

# Air Cooled Screw Chiller Performance Specification

Unit Tag	Qty	Model No.	Capacity (Tons)	Volts/Ph/Hz	Refrigerant
<b>CH-2</b>	<b>1</b>	<b>YVAA0248CSV46</b>	<b>135.0</b>	<b>460/3/60</b>	<b>R134a</b>

Pin:

BASE MODEL	POWER	CONTROLS	PIPING	COMP	EVAPORATOR	COND	CABINET	MISC	WARR			
<b>YVAA0248CSV46BA</b>	<b>VNXX</b>	<b>XEAXLXXXX36</b>	<b>24XOSXX</b>	<b>V182W</b>	<b>1SXA3B</b>	<b>NXV</b>	<b>7RNXX</b>	<b>XXXX</b>	<b>JXSX</b>			
5	10	15	20	25	30	35	40	45	50	55	60	65

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	30.0	Min. Flow Rate (gpm)	200.0	EER / COP	<b>8.3 / 2.4</b>
LWT (°F)	24.0	Max. Flow Rate (gpm)	750.0	NPLV	<b>12.6 / 3.7</b>
Design Flow Rate (gpm)	574.3			Minimum Unit Capacity	10 %
Pressure Drop (ft.)	<b>37.1</b>	Condenser Data		Physical Data	
Fluid	P.G. 30.0%	Ambient Temp. Design (°F)	95.0	Rigging Wt. (lbs.)	19217
Fouling Factor	0.00010	Altitude (ft.)	0	Operating Wt. (lbs.)	19980
Water Volume (gal)	73.0	Ambient Temp. Min (°F)	0.0		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	158	122		
Fan QTY/FLA (each)	8/2.4	8/2.4		

Single Point				
Min. Circuit Ampacity	361			
Recommended Fuse/CB Rating	450			
Max. Inverse Time CB Rating	500			
Max. Dual Element Fuse Size (Amps)	500			
Unit Short Circuit Withstand (STD)	50 kA			
Wire Lugs Per Phase*	3			
Wire Range (Lug Size)	#2 - 600 KCM			
Unit Power Factor	0.95			
Control KVA	2.0			
Starter Type	VSD			
			Operating Condition Electrical Data	
			Compressor kW	188.6
			Total Fan kW	7.6
			Total kW	196.3
			Total Current at Rated Conditions	N/A

Notes:

Outside the scope of AHRI Air-Cooled Water-Chilling Packages Using Vapor Compression Cycle Certification Program, but is rated in accordance with AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI)., Auxiliary components included in total KW - Oil heaters, Chiller controls. Auxiliary power is already included in the compressor and fan power

\* Use Copper Conductors only



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Part Load Rating Data				
Load %	Ambient (°F)	Capacity (Tons)	Compressor kW	Unit Efficiency
100.0	95.0	135.0	188.6	8.3 / 2.4
75.0	80.0	101.2	102.2	11.1 / 3.2
50.0	65.0	67.5	52.1	13.5 / 4.0
25.0	55.0	33.7	21.5	15.3 / 4.5

SOUND POWER LEVELS (In Accordance with AHRI 370) – Octave Band Center Frequency, Hz YVAA0248CSV46 ( Equipped with Low Sound Fans with Variable Speed Control and Low Sound Kit(level 1 reduction) )										
Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
100.0	95.0	88.0	92.0	89.0	90.0	89.0	81.0	76.0	71.0	92.0
75.0	80.0	90.0	89.0	89.0	89.0	85.0	80.0	75.0	70.0	90.0
50.0	65.0	88.0	90.0	89.0	89.0	86.0	79.0	75.0	70.0	90.0
25.0	55.0	85.0	87.0	86.0	86.0	83.0	76.0	72.0	67.0	87.0

SOUND PRESSURE LEVELS in dB at 30.0 (ft.) ** YVAA0248CSV46 ( Equipped with Low Sound Fans with Variable Speed Control and Low Sound Kit(level 1 reduction) )										
Load %	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	dBA
100.0	95.0	61.0	64.0	62.0	63.0	62.0	53.0	49.0	44.0	65.0
75.0	80.0	63.0	62.0	62.0	62.0	58.0	52.0	48.0	43.0	63.0
50.0	65.0	61.0	63.0	61.0	62.0	59.0	52.0	48.0	43.0	63.0
25.0	55.0	58.0	59.0	59.0	59.0	56.0	49.0	45.0	40.0	60.0

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

YVAA0248CSV46 Performance at AHRI Conditions					
Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54.0	Ambient Temp. (°F)	95.0	EER / COP	11.0 / 3.2
LWT (°F)	44.0	Altitude (ft.)	0	EER IPLV/COP IPLV	19.8 / 5.8
Flow Rate (gpm)	512.1			Capacity (Tons)	213.4
Pressure Drop (ft.)	27.8				
Fluid	Water				
Fouling Factor	0.00010				
Water Volume (gal)	73.0				