

# OMEGA 18 SEER Ducted Inverter System

## SUBMITTAL DATA

**208-230V/1/60Hz**

Job: Centro Comercial Guatemala  
Location: Guatemala  
Schedule No.: 220749  
System Designation: 1 to 1

Engineer: \_\_\_\_\_  
Architect: \_\_\_\_\_  
Location: \_\_\_\_\_  
Date: 08/02/22  
For  Reference  Approval  Review  Construction

### FEATURES

- DC Inverter Compressor.
- ETL& AHRI Listed.
- 24V Control(Thermostat not Included).
- R410A Refrigerant.
- AHU ECM Fan Motor w/3 Speed.
- Wide Operation Range.



1-IDU Specs

**IDU IEUC Series**

Model		IEUC824N0A -GNI070A	IEUC836N0A -GNI105A	IEUC848N0A -GNI140A	IEUC860N0A -GNI160A	
Power supply		V/Ph/H z 208- 230V/1PH/60H z	208- 230V/1PH/60Hz	208- 230V/1PH/60H z	208- 230V/1PH/60H z	
Cooling	Capacity	Btu/h	24000	36000	47000	56000
	SEER	Btu/h. W	18	18	18	18
Indoor coil	Number of rows		4×2	4×2	5×2	5×2
	Tube outside dia. / Type		7mm / Rifled tube			
	Fin spacing / Thickness / Type	mm / mm	1.6 / 0.095 / Non-hydrophilic window slice			
	Tube pitch(a) × row pitch(b)	mm	21 ×13.37	21 ×13.37	21 ×13.37	21 ×13.37
Indoor motor	type		ECM			
	Rated HP		1/3	1/2	3/4	3/4
	Rated RPM	r/min	770	870	1050	1050
	FLA	A	2.8	4.1	6.0	6.0
Indoor fan	material		Galvanized plate			
	Type		Centrifugal			
	Diameter	inch	11	11	11	11
	Height	inch	10-5/8	10-5/8	10-5/8	10-5/8
Indoor air flow	CFM	830	1100	1600	1600	
ESP	Pa	25	37.5	50	50	
Indoor noise level	dB(A)	63	66	67	68	
Metering device	Throttle type		TXV			
	Model number		3TR	3TR	5TR	5TR
Electrical Data	Voltage-Phase-Hz	V-Ph-Hz	208/230V 1Ph 60Hz			
	Minimum Circuit Ampacity	A	1.7	2	5	6
	Max. Overcurrent Protection	A	22	25	30	30
	Min / Max Volts	V	187 / 253	187 / 253	187 / 253	187 / 253
Indoor unit	Dimension (W×H×D)	mm	500×1162×560		560×1350×620	
		in.	19-2/3×45-3/4×22		22×53-1/8×24-1/2	
	Packing (W×H×D)	mm	580×1210×650		640×1390×710	
		in.	22-5/6×47-5/8×25-3/5		25-1/5×54-3/4×28	
	Net / Gross weight	kg	57 / 63	57 / 63	77 / 85	77 / 85
lbs		126 / 139	126 / 139	170 / 188	170 / 188	
Refrigerant piping Liquid side / Gas side	in.	3/8 / 3/4	3/8 / 3/4	3/8 / 7/8	3/8 / 7/8	

**Notes:**

1. Nominal cooling capacities are based on the following conditions:

Indoor temp: 27°C DB, 19°CWB; Outdoor temp: 35°C DB; Equivalent ref. piping: 5m (horizontal)

2. Actual noise level may differ, depending on the room structure, etc., since these noise values are from an anechoic room.

## 2-IDU DIMENSIONAL DRAWINGS

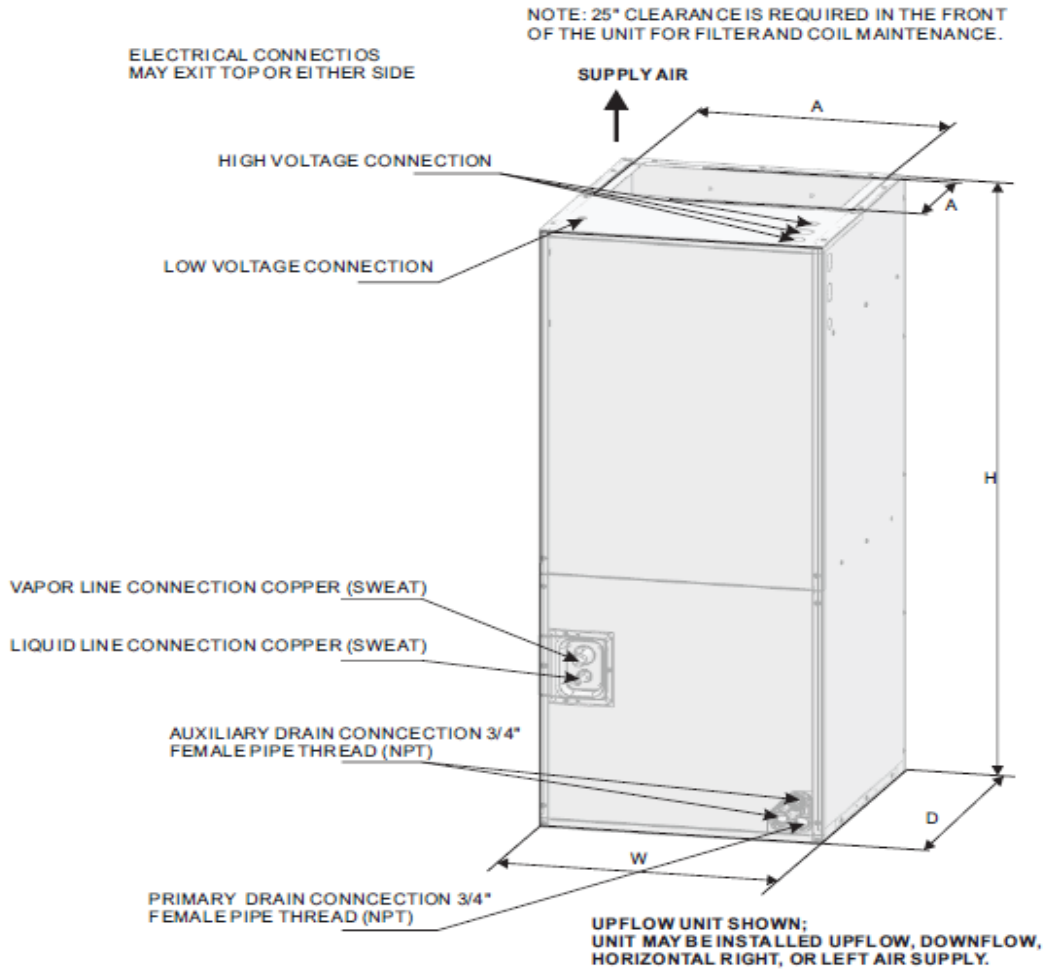
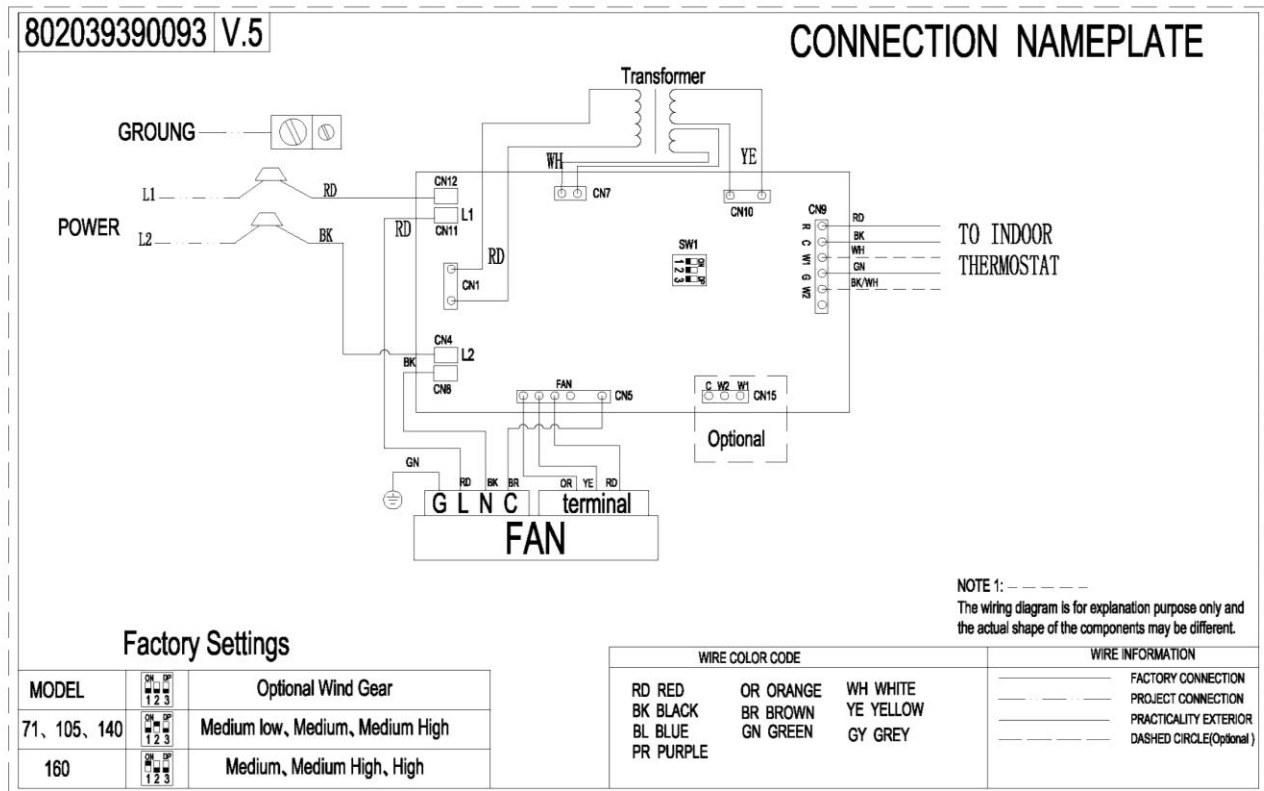


Fig.1 DIMENSIONS

DIMENSIONAL DATA					
MODEL SIZE	Dimensions				
	UNIT HEIGHT "H"/in	UNIT WIDTH "W"/in	UNIT LENGTH "D"/in	SUPPLY DUCT "A"/in	LIQUID LINE / VAPOR LINE IN
24K	45.75	19.68	22.05	454	3/8" / 3/4"
36K	45.75	19.68	22.05	454	3/8" / 3/4"
48K	53.15	22.05	24.53	496	3/8" / 7/8"
60K	53.15	22.05	24.53	496	3/8" / 7/8"

## 3-IDU WIRING DIAGRAM



## 1-ODU Specs

### ODU ICVC Series



Model			ICVC824H2A-GNI071A	ICVC836H2A-GNI100A	ICVC848H0A-GNI140A	ICVC860H0A-GNI170A
Electrical Data	Voltage-Phase-Hz	V-Ph-Hz	208/230V-1Ph-60Hz			
	Minimum Circuit Ampacity	A	14	19	25	29
	Max. Overcurrent Protection	A	20	30	40	50
	Min / Max Volts	V	187 / 253	187 / 253	187 / 253	187 / 253
Cooling	Capacity	Btu/h	24000	34500	47000	56000
	EER	Btu/h.W	11.6	11.6	11.6	10.8
	SEER	Btu/h.W	17.5	17.5	17.5	17.5
Compressor	Model		ATM240D57UF T	ATM240D57UF T	MNB42FCKMC- L	MNB42FCKM C-L
	Brand		GMCC	GMCC	Mitsubishi	Mitsubishi
	Type		Twin-rotary DC	Twin-rotary DC	Twin-rotary DC	Twin-rotary DC
	Thermal protector	uf	internal	internal	internal	internal
	Rated Capacity	W/h	7190±3%	7190±3%	13780±5%	13780±5%
	Input	W	1935±3%	1935±3%	4040±5%	4040±5%
	Rated inverter input current	A	8.85	8.85	11.80	11.80
	Refrigerant oil	ml	670	670	1400	1400
	RLA		13.5	18.5	27.2	27.2
LRA		45	45	58.1	58.1	
Outdoor motor	Model		YDK-110-8P2- AL	YDK-110-8P2- AL	DRN-310-200- 10	DRN-310-200- 10
	Brand		Lvzhi	Lvzhi	Panasonic	Panasonic
	Type		AC	AC	DC	DC
	Rated output power	W	110	110	200	200
	Capacitor	µF	6	6	/	/
	Speed	rpm	850/610	850/610	1100	1100
	FLA	A	0.9	0.9	2.5	2.5
Outdoor Fan	Material		Metal			
	Type		Axial flow			
	Diameter	In.	23.03	23.03	23.43	23.43
	Height	In.	4.33	4.33	4.53	4.53
	Air flow	CFM	2400	2950	4100	4100
Outdoor coil	Number of row		1	2	2	2
	Tube outside dia	mm (in.)	7 (9/32)	7 (9/32)	7 (9/32)	7 (9/32)
Outdoor noise level		dB(A)	52-63	52-63	54-65	54-65
Outdoor unit	Dimension (W×H×D)	mm	740×633×740		740×835×740	
		inch	29.13x24.92x29.13		29.13x32.87x29.13	

## 1-ODU Specs

### ODU ICVC Series Continuation....

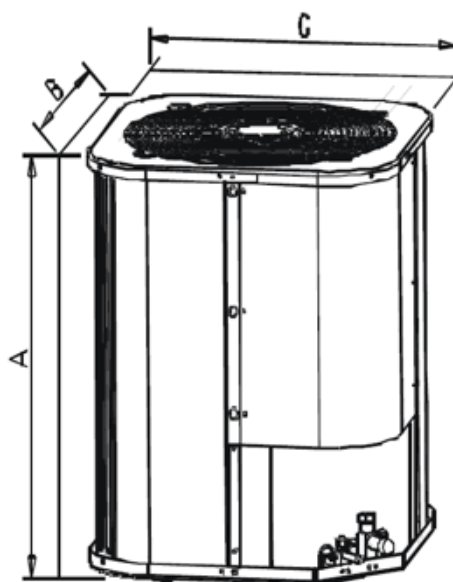


Outdoor unit	Packing (W×H×D)	mm	760×660×760		760×875×760	
		in.	30×26×30		30/16×34-4/9×3	
	Net / Gross weight	kg	71 / 75	71 / 75	91 / 96	91 / 96
lbs		157 / 165	157 / 165	201 / 211	201 / 211	
Refrigerant type			R410A	R410A	R410A	R410A
Refrigerant quantity		kg	3.35	3.35	4.85	4.85
Refrigerant system	Liquid side / Gas side	in.	3/8 / 3/4	3/8 / 3/4	3/8 / 7/8	3/8 / 7/8
	Factory charge R410A	oz	114	114	166	166
	Metering device		EEV	EEV	EEV	EEV
Max. refrigerant pipe length		m	30	30	30	30
		ft	100	100	100	100
Max. difference in level		m	15	15	15	15
		ft	50	50	50	50
Operating temperatures		°F	5-118	5-118	5-118	5-118

## 2-ODU DIMENSIONAL DRAWINGS

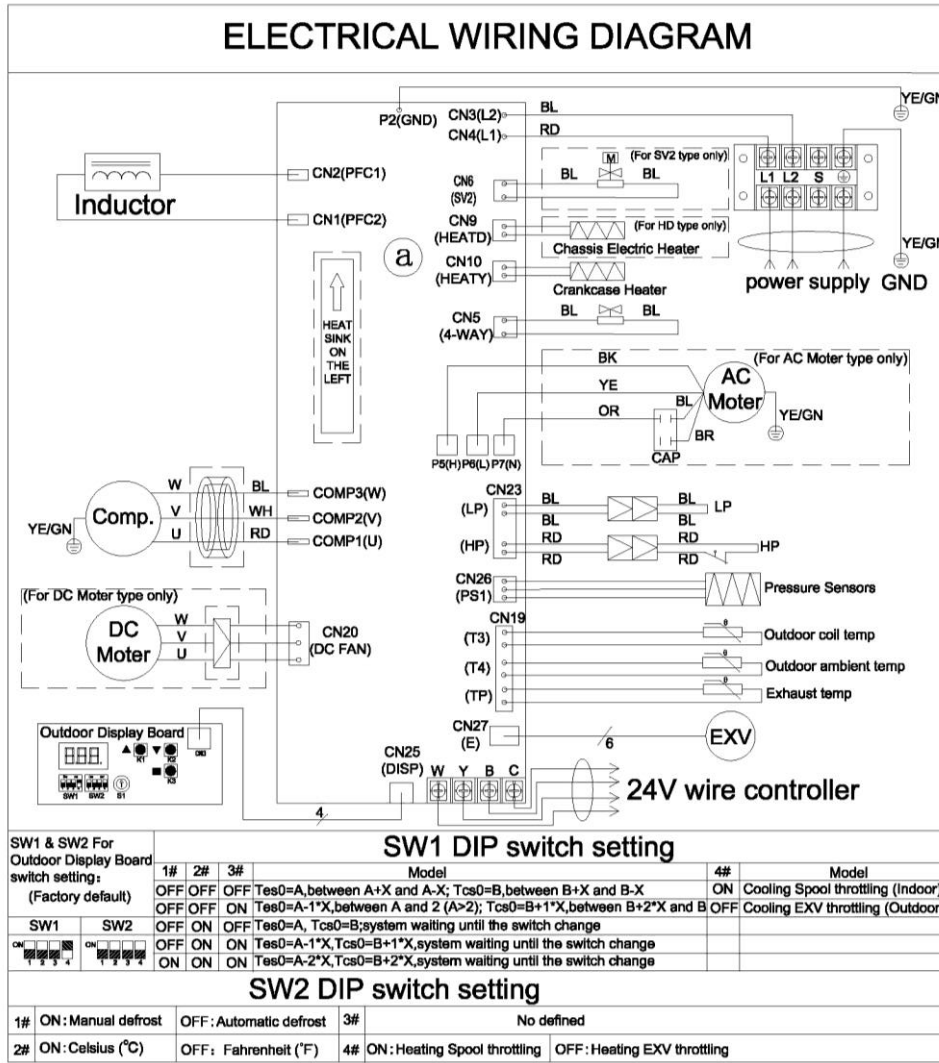
All dimensions are in mm. They are subject to change without notice. Certified dimensions will be provided upon request.

Unit Model	Dimensions(mm)			Refrigerant Connection Line Size(mm)			
	A	B	C	Liquid(Φ)		Vapor(Φ)	
				LF	RF	LF	RF
24	633	740	740	9.52		19.05	
36	633	740	740			19.05	
48	843	740	740			22	
60	843	740	740				



NOTE: LF means cooling only model; RF means heat pump model.

## 3-ODU WIRING DIAGRAM



## 4-ODU ELECTRICAL TABLE

Model	MCA	MOCP
24K	14.0	20.0
36K	19.0	30.0
48K	25.0	40.0
60K	29.0	50.0

MCA: Min. Circuit Ampacity  
 MOCP: maximum current rating of overcurrent protection