

Detailed Performance Summary For 30RQS-090

Project: Friends House
Prepared By:

03/08/2012
05:47PM

Unit Information

Tag Name:..... **30RQS-090**
Model Number:..... **30RQS-090**
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:..... **3**
Minimum Capacity:..... **33.0** %
Shipping Weight: **928** kg
Operating Weight: **972** kg
Unit Length:..... **2050** mm
Unit Width:..... **2258** mm
Unit Height:..... **1321** mm
Heating Mode
Minimum Outdoor Operating Temp: **-15** °C
Cooling Mode
Minimum Outdoor Operating Temp: **-10** °C

Performance Information

Heating Mode
Heating Capacity (instantaneous): **69.9** kW
Heating Capacity (integrated):..... **53.9** kW
Total Compressor Power:..... **25.1** kW
Total Fan Motor Power:..... **1.81** kW
Pump Power:..... **0.98** kW
Total Unit Power (without pump): **26.9** kW
Total Unit Power (with pump): **27.9** kW
Efficiency (without pump) (instantaneous):... **2.60** kW/kW
Cooling Mode
Cooling Capacity: **83.7** kW
Total Compressor Power:..... **29.4** kW
Total Fan Motor Power:..... **1.47** kW
Pump Power:..... **0.98** kW
Total Unit Power (without pump): **30.9** kW
Total Unit Power (with pump): **31.9** kW
Efficiency (without pump): **2.71** kW/kW

Acoustics Information

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

Fluid Heat Exchanger Information

Fluid Type:..... **Fresh Water**
Fouling Factor: **0.0000** (sqm-K)/kW
Heating Mode
Leaving Temperature: **40.0** °C
Entering Temperature:..... **35.0** °C
Fluid Flow: **3.37** L/s
Total Pressure Drop (incl. hydronic fittings):. **31.0** kPa
Cooling Mode
Leaving Temperature: **6.0** °C
Entering Temperature:..... **11.9** °C
Fluid Flow: **3.37** L/s
Total Pressure Drop (incl. hydronic fittings):. **36.3** kPa

Air Heat Exchanger Information

Altitude: **0** m
Number of Fans:..... **2**
Total Condenser Fan Air Flow at 20°C: **7380** L/s
Heating Mode
Entering Air Temperature (dry bulb): **-5.0** °C
Entering Air Temperature (wet bulb):..... **-5.4** °C
Entering Air Temperature (dew point):..... **-6.2** °C
Relative Humidity: **90.0** %

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Cooling Mode

Entering Air Temperature: **35.0** °C

Electrical Information

Unit Voltage:..... **400-3-50** V-Ph-Hz
Standby Power: **1.8** kW
Minimum Voltage:..... **360** Volts
Maximum Voltage:..... **440** Volts
Power Factor:..... **0.82**

Amps (Un)	Electrical Circuit 1	Electrical Circuit 2
Max Unit Current Draw (RLA)	76.1	
Max Start Up Current (ICF)	171.2	
Nominal Unit Current Draw (A)	62.1	

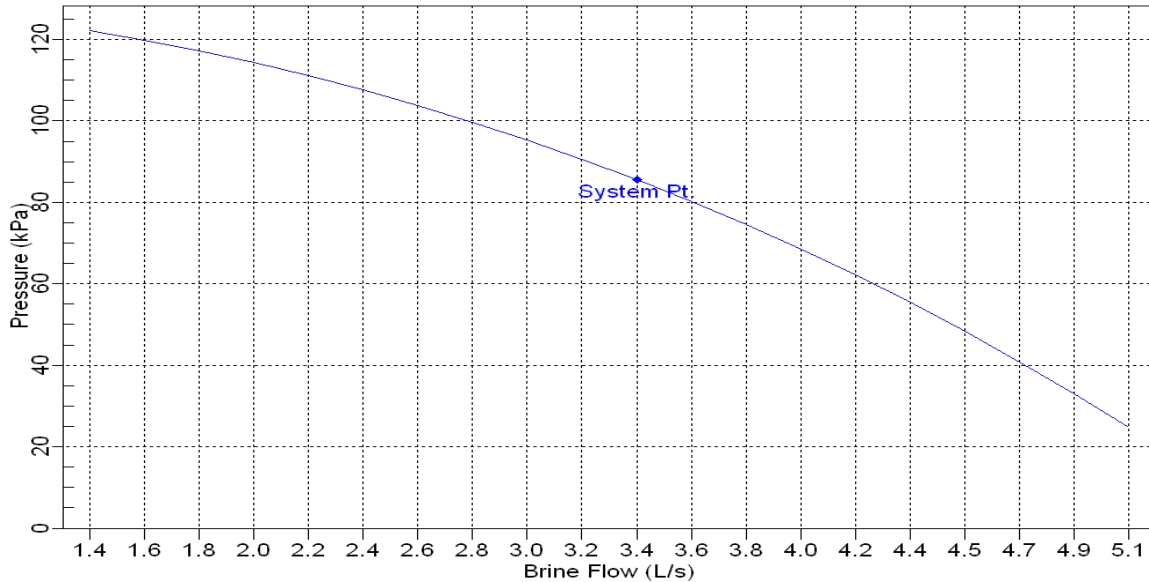
Maximum current draw of cooling and heating mode.

Integrated Pump Information

Heat Pump Mode

Static Head at Pump:..... **116.6** kPa
Static Head External to Heat Pump:..... **85.6** kPa

External Pressure Head to Heat Pump



Accessories and Installed Options

- Opt. 42 Freeze Protection (down to -20 deg C)
- Opt. 148C CCN to Bac-Net Gateway
- Opt. 116G Fixed Speed Dual Pump LP
- Opt. 15LS Low Noise
- Opt. 264 Water Exchanger Screwed Connection

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.