



BY JOHNSON CONTROLS

XJF 151M

ENERFLEX

PRELIMINARY PERFORMANCE

Screw Open #2

Date **10/7/2010**

Enerflex Energy Systems, Inc. - Bruce Hock

Atmospheric **13.4 psi**

Version **8.0.5**

Elevation **2500 ft**

COMPRESSOR

Model **XJF 151M**
Vi Control **3 Step Vi**
Disc Port **Standard**
Rotors **Standard**
Bearings **Standard**
Casing **Gray Iron**

PERFORMANCE

Shaft Power **89.0 hp**
Suction Flow **39.1 %**
Slide Valve Pos **21.9 %**
Speed **100.0 %**
Speed **1800 rpm**
Volumetric Eff **33.4 %**
Adiabatic Eff **52.8 %**

CONDITIONS

Comp Ratio **3.71**
Ideal Vi **2.08**
Actual Vi **2.20**
Disc Port **0.8 %**
Disc DewPoint
Bearing Oil Req **10.4 cSt**

UPSTREAM

Flow **0.689 MMSCFD**
Flow **21.9 lbm/min**
Temperature **60.0 °F**
Pressure **80.0 psig**
Line Pres Drop **1.7 psi**

DOWNSTREAM

Flow **0.689 MMSCFD**
Flow **21.9 lbm/min**
Temperature **120.0 °F**
Pressure **320.0 psig**
Line Pres Drop **7.0 psi**
Aftercooler HR **32.6 kbtu/hr**

SIDE

COMPRESSOR

Suction Temp **60.0 °F**
Suction Pres **78.3 psig**
Discharge Temp **170.0 °F**
Discharge Pres **327.0 psig**
Suction Flow **68 cfm**
Discharge Flow **22 cfm**

OIL SYSTEM

Oil **CP-1515-150**
Supply Temp **160.0 °F**
Heat Reject **155 kbtu/hr**
Bearing Flow **5.5 gpm**
Main Inj Flow **55.3 gpm**
Total Oil Flow **60.9 gpm**

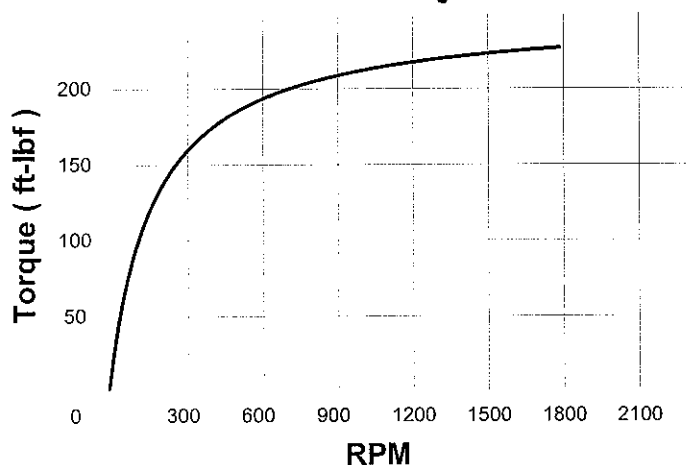
OIL SYSTEM

Main Inj Valve **1.00 in**
Valve Open **100.0 %**
Main Inj Orifice **0.375 in**
Pump Piping **All Oil**
Pump Boost **0.0 psi**
System dP **15.0 psi**

IDEAL GAS

Mole Weight **17.38**
Cp/Cv **1.30**
Compressibility **0.890**

STARTING TORQUE



WARNINGS

**FOR INFORMATION ONLY
SUBJECT TO ENGINEERING REVIEW**



BY JOHNSON CONTROLS

XJF 151M**ENERFLEX**

Screw Open #1

Date **10/7/2010**

Enerflex Energy Systems, Inc. - Bruce Hock

Atmospheric **13.4 psi**Version **8.0.5**Elevation **2500 ft****COMPRESSOR**

Model **XJF 151M**
Vi Control **3 Step Vi**
Disc Port **Standard**
Rotors **Standard**
Bearings **Standard**
Casing **Gray Iron**

PERFORMANCE

Shaft Power **89.0 hp**
Suction Flow **40.4 %**
Slide Valve Pos **24.1 %**
Speed **100.0 %**
Speed **1800 rpm**
Volumetric Eff **34.7 %**
Adiabatic Eff **55.6 %**

CONDITIONS

Comp Ratio **3.05**
Ideal Vi **1.91**
Actual Vi **2.20**
Disc Port **1.3 %**
Disc DewPoint
Bearing Oil Req **10.4 cSt**

UPSTREAM

Flow **0.874 MMSCFD**
Flow **27.8 lbm/min**
Temperature **60.0 °F**
Pressure **100.0 psig**
Line Pres Drop **1.7 psi**

DOWNSTREAM

Flow **0.874 MMSCFD**
Flow **27.8 lbm/min**
Temperature **120.0 °F**
Pressure **320.0 psig**
Line Pres Drop **7.0 psi**
Aftercooler HR **40.7 kbtu/hr**

SIDE**COMPRESSOR**

Suction Temp **60.0 °F**
Suction Pres **98.3 psig**
Discharge Temp **169.2 °F**
Discharge Pres **327.0 psig**
Suction Flow **71 cfm**
Discharge Flow **28 cfm**

OIL SYSTEM

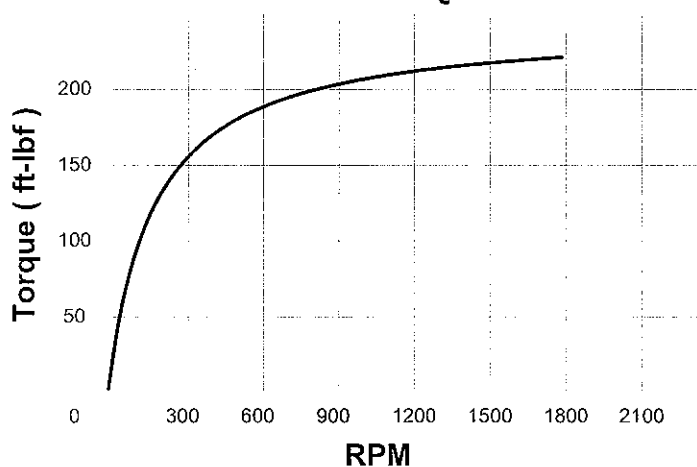
Oil **CP-1515-150**
Supply Temp **160.0 °F**
Heat Reject **136 kbtu/hr**
Bearing Flow **5.3 gpm**
Main Inj Flow **52.9 gpm**
Total Oil Flow **58.2 gpm**

OIL SYSTEM

Main Inj Valve **1.00 in**
Valve Open **100.0 %**
Main Inj Orifice **0.375 in**
Pump Piping **All Oil**
Pump Boost **0.0 psi**
System dP **15.0 psi**

IDEAL GAS

Mole Weight **17.38**
Cp/Cv **1.30**
Compressibility **0.890**

STARTING TORQUE**WARNINGS**

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