

Summary Performance Report For 162 tube

Project: Peer house
Prepared By:

06/20/2011
02:59PM



AquaSnap™ Air-Cooled Scroll Chiller



Unit Information

Tag Name: **162 tube**
 Model Number: **30RB0162-B**
 Quantity: **1**
 Manufacturing Source: **Montluel, France**
 Refrigerant: **R410A**
 Shipping Weight: **1782** kg
 Operating Weight: **1880** kg
 Unit Length: **2410** mm
 Unit Width: **2253** mm
 Unit Height: **2297** mm

Evaporator Information

Fluid Type: **Fresh Water**
 Fouling Factor: **0.0180** (sqm-K)/kW
 Leaving Temperature: **7.0** °C
 Entering Temperature: **12.0** °C
 Fluid Flow: **7.26** L/s
 Pressure Drop: **13.5** kPa

Condenser Information

Altitude: **0** m
 Number of Fans: **3**
 Total Condenser Fan Air Flow: **10262** L/s
 Entering Air Temperature: **35.0** °C

Integrated Pump Information

No Pump Selected

Performance Information

Cooling Capacity: **152.2** kW
 Total Compressor Power: **53.7** kW
 Total Fan Motor Power: **2.25** kW
 Total Unit Power (without pump): **56.0** kW
 Efficiency (without pump): **2.72** kW/kW
 A-Weighted Sound Power Level: **84** dbA

Accessories and Installed Options

Opt. 41 Evap Freeze Protection

 Opt. 263 Super Enviro-shield
 Opt. 15LS Super Low Noise
 Opt. 23A Side Panels Only
 Opt. 28 Winter Operation (down to -20 deg C)
 Opt. 280 DX Evaporator

Electrical Information

Unit Voltage: **400-3-50** V-Ph-Hz
 Standby Power: **0.6** kW
 Minimum Voltage: **360** Volts
 Maximum Voltage: **440** Volts
 Power Factor: **0.84**

Amps (Un)	Electrical Circuit 1	Electrical Circuit 2
Max Unit Current Draw (RLA)	126.0	---
Max Start Up Current (ICF)	299.0	---
Nominal Unit Current Draw (A)	96.0	---

Cooling and/or heating performance data according to EN 14511 and certified by EUROVENT.
 Sound Power Lw according to ISO 9614-1 and EUROVENT standard 8/1.

Calculation of Chiller Noise with Acoustic Package (5-sided box radiation)

Chiller Type:Carrier 30RB162-B LN

Length	2.41	m
Width	2.25	m
Height	2.30	m
Distance	25.0	m <i>Enter zero for Lw calc</i>
5SB area	8452.9	m ²
5SB corr	-39	dB

	63	125	250	500	1k	2k	4k	8k	A or Lin?
Chiller Lw	0	84	88	83	79	77	69	71	dB

	63	125	250	500	1k	2k	4k	8k	dB(A)
Lp @ 25m untreated	-39	45	49	44	40	38	30	32	46
Lp @ 25m with AA202	-39	44	46	41	37	34	26	29	43
Lp @ 25m with AA203	-39	43	45	36	30	29	22	25	39
Lp @ 25m with AA204	-39	41	43	32	27	25	18	21	35
Lp @ 25m with AA205	-42	35	37	26	20	19	12	15	30
Lp @ 25m with AA301	-42	39	39	28	21	21	14	17	32
Lp @ 25m with AA303	-43	34	36	22	16	15	6	12	28
Lp @ 25m with AA401	-47	35	36	24	15	10	2	5	29

Lw is Sound Power Level, dB re 10⁻¹²W (1pW); Lp is Sound Pressure Level, dB re 2 x 10⁻⁵Pa

Propagation in accordance with 5-sided box (conformal surface) model, with chiller on reflecting plane in otherwise free field.

Measurement position 1.5m above surface upon which chiller stands.

Data are derived from tests carried out in accordance with ISO 3744 or ISO9614, and are therefore a logarithmic average around the machine. Individual points may be noisier or quieter.

Acoustic base panels are required when chiller is raised off the ground, or is not on a solid surface.