

# OMEGA FLOOR CEILING VRF

## SUBMITTAL DATA

**220-240V/1/50-60Hz**

Job: \_\_\_\_\_  
Location: \_\_\_\_\_  
Schedule No.: \_\_\_\_\_  
System Designation: \_\_\_\_\_

Engineer: \_\_\_\_\_  
Architect: \_\_\_\_\_  
Date: \_\_\_\_\_  
For:      Reference      Approval      Review      Construction

### FEATURES

- Full DC Inverter Technologies
- Floor & Ceiling Installation
- Wide Airflow Range
- Auto Restart
- Self Diagnosis Function
- Easy Installation & Maintenance



## 1. Specifications

| Model                                |                        |                   | VEFC012Q0A-GWV036     | VEFC015Q0A-GWV045     | VEFC019Q0A-GWV056     |
|--------------------------------------|------------------------|-------------------|-----------------------|-----------------------|-----------------------|
|                                      |                        |                   | 820044400010          | 820044400011          | 820044400012          |
| Power supply                         |                        |                   | 220-240V/1N/50-60Hz   | 220-240V/1N/50-60Hz   | 220-240V/1N/50-60Hz   |
| Capacity                             | Cooling                | kW                | 3.6                   | 4.5                   | 5.6                   |
|                                      | Heating                | kW                | 4                     | 5                     | 6.3                   |
| Power Input                          |                        | kW                | 0.04                  | 0.04                  | 0.05                  |
| Fan motor                            | Model                  |                   | DR-310-75LD-8         | DR-310-75LD-8         | DR-310-75LD-8         |
|                                      | Type                   |                   | DC                    | DC                    | DC                    |
|                                      | Brand                  |                   | LIFENG                | LIFENG                | LIFENG                |
|                                      | Capacitor              | μF                | -                     | -                     | -                     |
|                                      | Speed (Rated)          | r/min             | 680/620/590           | 680/620/590           | 830/680/620           |
| Indoor coil                          | Number of rows         |                   | 3                     | 3                     | 3                     |
|                                      | Fin type               |                   | Hydrophilic aluminum  | Hydrophilic aluminum  | Hydrophilic aluminum  |
|                                      | Tube diameter and type | mm                | Ø7, Inner groove tube | Ø7, Inner groove tube | Ø7, Inner groove tube |
| Air flow (max.)                      |                        | m <sup>3</sup> /h | 550                   | 550                   | 700                   |
| Sound pressure level                 |                        | dB(A)             | 33~38                 | 33~38                 | 35~43                 |
| Body                                 | Dimension (W×H×D)      | mm                | 1050*675*235          | 1050*675*235          | 1050*675*235          |
|                                      | Packing (W×H×D)        | mm                | 1130*765*330          | 1130*765*330          | 1130*765*330          |
|                                      | Net/Gross weight       | kg                | 26.5/31               | 26.5/31               | 26.5/31               |
| Refrigerant type                     |                        |                   | R410A                 | R410A                 | R410A                 |
| Throttle type                        |                        |                   | EXV                   | EXV                   | EXV                   |
| Design pressure                      |                        | MPa               | 4.5/1.6               | 4.5/1.6               | 4.5/1.6               |
| Liquid pipe / Gas pipe               |                        | mm                | Ø6.35/ Ø12.7          | Ø6.35/ Ø12.7          | Ø6.35/ Ø12.7          |
| Connecting wire                      | Power wire             | mm <sup>2</sup>   | 2.5*2+2.5(L≤20m)      | 2.5*2+2.5(L≤20m)      | 2.5*2+2.5(L≤20m)      |
|                                      |                        |                   | 4*2+2.5(20m<L≤50m)    | 4*2+2.5(20m<L≤50m)    | 4*2+2.5(20m<L≤50m)    |
|                                      | Signal wire            | mm <sup>2</sup>   | 0.75*2 shield         | 0.75*2 shield         | 0.75*2 shield         |
| Drainage water pipe (Outer diameter) |                        | mm                | DN25                  | DN25                  | DN25                  |
| Controller                           | Standard               |                   | Remote controller     | Remote controller     | Remote controller     |
|                                      | Optional               |                   | Wired controller      | Wired controller      | Wired controller      |
| Operation temp                       |                        | °C                | 16~32                 | 16~32                 | 16~32                 |

**Note:**

- 1) Nominal cooling capacities are based on the following conditions.
  - Outdoor temperature: 35°C DB
  - Return air temperature: 27°C DB, 19°C WB
  - Equivalent piping length: 8m in horizontal
- 2) Nominal heating capacities are based on the following condition.
  - Outdoor temperature: 7°C DB, 6°C WB
  - Return air temperature: 20°C DB
  - Equivalent piping length: 8m in horizontal
- 3) Sound pressure level: Semi-anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.4 m.
- 4) The above data may be changed without notice for future improvement on quality and performance.

## 1. Specifications

| Model                                |                        |                   | VEFC024Q0A-GWV071     | VEFC027Q0A-GWV080     | VEFC031Q0A-GWV090     |
|--------------------------------------|------------------------|-------------------|-----------------------|-----------------------|-----------------------|
|                                      |                        |                   | 820044400013          | 820044400014          | 820044400015          |
| Power supply                         |                        |                   | 220-240V/1N/50-60Hz   | 220-240V/1N/50-60Hz   | 220-240V/1N/50-60Hz   |
| Capacity                             | Cooling                | kW                | 7.1                   | 8                     | 9                     |
|                                      | Heating                | kW                | 8                     | 8.8                   | 10                    |
| Power Input                          |                        | kW                | 0.06                  | 0.06                  | 0.07                  |
| Fan motor                            | Model                  |                   | DR-310-120LD-8        | DR-310-120LD-8        | 2*DR-310-75LD-8       |
|                                      | Type                   |                   | DC                    | DC                    | DC                    |
|                                      | Brand                  |                   | YONGAN                | YONGAN                | LIFENG                |
|                                      | Capacitor              | μF                | -                     | -                     | -                     |
|                                      | Speed (Rated)          | r/min             | 860/820/770           | 860/820/770           | 910/850/790           |
| Indoor coil                          | Number of rows         |                   | 3                     | 3                     | 3                     |
|                                      | Fin type               |                   | Hydrophilic aluminum  | Hydrophilic aluminum  | Hydrophilic aluminum  |
|                                      | Tube diameter and type | mm                | Ø7, Inner groove tube | Ø7, Inner groove tube | Ø7, Inner groove tube |
| Air flow (max.)                      |                        | m <sup>3</sup> /h | 1000                  | 1000                  | 1400                  |
| Sound pressure level                 |                        | dB(A)             | 42~46                 | 42~46                 | 42~47                 |
| Body                                 | Dimension (W×H×D)      | mm                | 1300*675*235          | 1300*675*235          | 1670*675*235          |
|                                      | Packing (W×H×D)        | mm                | 1380*765*325          | 1380*765*325          | 1750*765*325          |
|                                      | Net/Gross weight       | kg                | 32/37                 | 32/37                 | 41/47                 |
| Refrigerant type                     |                        |                   | R410A                 | R410A                 | R410A                 |
| Throttle type                        |                        |                   | EXV                   | EXV                   | EXV                   |
| Design pressure                      |                        | MPa               | 4.5/1.6               | 4.5/1.6               | 4.5/1.6               |
| Liquid pipe / Gas pipe               |                        | mm                | Ø9.53/ Ø15.9          | Ø9.53/ Ø15.9          | Ø9.53/ Ø15.9          |
| Connecting wire                      | Power wire             | mm <sup>2</sup>   | 2.5*2+2.5(L≤20m)      | 2.5*2+2.5(L≤20m)      | 2.5*2+2.5(L≤20m)      |
|                                      |                        |                   | 4*2+2.5(20m<L≤50m)    | 4*2+2.5(20m<L≤50m)    | 4*2+2.5(20m<L≤50m)    |
|                                      | Signal wire            | mm <sup>2</sup>   | 0.75*2 shield         | 0.75*2 shield         | 0.75*2 shield         |
| Drainage water pipe (Outer diameter) |                        | mm                | DN25                  | DN25                  | DN25                  |
| Controller                           | Standard               |                   | Remote controller     | Remote controller     | Remote controller     |
|                                      | Optional               |                   | Wired controller      | Wired controller      | Wired controller      |
| Operation temp                       |                        | °C                | 16~32                 | 16~32                 | 16~32                 |

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- 2) Nominal heating capacities are based on the following condition.
  - Outdoor temperature: 7°C DB, 6°C WB
  - Return air temperature: 20°C DB
  - Equivalent piping length: 8m in horizontal
- 3) Sound pressure level: Semi-anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.4 m.
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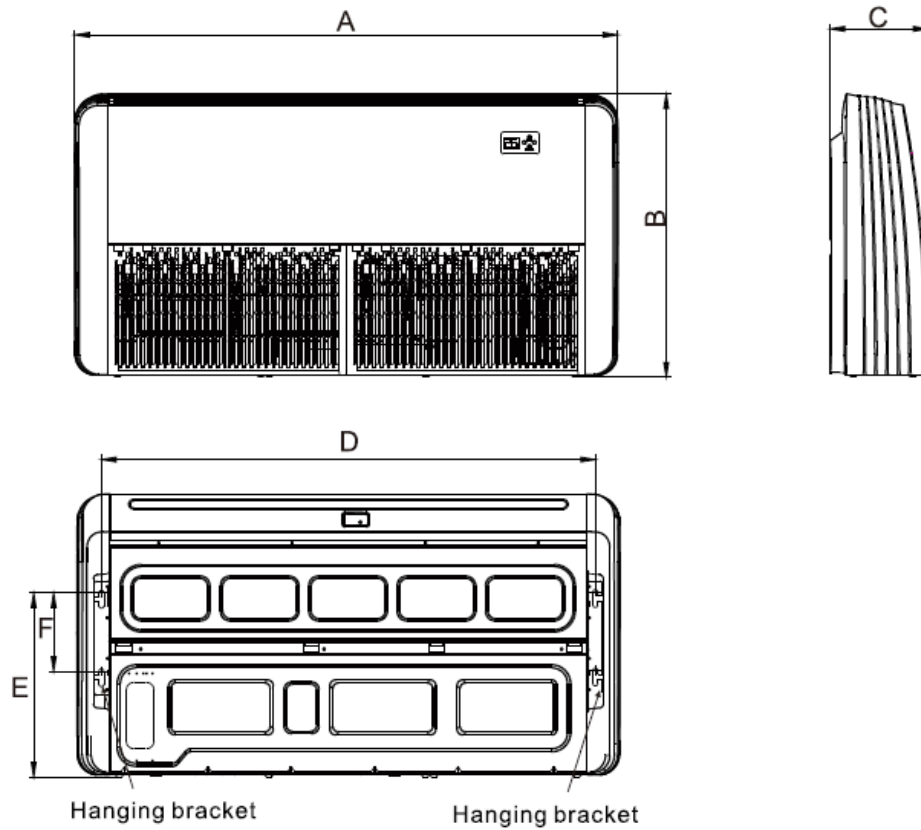
## 1. Specifications

| Model                                |                        |                   | VEFC038Q0A-GWV112    | VEFC048Q0A-GWV140    | VEFC060Q0A-GWV160    |
|--------------------------------------|------------------------|-------------------|----------------------|----------------------|----------------------|
|                                      |                        |                   | 820044400018         | 820044400016         | 820044400017         |
| Power supply                         |                        |                   | 220-240V/1N/50-60Hz  | 220-240V/1N/50-60Hz  | 220-240V/1N/50-60Hz  |
| Capacity                             | Cooling                | kW                | 11.2                 | 14                   | 16                   |
|                                      | Heating                | kW                | 12.5                 | 15                   | 17                   |
| Power Input                          |                        | kW                | 0.07                 | 0.1                  | 0.1                  |
| Fan motor                            | Model                  |                   | 2*DR-310-75LD-8      | 2*DR-310-75LD-8      | 2*DR-310-75LD-8      |
|                                      | Type                   |                   | DC                   | DC                   | DC                   |
|                                      | Brand                  |                   | LIFENG               | LIFENG               | LIFENG               |
|                                      | Capacitor              | μF                | -                    | -                    | -                    |
|                                      | Speed (Rated)          | r/min             | 910/850/790          | 1180/1030/850        | 1180/1030/850        |
| Indoor coil                          | Number of rows         |                   | 3                    | 4                    | 4                    |
|                                      | Fin type               |                   | Hydrophilic aluminum | Hydrophilic aluminum | Hydrophilic aluminum |
|                                      | Tube diameter and type | mm                | Ø7,Innergroove tube  | Ø7,Innergroove tube  | Ø7,Innergroove tube  |
| Air flow (max.)                      |                        | m <sup>3</sup> /h | 1400                 | 1900                 | 1900                 |
| Sound pressure level                 |                        | dB(A)             | 42~47                | 45~54                | 45~54                |
| Body                                 | Dimension (W×H×D)      | mm                | 1670*675*235         | 1670*675*235         | 1670*675*235         |
|                                      | Packing (W×H×D)        | mm                | 1750*765*325         | 1750*765*325         | 1750*765*325         |
|                                      | Net/Gross weight       | kg                | 41/47                | 43.5/49.5            | 43.5/49.5            |
| Refrigerant type                     |                        |                   | R410A                | R410A                | R410A                |
| Throttle type                        |                        |                   | EXV                  | EXV                  | EXV                  |
| Design pressure                      |                        | MPa               | 4.5/1.6              | 4.5/1.6              | 4.5/1.6              |
| Liquid pipe / Gas pipe               |                        | mm                | Ø9.53/ Ø15.9         | Ø9.53/ Ø15.9         | Ø9.53/ Ø15.9         |
| Connecting wire                      | Power wire             | mm <sup>2</sup>   | 2.5*2+2.5(L≤20m)     | 2.5*2+2.5(L≤20m)     | 2.5*2+2.5(L≤20m)     |
|                                      |                        |                   | 4*2+2.5(20m<L≤50m)   | 4*2+2.5(20m<L≤50m)   | 4*2+2.5(20m<L≤50m)   |
|                                      | Signal wire            | mm <sup>2</sup>   | 0.75*2 shield        | 0.75*2 shield        | 0.75*2 shield        |
| Drainage water pipe (Outer diameter) |                        | mm                | DN25                 | DN25                 | DN25                 |
| Controller                           | Standard               |                   | Remote controller    | Remote controller    | Remote controller    |
|                                      | Optional               |                   | Wired controller     | Wired controller     | Wired controller     |
| Operation temp                       |                        | °C                | 16~32                | 16~32                | 16~32                |

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- 2) Nominal heating capacities are based on the following condition.
  - Outdoor temperature: 7°C DB, 6°C WB
  - Return air temperature: 20°C DB
  - Equivalent piping length: 8m in horizontal
- 3) Sound pressure level: Semi-anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.4 m.
- 4) The above data may be changed without notice for future improvement on quality and performance.

## 2-DIMENSIONAL DRAWINGS - (MM)



| Model             | Body dimension (mm) |     |     | Installation dimension (mm) |     |     |
|-------------------|---------------------|-----|-----|-----------------------------|-----|-----|
|                   | A                   | B   | C   | D                           | E   | F   |
| VEFC012Q0A-GWV036 | 1050                | 675 | 235 | 933                         | 440 | 188 |
| VEFC015Q0A-GWV045 | 1050                | 675 | 235 | 933                         | 440 | 188 |
| VEFC019Q0A-GWV056 | 1050                | 675 | 235 | 933                         | 440 | 188 |
| VEFC024Q0A-GWV071 | 1300                | 675 | 235 | 1185                        | 440 | 188 |
| VEFC027Q0A-GWV080 | 1300                | 675 | 235 | 1185                        | 440 | 188 |
| VEFC031Q0A-GWV090 | 1670                | 675 | 235 | 1553                        | 440 | 188 |
| VEFC038Q0A-GWV112 | 1670                | 675 | 235 | 1553                        | 440 | 188 |
| VEFC048Q0A-GWV140 | 1670                | 675 | 235 | 1553                        | 440 | 188 |
| VEFC060Q0A-GWV160 | 1670                | 675 | 235 | 1553                        | 440 | 188 |

## 3- ELECTRICAL CHARACTERISTICS

| Model             | Indoor unit |          |         |         | MFC | Power cable          |                      |                    | Signal cable           |
|-------------------|-------------|----------|---------|---------|-----|----------------------|----------------------|--------------------|------------------------|
|                   | Hz          | Voltage  | Minimum | Maximum |     | L<20m                | L>50m                | Grounded           |                        |
| VEFC012Q0A-GWV036 | 50/60Hz     | 220-240V | 198     | 264     | 15  | 2*2.5mm <sup>2</sup> | 2*4.0mm <sup>2</sup> | 2.5mm <sup>2</sup> | 2*0.75 mm <sup>2</sup> |
| VEFC015Q0A-GWV045 | 50/60Hz     | 220-240V | 198     | 264     | 15  | 2*2.5mm <sup>2</sup> | 2*4.0mm <sup>2</sup> | 2.5mm <sup>2</sup> | 2*0.75 mm <sup>2</sup> |
| VEFC019Q0A-GWV056 | 50/60Hz     | 220-240V | 198     | 264     | 15  | 2*2.5mm <sup>2</sup> | 2*4.0mm <sup>2</sup> | 2.5mm <sup>2</sup> | 2*0.75 mm <sup>2</sup> |
| VEFC024Q0A-GWV071 | 50/60Hz     | 220-240V | 198     | 264     | 15  | 2*2.5mm <sup>2</sup> | 2*4.0mm <sup>2</sup> | 2.5mm <sup>2</sup> | 2*0.75 mm <sup>2</sup> |
| VEFC027Q0A-GWV080 | 50/60Hz     | 220-240V | 198     | 264     | 15  | 2*2.5mm <sup>2</sup> | 2*4.0mm <sup>2</sup> | 2.5mm <sup>2</sup> | 2*0.75 mm <sup>2</sup> |
| VEFC031Q0A-GWV090 | 50/60Hz     | 220-240V | 198     | 264     | 15  | 2*2.5mm <sup>2</sup> | 2*4.0mm <sup>2</sup> | 2.5mm <sup>2</sup> | 2*0.75 mm <sup>2</sup> |
| VEFC038Q0A-GWV112 | 50/60Hz     | 220-240V | 198     | 264     | 15  | 2*2.5mm <sup>2</sup> | 2*4.0mm <sup>2</sup> | 2.5mm <sup>2</sup> | 2*0.75 mm <sup>2</sup> |
| VEFC048Q0A-GWV140 | 50/60Hz     | 220-240V | 198     | 264     | 15  | 2*2.5mm <sup>2</sup> | 2*4.0mm <sup>2</sup> | 2.5mm <sup>2</sup> | 2*0.75 mm <sup>2</sup> |
| VEFC060Q0A-GWV160 | 50/60Hz     | 220-240V | 198     | 264     | 15  | 2*2.5mm <sup>2</sup> | 2*4.0mm <sup>2</sup> | 2.5mm <sup>2</sup> | 2*0.75 mm <sup>2</sup> |

Note:

- 1) Minimum: Permitted minimum operating voltage, lower than this value may damage the system
- 2) Maximum: Permitted maximum operating voltage, higher than this value may damage the system
- 3) MC: Minimum Current (A)
- 4) MFC: Maximum Fuse Current (A)
- 5) L: Total length of cable (m)