

Air Cooled Screw Chiller Performance Specification

Unit Tag	Qty	Model No.	Capacity (kW)	Volts/Ph/Hz	Refrigerant
HAFF2	1	YVAA0200CDG50	648.0	380-415/3/50	R134a

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR			
YVAA0200CDG50BA	VSXX	XTAXLXXXX50	41XOXXX	S210X	1SXA2B	NXG	XEXXX	XXXX	XXEX			
5	10	15	20	25	30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°C)	9.0	Min. Flow Rate (l/s)	18.9	COP	2.00
LWT (°C)	4.8	Max. Flow Rate (l/s)	72.6	NPLV	3.65
Design Flow Rate (l/s)	36.7			Minimum Unit Capacity	10 %
Pressure Drop (kPa)	37.0	Condenser Data		Physical Data	
Fluid	Water	Ambient Temp. Design (°C)	45.0	Rigging Wt. (kg.)	6205
Fouling Factor	0.01796	Altitude (m)	0	Operating Wt. (kg.)	6551
Water Volume (l)	276.3	Ambient Temp. Min (°C)	-17.8		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	267	267		
Fan QTY/FLA (each)	4/6.0	4/6.0		

Single Point				
Min. Circuit Ampacity	654			
Recommended Fuse/CB Rating	800			
Max. Inverse Time CB Rating	800			
Max. Dual Element Fuse Size (Amps)	800			
Unit Short Circuit Withstand (STD)	30kA			
Wire Lugs Per Phase*	3			
Wire Range (Lug Size)	35 - 300			
Unit Power Factor	0.95			
Control KVA	2.0			
Starter Type	VSD			
			Operating Condition Electrical Data	
			Compressor kW	298.7
			Total Fan kW	25.8
			Total kW	324.4

Notes:

* Use Copper Conductors only

Part Load Rating Data				
Load %	Ambient (°C)	Capacity (kW)	Compressor kW	Unit Efficiency
100.0	45.0	648.0	298.7	2.00
75.0	26.7	486.0	119.2	3.31
50.0	18.3	324.0	61.4	3.88
25.0	12.8	162.0	26.5	4.18



A JOHNSON CONTROLS COMPANY

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SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz YVAA0200CDG50 (Equipped with High Airflow Fans and Economical Sound Configuration)										
Load %	Ambient (°C)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	45.0	103.0	105.0	103.0	108.0	103.0	98.0	92.0	88.0	108.0
75.0	26.7	103.0	105.0	103.0	102.0	98.0	95.0	90.0	85.0	104.0
50.0	18.3	102.0	104.0	102.0	101.0	97.0	94.0	89.0	84.0	103.0
25.0	12.8	99.0	101.0	99.0	98.0	93.0	91.0	86.0	81.0	99.0

SOUND PRESSURE LEVELS in dB at 9.1 (m) ** YVAA0200CDG50 (Equipped with High Airflow Fans and Economical Sound Configuration)										
Load %	Ambient (°C)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	45.0	76.0	78.0	76.0	81.0	76.0	71.0	65.0	61.0	81.0
75.0	26.7	76.0	78.0	76.0	75.0	71.0	68.0	63.0	58.0	77.0
50.0	18.3	75.0	77.0	75.0	74.0	70.0	67.0	62.0	57.0	76.0
25.0	12.8	72.0	74.0	72.0	71.0	66.0	64.0	59.0	54.0	72.0

** Chiller is assumed to be a point source on a reflecting surface (hemispherical radiation)

YVAA0200CDG50 Performance at AHRI Conditions					
Evaporator Data		Condenser Data		Performance Data	
EWT (°C)	12.2	Ambient Temp. (°C)	35.0	COP	2.6
LWT (°C)	6.7	Altitude (kPa)	0	IPLV	3.9
Flow Rate (l/s)	33.0			Capacity (kW)	766.2
Pressure Drop (kPa)	30.0				
Fluid	Water				
Fouling Factor	0.01761				
Water Volume (l)	276.3				