



United Technologies

turn to the experts 



42C/V Fan Coil Unit

Air flow: 340 ~ 2040 m³/h



Turn To The Experts

Founded by the inventor of modern air conditioning, Carrier is a world leader in high-technology heating, air-conditioning and refrigeration solutions. Carrier experts provide sustainable solutions, integrating energy-efficient products, building controls and energy services for residential, commercial, retail, transport and food service customers. Carrier is a part of UTC Climate, Controls & Security, a unit of United Technologies Corp., a leading provider to the aerospace and building systems industries worldwide.

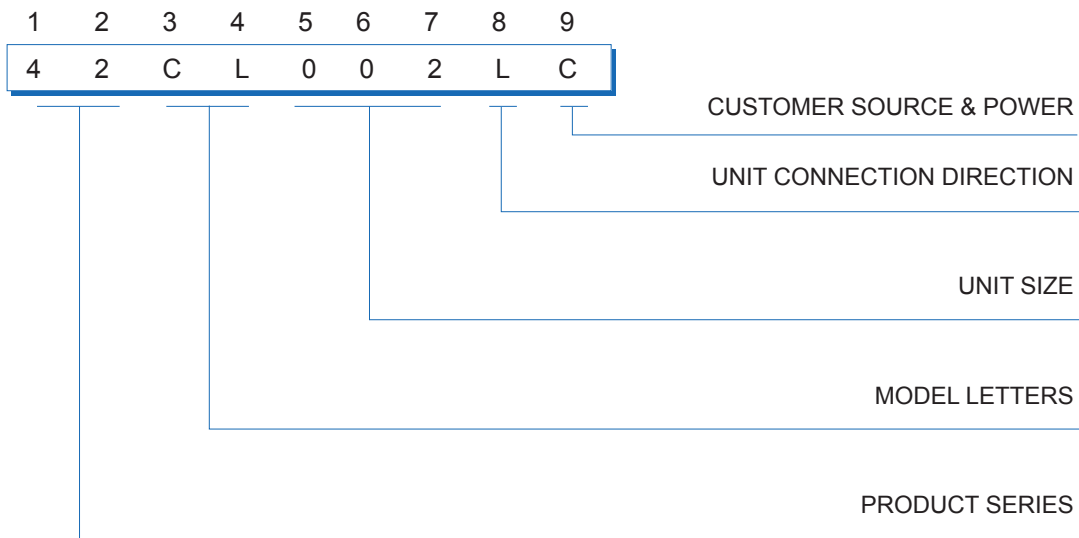
We constantly build upon our history of proven innovation with new products and services that improve global comfort and efficiency.



In 1998, Time magazine named Dr. Carrier one of its 20 most influential builders and titans of the 20th century.



Model number Nomenclature



- DIGIT NO. 1、 2
 PRODUCT SERIES
 42 : FAN COIL UNIT
- DIGIT NO. 3、 4
 MODEL LETTERS
 CL : Horizontal cabinet FCU
 VL : Vertical cabinet FCU
 VM : Vertical concealed FCU
 VP : Vertical concealed FCU (high static pressure)
- DIGIT NO.5、 6、 7
 UNIT SIZE
 002 : 340m³/h
 003 : 510m³/h
- DIGIT NO.8
 UNIT CONNECTION DIRECTION (FACE TO DISCHARGE AIR)
 L : LEFT
 R : RIGHT
- DIGIT NO.9
 CUSTOMER SOURCE & POWER
 O : SALE IN LOCAL 220V-1Ph-50Hz (omissible)
 C : EXPORT 220V-1Ph-50Hz

Air Flow

340~2040m³/h

Mechanical Specification

Carrier 42C/V is a range of fan coil units designed for horizontal/vertical, concealed/cabinet application.

- Seven size of various type of fan coil unit
- Airflow from 340-2040CMH, cooling capacity from 1800-11600w
- Left/Right connection

Minimum dimension

Compact design of 42C/V with thick depth of the unit.

High efficiency

Copper tubes are mechanically bonded into slit aluminum fin collars, which ensure the heat transferring better.

Low noise levels

Low noise level with optimized fan, low speed motor and special acoustic materials.

High Quality

Carrier quality philosophy embraces the product itself, its conception, design and the integrity of its declared performance (proven in rigorous laboratory tests) as well as the manufacturing process, materials and components used to create the product.

Easy Maintenance

42C/V use a heavy gage, galvanized steel with closed-cell, fire-retardant foam insulation. Water never touched the case, so that the corrosion is minimized and a long life is ensured. All coils are factory leakage tested. The motor/fan can be easily removed from the units, which makes it easy for maintenance.



Options



TMS710/720

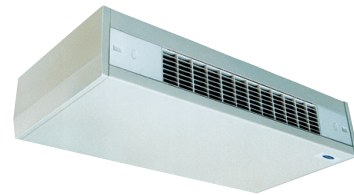
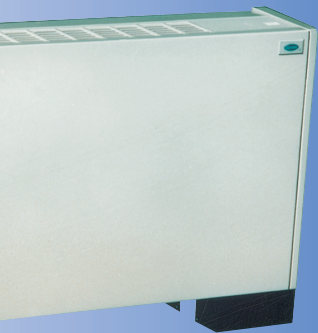


TMS810

Thermostat



- 42VM: Vertical Concealed Type
- 42VP: Vertical Concealed Type with High static pressure motor



- 42CL: Horizontal Cabinet Type



- 42VL: Vertical Cabinet Type

Technical Data

CL/VL/VM/VP

| Model | | 002 | 003 | 004 | 006 | 008 | 010 | 012 |
|--------------------------------------|------------------|------------------------------------|------|------|------|-------|-------|-------|
| Nominal Airflow m ³ /h | H | 340 | 510 | 680 | 1020 | 1360 | 1700 | 2040 |
| | M | 265 | 405 | 535 | 790 | 1060 | 1360 | 1595 |
| | L | 195 | 305 | 405 | 585 | 790 | 1020 | 1180 |
| Cooling Capacity W | 42VL/VM/VP | 2200 | 2900 | 3700 | 5400 | 7400 | 10000 | 11600 |
| | 42CL | 2050 | 2700 | 3700 | 5400 | 7200 | 10000 | 11200 |
| Heating Capacity W | 42VL/VM/VP | 3520 | 4640 | 5920 | 8370 | 11470 | 15500 | 18000 |
| | 42CL | 3280 | 4320 | 5920 | 8370 | 11160 | 15000 | 17500 |
| Input Power W | 42VL/CL/VM | 37 | 50 | 62 | 96 | 134 | 152 | 189 |
| | 42VP | 44 | 59 | 72 | 108 | 156 | 174 | 212 |
| Sound dB(A) | 42VL/CL/VM | 36 | 38 | 41 | 45 | 46 | 46 | 49 |
| | 42VP | 38 | 40 | 43 | 47 | 48 | 49 | 52 |
| Water Flow l/min | 42VL/VM/VP | 6.3 | 8.4 | 10.6 | 15.5 | 21.3 | 28.7 | 33.3 |
| | 42CL | 5.9 | 7.8 | 10.6 | 15.5 | 20.7 | 28.7 | 32.1 |
| Water Pressure Drop kPa | | 20 | 20 | 20 | 28 | 40 | 30 | 40 |
| Fan | Type | Centrifugal, Front Curve | | | | | | |
| Motor | Type | Permanent Capacitive, Ball Bearing | | | | | | |
| Coil | Working Pressure | 1.6 MPa | | | | | | |
| Coil Connection | In-Out | ZG3/4" FPT | | | | | | |
| | Condensing Drain | ZG3/4" MPT | | | | | | |
| Net Weight kg | 42VL | 19 | 21 | 23.5 | 28 | 38 | 48 | 48 |
| | 42CL | 19.5 | 21.5 | 24.5 | 30 | 41 | 52 | 52 |
| | 42VM/VP | 14 | 15 | 18 | 22 | 32 | 41 | 41 |
| Accessories | | Thermostat, Motorized valve | | | | | | |

Note: 1. The data is the performance in high speed with relevant static pressure.

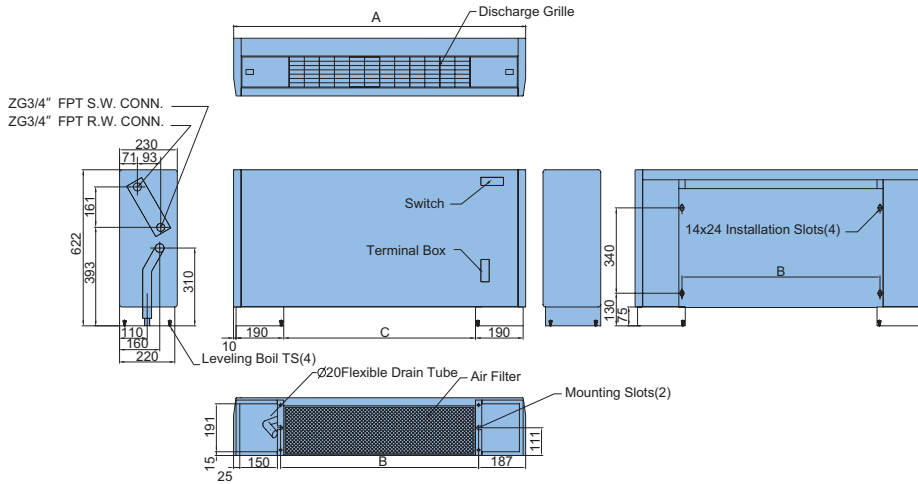
2. Cooling Condition: Entering Water 7 °C , Temperature Rise 5 °C , Entering Air Temperature 27 °C DB, 19.5 °C WB.

Heating Conditions: Entering Water 60 °C , Enter Air Temperature DB=21 °C , Water flow same as cooling condition

3. The noise is tested in the semi-anechoic test room, measured with a fine audiometer located 1 meter away from the unit front panel and the unit bottom panel.

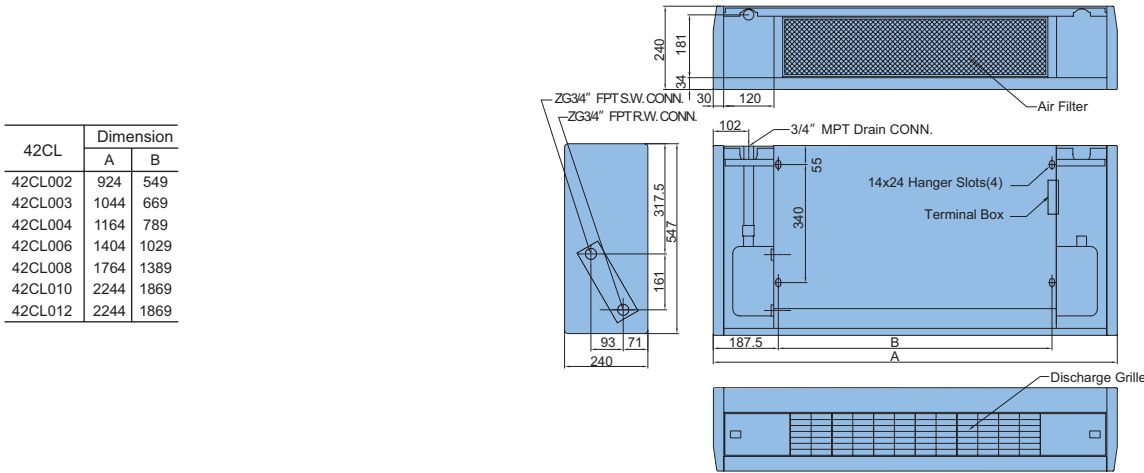
Dimension

42VL



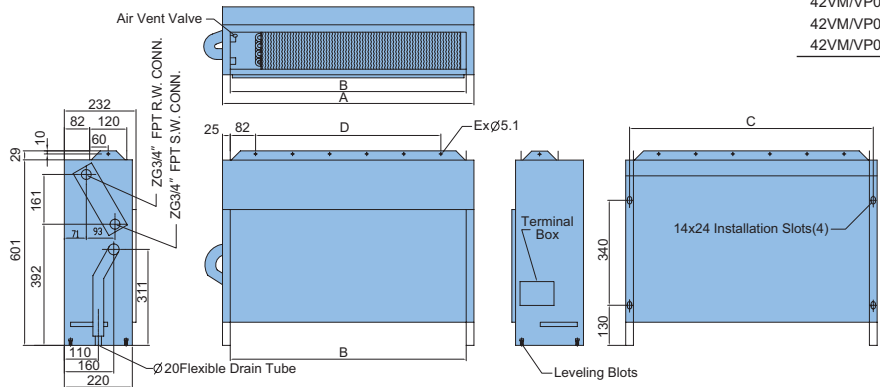
| 42VL | Dimension | | |
|---------|-----------|------|------|
| | A | B | C |
| 42VL002 | 924 | 549 | 524 |
| 42VL003 | 1044 | 669 | 644 |
| 42VL004 | 1164 | 789 | 764 |
| 42VL006 | 1404 | 1029 | 1004 |
| 42VL008 | 1764 | 1389 | 1364 |
| 42VL010 | 2244 | 1869 | 1844 |
| 42VL012 | 2244 | 1869 | 1844 |

42CL



| 42CL | Dimension | |
|---------|-----------|------|
| | A | B |
| 42CL002 | 924 | 549 |
| 42CL003 | 1044 | 669 |
| 42CL004 | 1164 | 789 |
| 42CL006 | 1404 | 1029 |
| 42CL008 | 1764 | 1389 |
| 42CL010 | 2244 | 1869 |
| 42CL012 | 2244 | 1869 |

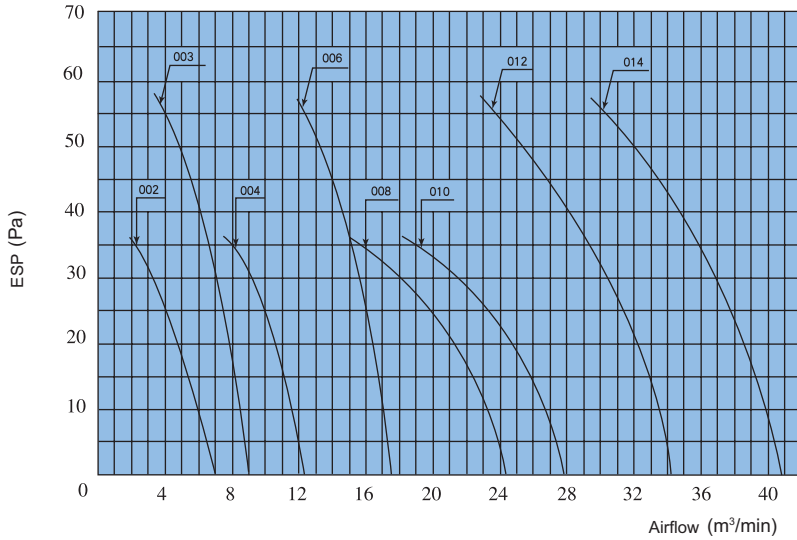
42VM/VP



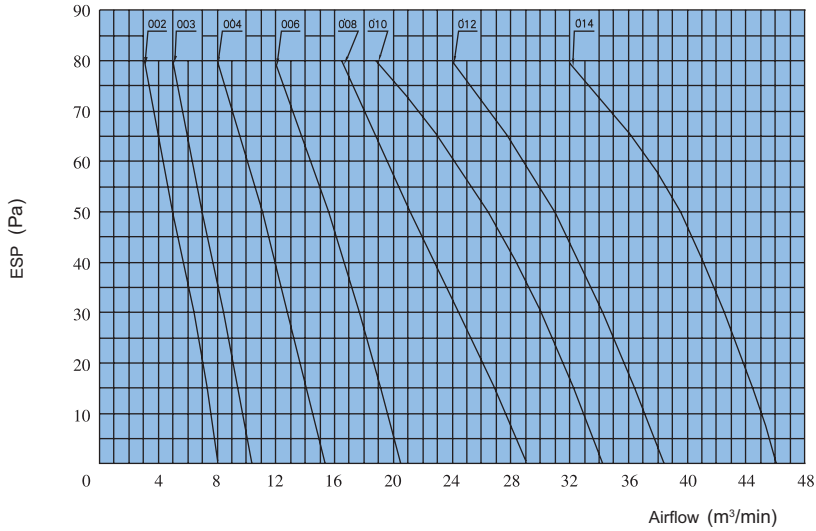
| 42VM/VP | Dimension | | | | |
|------------|-----------|------|------|------|----|
| | A | B | C | D | E |
| 42VM/VP002 | 574 | 524 | 549 | 360 | 10 |
| 42VM/VP003 | 694 | 644 | 669 | 480 | 12 |
| 42VM/VP004 | 814 | 764 | 789 | 600 | 14 |
| 42VM/VP006 | 1054 | 1004 | 1029 | 840 | 18 |
| 42VM/VP008 | 1414 | 1364 | 1389 | 1200 | 24 |
| 42VM/VP010 | 1894 | 1844 | 1869 | 1680 | 32 |
| 42VM/VP012 | 1894 | 1844 | 1869 | 1680 | 32 |

Fan Performance

Standard Static Pressure Unit



High Static Pressure Unit



Based on dry air condition, high speed, without filter and grills.

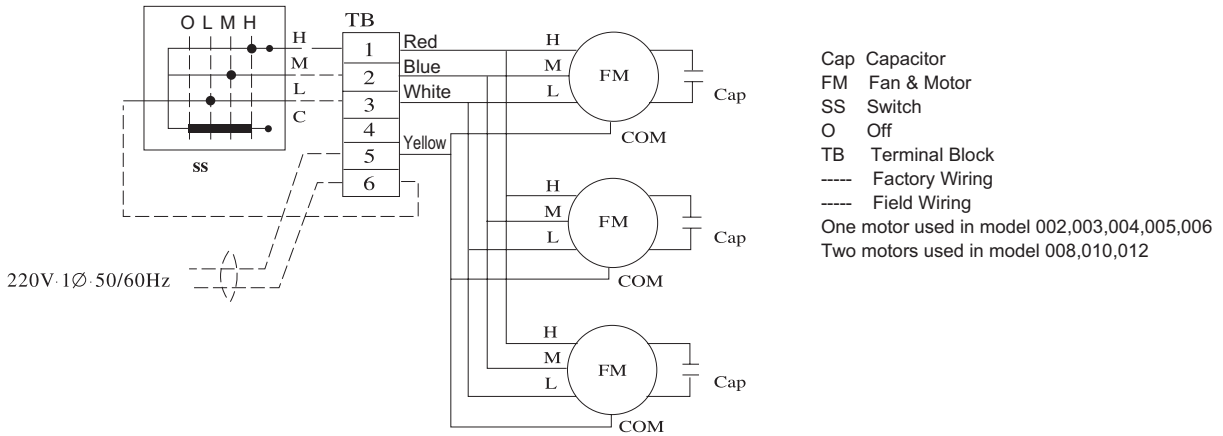
Copacity multiplier vs. speed table (cooling)

| | | 002 | 003 | 004 | 006 | 008 | 010 | 012 |
|-----|----|------|------|------|------|------|------|------|
| Med | TH | 0.85 | 0.86 | 0.87 | 0.89 | 0.86 | 0.86 | 0.89 |
| | SH | 0.83 | 0.84 | 0.85 | 0.87 | 0.84 | 0.84 | 0.87 |
| Low | TH | 0.7 | 0.71 | 0.74 | 0.74 | 0.73 | 0.73 | 0.73 |
| | SH | 0.66 | 0.67 | 0.7 | 0.7 | 0.69 | 0.69 | 0.69 |

Copacity multiplier vs. speed table (heating)

| | | 002 | 003 | 004 | 006 | 008 | 010 | 012 |
|-----|----|------|------|------|------|------|------|------|
| Med | TH | 0.84 | 0.85 | 0.86 | 0.87 | 0.86 | 0.86 | 0.87 |
| Low | SH | 0.72 | 0.73 | 0.74 | 0.75 | 0.74 | 0.74 | 0.75 |

Electric Diagram



Motor input power

| Model | | 002 | 003 | 004 | 006 | 008 | 010 | 012 |
|-------------|----------|------|------|------|------|------|------|------|
| Power (W) | VL/CL/VM | 37 | 52 | 62 | 96 | 134 | 152 | 189 |
| | VP | 44 | 59 | 72 | 108 | 156 | 174 | 212 |
| Current (A) | VL/CL/VM | 0.17 | 0.24 | 0.28 | 0.44 | 0.61 | 0.69 | 0.86 |
| | VP | 0.2 | 0.27 | 0.33 | 0.49 | 0.71 | 0.79 | 0.96 |

| Model | 42CL、VM、Vp | | | | | | | 42VL | | | | | | |
|--------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| | 002 | 003 | 004 | 006 | 008 | 010 | 012 | 002 | 003 | 004 | 006 | 008 | 010 | 012 |
| Base Unit | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Filter | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Speed Switch | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Thermostat | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |

Note: Refers to the standard accessory

Refers to the options. Customers need to order it dividually



Carrier improves the world around us; Carrier improves people's lives; our products and services improve building performance; our culture of improvement will not allow us to rest when it comes to the environment.



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|-----------------|--------------------|
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| Supersede: | CAT_42CV_E-1410-04 |
| Effective Date: | Nov, 2018 |