



GEA Refrigeration  
North America, Inc.

# Project Ratings

		Model 110GM #1	Model 110GM #2
		Condition 1	Condition 1
<b>Compressor</b>	Model	110GM	110GM
	Refrigerant	R-507	R-507
	Application	Economized	Economized
	Capacity	<i>Tons</i> 58.3	58.3
	Power	<i>BHP</i> 151.4	151.4
	Performance Factor	<i>BHP/TR</i> 2.60	2.60
	COP	1.82	1.82
	Speed	<i>RPM</i> 3550	3550
	Percent of Full Load	100%	100%
	Vi	2.6 to 5.5 - Var	2.6 to 5.5 - Var
Warnings	<b>Yes</b>	<b>Yes</b>	
<b>Evap</b>	Evap Temperature	°F -25.6	-25.6
	Evap Pressure	<i>psi</i> 28.8	28.8
	Useful S/Heat	°F 0.0	0.0
	Non-Useful S/Heat	°F 0.0	0.0
<b>Cond</b>	Cond / Inter Temperature	°F 95.0	95.0
	Cond / Inter Pressure	<i>psi</i> 240.7	240.7
	SubCooling At Cond	°F 0.0	0.0
	Condenser HOR	<i>MBH</i> 1084.9	1084.9
	Min Cond Temp	°F 55.0	55.0
	Separator Size	STD - 20" Dia	STD - 20" Dia
<b>Suction</b>	Suction Line Loss	<i>psi</i> 1.02	1.02
	Package Suction Loss	<i>psi</i> 0.12	0.12
	Saturated Suction Pressure	<i>psia</i> 28.8	28.8
	Suction Stop Valve Size	<i>in</i> 5.0	5.0
	Suction Temperature	°F -27.36	-27.36
	Mass Flow	<i>lb/min</i> 181.1	181.1
	Volume Flow	<i>cfm</i> 286.7	286.7
	Theoretical Swept Volume	<i>cfm</i> 334.7	334.7
	Volumetric Efficiency	% 85.7	85.7
<b>Discharge</b>	Discharge Line Loss	<i>psi</i> 2.18	2.18
	Package Discharge Loss	<i>psi</i> 3.33	3.33
	Discharge Pressure	<i>psia</i> 246.2	246.2
	Discharge Stop Valve Size	<i>in</i> 4.0	4.0
	Discharge Temp (100%)	°F 130.0	130.0
	Discharge Temp (min)	°F 130.0	130.0
	Mass Flow	<i>lb/min</i> 285.4	285.4
	Volume Flow	<i>cfm</i> 57.0	57.0
<b>Economizer</b>	Type	Flash	Flash
	Econ Vessel Temp	°F 24.62	24.62
	Econ Vessel Pressure	<i>psia</i> 80.1	80.1
	Econ Line Loss	<i>psi</i> 0.0	0.0
	Econ Package Loss	<i>psi</i> 6.71	6.71
	Econ Approach Temp	°F -	-
	Econ Mass Flow	<i>lb/min</i> 95.2	95.2
	Econ Capacity	<i>Tons</i> 22.5	22.5
	Sideload Mass Flow	<i>lb/min</i> 0.0	0.0
	Sideload Capacity	<i>Tons</i> 0.0	0.0
<b>Motor</b>	Voltage	V/PH/Hz 380/3/60	380/3/60
	Motor Size	<i>HP</i> 200	200
	Frame Size	444-5TS	444-5TS
	Efficiency	% 94.1	94.1
	Full Load Amps	<i>Amps</i> 269	269
	Starting Type	Solid State	Solid State
<b>Oil Cooling</b>	Oil Cooling Type	Liq. Inj. - IntelliSOC	Liq. Inj. - IntelliSOC
	Min Liq Inj Feed Pressure	<i>psia</i> 82.4	82.4
	Liq Inj Mass Flow (100%)	<i>lb/min</i> 9.1	9.1
	Liq Inj Capacity (100%)	<i>Tons</i> 2.9	2.9
	Liq Inj Mass Flow (min)	<i>lb/min</i> 42.8	42.8
	Liq Inj Capacity (min)	<i>Tons</i> 13.6	13.6
	Oil Type	FES #5 (55 gal) Shipped Loose	FES #5 (55 gal) Shipped Loose
	Oil Supply Temp	°F 130.0	130.0
	Functional Oil Flow	<i>GPM</i> 8.0	8.0
	Injection Oil Flow	<i>GPM</i> 4.0	4.0
	Total Oil Flow	<i>GPM</i> 12.1	12.1
	Oil Pump Size	<i>GPM</i> 22	22
	Oil Pump Motor HP	<i>HP</i> 3	3

GEA reserves the right to final verification of all ratings results.

Project Name:  
Proposal Number: P13-4085-KGG-Rev B  
Customer Name: Jerry Zhou

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