

Detailed Performance Summary For 30RBS-160

Project: Friends House
Prepared By:

03/08/2012
05:10PM

Unit Information

Tag Name:.....**30RBS-160**
 Model Number:.....**30RBS-160**
 Condenser Type:..... **Air Cooled**
 Compressor Type:..... **Scroll**
 Nameplate Voltage:.....**400-3-50** V-Ph-Hz
 Quantity:..... **1**
 Manufacturing Source: **Montluel, France**
 Refrigerant:..... **R410A**
 Capacity Control Steps:..... **4**
 Minimum Capacity:..... **25.0** %
 Shipping Weight: **1106** kg
 Operating Weight: **1122** kg
 Unit Length:..... **2122** mm
 Unit Width:..... **2273** mm
 Unit Height:..... **1321** mm
 Minimum Outdoor Operating Temp: **-10** °C

Performance Information

Cooling Capacity: **139.8** kW
 Total Compressor Power:..... **60.1** kW
 Total Fan Motor Power:..... **1.40** kW
 Pump Power:..... **1.92** kW
 Total Unit Power (without pump): **61.5** kW
 Total Unit Power (with pump): **63.4** kW
 Efficiency (without pump): **2.27** kW/kW

Acoustics Information

A-Weighted Sound Power Level:..... **83** dbA

Evaporator Information

Fluid Type:..... **Ethylene Glycol**
 Brine Concentration:..... **20.0** %
 Fouling Factor: **0.0000** (sqm-K)/kW
 Leaving Temperature: **6.0** °C
 Entering Temperature:..... **12.0** °C
 Fluid Flow: **5.81** L/s
 Total Pressure Drop (incl. hydronic fittings):. **64.7** kPa

Condenser Information

Altitude: **0** m
 Number of Fans:..... **2**
 Total Condenser Fan Air Flow at 20°C: **7816** L/s
 Entering Air Temperature: **34.0** °C

Electrical Information

Unit Voltage:..... **400-3-50** V-Ph-Hz
 Standby Power: **2.7** kW
 Minimum Voltage:..... **360** Volts
 Maximum Voltage:..... **440** Volts
 Power Factor:..... **0.78**

Amps (Un)	Electrical Circuit 1	Electrical Circuit 2
Max Unit Current Draw (RLA)	140.9	
Max Start Up Current (ICF)	284.5	
Nominal Unit Current Draw (A)	120.9	

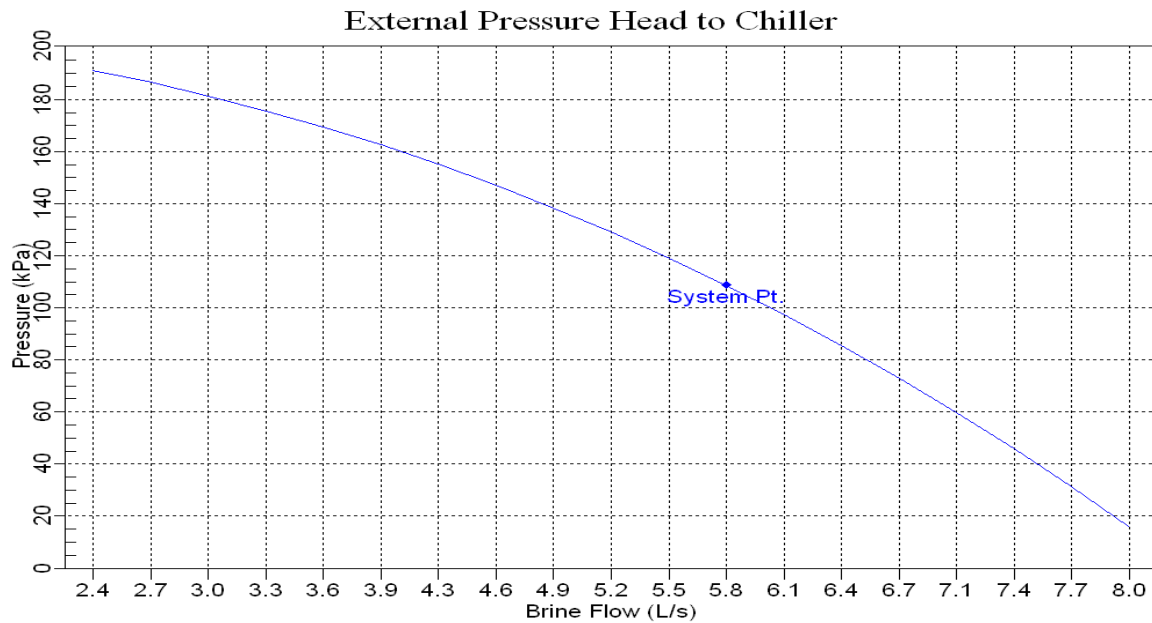
Integrated Pump Information

Static Head at Pump: **173.4** kPa
 Static Head External to Chiller: **108.7** kPa

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Accessories and Installed Options

- Opt. 148C CCN to Bac-Net Gateway
- Opt. 116G Fixed Speed Dual Pump LP
- Opt. 15LS Super Low Noise
- Opt. 264 Water Exchanger Screwed Connection

European Seasonal Energy Efficiency Ratio (EUROVENT)

ESEER: **3.85** kW/kW

Unit Performance				(1)
Percent Full Load Capacity, %	100	75	50	25
Percent of Full Load Power, %	100.0	53.6	27.3	12.6
Unloading Sequence	A	A	A	A
Cooling Capacity, kW	145.2	108.9	72.6	36.3
Total Unit Power, kW	63.9	34.3	17.5	8.1
Efficiency, kW/kW	2.27	3.18	4.15	4.49
Evaporator Data				
Fluid Entering Temperature, °C	12.0	10.7	9.5	8.2
Fluid Leaving Temperature, °C	7.0	7.0	7.0	7.0
Fluid Flow Rate, L/s	6.93	6.93	6.93	6.93
Fouling Factor, (sqm-K)/kW	0.000	0.000	0.000	0.000
Condenser Data				
Entering Air Temperature, °C	35.0	30.0	25.0	20.0

Values given are interpolated and are not directly measurable under laboratory conditions.

(1) Compressor cycling is expected. Stated performances are average.

All performance efficiency data are without pump.

Calculations done in accordance with adjusted performances(not taking into account pump efficiency and exchanger(s) pressure drop) - Not compliant with EN14511-3 : 2011.

Sound Power Lw according to ISO 9614-1 and EUROVENT standard 8/1.