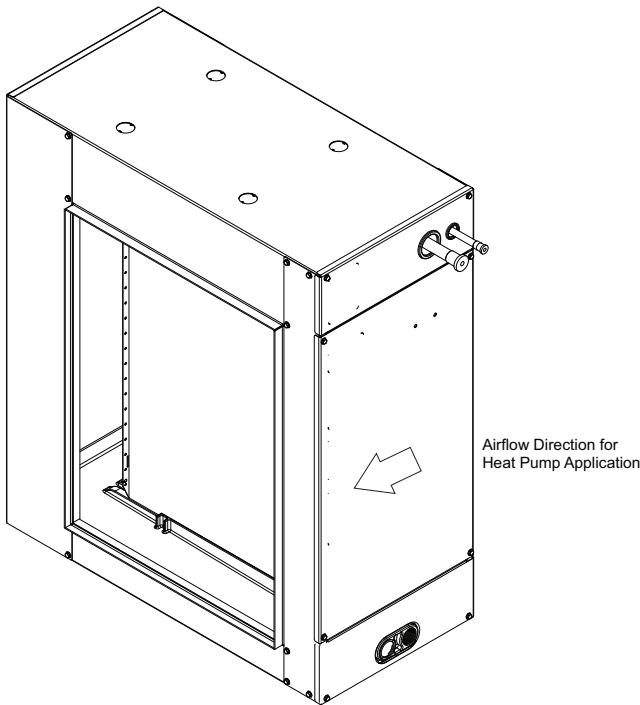


**CSPHP, CSRHP
Evaporator Coil
Slab Coil – Cased
Horizontal**



Turn to the Experts.™

Product Data



CSPHP / CSRHP

A09540

The CSPHP and CSRHP evaporator coils incorporate tin plated copper tubing and proven standards for reliable system operation and performance throughout the life of a quality Carrier Air Conditioner or Heat Pump system. Evaporator coils manufactured by Carrier and installed as part of a total comfort system provide ARI-rated performance ratings and are additionally listed with UL and c-UL. The coils are available for systems utilizing both Puron®, the environmentally friendly refrigerant, and R-22. The CSPHP and CSRHP are cased slab coils that are housed in a durable, 22 gauge, pre-painted taupe metallic cabinet to match the Carrier furnaces. The fully-insulated cabinet (foil faced with R-2.1 insulation properties) provides for quiet, efficient operation of the evaporator coil. The coils are available in sizes 024 through 060 (2-5 tons).

DESIGN FEATURES

Performance — Designed with performance in mind, these new slab coils offer low pressure drops to enhance system performance and airflow characteristics.

Thermostatic Expansion Valves (TXV) — All the Carrier coils have refrigerant-specific, factory-installed TXVs.

Durable Condensate Pans — The corrosion-resistant drain pan is designed in a new “fiberglass reinforced thermoset polyester” material (FRTP) that offers unsurpassed pan strength.

Refrigerant Connections — The coils are provided with industry proven sweat-connections for leak-free operation to maintain system reliability. The refrigerant tubing comes out the top of the unit for ease of installation and service.

Burst Pressure — These coils meet or exceed burst pressure of 2100 psi which is at least three to five times the pressure they will see in actual application; good for either Puron® refrigerant (R-410A) or R-22 refrigerant designs.

UV Knockouts — The cased coils also come with factory-installed UV knockouts for quick and easy installation of Carrier UV lights.

Serviceability — The coils are removable from the front of the unit without use of any tools, after the door is removed. The units are also designed with a single size screw, the same size as used on all our Carrier furnaces. One tool required for all jobs.

Installation Flexibility — The CSPHP and CSRHP evaporator coils are cased slab coils that provide flexibility for a wide variety of field applications. The unique design is great for all those horizontal applications. It should be noted that this new design maintains the same duct size openings as previous units, so replacement of present horizontal coils will be easy to convert.

NOTE: For cooling-only units, coil can be installed in either airflow direction. Heat pump applications require specific airflow direction to obtain performance.

Tin Plated Copper Coils — “T” models are built with special hairpins, tin plated to resist both general pitting corrosion and excessive indoor corrosion-Formicary Corrosion. (Formicary Corrosion is an industry phenomenon.)



CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI

MODEL NUMBER NOMENCLATURE

1 2 3 4 5 6 7 8 9 10 11 12
C S P H P 2 4 1 2 A T A

Product
C = Coil

Type
S – Slab

Refrigerant Type
P = Puron® Refrigerant (R-410A) TXV
R = R-22 TXV

Coil Configuration
H – Horizontal

Cabinet Finish
P = Painted

Variations
A = Basic

Tubing Design
T – Tin Plated Copper

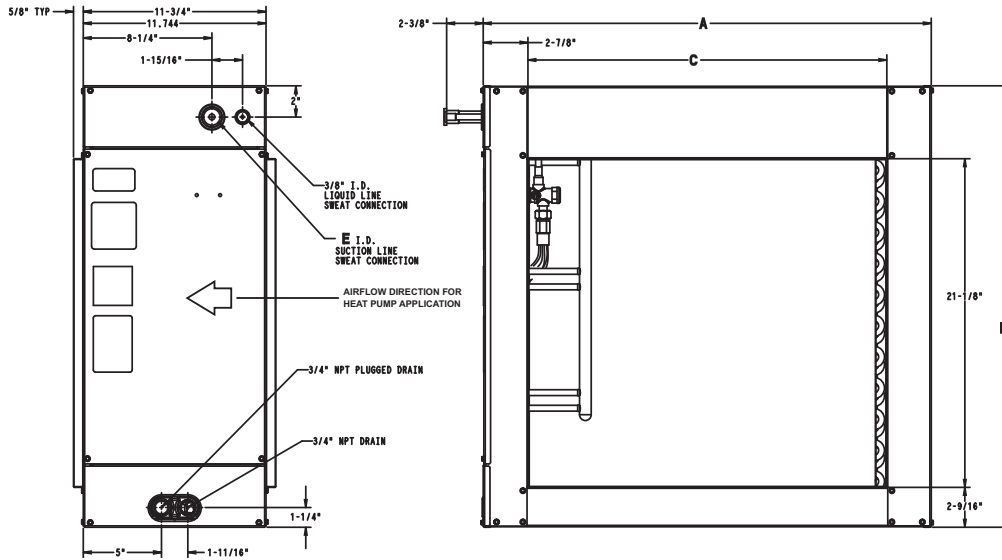
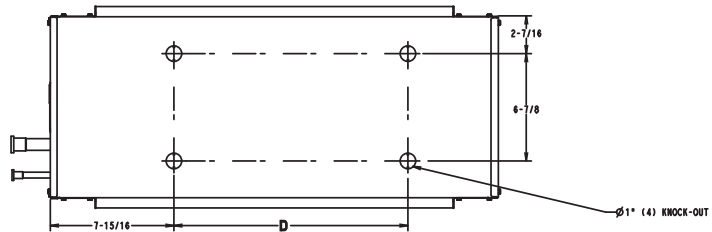
Revision Level
A = 1st

Cabinet Width
12 – 12-in. (305mm) Slab

Unit Capacity

| | |
|----------------|----------------|
| 24 = 2 Ton | 42 = 3 1/2 Ton |
| 30 = 2 1/2 Ton | 48 = 4 Ton |
| 36 = 3 Ton | 60 = 5 Ton |

CSPHP / CSRHP



A06523

DIMENSIONS

| UNIT | SERIES | A in. (mm) | B in. (mm) | C in. (mm) | D in. (mm) | E in. (mm) | SHIPPING WT. lb. (kg) |
|------------------|--------|-------------------|------------------|-------------------|-------------------|------------------|-----------------------------|
| CS(P,R)HP2412ATA | A | 24-1/16 (612) | 28-3/8 (721) | 16-1/16 (408) | 9-3/8 (238) | 5/8 (16) | 55.0 (25) |
| CS(P,R)HP3012ATA | A | 24-1/16 (612) | 28-3/8 (721) | 16-1/16 (408) | 9-3/8 (238) | 3/4 (19) | 56.0 (25) |
| CS(P,R)HP3612ATA | A | 28-13/16 (732) | 28-3/8 (721) | 23-1/16 (586) | 15-1/6 (383) | 3/4 (19) | 61.0 (28) |
| CS(P,R)HP4212ATA | A | 28-13/16 (732) | 28-3/8 (721) | 23-1/16 (586) | 15-1/16 (383) | 3/4 (19) | 63.0 (29) |
| CS(P,R)HP4812ATA | A | 28-13/16 (732) | 30-3/8 (772) | 23-1/16 (586) | 17-5/16 (440) | 7/8 (22) | 65.0 (29) |
| CS(P,R)HP6012ATA | A | 38-15/16 (989) | 30-3/8 (772) | 33-13/16 (859) | 24-13/16 (630) | 7/8 (22) | 82.5 (37) |

PERFORMANCE DATA

COOLING CAPACITIES (MBH) - PURON® REFRIGERANT

| CSPHP UNIT SIZE | INDOOR COIL AIR | | SATURATED TEMPERATURE LEAVING EVAPORATOR °F (°C) | | | | | | | | | | | | | | |
|-----------------------|--------------------|---------|--|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|---------|-------|------|
| | | | 30 (-1) | | | 35 (2) | | | 40 (4) | | | 45 (7) | | | 50 (10) | | |
| | CFM | EWB | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF |
| 2412 | 600 | 72 (22) | 39.20 | 19.20 | 0.00 | 36.20 | 17.60 | 0.00 | 32.80 | 15.90 | 0.00 | 29.00 | 14.10 | 0.00 | 24.70 | 12.30 | 0.00 |
| | | 67 (19) | 33.00 | 19.90 | 0.00 | 29.90 | 18.20 | 0.00 | 26.40 | 16.40 | 0.00 | 22.50 | 14.50 | 0.01 | 18.10 | 12.60 | 0.01 |
| | | 62 (17) | 27.30 | 20.40 | 0.01 | 24.10 | 18.60 | 0.01 | 20.60 | 16.70 | 0.01 | 16.60 | 14.80 | 0.01 | 12.90 | 12.90 | 0.04 |
| | 800 | 72 (22) | 47.90 | 23.30 | 0.00 | 44.40 | 21.50 | 0.00 | 40.30 | 19.60 | 0.00 | 35.60 | 17.50 | 0.00 | 30.40 | 15.30 | 0.01 |
| | | 67 (19) | 40.50 | 24.50 | 0.01 | 36.80 | 22.60 | 0.01 | 32.50 | 20.50 | 0.01 | 27.80 | 18.30 | 0.01 | 22.40 | 15.90 | 0.01 |
| | | 62 (17) | 33.70 | 25.60 | 0.02 | 29.80 | 23.50 | 0.02 | 25.50 | 21.30 | 0.02 | 20.70 | 19.00 | 0.02 | 16.60 | 16.60 | 0.07 |
| | 1000 | 72 (22) | 54.90 | 26.60 | 0.00 | 50.90 | 24.80 | 0.00 | 46.30 | 22.70 | 0.00 | 41.10 | 20.30 | 0.01 | 35.10 | 17.90 | 0.02 |
| | | 67 (19) | 46.60 | 28.50 | 0.02 | 42.40 | 26.40 | 0.02 | 37.60 | 24.10 | 0.02 | 32.10 | 21.60 | 0.03 | 25.90 | 18.90 | 0.03 |
| | | 62 (17) | 38.90 | 30.10 | 0.03 | 34.50 | 27.80 | 0.03 | 29.60 | 25.30 | 0.03 | 24.30 | 22.80 | 0.04 | 19.90 | 19.90 | 0.11 |
| 3012 | 750 | 72 (22) | 48.50 | 23.80 | 0.00 | 44.50 | 21.70 | 0.00 | 40.10 | 19.50 | 0.00 | 35.20 | 17.20 | 0.00 | 29.80 | 14.80 | 0.00 |
| | | 67 (19) | 40.70 | 24.50 | 0.01 | 36.60 | 22.30 | 0.01 | 32.20 | 20.00 | 0.01 | 27.20 | 17.60 | 0.01 | 21.80 | 15.20 | 0.01 |
| | | 62 (17) | 33.60 | 25.00 | 0.01 | 29.50 | 22.70 | 0.01 | 24.90 | 20.40 | 0.01 | 20.10 | 18.00 | 0.02 | 15.60 | 15.60 | 0.05 |
| | 1000 | 72 (22) | 59.50 | 29.00 | 0.00 | 54.70 | 26.50 | 0.00 | 49.30 | 24.00 | 0.00 | 43.20 | 21.20 | 0.01 | 36.50 | 18.40 | 0.02 |
| | | 67 (19) | 50.10 | 30.30 | 0.02 | 45.10 | 27.70 | 0.02 | 39.60 | 24.90 | 0.03 | 33.50 | 22.10 | 0.03 | 26.70 | 19.10 | 0.03 |
| | | 62 (17) | 41.50 | 31.40 | 0.03 | 36.40 | 28.60 | 0.03 | 30.80 | 25.80 | 0.03 | 24.90 | 22.90 | 0.03 | 20.00 | 20.00 | 0.09 |
| | 1250 | 72 (22) | 68.50 | 33.30 | 0.00 | 63.10 | 30.60 | 0.00 | 56.80 | 27.80 | 0.01 | 49.80 | 24.70 | 0.03 | 42.10 | 21.50 | 0.03 |
| | | 67 (19) | 57.80 | 35.30 | 0.04 | 52.10 | 32.40 | 0.04 | 45.80 | 29.30 | 0.04 | 38.70 | 26.00 | 0.04 | 30.80 | 22.70 | 0.05 |
| | | 62 (17) | 48.00 | 36.90 | 0.05 | 42.10 | 33.80 | 0.05 | 35.80 | 30.60 | 0.05 | 29.10 | 27.40 | 0.06 | 23.80 | 23.80 | 0.13 |
| 3612 | 900 | 72 (22) | 57.20 | 28.00 | 0.00 | 52.70 | 25.60 | 0.00 | 47.70 | 23.10 | 0.00 | 42.00 | 20.50 | 0.00 | 35.70 | 17.80 | 0.00 |
| | | 67 (19) | 48.10 | 29.00 | 0.00 | 43.50 | 26.50 | 0.01 | 38.30 | 23.80 | 0.01 | 32.60 | 21.10 | 0.01 | 26.20 | 18.20 | 0.01 |
| | | 62 (17) | 39.80 | 29.80 | 0.01 | 35.10 | 27.10 | 0.01 | 29.80 | 24.40 | 0.01 | 24.10 | 21.50 | 0.01 | 18.70 | 18.70 | 0.05 |
| | 1200 | 72 (22) | 69.90 | 34.00 | 0.00 | 64.50 | 31.30 | 0.00 | 58.40 | 28.40 | 0.00 | 51.50 | 25.30 | 0.00 | 43.80 | 22.10 | 0.01 |
| | | 67 (19) | 59.00 | 35.80 | 0.01 | 53.40 | 32.80 | 0.02 | 47.10 | 29.70 | 0.02 | 40.10 | 26.40 | 0.02 | 32.10 | 23.00 | 0.02 |
| | | 62 (17) | 49.00 | 37.20 | 0.02 | 43.20 | 34.10 | 0.02 | 36.80 | 30.90 | 0.02 | 29.90 | 27.50 | 0.03 | 24.00 | 24.00 | 0.08 |
| | 1500 | 72 (22) | 80.10 | 38.90 | 0.00 | 74.10 | 36.00 | 0.00 | 67.10 | 32.80 | 0.00 | 59.20 | 29.40 | 0.02 | 50.40 | 25.70 | 0.02 |
| | | 67 (19) | 67.80 | 41.50 | 0.03 | 61.50 | 38.30 | 0.03 | 54.30 | 34.90 | 0.03 | 46.20 | 31.20 | 0.03 | 37.10 | 27.30 | 0.04 |
| | | 62 (17) | 56.50 | 43.80 | 0.04 | 49.90 | 40.30 | 0.04 | 42.70 | 36.70 | 0.04 | 34.90 | 32.90 | 0.04 | 28.80 | 28.80 | 0.12 |
| 4212 | 1050 | 72 (22) | 70.70 | 34.70 | 0.00 | 65.00 | 31.60 | 0.00 | 58.60 | 28.40 | 0.00 | 51.50 | 25.10 | 0.00 | 43.70 | 21.70 | 0.00 |
| | | 67 (19) | 59.40 | 35.70 | 0.00 | 53.50 | 32.50 | 0.01 | 47.00 | 29.10 | 0.01 | 39.80 | 25.70 | 0.01 | 31.90 | 22.20 | 0.01 |
| | | 62 (17) | 49.00 | 36.50 | 0.01 | 43.00 | 33.20 | 0.01 | 36.50 | 29.70 | 0.01 | 29.40 | 26.30 | 0.01 | 22.80 | 22.80 | 0.05 |
| | 1400 | 72 (22) | 87.00 | 42.30 | 0.00 | 80.00 | 38.80 | 0.00 | 72.20 | 35.10 | 0.00 | 63.40 | 31.10 | 0.00 | 53.60 | 27.00 | 0.01 |
| | | 67 (19) | 73.20 | 44.30 | 0.02 | 66.00 | 40.50 | 0.02 | 58.00 | 36.50 | 0.02 | 49.10 | 32.30 | 0.02 | 39.30 | 28.00 | 0.02 |
| | | 62 (17) | 60.60 | 45.80 | 0.02 | 53.20 | 41.80 | 0.03 | 45.10 | 37.70 | 0.03 | 36.50 | 33.50 | 0.03 | 29.20 | 29.20 | 0.08 |
| | 1750 | 72 (22) | 100.30 | 48.70 | 0.00 | 92.40 | 44.90 | 0.00 | 83.30 | 40.70 | 0.00 | 73.20 | 36.30 | 0.02 | 61.90 | 31.60 | 0.03 |
| | | 67 (19) | 84.60 | 51.60 | 0.03 | 76.40 | 47.40 | 0.03 | 67.20 | 42.90 | 0.04 | 56.80 | 38.20 | 0.04 | 45.40 | 33.30 | 0.04 |
| | | 62 (17) | 70.20 | 54.00 | 0.04 | 61.70 | 49.50 | 0.04 | 52.50 | 44.90 | 0.04 | 42.70 | 40.10 | 0.05 | 35.00 | 35.00 | 0.12 |
| 4812 | 1200 | 72 (22) | 75.30 | 36.80 | 0.00 | 69.30 | 33.70 | 0.00 | 62.60 | 30.40 | 0.00 | 55.10 | 26.90 | 0.00 | 46.70 | 23.30 | 0.00 |
| | | 67 (19) | 63.30 | 38.10 | 0.00 | 57.10 | 34.80 | 0.01 | 50.30 | 31.30 | 0.01 | 42.60 | 27.70 | 0.01 | 34.20 | 23.90 | 0.01 |
| | | 62 (17) | 52.30 | 39.20 | 0.01 | 46.00 | 35.70 | 0.01 | 39.10 | 32.00 | 0.01 | 31.60 | 28.40 | 0.02 | 24.70 | 24.70 | 0.05 |
| | 1600 | 72 (22) | 91.80 | 44.60 | 0.00 | 84.60 | 41.00 | 0.00 | 76.40 | 37.20 | 0.00 | 67.30 | 33.10 | 0.01 | 57.00 | 28.80 | 0.02 |
| | | 67 (19) | 77.40 | 47.00 | 0.02 | 69.90 | 43.10 | 0.02 | 61.60 | 38.90 | 0.02 | 52.20 | 34.60 | 0.03 | 41.80 | 30.10 | 0.03 |
| | | 62 (17) | 64.20 | 48.90 | 0.03 | 56.50 | 44.80 | 0.03 | 48.00 | 40.50 | 0.03 | 39.00 | 36.10 | 0.03 | 31.50 | 31.50 | 0.09 |
| | 2000 | 72 (22) | 105.00 | 51.00 | 0.00 | 96.90 | 47.20 | 0.00 | 87.60 | 42.90 | 0.01 | 77.20 | 38.40 | 0.03 | 65.50 | 33.60 | 0.03 |
| | | 67 (19) | 88.80 | 54.40 | 0.04 | 80.40 | 50.20 | 0.04 | 70.80 | 45.60 | 0.04 | 60.10 | 40.70 | 0.04 | 48.10 | 35.60 | 0.04 |
| | | 62 (17) | 73.90 | 57.40 | 0.04 | 65.10 | 52.80 | 0.05 | 55.50 | 48.00 | 0.05 | 45.50 | 43.10 | 0.06 | 37.60 | 37.60 | 0.13 |
| 6012 | 1600 | 72 (22) | 98.90 | 48.20 | 0.00 | 91.10 | 44.20 | 0.00 | 82.40 | 40.00 | 0.00 | 72.60 | 35.60 | 0.00 | 61.70 | 30.90 | 0.01 |
| | | 67 (19) | 83.20 | 50.20 | 0.01 | 75.20 | 46.00 | 0.01 | 66.30 | 41.40 | 0.02 | 56.30 | 36.70 | 0.02 | 45.30 | 31.90 | 0.02 |
| | | 62 (17) | 68.90 | 51.80 | 0.02 | 60.70 | 47.30 | 0.02 | 51.60 | 42.60 | 0.02 | 41.80 | 37.90 | 0.02 | 33.00 | 33.00 | 0.07 |
| | 2000 | 72 (22) | 114.90 | 55.80 | 0.00 | 106.00 | 51.40 | 0.00 | 95.80 | 46.70 | 0.00 | 84.50 | 41.70 | 0.01 | 71.80 | 36.30 | 0.02 |
| | | 67 (19) | 96.80 | 58.90 | 0.02 | 87.60 | 54.10 | 0.02 | 77.30 | 49.00 | 0.03 | 65.70 | 43.60 | 0.03 | 52.80 | 38.00 | 0.03 |
| | | 62 (17) | 80.30 | 61.40 | 0.03 | 70.80 | 56.30 | 0.03 | 60.30 | 51.00 | 0.03 | 49.10 | 45.50 | 0.04 | 39.70 | 39.70 | 0.10 |
| | 2400 | 72 (22) | 128.30 | 62.30 | 0.00 | 118.50 | 57.60 | 0.00 | 107.10 | 52.50 | 0.01 | 94.60 | 47.00 | 0.02 | 80.40 | 41.10 | 0.03 |
| | | 67 (19) | 108.40 | 66.40 | 0.04 | 98.10 | 61.20 | 0.04 | 86.60 | 55.70 | 0.04 | 73.70 | 49.80 | 0.04 | 59.20 | 43.60 | 0.05 |
| | | 62 (17) | 90.10 | 69.90 | 0.05 | 79.50 | 64.40 | 0.05 | 67.90 | 58.60 | 0.05 | 55.60 | 52.60 | 0.06 | 45.90 | 45.90 | 0.13 |

See notes on page 5.

LEGEND:

CFM — Cubic Ft per Minute

EWB — Entering Wet Bulb (°F)

LWB — Leaving Wet Bulb (°F)

TC — Total Cooling Capacity 1000 Btuh

BF — Bypass Factor

MBH — 1000 Btuh

SHC — Sensible Heat Capacities (1000 Btuh)

CSPHP / CSRHP

PERFORMANCE DATA (cont)

COOLING CAPACITIES (MBH) - R-22 REFRIGERANT

| CSRHP UNIT SIZE | INDOOR COIL AIR | | SATURATED TEMPERATURE LEAVING EVAPORATOR °F (°C) | | | | | | | | | | | | | | |
|-----------------------|--------------------|---------|--|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|---------|-------|------|
| | | | 30 (-1) | | | 35 (2) | | | 40 (4) | | | 45 (7) | | | 50 (10) | | |
| | CFM | EWB | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF |
| 2412 | 600 | 72 (22) | 38.70 | 18.80 | 0.00 | 36.10 | 17.50 | 0.00 | 33.10 | 16.20 | 0.00 | 29.70 | 14.70 | 0.00 | 25.60 | 13.00 | 0.00 |
| | | 67 (19) | 32.90 | 20.20 | 0.00 | 30.20 | 18.90 | 0.00 | 27.00 | 17.40 | 0.00 | 23.20 | 15.60 | 0.00 | 18.70 | 13.70 | 0.01 |
| | | 62 (17) | 27.60 | 21.50 | 0.01 | 24.70 | 20.00 | 0.01 | 21.30 | 18.30 | 0.01 | 17.40 | 16.40 | 0.01 | 14.30 | 14.30 | 0.09 |
| | 800 | 72 (22) | 44.90 | 21.90 | 0.00 | 42.00 | 20.60 | 0.00 | 38.70 | 19.20 | 0.00 | 34.70 | 17.50 | 0.00 | 30.10 | 15.70 | 0.01 |
| | | 67 (19) | 38.40 | 24.20 | 0.01 | 35.30 | 22.70 | 0.01 | 31.70 | 21.10 | 0.01 | 27.50 | 19.30 | 0.01 | 22.40 | 17.10 | 0.01 |
| | | 62 (17) | 32.30 | 26.30 | 0.02 | 29.20 | 24.70 | 0.02 | 25.50 | 22.90 | 0.02 | 21.30 | 20.80 | 0.03 | 18.10 | 18.10 | 0.14 |
| | 1000 | 72 (22) | 49.30 | 24.40 | 0.01 | 46.30 | 23.10 | 0.01 | 42.80 | 21.60 | 0.01 | 38.40 | 19.90 | 0.02 | 33.40 | 18.00 | 0.02 |
| | | 67 (19) | 42.30 | 27.50 | 0.02 | 39.10 | 26.00 | 0.02 | 35.20 | 24.30 | 0.02 | 30.60 | 22.40 | 0.03 | 25.40 | 20.20 | 0.03 |
| | | 62 (17) | 35.90 | 30.40 | 0.03 | 32.50 | 28.80 | 0.03 | 28.70 | 26.90 | 0.04 | 24.70 | 24.70 | 0.06 | 21.50 | 21.50 | 0.18 |
| 3012 | 750 | 72 (22) | 50.70 | 24.60 | 0.00 | 47.00 | 22.80 | 0.00 | 42.80 | 20.80 | 0.00 | 37.80 | 18.70 | 0.00 | 31.80 | 16.20 | 0.00 |
| | | 67 (19) | 42.90 | 26.20 | 0.01 | 39.10 | 24.20 | 0.01 | 34.40 | 21.90 | 0.01 | 28.90 | 19.40 | 0.01 | 22.70 | 16.70 | 0.01 |
| | | 62 (17) | 35.70 | 27.40 | 0.01 | 31.40 | 25.20 | 0.01 | 26.60 | 22.70 | 0.02 | 21.40 | 20.20 | 0.02 | 17.40 | 17.40 | 0.11 |
| | 1000 | 72 (22) | 59.60 | 29.00 | 0.00 | 55.30 | 27.00 | 0.00 | 50.40 | 24.80 | 0.01 | 44.80 | 22.40 | 0.01 | 38.30 | 19.80 | 0.02 |
| | | 67 (19) | 50.60 | 31.40 | 0.02 | 46.20 | 29.20 | 0.02 | 41.10 | 26.90 | 0.02 | 34.90 | 24.10 | 0.03 | 27.40 | 21.00 | 0.03 |
| | | 62 (17) | 42.40 | 33.60 | 0.03 | 37.80 | 31.30 | 0.03 | 32.20 | 28.50 | 0.03 | 26.40 | 25.60 | 0.05 | 22.10 | 22.10 | 0.15 |
| | 1250 | 72 (22) | 66.20 | 32.40 | 0.01 | 61.60 | 30.40 | 0.02 | 56.20 | 28.10 | 0.03 | 49.90 | 25.50 | 0.03 | 42.90 | 22.80 | 0.04 |
| | | 67 (19) | 56.50 | 35.80 | 0.04 | 51.50 | 33.50 | 0.04 | 45.90 | 31.00 | 0.04 | 39.50 | 28.20 | 0.04 | 31.30 | 24.80 | 0.05 |
| | | 62 (17) | 47.50 | 39.00 | 0.04 | 42.50 | 36.50 | 0.05 | 36.90 | 33.70 | 0.05 | 30.70 | 30.40 | 0.08 | 26.20 | 26.20 | 0.20 |
| 3612 | 900 | 72 (22) | 53.00 | 25.70 | 0.00 | 49.30 | 24.00 | 0.00 | 45.10 | 22.00 | 0.00 | 40.20 | 19.90 | 0.00 | 34.60 | 17.60 | 0.00 |
| | | 67 (19) | 45.00 | 27.60 | 0.01 | 41.20 | 25.70 | 0.01 | 36.70 | 23.50 | 0.01 | 31.40 | 21.10 | 0.01 | 25.00 | 18.40 | 0.01 |
| | | 62 (17) | 37.70 | 29.30 | 0.01 | 33.60 | 27.10 | 0.01 | 28.80 | 24.70 | 0.01 | 23.40 | 22.10 | 0.02 | 19.20 | 19.20 | 0.10 |
| | 1200 | 72 (22) | 61.60 | 30.00 | 0.00 | 57.50 | 28.20 | 0.00 | 52.70 | 26.10 | 0.00 | 47.00 | 23.80 | 0.01 | 40.60 | 21.20 | 0.01 |
| | | 67 (19) | 52.50 | 33.00 | 0.02 | 48.20 | 30.90 | 0.02 | 43.10 | 28.60 | 0.02 | 37.30 | 26.00 | 0.02 | 30.00 | 23.00 | 0.02 |
| | | 62 (17) | 44.20 | 35.70 | 0.02 | 39.70 | 33.50 | 0.02 | 34.60 | 30.90 | 0.02 | 28.70 | 28.00 | 0.04 | 24.30 | 24.30 | 0.15 |
| | 1500 | 72 (22) | 67.80 | 33.40 | 0.01 | 63.50 | 31.60 | 0.02 | 58.40 | 29.50 | 0.02 | 52.20 | 27.00 | 0.02 | 45.10 | 24.30 | 0.03 |
| | | 67 (19) | 58.10 | 37.50 | 0.03 | 53.40 | 35.40 | 0.03 | 47.80 | 32.90 | 0.03 | 41.50 | 30.20 | 0.03 | 34.10 | 27.20 | 0.04 |
| | | 62 (17) | 49.10 | 41.30 | 0.04 | 44.30 | 39.00 | 0.04 | 39.00 | 36.30 | 0.04 | 33.30 | 33.30 | 0.07 | 28.80 | 28.80 | 0.19 |
| 4212 | 1050 | 72 (22) | 69.40 | 33.70 | 0.00 | 64.40 | 31.20 | 0.00 | 58.50 | 28.50 | 0.00 | 51.80 | 25.60 | 0.00 | 44.40 | 22.50 | 0.00 |
| | | 67 (19) | 58.70 | 35.80 | 0.01 | 53.40 | 33.10 | 0.01 | 47.40 | 30.20 | 0.01 | 40.60 | 27.00 | 0.01 | 32.40 | 23.50 | 0.01 |
| | | 62 (17) | 48.90 | 37.60 | 0.01 | 43.40 | 34.70 | 0.01 | 37.30 | 31.60 | 0.01 | 30.20 | 28.20 | 0.02 | 24.50 | 24.50 | 0.09 |
| | 1400 | 72 (22) | 81.50 | 39.60 | 0.00 | 75.80 | 37.00 | 0.00 | 69.20 | 34.10 | 0.00 | 61.40 | 30.80 | 0.01 | 52.40 | 27.20 | 0.01 |
| | | 67 (19) | 69.30 | 43.10 | 0.02 | 63.30 | 40.10 | 0.02 | 56.20 | 36.90 | 0.02 | 48.10 | 33.30 | 0.02 | 39.10 | 29.50 | 0.02 |
| | | 62 (17) | 58.00 | 46.20 | 0.02 | 51.70 | 42.90 | 0.02 | 44.70 | 39.50 | 0.03 | 37.10 | 35.80 | 0.04 | 31.10 | 31.10 | 0.14 |
| | 1750 | 72 (22) | 90.50 | 44.40 | 0.00 | 84.40 | 41.70 | 0.01 | 77.20 | 38.70 | 0.02 | 68.80 | 35.20 | 0.03 | 58.80 | 31.30 | 0.03 |
| | | 67 (19) | 77.30 | 49.20 | 0.03 | 70.70 | 46.10 | 0.03 | 63.00 | 42.60 | 0.04 | 54.00 | 38.70 | 0.04 | 44.00 | 34.60 | 0.04 |
| | | 62 (17) | 65.00 | 53.60 | 0.04 | 58.20 | 50.20 | 0.04 | 50.50 | 46.40 | 0.05 | 42.80 | 42.40 | 0.07 | 37.00 | 37.00 | 0.18 |
| 4812 | 1200 | 72 (22) | 67.50 | 32.70 | 0.00 | 62.70 | 30.50 | 0.00 | 57.20 | 28.00 | 0.00 | 50.80 | 25.20 | 0.00 | 43.50 | 22.20 | 0.00 |
| | | 67 (19) | 57.20 | 35.10 | 0.01 | 52.20 | 32.60 | 0.01 | 46.40 | 29.90 | 0.01 | 39.80 | 26.90 | 0.01 | 32.30 | 23.60 | 0.01 |
| | | 62 (17) | 47.80 | 37.30 | 0.01 | 42.60 | 34.50 | 0.01 | 36.70 | 31.60 | 0.01 | 30.10 | 28.40 | 0.02 | 24.80 | 24.80 | 0.10 |
| | 1600 | 72 (22) | 78.20 | 38.20 | 0.00 | 73.00 | 35.90 | 0.00 | 66.80 | 33.20 | 0.01 | 59.60 | 30.20 | 0.01 | 51.10 | 26.80 | 0.02 |
| | | 67 (19) | 66.70 | 42.00 | 0.02 | 61.10 | 39.30 | 0.02 | 54.50 | 36.30 | 0.02 | 46.80 | 32.90 | 0.02 | 38.20 | 29.40 | 0.03 |
| | | 62 (17) | 56.10 | 45.50 | 0.03 | 50.20 | 42.50 | 0.03 | 43.50 | 39.20 | 0.03 | 36.60 | 35.80 | 0.04 | 31.20 | 31.20 | 0.15 |
| | 2000 | 72 (22) | 86.10 | 42.50 | 0.02 | 80.60 | 40.20 | 0.02 | 74.00 | 37.40 | 0.03 | 66.10 | 34.30 | 0.03 | 56.90 | 30.70 | 0.03 |
| | | 67 (19) | 73.80 | 47.70 | 0.04 | 67.80 | 45.00 | 0.04 | 60.60 | 41.80 | 0.04 | 52.20 | 38.20 | 0.04 | 42.60 | 34.30 | 0.04 |
| | | 62 (17) | 62.30 | 52.60 | 0.04 | 56.10 | 49.50 | 0.05 | 49.10 | 46.00 | 0.05 | 42.10 | 42.10 | 0.08 | 36.70 | 36.70 | 0.20 |
| 6012 | 1600 | 72 (22) | 96.20 | 46.70 | 0.00 | 89.40 | 43.60 | 0.00 | 81.70 | 40.20 | 0.00 | 72.70 | 36.40 | 0.00 | 62.50 | 32.20 | 0.01 |
| | | 67 (19) | 81.50 | 50.60 | 0.01 | 74.50 | 47.10 | 0.01 | 66.40 | 43.30 | 0.01 | 57.10 | 39.10 | 0.02 | 46.60 | 34.70 | 0.02 |
| | | 62 (17) | 68.10 | 54.00 | 0.02 | 60.90 | 50.30 | 0.02 | 52.60 | 46.20 | 0.02 | 43.80 | 41.90 | 0.03 | 36.80 | 36.80 | 0.11 |
| | 2000 | 72 (22) | 107.40 | 52.50 | 0.00 | 99.90 | 49.30 | 0.00 | 91.40 | 45.60 | 0.01 | 81.60 | 41.50 | 0.02 | 70.40 | 37.10 | 0.02 |
| | | 67 (19) | 91.30 | 57.90 | 0.02 | 83.60 | 54.20 | 0.02 | 74.70 | 50.20 | 0.03 | 64.40 | 45.70 | 0.03 | 52.60 | 40.80 | 0.03 |
| | | 62 (17) | 76.60 | 62.80 | 0.03 | 68.70 | 58.90 | 0.03 | 59.80 | 54.50 | 0.03 | 50.40 | 49.70 | 0.05 | 43.60 | 43.60 | 0.16 |
| | 2400 | 72 (22) | 116.00 | 57.40 | 0.01 | 108.20 | 54.00 | 0.02 | 99.10 | 50.30 | 0.03 | 88.50 | 46.00 | 0.03 | 76.60 | 41.40 | 0.03 |
| | | 67 (19) | 98.90 | 64.20 | 0.03 | 90.80 | 60.50 | 0.04 | 81.20 | 56.20 | 0.04 | 70.30 | 51.60 | 0.04 | 57.60 | 46.40 | 0.04 |
| | | 62 (17) | 83.40 | 70.70 | 0.04 | 75.10 | 66.60 | 0.05 | 65.80 | 62.00 | 0.05 | 56.70 | 56.70 | 0.09 | 49.50 | 49.50 | 0.20 |

See notes on page 5.

LEGEND:

- CFM** — Cubic Ft per Minute
- EWB** — Entering Wet Bulb (°F)
- LWB** — Leaving Wet Bulb (°F)
- TC** — Total Cooling Capacity 1000 Btuh
- BF** — Bypass Factor
- MBH** — 1000 Btuh
- SHC** — Sensible Heat Capacities (1000 Btuh)

NOTES:

1. Contact manufacturer for cooling capacities at conditions other than shown in table.
2. Formulas:
 Leaving db = entering db - $\frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$
 Leaving wb = wb corresponding to enthalpy of air leaving coil (h_{LWB})

$$h_{LWB} = h_{EWB} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$$
 Where h_{EWB} = enthalpy of air entering coil
3. SHC is based on 80°F (27°C) db temperature of air entering the evaporator coil.
 Below 80°F (27°C) db, subtract (Correction Factor x CFM) from SHC.
 Above 80°F (27°C) db, add (Correction Factor x CFM) to SHC.
4. Direct interpolation is permissible. Do not extrapolate.
5. Fan motor heat has not been deducted.
6. All data points are based on 10°F (-12°C) superheat leaving coil and use of thermostatic expansion valve (TXV) device.
7. All units have sweat suction-tube connection and a liquid-tube connection. For 1-1/8-in. system suction tube, 3/4 x 1-1/8-in. suction tube connection adapter is available as accessory.
8. The CSPHP coils can be used in any properly designed system using Puron® refrigerant.
9. The CSRHP coils can be used in any properly designed system using R-22 refrigerant.
10. Before using maximum cfm shown in table, check coil static pressure drop to ensure system blower can provide necessary static pressure needed for coil and duct systems.
11. Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

CSPHP / CSRHP

| BYPASS FACTOR | ENTERING AIR DRY BULB TEMPERATURE °F (°C) | | | | | |
|-------------------|---|---------|---------|---------|---------|-------------------------|
| | 79 (26) | 78 (26) | 77 (25) | 76 (24) | 75 (24) | Under 75 (24) |
| | 81 (27) | 82 (28) | 83 (28) | 84 (29) | 84 (29) | Above 85 (29) |
| Correction Factor | | | | | | |
| 0.10 | 0.98 | 1.96 | 2.94 | 3.92 | 4.91 | Use formula shown below |
| 0.20 | 0.87 | 1.74 | 2.62 | 3.49 | 4.36 | |
| 0.30 | 0.76 | 1.53 | 2.29 | 3.05 | 3.82 | |

Interpolation is permissible.

Correction Factor = 1.09 x (1 - BF) x (db - 80)

PERFORMANCE DATA (cont)

COIL STATIC PRESSURE DROP (in. w.c.) PURON® AND R-22 REFRIGERANTS

| UNIT SIZE | STANDARD CFM | | | | | | | | | | | | | | | | | | | |
|--------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | |
| 2412 | Dry | | | | | | | | | | | | | | | | | | | |
| | 0.060 | 0.081 | 0.104 | 0.129 | 0.155 | 0.186 | 0.217 | | | | | | | | | | | | | |
| | Wet | | | | | | | | | | | | | | | | | | | |
| | 0.069 | 0.096 | 0.129 | 0.162 | 0.198 | 0.237 | 0.278 | | | | | | | | | | | | | |
| 3012 | Dry | | | | | | | | | | | | | | | | | | | |
| | 0.044 | 0.060 | 0.077 | 0.097 | 0.116 | 0.140 | 0.165 | 0.190 | 0.219 | | | | | | | | | | | |
| | Wet | | | | | | | | | | | | | | | | | | | |
| | 0.050 | 0.071 | 0.093 | 0.116 | 0.144 | 0.172 | 0.203 | 0.235 | 0.269 | | | | | | | | | | | |
| 3612 | Dry | | | | | | | | | | | | | | | | | | | |
| | 0.043 | 0.058 | 0.074 | 0.089 | 0.107 | 0.127 | 0.150 | 0.172 | 0.197 | 0.224 | 0.252 | | | | | | | | | |
| | Wet | | | | | | | | | | | | | | | | | | | |
| | 0.048 | 0.066 | 0.086 | 0.104 | 0.128 | 0.154 | 0.182 | 0.212 | 0.245 | 0.280 | 0.317 | | | | | | | | | |
| 4212 | Dry | | | | | | | | | | | | | | | | | | | |
| | | | 0.065 | 0.079 | 0.095 | 0.113 | 0.134 | 0.154 | 0.176 | 0.197 | 0.220 | 0.246 | 0.268 | | | | | | | |
| | Wet | | | | | | | | | | | | | | | | | | | |
| | | | 0.076 | 0.094 | 0.114 | 0.137 | 0.163 | 0.189 | 0.215 | 0.245 | 0.273 | 0.303 | 0.332 | | | | | | | |
| 4812 | Dry | | | | | | | | | | | | | | | | | | | |
| | | | 0.063 | 0.076 | 0.091 | 0.105 | 0.121 | 0.138 | 0.157 | 0.175 | 0.195 | 0.217 | 0.238 | 0.260 | 0.284 | | | | | |
| | Wet | | | | | | | | | | | | | | | | | | | |
| | | | 0.080 | 0.101 | 0.123 | 0.149 | 0.175 | 0.206 | 0.215 | 0.231 | 0.261 | 0.291 | 0.325 | 0.361 | 0.394 | | | | | |
| 6012 | Dry | | | | | | | | | | | | | | | | | | | |
| | | | | | 0.051 | 0.060 | 0.069 | 0.079 | 0.090 | 0.101 | 0.113 | 0.125 | 0.138 | 0.153 | 0.165 | 0.180 | 0.195 | 0.211 | 0.227 | |
| | Wet | | | | | | | | | | | | | | | | | | | |
| | | | | | 0.063 | 0.076 | 0.089 | 0.102 | 0.118 | 0.135 | 0.155 | 0.175 | 0.193 | 0.214 | 0.235 | 0.258 | 0.279 | 0.302 | 0.325 | |

CSPHP / CSRHP