

# CELSEON™



*Tecumseh*

Fractional Horse Power  
Indoor Air-Cooled Condensing Units

# CELSEON™

## Accomplish More With Less.

We know you're busy, that your time is valuable and reliability is critical. In today's fast-paced world, you can't afford to take chances.

Celseon indoor air-cooled condensing units use performance proven Tecumseh compressors, covering a broad capacity range with a limited number of models. A variety of options are offered including energy efficient, electronically commutated fan motors, service valves and liquid line receivers.

This translates to less time, less inventory and greater flexibility. All of this is backed by the Company that you've known to trust.

Tecumseh helps you accomplish more with less.



# FEATURES AND BENEFITS

## HIGHER INVENTORY TURNS

In comparison to conventional units, fewer models are needed to cover the same capacity range.

Flexible design allows for premium option packages at reduced lead-times.

## EFFICIENT

Choose between a shaded pole fan motor for standard efficiency or an electronically commutated (EC) type for high efficiency.

Molded fan shroud directs air flow across entire coil surface, optimizing system performance.

## EASY REPLACEMENT

Compact design works well in space restricted applications and facilitates field servicing.

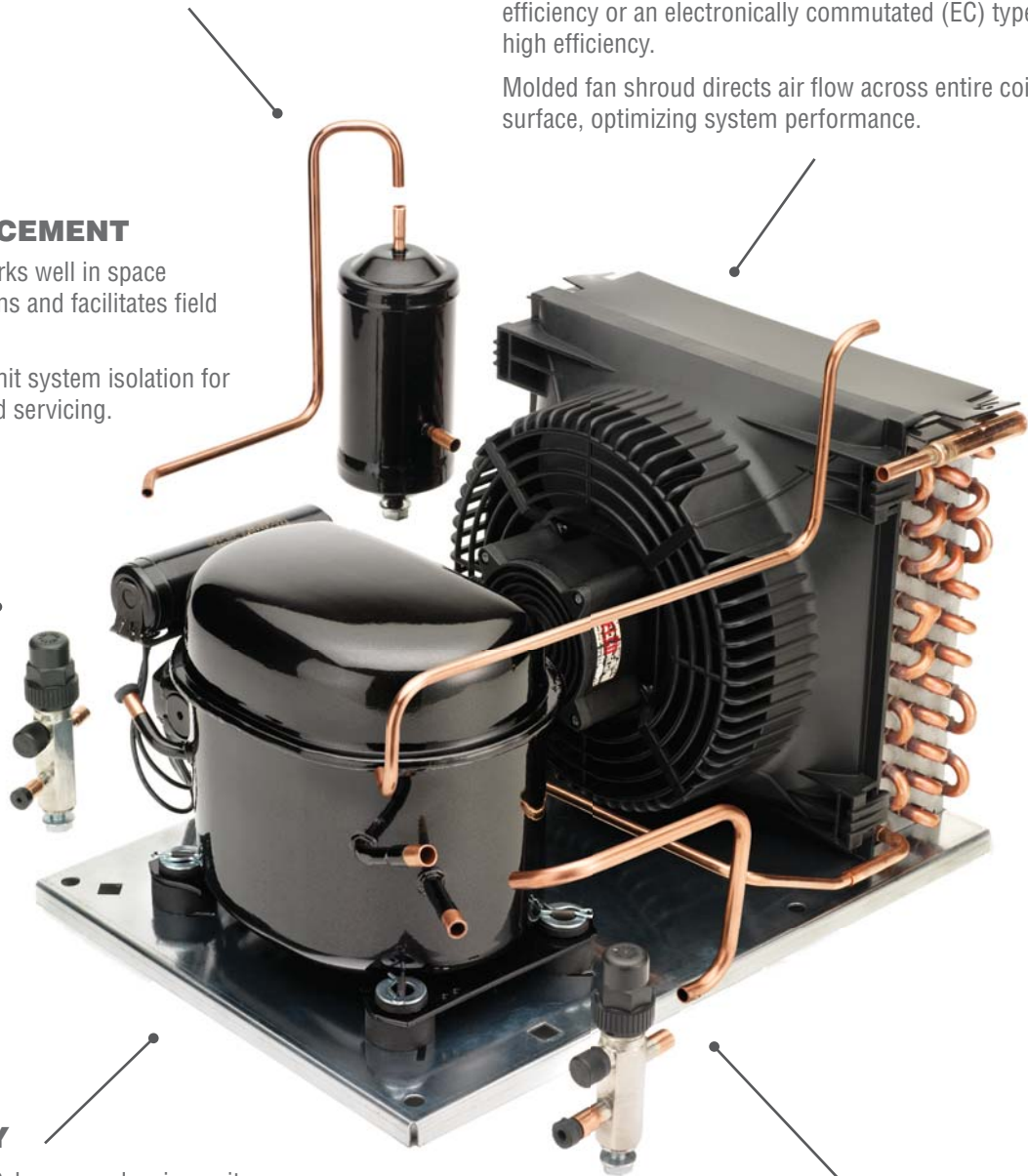
Shut-off valves permit system isolation for easy change-out and servicing.

## RELIABILITY

At the heart of all Celseon condensing units is the unsurpassed reliability of Tecumseh compressors. We pair our compressors with quality, corrosion resistant components to deliver longer life and greater up-time.

## LESS TIME

Sweat connections and electrical screw terminations simplify your installation, saving you time and money. Modular components provide quick and easy replacement.



# SPECIFICATIONS

## PRODUCT

Evaporating Ranges	High Temperature	20°F to 55°F (-6.7°C to 12.8°C)
	Commercial Temperature	-10°F to 40°F (-23.3°C to 4.4°C)
	Low Temperature	-40°F to 10°F (-40°C to -12.2°C)
Ambient Operating Temperature	80°F (26.6°C) up to 105°F (40.5°C)	

## MATERIALS

Steel Valves	Steel, Base Mounted with Copper Sweat Connections	
Receiver	Steel, Base Mounted with Copper Sweat Connections	
	Length: 6 Inches (152.4 mm)	
	Diameter: 2 Inches (51 mm)	
	Internal Capacity 17 in <sup>3</sup> (278.6 cm <sup>3</sup> )	

Base Plate	Cold Rolled Steel 16 Ga. Galvanized G90u	
Oil	Refrigerant	Oil Type
	R134a	Polyol Ester
	R404A	Polyol Ester
	R22	Mineral

Termination	Screw Type
Fan Shroud	High Density Polyethylene
Fan Guard	High Density Polypropylene
Fan Blade	Polyolefin
Fan Motors	Shaded Pole (SP)
	Electronically Commutated (EC)
Condenser	Copper Tube and Aluminium Fin
	9 1/4 Inches (234 mm) x 9 Inches (228 mm)
	Two, Three and Four Row
Electrical Cord	Length: 20 Inches (508 mm)
	Type: Three Prong, Grounded Plug

## DIMENSIONS\*

Length: 16 Inches (406.4 mm)
Width: 11 1/2 Inches (292.1 mm)
Height: 9.9 Inches (251 mm)
Suction Line Sweat Connection: 5/16 Inch (7.9 mm)
Liquid Line Sweat Connection: 1/4 Inch (6.35 mm)

## ADDITIONAL INFORMATION

Agency Listing	UL Recognized and CSA Certified File SA2372, Volume 6, Section 1
----------------	------------------------------------------------------------------

\* See Line Drawing, Page 5

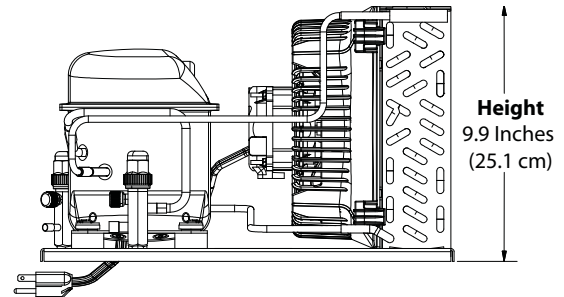
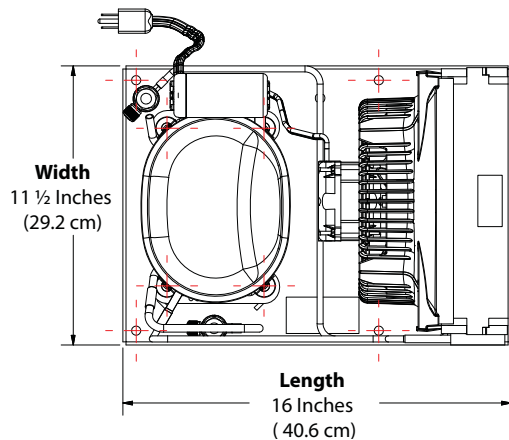


## AE Family of Compressors

The AE compressor has 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.

Original Equipment Manufacturer design engineers, wholesale distributors and service technicians across the globe know the AE compressor by name.

## DIMENSIONS



## CELSEON™ MODEL NUMBER

AEA 9 415 E XA S K

### Family and Generation

AEA, AEB Compressor Series

### Application Range

3, 4	High	-6.7°C to 12.8°C (20°F to 55°F)
9	Commercial	-23.3°C to 4.4°C (-10°F to 40°F)
1, 2	Low	-40°C to -12.2°C (-40°F to 10°F)

### Capacity

First number is total digits

Remainder is capacity in Btuh

This example 1500 Btuh Capacity

### Refrigerant

E	R 22
Y	R134a
Z	R404A

### Options

- K Includes Sweat Connections and Power Cord
- B Includes Sweat Connections, Power Cord and Receiver Tank
- C Includes Sweat Connections, Power Cord, Receiver Tank and Service Valves
- S Includes Sweat Connections, Power Cord and Service Valves

### Fan Motor Type/ Efficiency

- S Shaded Pole (SP), Standard Efficiency
- C Electronically Commutated (EC), High Efficiency

### Voltage

- XA 115 Volt

## AVAILABLE OPTIONS

Select the  
Model Designation for  
Customized Option  
Configurations

Options	Description
K	Includes Sweat Connections and Power Cord
B	Includes Sweat Connections, Power Cord and Receiver Tank
C	Includes Sweat Connections, Power Cord, Receiver Tank and Service Valves
S	Includes Sweat Connections, Power Cord and Service Valves

## Commercial / High Temperature

Celseon Model Number	Bill of Material	HP	Capacity (Btuh) at 90°F (32.2°C) Ambient, Rated at ARI Conditions														
			°F	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55
			°C	-23.3	-20.6	-17.8	-15.0	-12.2	-9.4	-6.7	-3.9	-1.1	1.7	4.4	7.2	10.0	12.7

### SHADED POLE FAN MOTOR, STANDARD EFFICIENCY (115V, Single Phase, 60 Hz)

#### R22

AEA9415EXASK	32G440-39	1/4	850	950	1070	1210	1350	1520	1690	1880	2090	2310	2550	-	-	-
AEA9422EXASK	32G355-39	1/3	-	-	1120	1500	1850	2160	2440	2680	2890	3060	3200	-	-	-

#### R404A

AEA9415ZXASK	32G450-39	1/4	830	950	1070	1190	1300	1420	1530	1640	1740	1850	1950	-	-	-
AEA9422ZXASK	32G350-39	1/3	1020	1200	1400	1600	1820	2050	2280	2530	2790	3060	3340	-	-	-

#### R134a

AEA3414YXASK	32G660-39	1/6	-	-	-	-	720	800	880	980	1080	1200	1320	1460	1610	1770
AEA3417YXASK	32G570-39	1/5	-	-	-	-	990	1070	1170	1280	1400	1540	1700	1860	2050	2240
AEA3425YXASK	32G560-39	1/5	-	-	-	-	1110	1280	1460	1640	1840	2040	2250	2460	2680	2910
AEA4430YXASK	32G470-39	1/4	-	-	-	-	1360	1580	1800	2030	2260	2490	2730	2970	3210	3460
AEA4440YXASK	32G360-39	1/3	-	-	-	-	1820	2080	2340	2610	2890	3180	3470	3770	4090	4400
AEA4448YXASK	32G380-39	1/3	-	-	-	-	2200	2480	2770	3060	3350	3650	3950	4250	4550	4860

### ELECTRONICALLY COMMUTATED FAN MOTOR, HIGH EFFICIENCY (115V, Single Phase, 60 Hz)\*\*

#### R22

AEA9415EXACK	32G440-39XP	1/4	850	950	1070	1210	1350	1520	1690	1880	2090	2310	2550	-	-	-
AEA9422EXACK	32G355-39XP	1/3	-	-	1120	1500	1850	2160	2440	2680	2890	3060	3200	-	-	-

#### R404A

AEA9415ZXACK	32G450-39XP	1/4	830	950	1070	1190	1300	1420	1530	1640	1740	1850	1950	-	-	-
AEA9422ZXACK	32G350-39XP	1/3	1020	1200	1400	1600	1820	2050	2280	2530	2790	3060	3340	-	-	-

#### R134a

AEA3414YXACK	32G660-39XP	1/6	-	-	-	-	720	800	880	980	1080	1200	1320	1460	1610	1770
AEA3417YXACK	32G570-39XP	1/5	-	-	-	-	990	1070	1170	1280	1400	1540	1700	1860	2050	2240
AEA3425YXACK	32G560-39XP	1/5	-	-	-	-	1110	1280	1460	1640	1840	2040	2250	2460	2680	2910
AEA4430YXACK	32G470-39XP	1/4	-	-	-	-	1360	1580	1800	2030	2260	2490	2730	2970	3210	3460
AEA4440YXACK	32G360-39XP	1/3	-	-	-	-	1820	2080	2340	2610	2890	3180	3470	3770	4090	4400
AEA4448YXACK	32G380-39XP	1/3	-	-	-	-	2200	2480	2770	3060	3350	3650	3950	4250	4550	4860

## Low Temperature

Celseon Model Number	Bill of Material	HP	Capacity (Btuh) at 90°F (32.2°C) Ambient, Rated at ARI Conditions												
			°F	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	
			°C	-40.0	-37.2	-34.4	-31.7	-28.9	-26.1	-23.3	-20.6	-17.8	-15.0	-12.2	

### SHADED POLE FAN MOTOR, STANDARD EFFICIENCY (115V, Single Phase, 60 Hz)

#### R404A

AEA2380ZXASK	32G420-39	1/4	-	-	610	700	810	910	1030	1150	1280	1420	1570
AEA2411ZXASK	32G330-39	1/3	-	-	790	920	1060	1190	1340	1480	1630	1790	1940

#### R134a

AEA1360YXASK	32G510-39	1/5	-	-	390	420	470	530	610	700	820	940	1080
AEA2410YXASK	32G410-39	1/4	-	-	390	600	800	990	1180	1350	1520	1680	1830
AEA2413YXASK	32G320-39	1/3	-	-	620	850	1080	1290	1480	1660	1830	1980	2120

### ELECTRONICALLY COMMUTATED FAN MOTOR, HIGH EFFICIENCY (115V, Single Phase, 60 Hz)\*\*

#### R404A

AEA2380ZXACK	32G420-39XP	1/4	-	-	610	700	810	910	1030	1150	1280	1420	1570
AEA2411ZXACK	32G330-39XP	1/3	-	-	790	920	1060	1190	1340	1480	1630	1790	1940

#### R134a

AEA1360YXACK	32G510-39XP	1/5	-	-	390	420	470	530	610	700	820	940	1080
AEA2410YXACK	32G410-39XP	1/4	-	-	390	600	800	990	1180	1350	1520	1680	1830
AEA2413YXACK	32G320-39XP	1/3	-	-	620	850	1080	1290	1480	1660	1830	1980	2120

\* Options are denoted by the last character in the Model Number (see page 5 for more detail)

\*\* Capacities are based on Shaded Pole fan motors. Improved capacity and efficiency can be expected with Electronically Commutated fan motors.

**Commercial / High Temperature**

Dimensions			Line Connections		Gross Weight Lbs (Kg)	Pump Down Capacity	Oil		Maximum Fuse Size (Amps)	Available Options*
Length	Width	Height	Suction	Liquid			Type	Charge Oz (Kg)		

**SHADED POLE FAN MOTOR, STANDARD EFFICIENCY (115V, Single Phase, 60 Hz)**

<b>R22</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.56	Mineral	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.81	Mineral	10 (0.28)	15	K, B, C, S

<b>R404A</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.36	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.57	Polyol Ester	10 (0.28)	15	K, B, C, S

<b>R134a</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.58	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.58	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.58	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.83	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.83	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	2.08	Polyol Ester	10 (0.28)	20	K, B, C, S

**ELECTRONICALLY COMMUTATED FAN MOTOR, HIGH EFFICIENCY (115V, Single Phase, 60 Hz)\*\***

<b>R22</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.56	Mineral	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.81	Mineral	10 (0.28)	15	K, B, C, S

<b>R404A</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.36	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.57	Polyol Ester	10 (0.28)	15	K, B, C, S

<b>R134a</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.58	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.58	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.58	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.83	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.83	Polyol Ester	10 (0.28)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	2.08	Polyol Ester	10 (0.28)	20	K, B, C, S

**Low Temperature**

Dimensions			Line Connections		Gross Weight Lbs (Kg)	Pump Down Capacity	Oil		Maximum Fuse Size (Amps)	Available Options*
Length	Width	Height	Suction	Liquid			Type	Charge Oz (Kg)		

**SHADED POLE FAN MOTOR, STANDARD EFFICIENCY (115V, Single Phase, 60 Hz)**

<b>R404A</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.36	Polyol Ester	16 (0.45)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.57	Polyol Ester	16 (0.45)	15	K, B, C, S

<b>R134a</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	NA	Polyol Ester	16 (0.45)	15	K, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.58	Polyol Ester	16 (0.45)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.83	Polyol Ester	16 (0.45)	15	K, B, C, S

**ELECTRONICALLY COMMUTATED FAN MOTOR, HIGH EFFICIENCY (115V, Single Phase, 60 Hz)\*\***

<b>R404A</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.36	Polyol Ester	16 (0.45)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.57	Polyol Ester	16 (0.45)	15	K, B, C, S

<b>R134a</b>										
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	NA	Polyol Ester	16 (0.45)	15	K, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.58	Polyol Ester	16 (0.45)	15	K, B, C, S
16" (40.6 cm)	11.5" (29.2 cm)	9.9" (25.1 cm)	5/16" Swt	1/4" Swt	40.6 (18.4)	1.83	Polyol Ester	16 (0.45)	15	K, B, C, S



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

Tecumseh Products Company

1136 Oak Valley Drive

Ann Arbor, MI 48108

Email: [tecumsehmarketing@tecumseh.com](mailto:tecumsehmarketing@tecumseh.com)

Phone: 800.211.3427

734.585.9500



*Tecumseh*

©2009 Tecumseh Products Company. All Rights Reserved.

Publication # CU-0003