

# OMEGA One Way Cassette IDU

## SUBMITTAL DATA

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

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

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

### FEATURES

- Build in Drain Pump
- Small Installation Space
- One Way Air Flow
- High-Efficiency DC Motor
- Water Overflow Protection
- Flare Connections

**VECW**



## 1- Specifications

**Table 1.1: VECW006~VECW012**

Model			VECW006Q0A-DWV018	VECW008Q0A-DWV022	VECW010Q0A-DWV028	VECW0012Q0A-DWV036
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling <sup>1</sup>	Capacity	kW	1.8	2.2	2.8	3.6
		kBtu/h	6.1	7.5	9.6	12.3
	Power input	W	25	25	30	30
Heating <sup>2</sup>	Capacity	kW	2.2	2.6	3.2	4.0
		kBtu/h	7.5	8.9	10.9	13.6
	Power input	W	25	25	30	30
Fan motor	Type		DC			
	Number		1			
Indoor coil	Number of rows		2	2	2	2
	Tube pitch × row pitch	mm	21×13.37	21×13.37	21×13.37	21×13.37
	Fin spacing	mm	1.5	1.5	1.5	1.5
	Fin type		Hydrophilic aluminum			
	Tube OD and type	mm	Φ7 Inner-groove			
	Dimensions (L×H×W)	mm	760×252.4×26.74			
	Number of circuits		2	2	3	3
Air flow rate <sup>3</sup>		m <sup>3</sup> /h	380/355/330/300/286/263/240		460/440/410/380/355/330/300	
Sound pressure level <sup>4</sup>		dB(A)	30/28/27/26/25/24/22		37/36/35/34/32/31/30	38/37/35/34/32/31/30
Main body	Net dimensions <sup>5</sup> (W×H×D)	mm	1054×153×425			
	Packed dimensions (W×H×D)	mm	1155×245×490			
	Net/Gross weight	kg	11.8/15.3		12.3/15.8	
Panel	Net dimensions (W×H×D)	mm	1180×25×465			
	Packed dimensions (W×H×D)	mm	1232×107×517			
	Net/Gross weight	kg	3.5/5.2			
Refrigerant type			R410A	R410A	R410A	R410A
Design pressure (H/L)		MPa	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7			
	Drain pipe	mm	OD Φ32			

**Notes:**

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

# 1- Specifications

**Table 1.2: VECW015~VECW024**

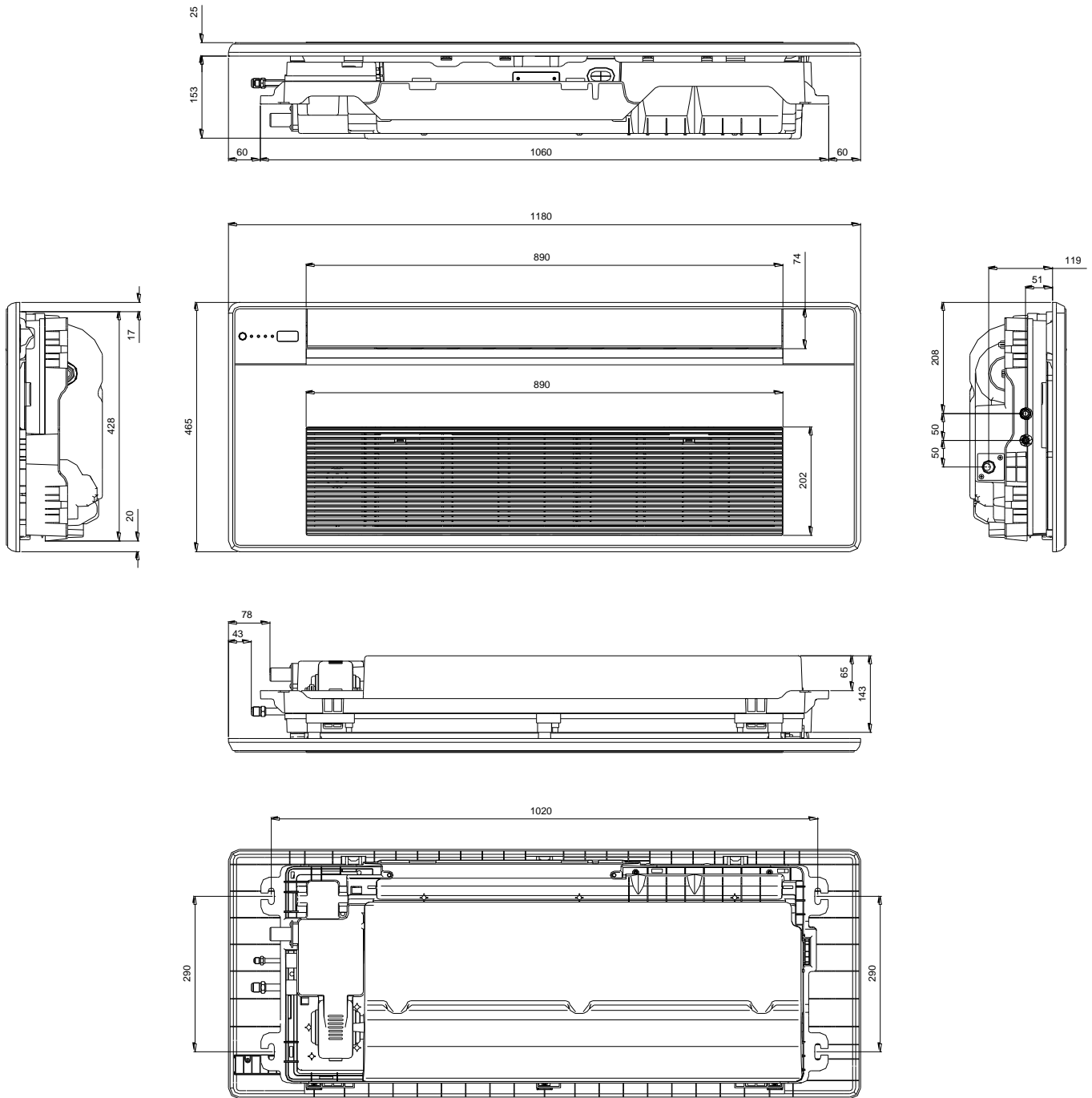
Model			VECW015Q0A-DWV045	VECW019Q0A-DWV056	VECW024Q0A-DWV071
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling <sup>1</sup>	Capacity	kW	4.5	5.6	7.1
		kBtu/h	15.4	19.1	24.2
	Power input	W	40	48	60
Heating <sup>2</sup>	Capacity	kW	5.0	6.3	8.0
		kBtu/h	17.1	21.5	27.3
	Power input	W	40	48	60
Fan motor	Type		DC		
	Number		1		
Indoor coil	Number of rows		2	2	2
	Tube pitch × row pitch	mm	21×13.37	21×13.37	21×13.37
	Fin spacing	mm	1.5	1.5	1.5
	Fin type		Hydrophilic aluminum		
	Tube OD and type	mm	Φ7 Inner-groove		
	Dimensions (L×H×W)	mm	955×231×26.74		
	Number of circuits		3	3	5
Air flow rate <sup>3</sup>		m <sup>3</sup> /h	693/662/638/600/556 /510/476	792/763/728/688/643 /589/549	933/873/815/749/689 /637/592
Sound pressure level <sup>4</sup>		dB(A)	39/37/36/35/34/32/31	41/39/38/37/36/35/33	43/41/40/39/37/36/35
Main body	Net dimensions <sup>5</sup> (W×H×D)		mm 1275×189×450		
	Packed dimensions (W×H×D)		mm 1370×295×505		
	Net/Gross weight		kg 16.1/20.4	kg 16.4/20.7	kg 17.6/22.4
Panel	Net dimensions (W×H×D)		mm 1350×25×505		
	Packed dimensions (W×H×D)		mm 1410×95×560		
	Net/Gross weight		kg 4/5.4		
Refrigerant type			R410A	R410A	R410A
Design pressure (H/L)		MPa	4.4/2.6	4.4/2.6	4.4/2.6
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7	Φ9.53/Φ15.9	
	Drain pipe	mm	OD Φ32		

**Notes:**

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

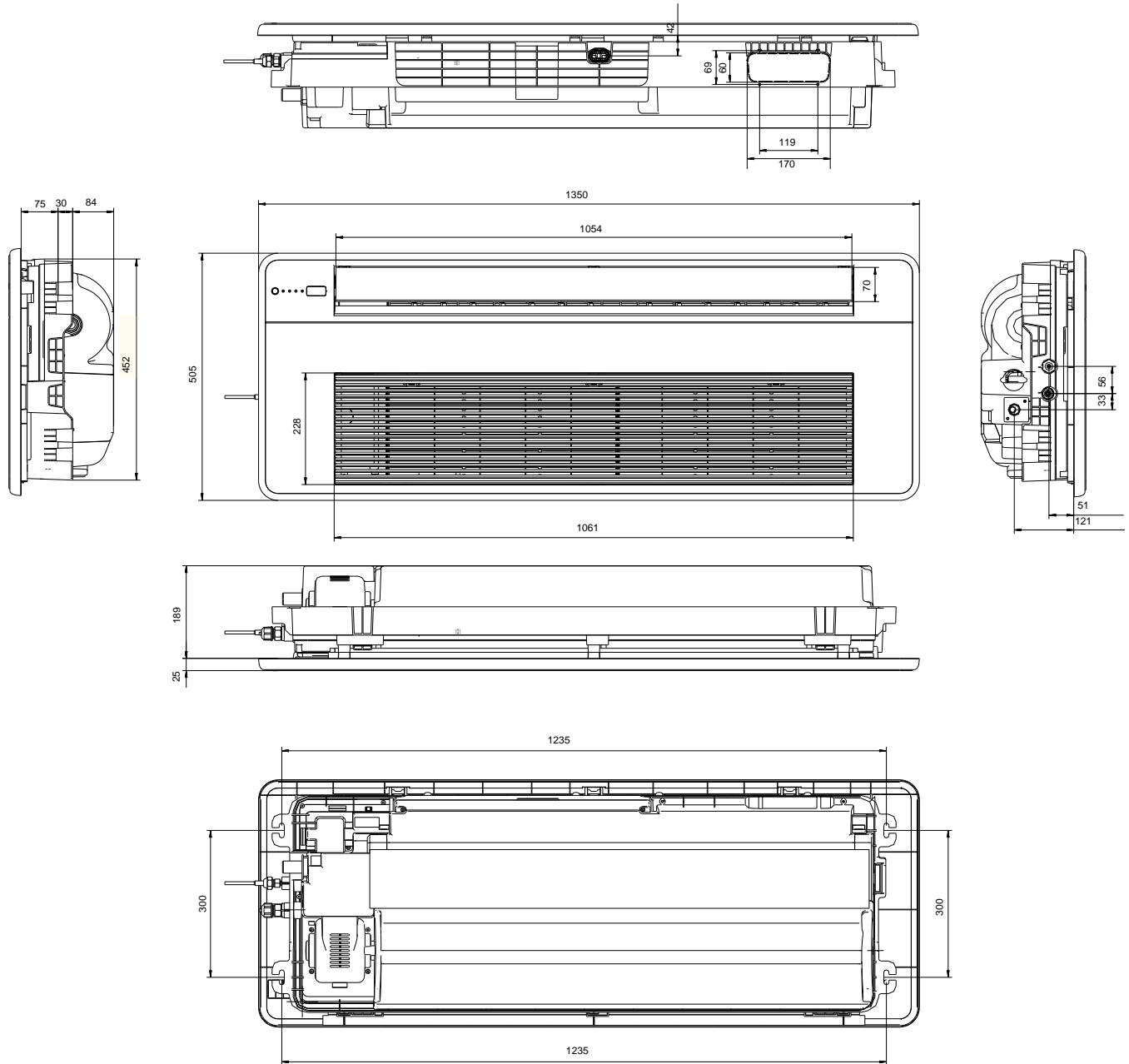
2-DIMENSIONAL DRAWINGS - (MM)

Figure 1.1: VECW006~VECW012



2-DIMENSIONAL DRAWINGS - (MM)

Figure 1.2: VECW015~VECW024



3- Unit Placement

### 3 Unit Placement

#### 3.1 Placement Considerations

Unit placement should take account of the following considerations:

- Units should not be installed in the following locations:
  - Where exposure to direct radiation from a high-temperature heat source or to interference from a source of electromagnetic radiation may occur.
  - Where dust or dirt may affect heat exchangers.
  - Where exposure to oil or to corrosive or harmful gases, such as acidic or alkaline gases, may occur.
  - Where exposure to salinity may occur, such as seaside locations.
  - Where highly flammable materials are present.
  - Where exposure to oily air may occur, such as a kitchen.
  - Where exposure to very high humidity may occur, such as a laundry.
- Units should be installed in positions where:
  - The ceiling is horizontal and is able to bear the unit's weight.
  - There are no obstructions that could impede the airflow into and out of the unit.
  - The airflow out of the unit can reach throughout the room.
  - There is sufficient space for access during installation, servicing and maintenance.
  - The refrigerant piping and drain piping can be easily connected to the refrigerant piping and drain piping systems.
  - Short-circuit ventilation (where outlet air returns quickly to a unit's air inlet) will not occur.

#### 3.2 Space Requirements

Figure 3.1: One-way Cassette space requirements (unit: mm)

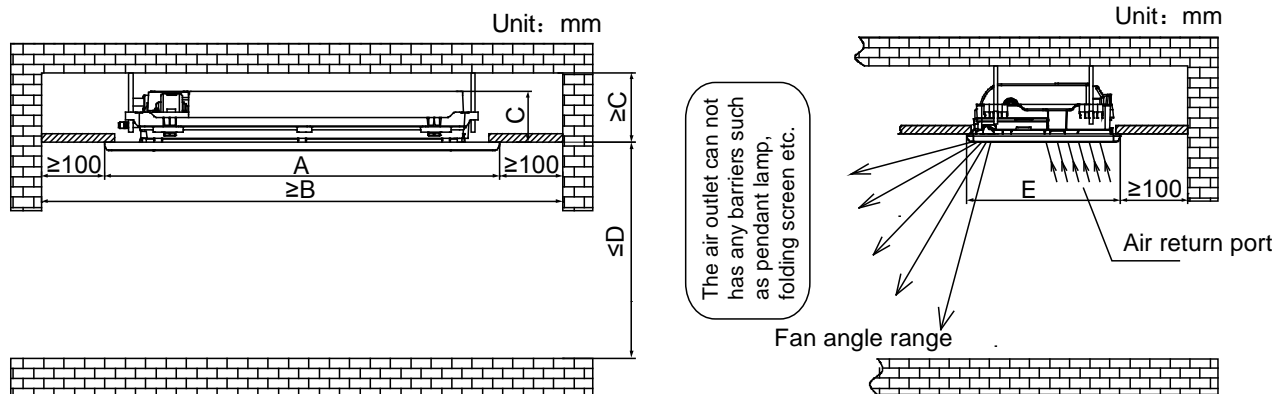


Table 3.1: One-way Cassette dimensions and space requirements

Model name	Dimensions / Requirements (mm)				
	A	B	C	D	E
VECW006Q0A VECW008Q0A VECW010Q0A VECW012Q0A	1180	1380	153	3200	465
VECW015Q0A VECW019Q0A VECW024Q0A	1350	1550	189	4000	505

4-Electrical Characteristics

Table 4.1: One-way Cassette electrical characteristics

Model name	Power supply						Indoor fan motors	
	Hz	Volts	Min. volts	Max. volts	MCA	MFA	Rated motor output (kW)	FLA
VECW007Q0A-DWV018	50/60	220-240	198	264	0.38	15	0.02	0.30
VECW008Q0A-DWV022	50/60	220-240	198	264	0.38	15	0.02	0.30
VECW010Q0A-DWV028	50/60	220-240	198	264	0.39	15	0.02	0.31
VECW012Q0A-DWV036	50/60	220-240	198	264	0.39	15	0.02	0.31
VECW015Q0A-DWV045	50/60	220-240	198	264	0.53	15	0.06	0.42
VECW019Q0A-DWV056	50/60	220-240	198	264	0.58	15	0.06	0.46
VECW024Q0A-DWV071	50/60	220-240	198	264	0.59	15	0.06	0.47

Abbreviations:

MCA: Minimum Circuit Amps

MFA: Maximum Fuse Amps

FLA: Full Load Amps



17702 Mitchell North, #101  
 Irvine, CA. 92614 .USA  
 Tel: 714 795 2830  
 Fax: 714 966 1646  
 info@omegavrf.com  
 www.omegavrf.com



**Showroom & Technology Center**  
 11380 Interchange Circle North  
 Miramar, FL 33025 .USA  
 Tel: 305 901 1270  
 Fax: 954 212 8280  
 info@otecomega.com  
 www.otecomega.com