

Job Reference Information :

Job Number :
 Job Reference :
 End User :
 Packager :
 Driver/Model :

Sizing Input Information :

Ambient Temp : 100 F
 Location Elevation : 50
 Gas Type Selection : Natural Gas
 Relative Humidity : 100.0
 Specific Gravity : 0.75
 k-value Cp/Cv : 1.226
 Suction gage pressure : 5 PSI
 Inlet Gas Temp : 80 F
 Discharge gage pressure : 125 PSI
 Design Flow Rate : .5 MMSCFD

Conditions used in sizing/rating the unit:

Suction PSIA 19.67
 Discharge PSIA 139.67
 Location Atmospheric Pressure 14.67
 Moisture Factor Multiplier 1.027

Selected Frame :

Frame Selection : SSPG99B (5.2 VI)
 Design Rpm : 1010
 Min Rpm : 673
 Max Rpm : 2945
 Max Suction Pressure, PSIG 50
 Max Power allowed, BHP 180
 Driver type selection : Engine or V-Belt
 Unit is equipped with a Turn Valve, set at 100 %.

Rating/Sizing Results: (Note: This is a Flange-to-Flange Rating)

Discharge Temp, Degrees F	191	
Oil Inlet Temp, Degrees F	180	
Temperature RISE, Degrees Fahrenheit	11	
REQUIRED Flow in INLET Cu Ft per Min.	276.6	
RATED Flow in ICFM at op. RPM	276.7	
Volumetric Efficiency at op. RPM	88.08	
Adiabatic Efficiency at op. RPM	73.36	
REQUIRED Flow in Millions of SCF/Day	0.500	
RATED Flow in Millions of SCF/Day		0.500 MMSCFD
RATED Flow in SCFM	347.3	
RATED FLOW, lb/min	20.33	
RATED BHP at operating point		<u>76.2 BHP</u>
OIL FLOW CALCULATED, Gal/Min	54.8	
OIL Cooler Heat Load, MMBTU/Hr	0.137	
Internal Vol. Ratio ("VI")	5.17	
Internal Comp. Ratio	7.49	
Job Compression Ratio	7.10	

NOTE! This unit has a frame-mounted oil pump
 but the oil flow around the pump in the BYPASS is GREATER than
 the pump rate. The BYPASS flow is the oil flow rate used above.

No warnings detected due to compressor operating conditions.

The "Use Compressibility" option is: OFF, Zs = 1.000, and Zd = 0.984.

