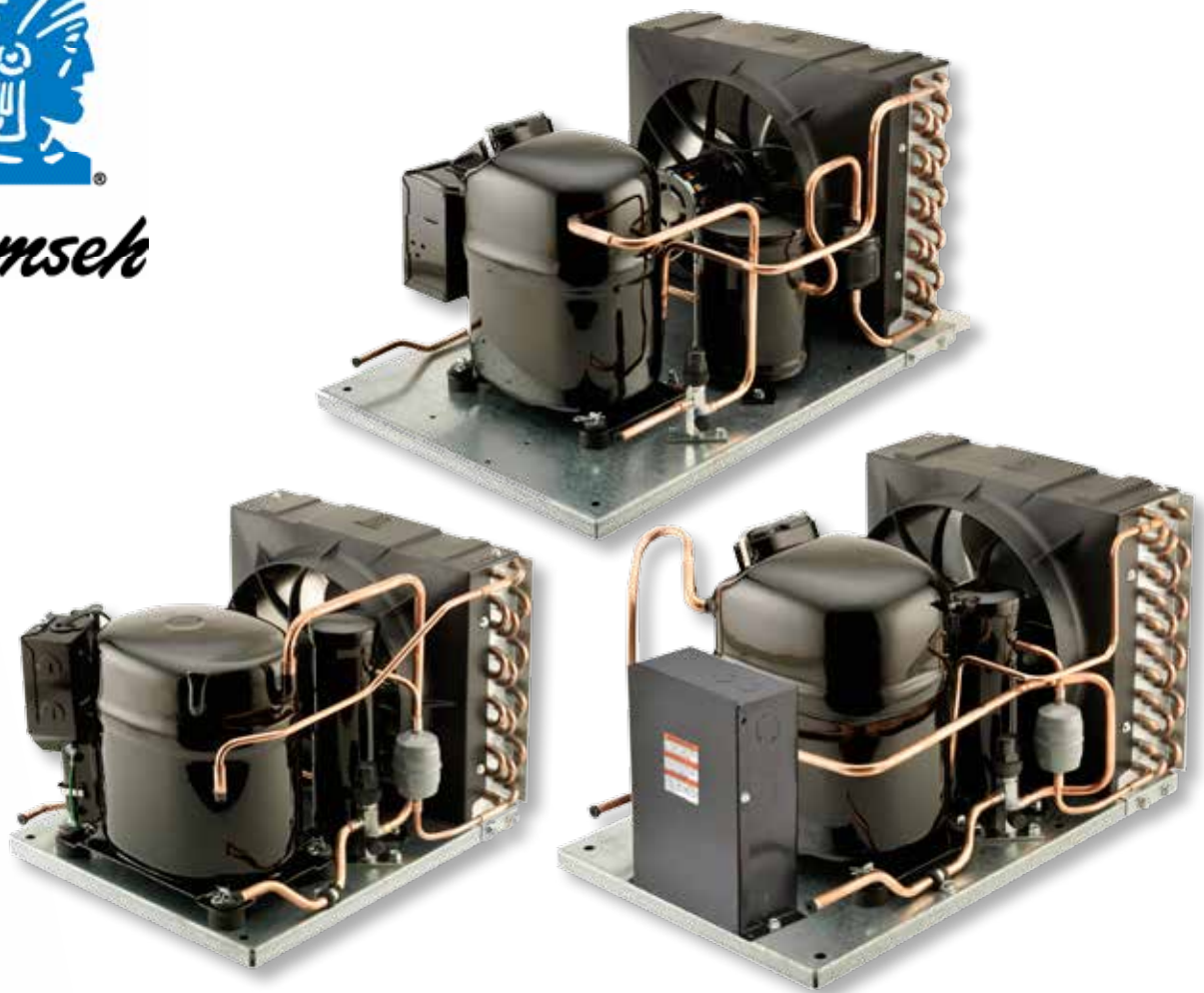




*Tecumseh*



## Modular Design= True Simplicity

### The New AK/AJ Celseon Line of Condensing Units

#### **FEWER MODELS TO STOCK**

Celseon covers a broad capacity range of models up to 1 1/4 HP with popular feature options.

#### **SPACE EFFICIENT**

Modular design, built on three (3) compact bases that are scaled to capacity.

#### **EFFICIENCY**

Standard higher efficiency PSC condenser fan motor. Improved air flow across the coil. Optional AE2 compressor on selected models.

#### **MAINTENANCE FRIENDLY**

Removable molded fan guard assembly for ease of maintenance and cleaning.

#### **SAVES TIME & MONEY**

Sweat connections, electrical screw terminations, and optional service valves simplify installation and service.

#### **PROVEN RELIABILITY**

Rugged Tecumseh compressors deliver long life and greater "up time" along with quality components.

# CELSEON<sup>®</sup>

For more information on products by Tecumseh, please visit our website [www.tecumseh.com](http://www.tecumseh.com)

# SPECIFICATIONS

# DRAWINGS

## Product

<b>Models:</b>	High/Comm. Temperature	1/2 to 1 HP (5 AE <sup>2</sup> models, 12 AK/AJ models)
	Med./Comm. Temperature	1/3 to 1 HP (23 AK/AJ models)
	Low Temperature:	1/2 to 1-1/4 HP (1 AE <sup>2</sup> model, 7 AK/AJ models)
<b>Evaporating Ranges:</b>	High Temperature:	+20°F to +55°F (-6.7°C to +12.8°C)
	Med./Comm. Temperature:	-10°F to +45°F (-23.3°C to +7.2°C)
	Low Temperature:	-40°F to +10°F (-40.0°C to -12.2°C)
<b>Ambient Operating Temperature:</b>		Rated at 90°F (32.2°C) Range: 80°F (26.6C) to 105°F (40.5°C)

## Materials

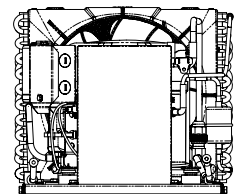
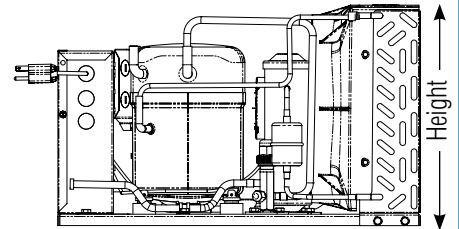
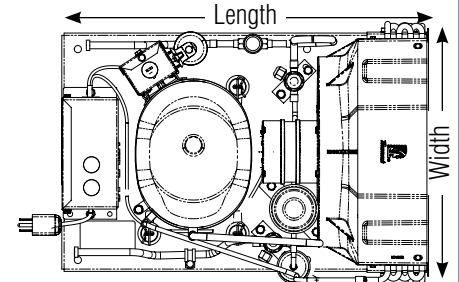
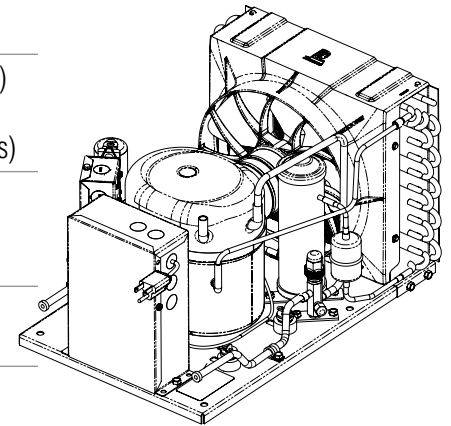
<b>Steel Valves:</b>	Steel, Base Mounted with Copper Sweat Connections Replacement P/N: 3/8 ODF 56630	
<b>Receiver:</b>	Steel, Base Mounted with Copper Sweat Connections Replacement P/N: 510-10000      510-10002 Height: 9.0 in (229 mm)      7.0 in (178 mm) Diameter: 2.5 in (64 mm)      5.0 in (127 mm) Internal Capacity: 37 in <sup>3</sup> (606 cm <sup>3</sup> )      128 in <sup>3</sup> (1999 cm <sup>3</sup> )	
<b>Base Plate:</b>	Cold Rolled Steel 16 Ga. Galvanized G90u	
<b>Refrigerant and Oil:</b>	<b>Refrigerant</b>	<b>Oil Type</b>
	R134a, R404A	Polyolester (POE)
	R12, R22 compatible	Synthetic Alkylate (AB)
<b>Fan Guard:</b>	Polypropylene – Replacement P/N: Small 707-00004 Medium 707-00005 Large 707-00002	
<b>Fan Blade:</b>	Aluminum – Replacement P/N: 515-10002: 12W 515-10003: 35W 515-10001: 50W	
<b>Fan Motor (PSC):</b> (Permanent Split Capacitor)	810-10001: 12W 115V 810-10003: 35W 115V 810-10004: 50W 115V	810-10000: 12W 230V 810-10002: 35W 230V 810-10041: 50W 230V
<b>Condenser:</b>	Copper Tube and Aluminum Fin Replacement P/N: Small 506-10004 Medium 506-10008 Large 506-00002	<b>Width x Height</b> 3-row 13 in 10.2 in 4-row 13 in 11.3 in 3-row 17 in 12.4 in
<b>Electrical Cord:</b>	Length: 42 inches (1066 mm) Replacement P/N: 85106-14: 115V; 85259-5: 230V	

## Dimensions

	Length	Width	Height
Small:	15 in (381 mm)	14 in (356 mm)	11.7 in (297 mm)
Medium:	20 in (508 mm)	14.3 in (363 mm)	12.2 in (310 mm)
Large:	24 in (609 mm)	17.6 in (447 mm)	13.4 in (340 mm)
<b>Suction Line Sweat Connection:</b>	3/8 inch (9.5 mm) ODF - All units and all options		
<b>Liquid Line Sweat Connection:</b>	1/4 inch (6.3 mm) ODF - Base unit only (Sm + Med) 3/8 in all other size and options		

## Additional Information

<b>Agency Listing:</b>	UL® Recognized
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## The Compressors

The AK and AJ compressors have earned an unsurpassed reputation for reliability and value. Dependability is proven by millions upon millions of compressors that are actively working in a wide range of refrigeration applications. The high efficiency AE<sup>2</sup> compressor extended range, up to 1/2 HP, is also included.

# AK/AJ CELSEON MODELS

MODEL NUMBER	BOM #	VOLT	BTU/H @ 90 F	HP
<b>R134a LOW TEMPERATURE</b>				
AJA2423YAAD*	2G201-*9	115/60/1	2320	1/2

<b>R12 LOW TEMPERATURE</b>				
AJA2427AAAD*	2G203-*9	115/60/1	2780	3/4
AJA2427ANAD*	2G204-*9	208-230/60/1	2780	3/4

<b>R404A LOW TEMPERATURE</b>				
AJA2423ZAAD*	2G202-*9	115/60/1	2255	1/2
AE2425Z-AA3CD*	2G****-*9	115/60/1	TBD	3/4
AJA2430ZAAD*	2G739-*9	115/60/1	3000	3/4
AJB2439ZAAD*	2G701-*9	115/60/1	3300	1
AJB2447ZNAD*	2G1001-*9	208-230/60/1	4750	1-1/4

<b>R134a MEDIUM TEMPERATURE</b>				
AKA7437YAAD*	2G209-*9	115/60/1	3675	1/2
AJA7455YAAD*	2G710-*9	115/60/1	5540	3/4
AJA7455YNAD*	2G711-*9	208-230/60/1	5540	3/4

<b>R12 MEDIUM TEMPERATURE</b>				
AJA7444AAAD*	2G210-*9	115/60/1	4400	1/2
AJA7444ANAD*	2G211-*9	208-230/60/1	4400	1/2
AJA7465AAAD*	2G712-*9	115/60/1	6560	3/4
AJB7465ANAD*	2G713-*9	208-230/60/1	6560	3/4

<b>R22 COMMERCIAL TEMPERATURE</b>				
AKA9435EAAD*	2G303-*9	115/60/1	3510	1/2
AKA9435ENAD*	2G304-*9	208-230/60/1	3510	1/2
AKA9446EAAD*	2G214-*9	115/60/1	4600	1/2
AKA9446ENAD*	2G215-*9	208-230/60/1	4600	1/2
AKA9461ENAD*	2G716-*9	208-230/60/1	6100	3/4
AKA9470ENAD*	2G719-*9	208-230/60/1	7000	3/4
AJA9486ENAD*	2G1002-*9	208-230/60/1	8600	1

<b>R404A COMMERCIAL TEMPERATURE</b>				
AKA9430ZAAD*	2G301-*9	115/60/1	3090	1/3
AKA9430ZNAD*	2G302-*9	208-230/60/1	3090	1/3
AKA9442ZAAD*	2G212-*9	115/60/1	4235	1/2
AKA9442ZNAD*	2G213-*9	208-230/60/1	4235	1/2
AKA9457ZAAD*	2G714-*9	115/60/1	5710	3/4
AKA9457ZNAD*	2G715-*9	208-230/60/1	5810	3/4
AKA9463ZAAD*	2G717-*9	115/60/1	6360	3/4
AKA9463ZNAD*	2G718-*9	208-230/60/1	6360	3/4
AJA7480ZNAD*	2G1010-*9	208-230/60/1	7940	1

Continued on the back page

# AK/AJ CELSEON MODELS (Continued from previous page)

MODEL NUMBER	BOM #	VOLT	BTU/H @ 90 F	HP
<b>R134A HIGH / COMMERCIAL TEMPERATURE</b>				
AE4450Y-AA1AD*	2G****-9	115/60/1	TBD	1/2
AE4456Y-AA1CD*	2G****-9	115/60/1	TBD	1/2
AE4460Y-AA3CD*	2G****-9	115/60/1	TBD	1/2
AE4460Y-FZ3CD*	2G****-9	220-240/50/1	TBD	1/2

<b>R404A HIGH / COMMERCIAL TEMPERATURE</b>				
AE4450Z-AA1AD*	2G****-9	115/60/1	TBD	1/2
AE4470Z-AA3CD*	2G****-9	115/60/1	TBD	1/2

<b>R12 HIGH TEMPERATURE</b>				
AJA4456AAAD*	2G220-9	115/60/1	5675	1/2
AJA4456ANAD*	2G221-9	208-230/60/1	5675	1/2
AJA4488AAAD*	2G737-9	115/60/1	8800	3/4
AJA4488ANAD*	2G738-9	208-230/60/1	8800	3/4
AJA4512ANAD*	2G1020-9	208-230/60/1	11780	1

<b>R134a HIGH TEMPERATURE</b>				
AKA4457YAAD*	2G222-9	115/60/1	5700	1/2
AKA4457YNAD*	2G223-9	208-230/60/1	5700	1/2
AKA4472YAAD*	2G731-9	115/60/1	7200	1/2
AKA4472YNAD*	2G732-9	208-230/60/1	7200	1/2
AJA4492YAAD*	2G733-9	115/60/1	TBD	3/4
AJA4492YNAD*	2G734-9	208-230/60/1	TBD	3/4
AJA4512YNAD*	2G1021-9	208-230/60/1	TBD	1

## CONDENSING UNIT MODEL NUMBER

**AE 4 460 Y - AA 1A D K** (AE<sup>2</sup> models only)

**AKA 4 460 Y AA D K** (All models except AE<sup>2</sup>)

### Family & Generation

AE<sup>2</sup> AK, AJ Compressor Series

### Application Range

4 High +20°F to +55°F (-6.7°C to +12.8°C)  
 4 High/Comm. (AE<sup>2</sup> models only)  
 7, 9 Med/Comm. -10°F to +45°F (-23.3°C to +7.2°C)  
 2 Low -40°F to +10°F (-40.0°C to -12.2°C)

Rated at 90°F (32.2°C) Ambient 80° to 105°F (26.6 to 40.5°C)

### Capacity

First number is total digits  
 Remainder is capacity in Btu/h  
 This example 6,000 Btu/h Capacity

### Refrigerant

A = R12 E = R22 Y = R134a Z = R404A/R507

### Options (see options at right)

With no power cord:

A, H, G, J

With power cord:

K, S, C, P

### Fan Motor/Efficiency

D Permanent Split Capacitor

Motor (PSC)

### Voltage

AA 115/60/1

NA 208-230/60/1

### Release Variant

## AVAILABLE OPTIONS

Options NO Power Cord	Description	Options with Power Cord
A	Sweat Connections	K
H	Sweat Connections, and Service Valves	S
G	Sweat Connections, Service Valves and Receiver Tank	C
J	Sweat Connections, Service Valves, Receiver Tank, Filter-Drier and Sight Glass	P