

D-R Size Version
6.5.16.727

PACKAGER:
LOCATION:
JOB/REF:

DRESSER-RAND
A Siemens Business

DESIGN POINT

AMBIENT T (F) : 100.0
REF TEMP. (F) : 60.0
COMPRESSOR DATA
MODEL 5.5 RDS 2
STROKE (IN) 5.500
ROD DIA (IN) 2.125

ALTITUDE (FT) 0
REF PRESS (PSIA) 14.6960
RATED RPM 1000
CALC RPM 1000
Calc PS (FPM) 916.67

ATM PRESS (PSIA) 14.6960
LUBRICATED
DRIVER DATA
TYPE Engine
MANUF Waukesha
MODEL F3521GSI

DRIVER (HP) 738
COOLER (HP) 0

Stage Number		1	2
Gas		SWEETNAT	SWEETNAT
Dry Gas Mol. Weight		17.407	17.407
Dry Gas Spec. Gravity		0.601	0.601
Cp/Cv @ 14.7/60		1.293	1.293
Avg. Temp. Expon. (K)		1.279	1.290
Avg. Vol. Expon. (N)		1.279	1.298
Gas Crit. Temperature	F	-96.511	-96.511
Gas Crit. Pressure	PSIA	671.383	671.383
Z Standard		0.998	0.998
Z Suction		0.965	0.938
Z Discharge		0.965	0.939
Inlet Temperature	F	80.00	120.00
Inlet Line Pressure	PSIG	250.00	
Inlet Press. @ Cyl Flg	PSIG	247.02	595.09
Interstage Press. Drop	%	3.49	0.00
Disch. Press. @ Cyl Flg	PSIG	617.14	754.02
Disch. Line Pressure	PSIG		750.00
Ratio of Compression		2.414	1.261
Adiabatic Disch. Temp.	F	194.24	150.97
Est Actual Disch Temp	F	211.97	163.62
Stg. Piston Displ.	CFM	439.9	168.7
Stg. Inlet Capacity	ACFM	352.1	157.9
CAPACITY ACTUAL WET	MMSCFD	9.00	9.00
CAPACITY ACTUAL DRY	MMSCFD	8.98	8.98
TOTAL COMPRESSOR POWER	HP	628.58	

Stage number at (HE/CE)		1/1	2/2
Frame Ext/Cyl. Bore	#/IN	1/ 9.500	2/ 6.000
Cylinder Pattern		GN2820AA	G3806L
RDP	PSIG	1000.0	1750.0
MAWP	PSIG	1100.0	1925.0
Cyl. Action/HE Rod Dia.	Act./IN	DA/ 0.00	DA/ 0.00
Brake power / Cylinder	HP	467.9	146.1
Capacity Wet/ Cylinder	MMSCFD	9.00	9.00
HE Disch. Vol. Eff.	%	40.13	78.41
CE Disch. Vol. Eff.	%	40.23	78.19
HE Inlet Vol. Eff.	%	79.94	93.73
CE Inlet Vol. Eff.	%	80.14	93.46
Avg. Inlet Vol. Eff.	%	80.04	93.60
HE Clearance Req'd.	%	16.10	17.50
HE Clearance Min.	%	16.10	17.50
HE Pocket Open	%	0.00	0.00
HE Clearance Added	IN3	0.0	0.0
CE Clearance Req'd.	%	15.90	18.90
CE Clearance Min.	%	15.90	18.90
CE Clearance Added	IN3	0.0	0.0
Valve Model - HE			
Valve Model - CE			
Valves/Corner (HES/HED/CES/CED)		1/1/1/1	1/1/1/1
Valve Lift - HE	IN	0.080	0.080
Valve Lift - CE	IN	0.080	0.080
Valve Lift Area - HE	SQIN	7.362	3.626
Valve Lift Area - CE	SQIN	7.362	3.626
API Inlet Vlv Vel Avg.	FPM	8605.0	6699.6
Internal Gas Load - T	LBF	30123	4229
Internal Gas Load - C	LBF	-34132	-9250
MACGL	LBF	44275	44275
Combined Rod Load - T	LBF	22423	26836
Combined Rod Load - C	LBF	-29017	-23942
MACCRL	LBF	38500	38500
Recip. Weight @ XHD Pin	LB	337.0	337.0
Reversal @ XHD Pin	DEG	145.0	155.0