

Project Name: **Proiincsa**

 Unit Tag: **CH-5**

 Qty.: **1**

 Model: **YMAE0035**

Full Load - Design

PIN

YMAE0035PJ	P46VBXSAAL	YPAAAAXEA1	3BX1XXXNSS	ATXXXXXXXXA				
...5...10	...5...20	...5...30	...5...40	...5...50	...5...60	...5...70	...5...80	...5...90



Unit	
Model No.	YMAE0035
Number of Compressors per Module	2
Compressor Type	Scroll - Inverter
Number of Compressor Circuits	2
Refrigerant	R454B
Turndown Rate	19.0 %
Cooling Mode Operation	
Net Cooling Capacity [tons.R]	35.03
Total Power Input [kW]	40.03
EER [Btu/W.h]	10.50
Part Load Efficiency (NPLV/IP) [Btu/W.h]	19.89
Ambient Air Temperature* [°F]	85.0
Entering Liquid Temperature* [°F]	54.00
Leaving Liquid Temperature* [°F]	44.00
Entering Flow Rate [USGPM]	83.81
Evap. Pressure Drop [ft H2O]	13.8
Sound Pressure (Hemispherical Method) [dB(A)]	54.0
Sound Pressure Measured at [ft]	30.0
Electrical Data	
Nominal Voltage / Voltage Limits	460-3-60.0 / 414V - 506V
Nominal Voltage	460-3-60.0
Compressor RLA (each circuit) [A]	30.3 / 30.3
Fan QTY	2
Fan MOC [A]	2.4
Min. Circuit Ampacity [A]	74.0
Max. Inverse Time CB Rating [A]	100.0
Max. Dual Element Fuse Size [A]	100.0
Unit Short Circuit Withstand [kA]	65

Performance Impacting Options

Condenser Coil	Copper Tube Aluminum Fin Coils (Round Tube And Fin)
Fan	High Efficiency Fans with Variable Speed EC motor
Sound Kit	Acoustic Blanket Required

Weight & Dimensional Data

Shipping Weight [lbs]	2370
Operating Weight [lbs]	2403
Refrigerant Charge per Module [lbs]	51
Overall Length [in]	88.2
Overall Width [in]	47.2
Overall Height [in]	99.0

Performance Specification

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Heat Exchanger Performance

Water to Refrigerant Heat Exchanger		Ambient Coils	
Evaporator Type	Braze Plate Exchanger	Number of Fans	2
Fluid Volume [USGAL]	3.1	Altitude* [ft]	7570
Fluid Type*	Water	Total Air Flow [cfm]	21498
Fouling Factor* [h ft ² F/Btu]	0.000100	Fan Power [kW]	1.532
Fluid Connection Diameter [in]	2.5		

* Designates user specified input

Outside the scope of AHRI Air-Cooled Water-Chilling Packages Certification Program or not optionally certified, 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

Part Load Performance (Based on Multi-Step Unloading w/ User Specified % Load & Ambient Temp)

Percent Load	Ambient [°F]	Capacity [tons.R]	Power Input [kW]	Unit Efficiency [Btu/W.h]
100.0	85.0	35.03	40.03	10.50

Estimated Sound Pressure Levels at 30.0 ft (Derived from AHRI 370 Sound Power using Hemispherical Method)

Percent Load	Ambient [°F]	Octave Band Center Frequency [Hz]								LpA
		63	125	250	500	1000	2000	4000	8000	
100.0	85.0	53.0	55.0	54.0	52.0	48.0	45.0	42.0	40.0	54.0

Performance at AHRI Conditions

Evaporator		Condenser	
EFT [°F]	54.00	Ambient Temp. [°F]	95.0
LFT [°F]	44.00	Altitude [ft]	0.00
Flow Rate [USGPM]	83.74	Performance	
Pressure Drop [ft H ₂ O]	13.7	EER [Btu/W.h]	10.20
Fluid Type	Water	IPLV.IP [Btu/W.h]	20.02
Fouling Factor [h ft ² F/Btu]	0.000100	Net Cooling Capacity [tons.R]	35.00
Fluid Volume [USGAL]	3.1		

Note: Unit rated at design condition capacity.

Part Load Performance (Based on AHRI 550/590 - 2023 (IP))

Percent Load	Ambient [°F]	Capacity [tons.R]	Power Input [kW]	Unit Efficiency [Btu/W.h]
100.0	95.0	35.00	41.17	10.20
75.0	80.0	26.25	19.92	15.81
50.0	65.0	17.50	9.404	22.33
25.0	55.0	8.750	3.906	26.89

Notes:

The product image shown is for illustrative purposes only and is not representative of selected options.