-3 Generating Set is a self contained weather proofed turbine generator package with auxiliary equipment and is designed for "black start" without external power. Rated for both continuous base load and peaking operation. No cooling water is required. Lift tackle for quick exchange of the gas generator is built in. Fast starting the OT-F-3 goes to synchronized full load in less than four minutes. This unit has 4500 hours of total time usage with 640 starts and was used as a backup for a large plant in Canada.

The engine consists of an aircraft type gas producer combined with an industrial type power turbine and can operate on either diesel fuel or natural gas. We have support documentation and set up personnel. Set up time 3-4 days and can be moved in four tractor trailer loads. Call or E-Mail for additional information and pricing.

Detailed specifications are as follows:

9500 KW (9.5 MEGA WATT PORTABLE POWER GENERATING PLANT

MODEL SPECIFICATION-OT-3

CONSTANT SPEED 9500 KW

1. SCOPE

This specification defines a simple cycle, two shaft industrial gas turbine engine for use in applications with constant output speed requirements.

2. MODEL FEATURES

2.1 The engine consists of an aircraft type gas producer combined with an industrial type power turbine as follows-MODEL 1 SERIES GAS PRODUCER

MODEL 1A POWER TURBINE

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2.1A The model 1 gas series gas producer has a ten-stage axial flow compressor, six combustion chambers, and two-stage turbine. Model variants are available in this series for operation with liquid or gaseous fuels.

2.1b The model 1A power turbine is a single-stage industrial type power turbine designed for constant speed operation at the rated speed below.

3 ENGINE RATING & OPERATING LIMITS NORMAL PEAKING

Rate Output Power(NEMA Conditions (KW) 8350+5% 9500+5%

Turbine Inlet Temp at Rated Power (F) 1457 1550

Turbine Outlet Temp at Rated Power (F) 925 975

Heat Rate at Rated Power- BTU/KW hr. 10,100+5% 12,250+5%

Gas Gen. Speed Max Continious Rating 7600 rpm

Power Turbine Rated Speed 7500 rpm

Over Speed Trip Setting 8250 rpm

Min. Continious @ Full Load 4000 rpm

Placard Speed Range 6600-7250 rpm

Max. Power Limit (Mechanical Limitations) 7500 kw

Air Weight Flow @ Rated Power (lb/sec) 93.3 97.5

Pressure Ratio @ Rated Power 5.04 5.36

The Hawker Sidley turbine is fueled by either natural gas or diesel. Two jets are included (1 New Never Used) with this unit and are rubber mounted in shipping containers. New slide in filter racks and new filters have been installed. These filters are a slide in type for ease of changing.

Model 7621 Woodward Governor 1200 rpm

Exciter Generator 600 volts-3-phase

The Rams and Hoses are new

The Brushes in the generator are also new

There is complete installation support documentation available

We can provide a technician for initial set up.

This plant can be set up and running in 5-7 days

WEIGHTS OF MAJOR COMPONENTS FOR SHIPPING

NET LBS. LENGTH WIDTH HEIGHT

Turbine Cubicle 45,000 19' 10' 11'

Inlet Filter Cube Top 7,000 13' 10' 8'

Inlet Filter Cubicle Btm 16,000 13' 10' 10'

Exhaust Silencer 10,000 6' 8' 10'

Generator Cubicle 92,000 17' 10' 12'

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Control Cubicle 41,000 22' 11' 11'

Gas Gen(Spare Turbine) 5,500 13' 5' 5'

Total Weights For Shipping.....359,000 lbs.

FOB Port of Vancouver British Columbia