



42CT SERIES [300 to 1400 CFM]

Ducted Chilled Water Fan Coil Unit for Standard Chiller and District Cooling Application





ABOUT CARRIER



CARRIER: A WORLD LEADER IN HEATING, AIR-CONDITIONING AND REFRIGERATION SOLUTIONS.

MAKING THE WORLD A BETTER PLACE TO LIVE, WORK AND PLAY

Built on Willis Carrier's invention of modern air conditioning in 1902, Carrier is the world leader in heating, airconditioning and refrigeration solutions. We constantly build upon our history of proven innovation with new products and services that improve global comfort and efficiency.

ABOUT CARRIER INTERNATIONAL SDN BHD (CISB)

Carrier established its first foothold in Malaysia in 1959 when Carrier International (Malaysia) Ltd was formed as a distributor for Carrier air-conditioning equipment and components. The company was subsequently renamed as Carrier International Sdn Bhd (CISB). Today, CISB is one of the largest manufacturers of HVAC products in South-East Asia with products ranges setting the standard for performance, energy efficiency and sustainability.

With state of the art manufacturing technologies, the CISB invests heavily in product design/ development with dedicated engineering team and in house testing laboratories to carry out continuous development in thermal performance and air flow. The factory is ISO 9001:2015 certified which is a guarantee for the quality of our product offering and services provided. The factory also complies with EH&S regulations and takes a responsible approach to environment, health and safety.

As one of the market leader in HVAC industries, our products are manufactured with stringent sourcing, manufacturing and quality process that meets Carrier global QA/QC standard and control.

ABOUT 42CT FAN COIL UNITS

42CT series fan coil units are manufactured in Carrier Malaysia facility under Carrier Corporation USA. These units are produced and designed with latest technology. 42CT/CTL(4Rows) single skin ducted units are EUROVENT CERTIFIED and all other units performance is rated in accordance to EUROVENT standards. Refer below Eurovent website link for details: http://www.eurovent-certification.com

COMPUTER SELECTION

We have made available a computer program to finalize your selections. Please contact your Carrier representative for a computer selection based on your "Quick Selection" plus the design parameters of your application.



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42CT-/CTL 4 Row Ducted Unit are Eurovent Certified

If fan coil terminals are the answer to your job requirements, you can't afford to pass over Carrier's versatile and extensive range of fan coil units. With Carrier's 42CT series fan coil units, you can select furred-in style, in capacities from 300 to 1,400 cfm. Units are ideal for installations in residential, hotels, motels, apartments, offices, hospitals, schools and other multi-room buildings.

Carrier room fan coil terminals provide unsurpassed year round comfort, with high cooling performance. Carrier 42 series terminal requires very little space and is easy to install. Piping, drain and wiring connections are readily accessible to save installation time and field labor expense.

Forget about expensive ductwork, forget about complex system controls, forget the aggravation and choose Carrier's easy to install room fan coil units – in pipe systems. Opt for quiet. Carrier room fan coil units operate at exceptionally low sound levels. Generous amount of insulation absorbs operating sound and rugged, rigid construction ensures vibration free operation at all fan speeds.

Carrier room fan coil units are economical. Three speed fans deliver just the right amount of conditioned air for your comfort needs at any load. And each individual unit can be shut off when not in use. Permanent Split Capacitor motors deliver peak operating efficiency. In choosing Carrier units, you can match your application with a wide range of custom-designed options and accessories. When you go for Carrier 42 series, the advantages to owner, installer and the room occupants are too great to ignore.

Carrier 42CT series fan coils give you design and equipment location flexibility

- Wide range of popular capacities, 300 1400 cfm
- · Available up to 9 sizes.
- Furred-in units
- Select 4 row coils (42CT-/CTL), 3 row coils (Non-Eurovent)
- · Accommodates 2 pipe systems
- Top panel insulated and low fan speed means quiet operation
- · Draw outside air for odor dilution
- · Uses only minimal space

Select Carrier fan coils for easy, low cost installation

- · Easy wiring, piping connections
- Mounting holes, slots speed hanging
- · Requires no expensive ductwork
- · Ideal for new construction or renovation

Save operating costs with Carrier fan coils

- Higher efficiency & reliability: Electronic Commutated Motor (42CT-/CTL) option
- · Individual unit shut-off when not in use
- · Efficient, 3 speed centrifugal fans
- · Permanent Split Capacitor motors
- · High efficiency heat transfer surface

Carrier fan coils save your service and maintenance expense

- Nationwide Carrier service
- Insulated drain pan
- Easy access to components
- Rugged construction
- Factory leak test for coil
- · Cleanable Nylon filters
- · Long life, heavy duty bearings
- · Quick clip filter removal for rear side access
- Threaded in/ out water connection



ISO 9001 Certificate



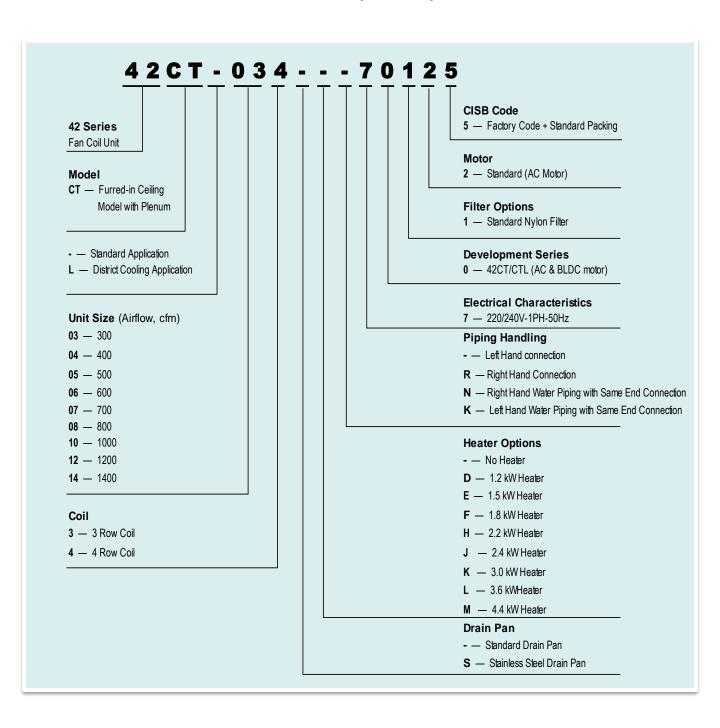
Eurovent Certificate



IQ Net Certificate

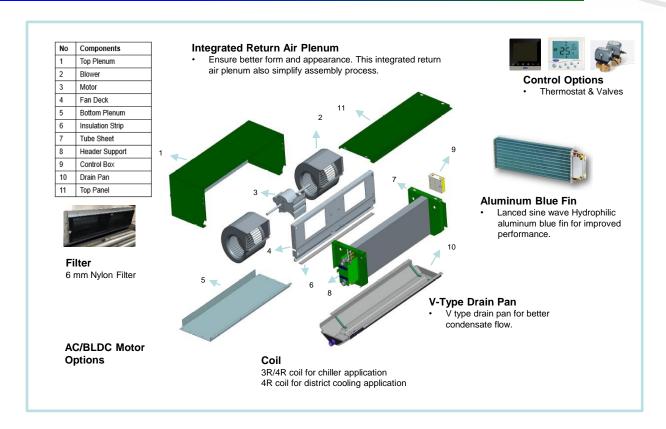


MODEL 42CT/CTL (AC Motor)





NEW SERIES: 42CT/CTL EXPLODED VIEW & MAIN FEATURES



High Efficiency

 42CT/CTL unit coil were manufactured using the latest developed double-flanging structure of wide seam blue hydrophilic aluminum fin with an advance mechanical tube-expanding process. This 42CT/CTL hydrophilic aluminum fin will provide sufficient heat transfer channel for an efficient heat exchange. In addition, the wide impeller fan will provide a uniform air distribution that makes the heat transfer more effective and ensure a better cooling capacity.



Low Noise

- 42CT/CTL unit series are equipped with a wide diameter impeller and a low speed forward multi-blade. The fan casing is strengthtened with reinforcing ribs that provides additional structure strength.
- It adopts NSK bearings which ensuring small vibration and low noise during operation.



High Strength V Type Drain Pan

 42CT/CTL unit series will come with a newly designed V-type drain pan that are produced using an integral molding process. The design of the drain outlet that are located at the lowest position of the unit will ensure condensate able to drain out smoothly. With this V-type design, it will also enhance the strength of the drain pan to avoid any deformation during transportation process.





42CT Furred-in Ceiling FCU with Plenum 4 Rows (AC)

| PERFORMANCE | | | MODEL: 42CT | | | | | | | | | |
|-------------------------------|----------------------|--------|---|--------|----------|------------|------------|-----------|------------|--------|--------|--|
| PE | RFORMANCE | | 03 | 04 | 05 | 06 | 07 | 08 | 10 | 12 | 14 | |
| Air Valuma | | | 300 | 400 | 500 | 600 | 700 | 800 | 1000 | 1200 | 1400 | |
| Air Volume | High | ℓ/s | 142 | 189 | 236 | 283 | 330 | 378 | 472 | 566 | 661 | |
| Cooling Capac | sity (Eluid)* | kW | 3.30 | 3.80 | 4.7 | 5.8 | 6.6 | 7.7 | 9.6 | 10.4 | 12.1 | |
| Cooling Capac | Sity (Fluid) | Btu/hr | 11,270 | 12,978 | 16,051 | 19,808 | 22,540 | 26,297 | 32,786 | 35,518 | 41,324 | |
| Motor power of | utput | W | 24 | 30 | 51 | 55 | 72 | 34 x 2 | 48 x 2 | 62 x 2 | 83 x 2 | |
| Motor current | | Amp | 0.29 | 0.35 | 0.43 | 0.49 | 0.59 | 0.70 | 0.84 | 1.02 | 1.55 | |
| Carrad | High | | 36.7 | 38.9 | 39.6 | 40.5 | 41.3 | 42.1 | 42.3 | 42.5 | 44.0 | |
| Sound Pressure** | Med | dB(A) | 35.1 | 37.7 | 37.5 | 38.4 | 39.3 | 40.1 | 40.3 | 40.8 | 42.0 | |
| i iessuie | Low | | 33.3 | 36.1 | 35.6 | 36.5 | 37.5 | 38.4 | 38.4 | 39.4 | 39.9 | |
| Water Flow | | ℓ/s | 0.16 | 0.18 | 0.22 | 0.28 | 0.31 | 0.37 | 0.46 | 0.50 | 0.58 | |
| Water Pressu | re Drop | kPa | 17.00 | 14.00 | 14.50 | 18.40 | 23.50 | 21.70 | 28.1 | 23.90 | 33.60 | |
| Fan Type | | | Centrifugal Forward-curved blades | | | | | | | | | |
| Motor Type | | | Permanent Split Capacitor | | | | | | | | | |
| | No. of Row | | | | | | 4 | | | | | |
| Coil | Working Pressure |) | 1.72 MPa | | | | | | | | | |
| Coll | Face Area (m²) | | 0.12 | 0.14 | 0.16 | 0.19 | 0.21 | 0.26 | 0.27 | 0.32 | 0.35 | |
| | Water Volume (l) | | 0.84 | 0.95 | 1.06 | 1.29 | 1.40 | 1.73 | 1.80 | 2.08 | 2.30 | |
| | Water In-Out/ Mat | terial | | | 3/4" FP7 | Г (BSP)/ I | Brass (Thr | eaded Cor | nnections) | | | |
| Connections Condensate Drain/ | | | 3/4" MPT (BSP)/ GI Steel (Threaded Connections) | | | | | | | | | |
| | Height | mm | | | | | 242 | | | | | |
| Cabinet Size | Width | mm | | | | | 560 | | | | | |
| | Length | mm | 781 | 861 | 941 | 1,101 | 1,181 | 1,421 | 1,471 | 1671 | 1,831 | |
| Casing Material / Thickness | | | Galvanized Steel/ 0.8 & 1.0mm | | | | | | | | | |
| Casing Treatm | nent / External Fini | sh | G60 Galvanized Steel (Z180 Zinc Coating) | | | | | | | | | |
| | | kg | 17.2 | 18.1 | 20.3 | 22.9 | 24.3 | 31.3 | 33.4 | 36.9 | 39.4 | |

NOTE:

Based on motor at high speed, standard air and dry coil operation; 5.0°C water temperature rise; entering air temperature 27.0°C DB; 19.0°C WB; Entering water temperature 7.0°C (EUROVENT CONDITION)

- - For other design conditions, please apply the selection program to finalize your applications - -



^{**} Sound measurement in accordance with JIS8616-2006 Standard (1.5M below the unit bottom)



42CTL Furred-in Ceiling FCU with Plenum 4 Rows (AC)

| PERFORMANCE | | | MODEL: 42CTL (District Cooling Application) | | | | | | | | |
|-----------------------------|------------------------------|--------|---|-------|---------|---------|------------|-----------|-----------|--------|--------|
| PE | 03 | 04 | 05 | 06 | 07 | 08 | 10 | 12 | 14 | | |
| Air Volume | I li sula | CFM | 300 | 400 | 500 | 600 | 700 | 800 | 1000 | 1200 | 1400 |
| Air volume | High | ℓ/s | 142 | 189 | 236 | 283 | 330 | 378 | 472 | 566 | 661 |
| Caaling Canacit | ь. (Гы:d* | kW | 2.40 | 2.80 | 3.80 | 4.80 | 5.30 | 6.70 | 7.90 | 10.60 | 11.50 |
| Cooling Capacit | ly (Fiuia) | Btu/hr | 8,196 | 9,563 | 12,978 | 16,393 | 18,100 | 22,882 | 26,980 | 36,201 | 39,275 |
| Motor nominal p | ower output | W | 24 | 30 | 51 | 55 | 72 | 34 x 2 | 48 x 2 | 62 x 2 | 83 x 2 |
| Motor current | | Amp | 0.29 | 0.35 | 0.43 | 0.49 | 0.59 | 0.70 | 0.84 | 1.02 | 1.55 |
| | High | | 36.7 | 38.9 | 39.6 | 40.5 | 41.3 | 42.1 | 42.3 | 42.5 | 44.0 |
| Sound Pressure** | Med | dB(A) | 35.1 | 37.7 | 37.5 | 38.4 | 39.3 | 40.1 | 40.3 | 40.8 | 42.0 |
| Pressure | Low | | 33.3 | 36.1 | 35.6 | 36.5 | 37.5 | 38.4 | 38.4 | 39.4 | 39.9 |
| Water Flow | | ℓ/s | 0.06 | 0.07 | 0.10 | 0.13 | 0.14 | 0.18 | 0.21 | 0.28 | 0.30 |
| Water Pressure | Drop | kPa | 40.60 | 19.00 | 37.80 | 29.20 | 33.70 | 37.50 | 42.10 | 46.50 | 58.40 |
| Fan Type | | | Centrifugal Forward-curved blades | | | | | | | | |
| Motor Type | | | Permanent Split Capacitor | | | | | | | | |
| | No. of Row | | | | | | 4 | | | | |
| Cail | Working Pressure |) | | | | | 1.72 N | Лра | | | |
| Coil | Face Area (m²) | | 0.12 | 0.14 | 0.16 | 0.19 | 0.21 | 0.26 | 0.27 | 0.32 | 0.35 |
| | Water Volume (l) | | 0.84 | 0.95 | 1.06 | 1.29 | 1.40 | 1.73 | 1.80 | 2.08 | 2.30 |
| | Water In-Out/ Ma | terial | | | 3/4" FF | T (BSP) | / Brass (T | hreaded (| Connectio | ns) | |
| Connections | Condensate Drain Material | n/ | 3/4" MPT (BSP)/ GI Steel (Threaded Connections) | | | | | | | | |
| | Height | mm | | | | | 242 | 2 | | | |
| Cabinet Size | Width | mm | | | | | 560 |) | | | |
| | Length | mm | 781 | 861 | 941 | 1,101 | 1,181 | 1,421 | 1,471 | 1671 | 1,831 |
| Casing Material / Thickness | | | Galvanized Steel/ 0.8 & 1.0mm | | | | | | | | |
| Casing Treatme | ent / External Finish | า | G60 Galvanized Steel (Z180 Zinc Coating) | | | | | | | | |
| Net Weight | | kg | 17.2 | 18.1 | 20.3 | 22.9 | 24.3 | 31.3 | 33.4 | 36.9 | 39.4 |

NOTE:

- - For other design conditions, please apply the selection program to finalize your applications - -

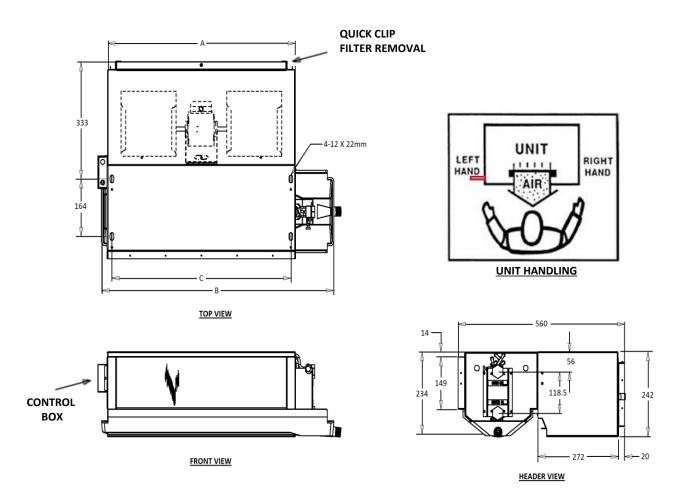


^{*} Based on motor at high speed, standard air and dry coil operation, 9°C water temperature rise; entering-air temperature 24.0°C dB; 18.0°C wB; entering water temperature 5.5°C (EUROVENT CONDITION).

^{**} Sound measurement in accordance with JIS8616-2006 standard (1.5M below the unit bottom)



42CT-/CTL Furred-in Ceiling FCU with Plenum



| MODEL | | NET WEIGHT (kg) | | |
|----------|------|-----------------|------|-------------------|
| 42CT/CTL | Α | В | С | 4 Rows (AC Motor) |
| 03 | 632 | 781 | 602 | 17.2 |
| 04 | 712 | 861 | 682 | 18.1 |
| 05 | 792 | 941 | 762 | 20.3 |
| 06 | 952 | 1101 | 922 | 22.9 |
| 07 | 1032 | 1181 | 1002 | 24.3 |
| 08 | 1272 | 1421 | 1242 | 31.3 |
| 10 | 1322 | 1471 | 1292 | 33.4 |
| 12 | 1522 | 1671 | 1492 | 36.9 |
| 14 | 1682 | 1831 | 1652 | 39.4 |

PERFORMANCE RATING



42CT Furred-in Ceiling Model (4-Rows)

| Model | | ESP | Air Flow | Capac | ty (kW) | Air off | FCU (°C) | Water | Water | |
|-------|--------|------|----------|-------|----------|---------|----------|---------------|-------------------|--|
| 42CT | Speed | (Pa) | (CFM) | Total | Sensible | DB | WB | Flow (ℓ/s) | Pressure (kPa) | |
| | High | | 255 | 3.8 | 2.4 | 10.8 | 10.4 | 0.18 | 22.2 | |
| 03 | Medium | 50 | 187 | 2.9 | 1.8 | 10.1 | 9.5 | 0.14 | 13.3 | |
| | Low | | 104 | 1.7 | 1.1 | 9.1 | 8.5 | 0.08 | 4.7 | |
| | High | | 328 | 4.2 | 2.8 | 12.2 | 11.7 | 0.20 | 16.9 | |
| 04 | Medium | 50 | 269 | 3.6 | 2.4 | 11.5 | 11.0 | 0.17 | 12.5 | |
| | Low | | 166 | 2.4 | 1.6 | 10.5 | 9.7 | 0.12 | 5.7 | |
| | High | | 430 | 5.1 | 3.5 | 12.9 | 12.3 | 0.24 | 17.1 | |
| 05 | Medium | 50 | 333 | 4.3 | 2.8 | 12.1 | 11.4 | 0.20 | 12.0 | |
| | Low | | 249 | 3.4 | 2.2 | 11.2 | 10.5 | 0.16 | 7.7 | |
| | High | 50 | 529 | 6.2 | 4.2 | 13.1 | 12.4 | 0.29 | 20.4 | |
| 06 | Medium | | 426 | 5.3 | 3.6 | 12.3 | 11.7 | 0.25 | 15.5 | |
| | Low | | 263 | 3.6 | 2.4 | 11.1 | 10.4 | 0.17 | 7.4 | |
| | High | 50 | 590 | 7.0 | 4.7 | 12.9 | 12.3 | 0.33 | 25.9 | |
| 07 | Medium | | 451 | 5.8 | 3.8 | 12.0 | 11.4 | 0.28 | 18.4 | |
| | Low | | 306 | 4.3 | 2.8 | 11.0 | 10.3 | 0.20 | 10.3 | |
| | High | | 675 | 8.3 | 5.5 | 12.6 | 12.0 | 0.40 | 24.1 | |
| 08 | Medium | 50 | 506 | 6.8 | 4.4 | 11.6 | 11.0 | 0.32 | 16.6 | |
| | Low | | 323 | 4.7 | 3.0 | 10.5 | 9.8 | 0.22 | 8.2 | |
| | High | | 832 | 10.2 | 6.8 | 12.6 | 12.0 | 0.49 | 31.5 | |
| 10 | Medium | 50 | 653 | 8.6 | 5.7 | 11.7 | 11.1 | 0.41 | 23.5 | |
| | Low | | 469 | 6.7 | 4.3 | 10.8 | 10.1 | 0.32 | 15.0 | |
| | High | | 933 | 10.9 | 7.4 | 13.1 | 12.4 | 0.52 | 25.5 | |
| 12 | Medium | 50 | 757 | 9.4 | 6.3 | 12.3 | 11.7 | 0.45 | 19.7 | |
| | Low | | 569 | 7.6 | 5 | 11.4 | 10.7 | 0.36 | 13.4 | |
| | High | | 1084 | 12.6 | 8.6 | 13.1 | 12.4 | 0.60 | 36.4 | |
| 14 | Medium | 50 | 912 | 11.2 | 7.6 | 12.4 | 11.7 | 0.54 | 29.7 | |
| | Low | 1 | 713 | 9.4 | 6.3 | 11.6 | 10.9 | 0.45 | 21.8 | |

NOTE: Air Conditions: EDB/EWB 27.0/19.0°C

Water Conditions: EWT/LWT 7.0/12.0°C ΔT: 5.0°C





42CTL Furred-in Ceiling Model (4-Rows) District Cooling Application

| Model | | ESP | Air Flow | Capaci | ty (kW) | Air off | FCU (°C) | Water | Water |
|-------|--------|------|----------|--------|----------|---------|----------|---------------|-------------------|
| 42CTL | Speed | (Pa) | (CFM) | Total | Sensible | DB | WB | Flow (ℓ/s) | Pressure (kPa) |
| | High | | 258 | 2.6 | 1.7 | 12.5 | 12 | 0.07 | 50.7 |
| 03 | Medium | 50 | 189 | 2.1 | 1.3 | 11.6 | 11.1 | 0.06 | 32.9 |
| | Low | | 105 | 1.3 | 0.8 | 10.2 | 9.7 | 0.04 | 13.3 |
| | High | | 332 | 3.1 | 2.1 | 13.1 | 12.6 | 0.08 | 23.1 |
| 04 | Medium | 50 | 272 | 2.7 | 1.8 | 12.5 | 12 | 0.07 | 17.7 |
| | Low | | 168 | 1.9 | 1.2 | 11.3 | 10.8 | 0.05 | 8.8 |
| | High | | 435 | 4.1 | 2.7 | 13 | 12.5 | 0.11 | 44.1 |
| 05 | Medium | 50 | 337 | 3.5 | 2.3 | 12.2 | 11.7 | 0.09 | 32.4 |
| | Low | | 252 | 2.8 | 1.8 | 11.4 | 10.8 | 0.08 | 21.5 |
| | High | | 534 | 5.2 | 3.4 | 12.8 | 12.3 | 0.14 | 34.1 |
| 06 | Medium | 50 | 431 | 4.5 | 2.9 | 12.1 | 11.7 | 0.12 | 25.5 |
| | Low | | 266 | 3.2 | 2 | 10.9 | 10.4 | 0.08 | 12.6 |
| | High | 50 | 596 | 5.8 | 3.8 | 12.9 | 12.4 | 0.15 | 37.8 |
| 07 | Medium | | 455 | 4.8 | 3.1 | 12.1 | 11.6 | 0.13 | 27.6 |
| | Low | | 309 | 3.6 | 2.3 | 11 | 10.5 | 0.1 | 15.7 |
| | High | | 682 | 7.3 | 4.6 | 12 | 11.7 | 0.19 | 42.5 |
| 08 | Medium | 50 | 511 | 6 | 3.7 | 11.1 | 10.7 | 0.16 | 29.9 |
| | Low | | 326 | 4.3 | 2.6 | 10 | 9.5 | 0.11 | 15.1 |
| | High | | 840 | 8.6 | 5.5 | 12.5 | 12 | 0.23 | 48.6 |
| 10 | Medium | 50 | 660 | 7.3 | 4.6 | 11.6 | 11.2 | 0.19 | 37 |
| | Low | | 474 | 5.8 | 3.6 | 10.7 | 10.1 | 0.15 | 24.2 |
| | High | | 942 | 11.2 | 6.9 | 11.2 | 10.9 | 0.3 | 50.9 |
| 12 | Medium | 50 | 764 | 9.6 | 5.9 | 10.5 | 10.2 | 0.25 | 39 |
| | Low | | 575 | 7.7 | 4.7 | 9.7 | 9.2 | 0.2 | 27 |
| | High | | 1095 | 12 | 7.5 | 11.9 | 11.6 | 0.32 | 62.8 |
| 14 | Medium | 50 | 921 | 10.6 | 6.7 | 11.3 | 10.9 | 0.28 | 51.2 |
| | Low | | 721 | 8.9 | 5.5 | 10.6 | 10.1 | 0.23 | 37.5 |

NOTE: Air Conditions: EDB/EWB 24.0/18.0°C Water Conditions: EWT/LWT 5.5/14.5°C Δ T: 9.0°C

^{- -} For other design conditions, please apply the selection program to finalize your applications - -



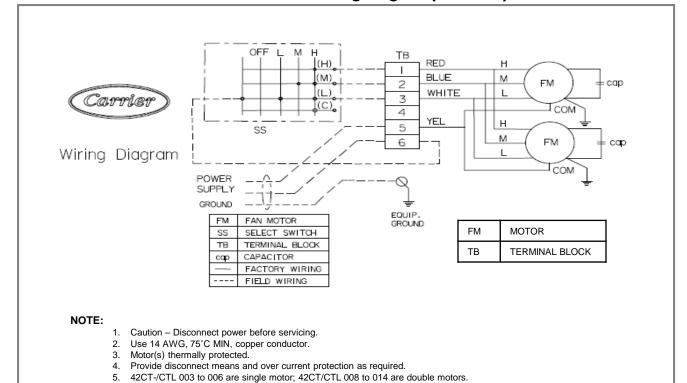
42CT-/CTL MOTOR DATA

| Model | Unit Size | Power Supply (V- Ph-Hz) | Fan Speed | Fan Speed (rpm) | Nominal Power Output (W) | Power Input (W) | Running Amps 42CT-/CTL 4 rows | Remarks |
|-------------|-----------|-------------------------------|--------------|--------------------|-----------------------------------|-----------------------|--|--------------------------------------|
| | | | Hi | 1140 | | 69 | 0.300 | |
| | 03 | | Med | 1065 | 24 | 59 | 0.270 | |
| | | | Low | 974 | | 48 | 0.230 | |
| | | | Hi | 1185 | | 74 | 0.324 | |
| | 04 | | Med | 1080 | 30 | 68 | 0.303 | |
| | | | Low | 988 | | 56 | 0.256 | |
| | | | Hi | 1256 | | 99 | 0.431 | |
| | 05 | | Med | 1134 | 51 | 84 | 0.385 | |
| | | | Low | 1037 | | 76 | 0.353 | |
| | | | Hi | 1241 | | 109 | 0.506 | |
| | 06 | | Med | 1106 | 55 | 98 | 0.468 | * Total |
| | |] | Low | 1000 | | 81 | 0.379 | motor amps and watts shown for |
| | 07 | | Hi | 1291 | 72 | 139 | 0.620 | |
| 42CT-/42CTL | | 230-1-50 | Med | 1129 | | 115 | 0.520 | |
| | | | Low | 1016 | | 96 | 0.440 | units with 2 |
| | | | Hi | 1152 | | 163 | 0.720 | motors (size |
| | 08* | | Med | 1032 | 34 (x2) | 142 | 0.640 | 08 to 14). |
| | | | Low | 957 | | 119 | 0.550 | |
| | | | Hi | 1310 | | 195 | 0.860 | |
| | 10* | | Med | 1151 | 48 (x2) | 168 | 0.740 | |
| | | | Low | 1040 | | 145 | 0.650 | |
| | | | Hi | 1323 | | 241 | 1.080 | |
| | 12* | | Med | 1205 | 62 (x2) | 214 | 0.950 | |
| | | | Low | 1071 | | 190 | 0.850 | |
| | | | Hi | 1358 | | 324 | 1.600 | |
| | 14* | | Med | 1220 | 83 (x2) | 265 | 1.160 | |
| | | | Low | 1104 | | 223 | 0.990 | |

Based on 50PA 42CT/CTL 4R – Dry Coil CFM



42CT-/CTL Series Wiring Diagram (AC Motor)



6. Snap apart carefully at hinge to separate cover from the control box.

GUIDE SPECIFICATIONS



HVAC GUIDE SPECIFICATIONS Size Range: 300 to 1400 Nominal Cfm

42CT-/CTL Models

Standard base unit shall be equipped with a 3-row or 4-row coil for installation in a 2-pipe system. Coils shall have 7mm copper tubes, aluminium blue fins bonded to the tubes by mechanical expansion. Each coil shall have a manual air vent and threaded connections field piping (refer to Technical Data). Working pressure 1.72 MPa, 0.105mm fin thickness and 0.24mm tube wall thickness.

PART 1 – GENERAL

1.1 System Description

Horizontal, room fan coil unit with furred-in, above ceiling for ducting, or with cabinet for exposed ceiling installations.

1.2 Quality Assurance

- A. Carrier fan coil units are tested in accordance with Eurovent standard. (Refer page no. 2 for Eurovent website link).
- B. Unit insulation to be MVSS 302 compliance and drain pan insulation to be UL94 compliance.
- C. Carrier fan coil unit is completely insulated in fan section as well as coil section.
- D. Unit cabinet material to be galvanized steel sheet complying to ASTM A653 standard.
- E. Each coils are tested with Nitrogen (N2) under water at 400 psig while submerged in water.
- F. Factory shall be ISO-9001:2015 certified.

1.3 Delivery Storage and Handling

Each unit shall be individually packaged from point of manufacture. Unit shall be handled and stored in accordance with the manufacturer's instructions.

PART 2 - PRODUCTS

EQUIPMENT

2.1 General

Factory assembled, horizontal, blow-thru type fan coil for furred-in, exposed ceiling or ducted installations. Unit shall be complete with water coil(s), fan(s), motor(s), drain pan, filters and all required wiring, collars for ducted units. Carrier fan coil unit casing is manufactured from heavy gauge galvanized steel sheet as per ASTM A653 standard. Unit inner surfaces for the cooling coil section are insulated for better thermal & sound performance.

2.2 42CT-, CTL Furred-in Units

Base 42CT, CTL unit with factory installed plenum section and cleanable filter as shown on equipment drawings. The plenum shall be rear air return. Shall enclose the fan/motor assemblies. Units have 10mm thick PU insulation on coil top panel and ¼" PE insulation 28.6kg/m³ density on the drain pan. Unit shall have a removable panel to provide access to fan/motor assemblies and unit identification label. Filter track with quick clip permanent Nylon filter and 18 mm supply collar for duct connection.

2.3 Fan

Direct driven, double width fan wheels with forward curved blades shall be statically and dynamically balanced. Fan scrolls and wheels shall be constructed of galvanized steel.

GUIDE SPECIFICATIONS (cont')



2.4 Coils

Standard base unit shall be equipped with a 3-row or 4-row coil for installation in a 2 pipe system. All coils shall have 7mm seamless copper tubes and "dual sine wave" corrugated aluminum fin plates. Coil fins are mechanically bonded to tube joints. All coils are tested with Nitrogen (N2) underwater at 400psi while submerged in water. Coils performance shall be rated in accordance to AHRI410 Standard (refer to Technical Data for more detail information). Working pressure 1.72 MPa, 0.105 mm fin thickness and 0.24 mm tube wall thickness for 7 mm tube or 0.28 mm tube wall thickness for 3/8" tube.

2.5 Drain Pan

Galvanized drain pan covers entire length & width of coil till the headers. Drain pan is powder coated and is insulated with $\frac{1}{4}$ " closed cell PE insulation on the outside. The drain pan is with $\frac{3}{4}$ " male pipe thread connection

2.6 Operating Characteristics

A one coil unit installed in a 2-pipe system shall be capable of providing cooling as determined by the operating mode of the central water supply system.

2.7 Electrical Requirements

Standard unit shall operate on 220V/240v, single phase, 50Hz electric power. All internal wiring shall be in flexible conduit.

2.8 Motor(s)

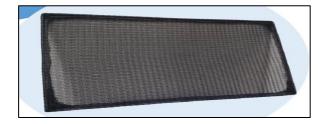
Fan motors shall be 3-speed, 230V (42CT Series), single phase, 50Hz, permanent split capacitor type, with ball type bearings and oversized oil reservoirs to ensure lubrication. The fan motor(s) shall be equipped with integral automatic temperature reset for motor protection.

| Model | Туре | Unit Size | Motor Insulation Class | End Closure Type |
|----------|------|-----------|------------------------------|---------------------|
| 42CT/CTL | AC | All | В | |
| 42CT/CTL | ECM | All | В | Open Drip Proof |



2.9 Filter

Permanent washable Nylon filters (Honeycomb Polyolefin Network) with 6mm thickness and Ø4 frame material hard steel wire (BS EN10244 Class D or JIS G3532 class 2).



- Filter access by rear bottom removal.
- Aluminum Filter MERV 2, G2 filter class are available as a customization option upon request.



Carrier International Sdn. Bhd. (3385-T)
Lot 4, Jalan P/6, 43650 Bandar Baru Bangi,
Selangor Darul Ehsan, Malaysia.
Tel: 03-8913 7600

42CT-&CTL/EUROVENT

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