

Celseon[®] Low Profile

Low Profile. High Efficiency. Maximum Cold.

Celseon Low Profile models include all of the features and benefits of the standard Celseon offering but at a reduced height of 8.9", allowing maximization of the refrigerated cabinet while providing ease-of-service for field technicians.

Celseon's modular construction is built around a common base plate that accommodates an assortment of Tecumseh compressor models and standardized components. Compressor models include the TH series and the all-new, High Efficiency AE² series. Options include power cord, service valves and liquid line receiver tank.

The Low Profile product offering covers a capacity range from 1/8th to 1/3rd Horsepower and for refrigerants R134a and R404A/R507, R290 as well as R12, R22 and their replacement blends.

FEATURES AND BENEFITS

- **FEWER MODELS TO STOCK**

Celseon covers a broad capacity range with a limited number of models.

- **COMPACT SIZE**

Works well in space restricted applications.

- **EFFICIENT**

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

- **QUICK AND EASY**

Detachment of fan motor/shroud for easy replacement and cleaning.

- **EASY CHANGE-OUT**

Shut-off valve allows system isolation for easy replacement and servicing.

- **SAVES TIME & MONEY**

Sweat connections and electrical screw terminations makes installation fast and easy.



SPECIFICATIONS

Application

| | | |
|---------------------------------------|-------------------------------------|-------------------------------------|
| Evaporating Ranges: | High Temperature | +10°F to +55°F (-12.2°C to +12.8°C) |
| | Commercial Temperature | -5°F to +40°F (-20.6°C to +4.4°C) |
| | Low Temperature | -40°F to +5°F (-40°C to -15.0°C) |
| Ambient Operating Temperature: | +80°F (+26.6°C) to +110°F (+43.3°C) | |

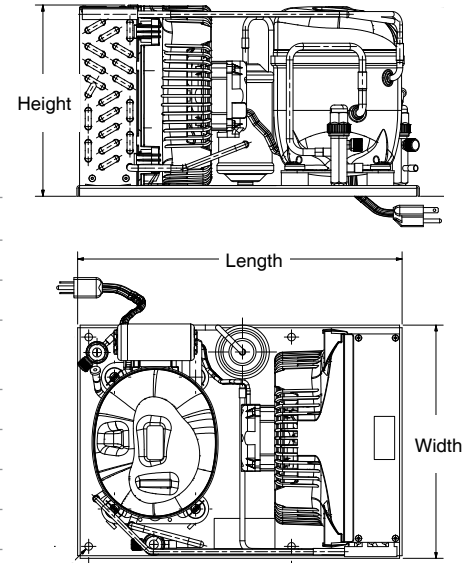
Materials

| | | |
|---------------------------------|---|----------------------------------|
| Valves: | Steel, Base Mounted with Copper Sweat Connections | |
| Receiver: | Steel, Plated Body with Copper Sweat Connections | |
| Base Plate: | Cold Rolled Steel 16 Ga. Galvanized G90U | |
| Refrigerant/Oil: | R134a, R404A/R507 | R22, R12 |
| | Polyolester (POE) | Synthetic Alkylate (AB) |
| Electrical Terminations: | Screw | |
| Fan Guard: | High Density Polypropylene | |
| Fan Blade: | Polypropylene | |
| Fan Motor: | Shaded Pole (6 or 9 Watt) or ECM | |
| Condenser: | Copper Tube and Aluminum Fin | |
| Electrical Cord: | Length: 20 inches (508 mm) | Type: Three Prong, Grounded Plug |

Physical Properties

| | | | |
|-------------------------|---|----------------------|---|
| Dimensions: | Length: | Width: | Height: |
| | 16 inches (406 mm) | 11.5 inches (292 mm) | 8.9 inches (226 mm) *9.9 inches (252 mm) *TPA models only |
| Connection Type: | Suction Line: 5/16 inch (7.9 mm) without valves or 3/8 inch (9.5 mm) ODF Sweat with valves Liquid Line: 1/4 inch (6.4 mm) ODF Sweat | | |

DIMENSIONS



AVAILABLE OPTIONS

Select the Model Designation for Customized Option Configurations

| Options Model No (Item No) | Option Configuration |
|----------------------------|---|
| K (39) | Sweat Connections and Power Cord |
| B (49) | Sweat Connections, Power Cord and Receiver Tank |
| C (59) | Sweat Connections, Power Cord, Receiver Tank and Service Valves |
| S (69) | Sweat Connections, Power Cord and Service Valves |

Note: Bill of Materials ending in XP or XPS utilize an ECM motor, except R290 units, which have ECM motors as standard.

LOW PROFILE CONDENSING UNIT MODEL NUMBER

AE 4 440 Y - AA 1A S K (AE² models only)
AEA 9 440 Z XA S K (All models except AE²)

Family & Generation

AE², AEA, AEB Compressor Series
 TPA, TPB Compressor Series
 THA Compressor Series

Application Range

3, 4 High +10°F to +55°F (-12.2°C to +12.8°C)
 0, 9, 4* Comm. -5°F to +40°F (-20.6°C to +4.4°C)
 *(AE² models only using R404A/R507 and R290)
 1, 2 Low -40°F to +5°F (-40°C to -15.0°C)

Capacity

First number is total digits. Remainder is capacity in Btu/h.
 This example 4000 Btu/h Capacity

Refrigerant

A = R12 E = R22 U = R290 Y = R134a Z = R404A/R507

Options

K (39), B (49), C (59), S (69)

Fan Motor Type

S Shaded Pole (SP), Std Efficiency
 C Electronically Commutated Motor (ECM), High Efficiency

Voltage/Frequency/Ph

XA 115/60/1; 100/50/1
 AB 115/60/1; 90/50/1
 AA 115/60/1

Efficiency Level



High Temperature

| Model Number | Item Number (Bill of Material) | HP | Ambient °F (°C) | Capacity (Btu/h) at Rated Conditions/ Evaporator Temperature | | | | | | | | | |
|--|--------------------------------|-----|-----------------|--|--------|--------|--------|--------|-------|-------|--------------|--------|--------|
| | | | | 10°F | 15°F | 20°F | 25°F | 30°F | 35°F | 40°F | 45°F | 50°F | 55°F |
| | | | | -12.2°C | -9.4°C | -6.7°C | -3.9°C | -1.1°C | 1.7°C | 4.4°C | 7.2°C | 10.0°C | 12.8°C |
| R134a HBP Application Range +10°F to 55°F (-12.2°C to 12.7°C) | | | | | | | | | | | | | |
| AE3425Y-AA1AS* | 32F560-***S | 1/5 | 90 (32.2) | 1,140 | 1,370 | 1,590 | 1,810 | 2,040 | 2,260 | 2,480 | 2,700 | 2,910 | 3,130 |
| | | | 100 (37.8) | 1,080 | 1,280 | 1,480 | 1,670 | 1,860 | 2,050 | 2,230 | 2,410 | 2,590 | 2,760 |
| | | | 110 (43.3) | 920 | 1,130 | 1,320 | 1,510 | 1,680 | 1,850 | 2,000 | 2,140 | 2,280 | 2,400 |
| AE4430Y-AA1AS* | 32F470-***S | 1/4 | 90 (32.2) | 1,430 | 1,620 | 1,830 | 2,050 | 2,290 | 2,540 | 2,800 | 3,080 | 3,380 | 3,690 |
| | | | 100 (37.8) | 1,320 | 1,490 | 1,680 | 1,880 | 2,100 | 2,330 | 2,570 | 2,840 | 3,110 | 3,400 |
| | | | 110 (43.3) | 1,190 | 1,350 | 1,530 | 1,710 | 1,910 | 2,120 | 2,340 | 2,570 | 2,810 | 3,070 |
| AE4440Y-AA1AS* | 32F360-***S | 1/3 | 90 (32.2) | 1,880 | 2,100 | 2,340 | 2,580 | 2,830 | 3,100 | 3,370 | 3,650 | 3,950 | 4,250 |
| | | | 100 (37.8) | 1,700 | 1,930 | 2,150 | 2,390 | 2,620 | 2,860 | 3,110 | 3,360 | 3,610 | 3,870 |
| | | | 110 (43.3) | 1,570 | 1,760 | 1,970 | 2,180 | 2,390 | 2,620 | 2,850 | 3,080 | 3,330 | 3,580 |
| R12† HBP Application Range +10°F to 55°F (-12.2°C to 12.7°C) | | | | | | | | | | | | | |
| AE4430A-AA1AS* | 32F472-***S | 1/4 | 90 (32.2) | 1,620 | 1,830 | 2,070 | 2,320 | 2,590 | 2,870 | 3,160 | 3,480 | 3,820 | 4,170 |
| | | | 100 (37.8) | 1,550 | 1,750 | 1,970 | 2,210 | 2,470 | 2,740 | 3,020 | 3,340 | 3,650 | 4,000 |
| | | | 110 (43.3) | 1,520 | 1,730 | 1,960 | 2,190 | 2,450 | 2,720 | 3,000 | 3,290 | 3,600 | 3,930 |
| AE4440A-AA1AS* | 32F362-***S | 1/3 | 90 (32.2) | 2,120 | 2,370 | 2,640 | 2,920 | 3,200 | 3,500 | 3,810 | 4,120 | 4,660 | 4,800 |
| | | | 100 (37.8) | 1,950 | 2,220 | 2,470 | 2,750 | 3,010 | 3,290 | 3,580 | 3,860 | 4,150 | 4,450 |
| | | | 110 (43.3) | 1,840 | 2,060 | 2,300 | 2,550 | 2,800 | 3,070 | 3,330 | 3,600 | 3,900 | 4,190 |

*/** Options (see available options on page 5)

† Or compatible equivalent.



| High Temperature | | | | | | | | | | | | |
|--|--------------------------------|--------------------------|-----------|----------------------|--|----------|----------------------|----------------------|-----------|------------|------------|-------------|
| Model Number | Item Number (Bill of Material) | Line Connections in (mm) | | Gross Weight lb (kg) | Pump Down Cap 90% lb (kg) @ 90°F Ambient | Oil Type | Min Circuit Ampacity | Max Fuse Size (Amps) | Fan Motor | Power Cord | Rec'r Tank | Srcv Valves |
| | | Suction | Liquid | | | | | | | | | |
| R134a HBP Application Range +10°F to 55°F (-12.2°C to 12.7°C) | | | | | | | | | | | | |
| AE3425Y-AA1ASK | 32F560-39S | 5/16 (7.9) | 1/4 (6.4) | 38.1 (17.3) | NA | POE | 5.0 | 15 | 6W115 | ■ | | |
| AE3425Y-AA1ASS | 32F560-69S | 3/8 (9.5) | 1/4 (6.4) | 38.9 (17.6) | NA | POE | 5.0 | 15 | 6W115 | ■ | | ■ |
| AE4430Y-AA1ASK | 32F470-39S | 5/16 (7.9) | 1/4 (6.4) | 38.1 (17.3) | N/A | POE | 6.7 | 15 | 9W115 | ■ | | |
| AE4430Y-AA1ASB | 32F470-49S | 5/16 (7.9) | 1/4 (6.4) | 38.7 (17.6) | 1.83 (0.8) | POE | 6.7 | 15 | 9W115 | ■ | ■ | |
| AE4430Y-AA1ASC | 32F470-59S | 3/8 (9.5) | 1/4 (6.4) | 39.5 (17.9) | 1.83 (0.8) | POE | 6.7 | 15 | 9W115 | ■ | ■ | ■ |
| AE4430Y-AA1ASS | 32F470-69S | 3/8 (9.5) | 1/4 (6.4) | 38.9 (17.6) | N/A | POE | 6.7 | 15 | 9W115 | ■ | | ■ |
| AE4440Y-AA1ASK | 32F360-39S | 5/16 (7.9) | 1/4 (6.4) | 38.1 (17.3) | N/A | POE | 7.9 | 15 | 9W115 | ■ | | |
| AE4440Y-AA1ASB | 32F360-49S | 5/16 (7.9) | 1/4 (6.4) | 38.7 (17.6) | 1.83 (0.8) | POE | 7.9 | 15 | 9W115 | ■ | ■ | |
| AE4440Y-AA1ASC | 32F360-59S | 3/8 (9.5) | 1/4 (6.4) | 39.5 (17.9) | 1.83 (0.8) | POE | 7.9 | 15 | 9W115 | ■ | ■ | ■ |
| AE4440Y-AA1ASS | 32F360-69S | 3/8 (9.5) | 1/4 (6.4) | 38.9 (17.6) | N/A | POE | 7.9 | 15 | 9W115 | ■ | | ■ |
| R12[†] HBP Application Range +10°F to 55°F (-12.2°C to 12.7°C) | | | | | | | | | | | | |
| AE4430A-AA1ASC | 32F472-59S | 3/8 (9.5) | 1/4 (6.4) | 39.5 (17.9) | 2.58 (1.2) | AB | 6.7 | 15 | 9W115 | ■ | ■ | ■ |
| AE4430A-AA1ASS | 32F472-69S | 3/8 (9.5) | 1/4 (6.4) | 38.9 (17.6) | N/A | AB | 6.7 | 15 | 9W115 | ■ | | ■ |
| AE4440A-AA1ASC | 32F362-59S | 3/8 (9.5) | 1/4 (6.4) | 39.5 (17.9) | 2.58 (1.2) | AB | 7.9 | 15 | 9W115 | ■ | ■ | ■ |
| AE4440A-AA1ASS | 32F362-69S | 3/8 (9.5) | 1/4 (6.4) | 38.9 (17.6) | N/A | AB | 7.9 | 15 | 9W115 | ■ | | ■ |

[†] Or compatible equivalent.