

# Technical specifications

## Ceiling Concealed Unit FWW-C

### Standard unit/2 pipe/3 rows

|                                 |                                      |        | MODEL                                                               | FWW200C | FWW300C | FWW400C | FWW600C | FWW800C | FWW1000C | FWW1200C | FWW1400C           | FWW1600C | FWW1800C |
|---------------------------------|--------------------------------------|--------|---------------------------------------------------------------------|---------|---------|---------|---------|---------|----------|----------|--------------------|----------|----------|
| Performance                     |                                      |        |                                                                     |         |         |         |         |         |          |          |                    |          |          |
| Air flow                        | High                                 | m³/h   | 390                                                                 | 530     | 760     | 1040    | 1420    | 1620    | 2040     | 2350     | 2700               | 3020     |          |
|                                 |                                      | CFM    | 229                                                                 | 312     | 447     | 612     | 835     | 953     | 1200     | 1382     | 1588               | 1776     |          |
|                                 | Medium                               | m³/h   | 260                                                                 | 370     | 490     | 780     | 1090    | 1140    | 1500     | 2050     | 2430               | 2780     |          |
|                                 |                                      | CFM    | 153                                                                 | 218     | 288     | 459     | 641     | 671     | 882      | 1206     | 1429               | 1635     |          |
|                                 | Low                                  | m³/h   | 190                                                                 | 240     | 340     | 500     | 740     | 830     | 1020     | 1550     | 1830               | 2180     |          |
|                                 |                                      | CFM    | 112                                                                 | 141     | 200     | 294     | 435     | 488     | 600      | 912      | 1076               | 1282     |          |
| External static pressure        |                                      | Pa     | 60/80                                                               |         |         |         |         |         |          |          |                    |          |          |
|                                 |                                      | in.wg  | 0.24/0.32                                                           |         |         |         |         |         |          |          |                    |          |          |
| Total cooling capacity          |                                      | W      | 2200                                                                | 3200    | 4390    | 6160    | 7810    | 8830    | 10700    | 12500    | 14500              | 16200    |          |
|                                 |                                      | Btu/h  | 7507                                                                | 10919   | 14979   | 21019   | 26649   | 30129   | 36510    | 42651    | 49476              | 55277    |          |
| Sensible cooling capacity       |                                      | W      | 1738                                                                | 2359    | 3242    | 4401    | 6040    | 6409    | 7763     | 9100     | 10700              | 11850    |          |
|                                 |                                      | Btu/h  | 5930                                                                | 8049    | 11062   | 15017   | 20609   | 21868   | 26488    | 31050    | 36509              | 40433    |          |
| Water flow rate                 |                                      | m³/h   | 0.4                                                                 | 0.6     | 0.8     | 1.1     | 1.4     | 1.6     | 1.9      | 2.2      | 2.5                | 2.8      |          |
|                                 |                                      | USGPM  | 1.8                                                                 | 2.5     | 3.4     | 4.8     | 6.1     | 6.9     | 8.5      | 9.6      | 11.2               | 12.5     |          |
| Head loss                       |                                      | kPa    | 15                                                                  | 12      | 22      | 38      | 18      | 21      | 33       | 33       | 32                 | 34       |          |
|                                 |                                      | in.wg. | 58                                                                  | 48      | 86      | 153     | 74      | 84      | 131      | 132      | 128                | 136      |          |
| Sound pressure level<br>(dB(A)) | 60Pa                                 | High   | 42                                                                  | 44      | 45      | 47      | 49      | 50      | 51       | 51.5     | 53                 | 53.5     |          |
|                                 |                                      | Medium | 38                                                                  | 39      | 41      | 43      | 46      | 47      | 48       | 50       | 51.5               | 52       |          |
|                                 |                                      | Low    | 36                                                                  | 36      | 38      | 40      | 43      | 44      | 41       | 46.5     | 47.5               | 49.5     |          |
|                                 | 80Pa                                 | High   | 43.9                                                                | 45      | 47.4    | 49.4    | 49.7    | 51.6    | 52.6     | 52       | 53.5               | 54       |          |
|                                 |                                      | Medium | 42.3                                                                | 42.2    | 43      | 47.4    | 48      | 49      | 50       | 50.5     | 52                 | 52.5     |          |
|                                 |                                      | Low    | 39                                                                  | 39.8    | 41      | 42      | 46      | 46      | 47       | 47       | 48                 | 50       |          |
| Electrical Data                 |                                      |        |                                                                     |         |         |         |         |         |          |          |                    |          |          |
| 220-240V~/50Hz                  | Rated Power<br>Input-60Pa<br>(W)     | High   | 47                                                                  | 69      | 83      | 149     | 205     | 219     | 271      | 390      | 528                | 564      |          |
|                                 |                                      | Medium | 39                                                                  | 58      | 63      | 123     | 185     | 183     | 235      | 354      | 425                | 511      |          |
|                                 |                                      | Low    | 35                                                                  | 47      | 53      | 105     | 163     | 159     | 209      | 249      | 299                | 387      |          |
|                                 | Rated running<br>current-60Pa<br>(A) | High   | 0.21                                                                | 0.31    | 0.38    | 0.68    | 0.93    | 1       | 1.23     | 1.78     | 2.41               | 2.57     |          |
|                                 |                                      | Medium | 0.19                                                                | 0.29    | 0.3     | 0.57    | 0.84    | 0.86    | 1.07     | 1.61     | 1.93               | 2.33     |          |
|                                 |                                      | Low    | 0.17                                                                | 0.26    | 0.26    | 0.49    | 0.74    | 0.74    | 0.95     | 1.13     | 1.37               | 1.77     |          |
|                                 | Rated Power<br>Input-80Pa<br>(W)     | High   | 51                                                                  | 73      | 97      | 157     | 215     | 237     | 281      | 406      | 559                | 590      |          |
|                                 |                                      | Medium | 45                                                                  | 60      | 71      | 125     | 193     | 189     | 237      | 368      | 454                | 522      |          |
|                                 |                                      | Low    | 37                                                                  | 51      | 57      | 113     | 175     | 173     | 221      | 257      | 320                | 402      |          |
|                                 | Rated running<br>current-80Pa<br>(A) | High   | 0.23                                                                | 0.33    | 0.44    | 0.71    | 0.98    | 1.08    | 1.28     | 1.86     | 2.55               | 2.7      |          |
|                                 |                                      | Medium | 0.21                                                                | 0.3     | 0.33    | 0.57    | 0.88    | 0.87    | 1.09     | 1.69     | 2.07               | 2.38     |          |
|                                 |                                      | Low    | 0.18                                                                | 0.27    | 0.28    | 0.52    | 0.8     | 0.8     | 1.01     | 1.17     | 1.47               | 1.84     |          |
| 208-230V~/60Hz                  | Rated Power<br>Input-80Pa<br>(W)     | High   | 75                                                                  | 97      | 125     | 175     | 248     | 270     | 335      | 334      | 748                | 835      |          |
|                                 |                                      | Medium | 70                                                                  | 89      | 108     | 156     | 218     | 242     | 304      | 288      | 588                | 729      |          |
|                                 |                                      | Low    | 60                                                                  | 75      | 97      | 129     | 182     | 201     | 242      | 214      | 389                | 530      |          |
|                                 | Rated running<br>current-80Pa<br>(A) | High   | 0.36                                                                | 0.47    | 0.6     | 0.84    | 1.19    | 1.3     | 1.61     | 1.59     | 3.43               | 3.85     |          |
|                                 |                                      | Medium | 0.33                                                                | 0.44    | 0.55    | 0.75    | 1.05    | 1.16    | 1.46     | 1.34     | 2.68               | 3.34     |          |
|                                 |                                      | Low    | 0.29                                                                | 0.39    | 0.49    | 0.63    | 0.88    | 0.98    | 1.2      | 0.97     | 1.77               | 2.41     |          |
| 115V~/60Hz                      | Rated Power<br>Input-80Pa<br>(W)     | High   | 72                                                                  | 107     | 125     | 187     | 253     | 283     | 353      | -        | -                  | -        |          |
|                                 |                                      | Medium | 53                                                                  | 69      | 93      | 135     | 209     | 211     | 265      | -        | -                  | -        |          |
|                                 |                                      | Low    | 45                                                                  | 57      | 81      | 123     | 193     | 187     | 247      | -        | -                  | -        |          |
|                                 | Rated running<br>current-80Pa<br>(A) | High   | 0.63                                                                | 0.93    | 1.09    | 1.63    | 2.2     | 2.46    | 3.07     | -        | -                  | -        |          |
|                                 |                                      | Medium | 0.49                                                                | 0.67    | 0.86    | 1.2     | 1.84    | 1.85    | 2.33     | -        | -                  | -        |          |
|                                 |                                      | Low    | 0.43                                                                | 0.57    | 0.76    | 1.1     | 1.69    | 1.7     | 2.2      | -        | -                  | -        |          |
| Coil                            |                                      |        |                                                                     |         |         |         |         |         |          |          |                    |          |          |
| Tube material                   |                                      |        | Copper                                                              |         |         |         |         |         |          |          |                    |          |          |
| Fin material                    |                                      |        | Hydrophilic aluminum 0.11mm                                         |         |         |         |         |         |          |          |                    |          |          |
| Max. Working Pressure           |                                      |        | 1.6MPa                                                              |         |         |         |         |         |          |          |                    |          |          |
| Cooling Water Pipe Size         |                                      |        | Rc 3/4 Female thread                                                |         |         |         |         |         |          |          | Rc 1 Female thread |          |          |
| Condensation Water Pipe Size    |                                      |        | R3/4 Male thread                                                    |         |         |         |         |         |          |          |                    |          |          |
| Fan                             |                                      |        |                                                                     |         |         |         |         |         |          |          |                    |          |          |
| Type                            |                                      |        | Galvanized steel double stage impeller centrifugal (blade: forward) |         |         |         |         |         |          |          |                    |          |          |
| Quantity                        |                                      |        | 1                                                                   |         | 2       |         | 3       |         | 4        |          | 2                  |          |          |
| Motor                           |                                      |        |                                                                     |         |         |         |         |         |          |          |                    |          |          |
| Type                            |                                      |        | 3 Speed Permanent Split Capacitor Motor                             |         |         |         |         |         |          |          |                    |          |          |
| Quantity                        |                                      |        | 1                                                                   |         | 1       |         | 2       |         | 2        |          | 1                  |          |          |
| Insulation class                |                                      |        | IP20/E                                                              |         |         |         |         |         |          |          |                    |          |          |
|                                 |                                      |        | IP20/F                                                              |         |         |         |         |         |          |          |                    |          |          |

#### NOTES:

- 1) ALL SPECIFICATIONS ARE SUBJECT TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) THE AIR FLOW IS DRY AIR FLOW TESTED ON STANDARD AIR CONDITION WITHOUT WATER IN COIL.
- 3) THE COOLING CAPACITY ARE BEING TESTED UNDER FOLLOWING CONDITION:  
COOLING: H SPEED, ENTERING AIR DB/WB: 27°C/19.5°C, WATER INLET 7°C, WATER OUTLET 12°C
- 4) FOR MEDIUM AND LOW SPEED, PLEASE REFER TO FOLLOWING CORRECTION COEFFICIENT:

| SPEED  | MODEL         | FWW200C | FWW300C | FWW400C | FWW600C | FWW800C | FWW1000C | FWW1200C | FWW1400C | FWW1600C | FWW1800C |
|--------|---------------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|
| MEDIUM | TOTAL CAP.    | 0.85    | 0.82    | 0.84    | 0.84    | 0.87    | 0.85     | 0.86     | 0.96     | 0.93     | 0.97     |
|        | SENSIBLE CAP. | 0.78    | 0.75    | 0.78    | 0.8     | 0.8     | 0.8      | 0.8      | 0.95     | 0.9      | 0.95     |
| LOW    | TOTAL CAP.    | 0.66    | 0.6     | 0.65    | 0.65    | 0.68    | 0.7      | 0.71     | 0.81     | 0.8      | 0.87     |
|        | SENSIBLE CAP. | 0.58    | 0.55    | 0.58    | 0.6     | 0.62    | 0.63     | 0.66     | 0.77     | 0.75     | 0.83     |

- 5) SOUND PRESSURE MEASURED AT 1M IN FRONT OF THE UNIT AND 1M BELOW THE VERTICAL CENTER LINE OF THE UNIT, AND TESTED IN SEMI-ANECHOIC ROOM, WITH BACKGROUND SOUND PRESSURE LEVEL: 11.5dB (A).
- 6) ALL PERFORMANCE ARE TESTED UNDER 220V~/50HZ AND WITHOUT PLENUM AND FILTER.
- 7) WHEN THE WATER CONNECT DIRECTION IS CHANGED IN FIELD, THE CAPACITY SHOULD BE REDUCED BY 15%.
- 8) PERFORMANCE OF SPECIFIED CONDITION CAN BE CALCULATED BY OUR SOFTWARE.