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.
Carrier China

Carrier Corporation is a subsidiary of the United Technologies Corp. (UTC), which ranks 123th in Fortune Top 500 in 2009 and has its operation in aerospace and building systems industries all over the world.

Carrier is the largest supplier of HVAC and refrigeration equipment around the world, and also a global leader to provide energy management and sustainable building services. Its products and sales cover China and other 170-plus countries. From the time our founder Dr. Carrier invented the first system of modern air conditioning in 1902, Carrier has been the world leader in the air conditioning industry, and up to now, holds several thousands of air-conditioning patented technologies as well as 11 R&D centers in China and other countries. In 2009, Carrier ranked top in the industry with its sales volume of US $11.4 billion.

In 1987, Carrier established its first joint venture in Shanghai, China. Today, Carrier has more than 2,000 Chinese employees, and around the country, there are over 40 sales and after-sale service organizations to provide customers with quality products.

The world-class Carrier factory in China has a number of technically advanced production lines of units and compressors, manufacturing commercial and residential central air-conditioning units and air-end products. A wide range of products are able to meet diversified requirements of different customers.
### Model number Nomenclature

<table>
<thead>
<tr>
<th>Digit</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>Product series</td>
<td>42: fan coil unit</td>
</tr>
<tr>
<td>3, 4</td>
<td>Model letters</td>
<td>CE: horizontal ceiling FCU</td>
</tr>
<tr>
<td>5, 6, 7</td>
<td>Unit size</td>
<td>002: 340 m$^3$/h, 003: 510 m$^3$/h</td>
</tr>
<tr>
<td>8, 9</td>
<td>Coil rows</td>
<td>20: 2 row cooling, 30: 3 row cooling, 31: 3 row cooling + 1 row heating</td>
</tr>
<tr>
<td>10</td>
<td>External static pressure</td>
<td>0: 12 Pa standard, 3: 30 Pa with static pressure, 5: 50 Pa high static pressure</td>
</tr>
<tr>
<td>11</td>
<td>Drain pan</td>
<td>A: standard drainpan, B: lengthened drainpan, C: stainless drainpan, D: lengthened stainless drainpan</td>
</tr>
<tr>
<td>12</td>
<td>Unit connection direction</td>
<td>L: left, R: right</td>
</tr>
<tr>
<td>13</td>
<td>Customer source &amp; power</td>
<td>0: sale in local 220V-1Ph-50Hz (omissible), 1: export to Hong Kong 220V-1Ph-50Hz</td>
</tr>
<tr>
<td>14</td>
<td>Return air plenum &amp; filter</td>
<td>0: without both (omissible), A: unit with rear return air plenum, B: unit with bottom return air plenum, C: unit with rear return air plenum &amp; nylon filter, D: unit with bottom return air plenum &amp; nylon filter</td>
</tr>
</tbody>
</table>

### Air Flow

340~2500 m$^3$/h
42CE Fan Coil Units are the new energy saving products improved with advanced technology by Carrier. The units have advanced technology of low noise fan, air condition manufacture process and the last lanced sine wave fin. 42CE is developed to be an ultra-tranquil, high efficiency, convenient using and compact configuration product.

**Ultra-tranquil**
The units use the wide wheel of latest design and low speed forward-curved blades, which are most suitable for the motor. Addition with good insulated noise eliminated material, unit noise is 2~5dB(A) lower than the same type unit.

**High efficiency**
Aluminum lanced sine wave fin coils with copper tubing assure highly efficient heat transfer between primary and secondary coil surfaces.

**Ultra thin**
The unit height is only 230mm so that they can save installation space and meet the requirement of all kinds of situations.
Agile selection

Considering of the specialties and limit of installation, Carrier offer different drain pan to the consumer.

- Standard drain pan-reduce the installation space, especially to the narrow installation space.
- Lengthened drain pan-well collect possible sweating from field installed valves.
- External drain pan-350mm length can be selected to meet the requirement of all kind of condition.

Beside the characteristic above, the units have more development below

- Change the terminal from close to open structure and the wiring of motor to metal tube to assure more safety and reliability.
- The latest noise eliminated fiberglass insulation can assure not only the good appearance and perfect performance but also well-insulated performance measuring up the international standard under the testing of most abominable sweat condition.
- The round wheel of latest design can apply high temperature situation reliably.
- The drain pan and insulation are mould holistically to make the process more easy and better as well as prevent the leak when welding the drain pan.

**NOTE:** Distinguish the direction of right or left by facing to the air outlet.

Accessories

3-way valve

2-way valve

Thermostat

Remote Controller
# Technical Parameter

## TECHNICAL DATA (3R COIL)

<table>
<thead>
<tr>
<th>Performance</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>002</td>
</tr>
<tr>
<td>HIGH</td>
<td>340</td>
</tr>
<tr>
<td>MED</td>
<td>265</td>
</tr>
<tr>
<td>LOW</td>
<td>195</td>
</tr>
</tbody>
</table>

| Water Flow | l/min | 7.7 | 10.1 | 13.2 | 16.7 | 19.7 | 24.2 | 29.7 | 32.5 | 39.3 |

| Water Drop | KPa | 25 | 26 | 35 | 30 | 32 | 35 | 50 | 50 | 53 |

<table>
<thead>
<tr>
<th>Fan</th>
<th>Type</th>
<th>Centrifugal, forward-curved Blades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor</td>
<td>Type</td>
<td>Permanent Split Capacitor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coil</th>
<th>Row</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Pressure</td>
<td>1.6 MPa</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONNS</th>
<th>In-Out</th>
<th>3/4&quot;FPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condensing Drain</td>
<td>3/4&quot; MPT</td>
<td></td>
</tr>
</tbody>
</table>

| Net Weight | Kg | 13.4 | 14.9 | 16.9 | 18.2 | 19.5 | 26.9 | 29.5 | 33.6 | 39.5 |

| Options | Thermostat, Motorized Valve, Return Air Plenum |

Note: 1. The data is the performance in high speed with relevant static pressure.  
Heating Conditions: Entering Water 60°C, Air 21°CDB, the same water flow as the cooling conditions.  
3. The noise is tested in the anechoic test room, measured with a fine audiometer located 1 meter away from the unit front panel and the unit bottom panel.
## Dimensions

### Fan Coil Unit (2R COIL / 3R COIL)

|-----------|----------------------------------------------------------------------------------------------------------|

Note: B is the dimension of lengthen drain pan
Dimensions

42CE Return Air Plenum

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>Dimension</th>
<th>USED IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>42CE402900</td>
<td>554 47 2 400 494 520</td>
<td>42CE002</td>
</tr>
<tr>
<td>42CE403900</td>
<td>634 87 2 400 574 600</td>
<td>42CE003</td>
</tr>
<tr>
<td>42CE404900</td>
<td>754 47 3 600 694 720</td>
<td>42CE004</td>
</tr>
<tr>
<td>42CE405900</td>
<td>834 87 3 600 774 800</td>
<td>42CE005</td>
</tr>
<tr>
<td>42CE406900A</td>
<td>1034 87 4 800 974 1000</td>
<td>42CE006</td>
</tr>
<tr>
<td>42CE408900</td>
<td>1274 107 5 1000 1214 1240</td>
<td>42CE008</td>
</tr>
<tr>
<td>42CE410900</td>
<td>1394 67 6 1200 1334 1360</td>
<td>42CE010</td>
</tr>
<tr>
<td>42CE412900</td>
<td>1634 87 7 1400 1574 1600</td>
<td>42CE012</td>
</tr>
<tr>
<td>42CE414900</td>
<td>1874 107 8 1600 1814 1840</td>
<td>42CE014</td>
</tr>
</tbody>
</table>

Note: 1. With Rear/Bottom air return plenum
2. Easily connect with Rear/Bottom air return plenum in the jobsite
3. No filter in the air plenum, please install the filter at the return air duct
**Fan Performance**

### 3/(3+1)R Standard Unit

42CE002300~42CE014300/42CE002310~42CE008310

![Graph showing 3/(3+1)R Standard Unit](image)

### 3/(3+1)R With Static Pressure Unit

42CE002303~42CE014303/42CE002313~42CE008313

![Graph showing 3/(3+1)R With Static Pressure Unit](image)

### 3/(3+1)R High Static Pressure Unit

42CE002305~42CE014305/42CE002315~42CE008315

![Graph showing 3/(3+1)R High Static Pressure Unit](image)
42CE Fan Coil Unit

Power: 220V-1Ph-50Hz

<table>
<thead>
<tr>
<th>Type</th>
<th>002</th>
<th>003</th>
<th>004</th>
<th>005</th>
<th>006</th>
<th>008</th>
<th>010</th>
<th>012</th>
<th>014</th>
</tr>
</thead>
<tbody>
<tr>
<td>2row 12Pa</td>
<td>32</td>
<td>46</td>
<td>56</td>
<td>75</td>
<td>94</td>
<td>134</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2row 30Pa</td>
<td>40</td>
<td>54</td>
<td>72</td>
<td>87</td>
<td>102</td>
<td>155</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2row 50Pa</td>
<td>46</td>
<td>65</td>
<td>84</td>
<td>98</td>
<td>112</td>
<td>174</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3row 12Pa</td>
<td>32</td>
<td>46</td>
<td>56</td>
<td>75</td>
<td>94</td>
<td>134</td>
<td>150</td>
<td>180</td>
<td>225</td>
</tr>
<tr>
<td>3row 30Pa</td>
<td>40</td>
<td>52</td>
<td>72</td>
<td>87</td>
<td>102</td>
<td>155</td>
<td>172</td>
<td>210</td>
<td>240</td>
</tr>
<tr>
<td>3row 50Pa</td>
<td>46</td>
<td>63</td>
<td>84</td>
<td>98</td>
<td>112</td>
<td>174</td>
<td>195</td>
<td>236</td>
<td>290</td>
</tr>
<tr>
<td>3+1row 12Pa</td>
<td>32</td>
<td>46</td>
<td>56</td>
<td>75</td>
<td>94</td>
<td>134</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3+1row 30Pa</td>
<td>40</td>
<td>52</td>
<td>72</td>
<td>87</td>
<td>102</td>
<td>155</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3+1row 50Pa</td>
<td>46</td>
<td>63</td>
<td>84</td>
<td>98</td>
<td>112</td>
<td>174</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Current (A)

<table>
<thead>
<tr>
<th>Type</th>
<th>002</th>
<th>003</th>
<th>004</th>
<th>005</th>
<th>006</th>
<th>008</th>
<th>010</th>
<th>012</th>
<th>014</th>
</tr>
</thead>
<tbody>
<tr>
<td>2row 12Pa</td>
<td>0.15</td>
<td>0.21</td>
<td>0.25</td>
<td>0.34</td>
<td>0.43</td>
<td>0.61</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2row 30Pa</td>
<td>0.18</td>
<td>0.25</td>
<td>0.33</td>
<td>0.40</td>
<td>0.46</td>
<td>0.70</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2row 50Pa</td>
<td>0.21</td>
<td>0.30</td>
<td>0.38</td>
<td>0.45</td>
<td>0.51</td>
<td>0.79</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3row 12Pa</td>
<td>0.15</td>
<td>0.21</td>
<td>0.25</td>
<td>0.34</td>
<td>0.43</td>
<td>0.61</td>
<td>0.68</td>
<td>0.82</td>
<td>1.02</td>
</tr>
<tr>
<td>3row 30Pa</td>
<td>0.18</td>
<td>0.24</td>
<td>0.33</td>
<td>0.40</td>
<td>0.46</td>
<td>0.70</td>
<td>0.78</td>
<td>0.95</td>
<td>1.09</td>
</tr>
<tr>
<td>3row 50Pa</td>
<td>0.21</td>
<td>0.29</td>
<td>0.38</td>
<td>0.45</td>
<td>0.51</td>
<td>0.79</td>
<td>0.89</td>
<td>1.07</td>
<td>1.32</td>
</tr>
<tr>
<td>3+1row 12Pa</td>
<td>0.15</td>
<td>0.21</td>
<td>0.25</td>
<td>0.34</td>
<td>0.43</td>
<td>0.61</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3+1row 30Pa</td>
<td>0.18</td>
<td>0.24</td>
<td>0.33</td>
<td>0.40</td>
<td>0.46</td>
<td>0.70</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3+1row 50Pa</td>
<td>0.21</td>
<td>0.29</td>
<td>0.38</td>
<td>0.45</td>
<td>0.51</td>
<td>0.79</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Carrier Corporation identified six specific areas of concentration that directly impact how we, as a world manufacturer, balance our customer's needs for comfort with the environment's needs for responsible consumption.