

# OMEGA INVERTER TECHNOLOGY

INVERTER  
TECHNOLOGY  
EXPERT

Engineered to elevate efficiency and comfort .....  
..... to the next level!



IEMP

## IEMP SERIES

Medium ESP Ducted

Inverter Air Conditioners 50 Hz

Cooling Nominal: 9,000-60,000 BTU/h (2.6-16.0 kW)

Long Piping Distance (80 ~ 160 ft)

### Product Features

- ✓ 16 SEER in Cooling Mode.
- ✓ Ideal for Small Commercial & industrial Applications
- ✓ Auto Restart.
- ✓ Heat Pump.
- ✓ Low Voltage Start Up.
- ✓ Factory Tested.
- ✓ Low Temperature Cooling Down to -5° C & High Temperature Cooling up to 50° C ambient.

### Outdoor Unit Features

- ✓ DC Inverter Rotary Compressor.
- ✓ Electronic Expansion Valve.
- ✓ Super Quiet Operation.
- ✓ High Efficiency Coils with Hydrophilic Fins.
- ✓ Refrigerant-Cooled IPM Module.
- ✓ High & Low Pressure Protection.
- ✓ Discharge Temperature Protection.
- ✓ Phase Loss & Overcurrent Protection.
- ✓ PFC & IPM Module Protection.
- ✓ Self-Diagnostics.

### Indoor Unit Features

- ✓ Wired Remote Control (Optional).
- ✓ Auto Setting for Cooling, Heating, Dehumidifying, Fan.
- ✓ Sleep Mode.
- ✓ Turbo Cooling Function with Multi-Speed Fan Control.
- ✓ Built in Drain Pump.
- ✓ Easy Maintenance and Cleanable Cartridge Filters.
- ✓ Easy Connect Flare Connections.
- ✓ Low Temperature Dry Function.
- ✓ Anti-Freezing & Anti-High Temperature Protection.
- ✓ Sensor Malfunction Alarm.
- ✓ Communication Malfunction Alarm.
- ✓ Programmable 24 hours On/Off Timer.
- ✓ Under/Over Voltage protection.
- ✓ Built in Surge protector.



OMEGA

DC INVERTER

OTEC  
AIR CONDITIONING

A Product of  
OMEGA  
Environmental  
Technologies LLC.

ISO 14001 ISO 9001



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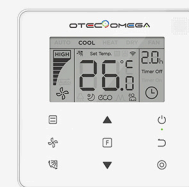
Medium ESP Ducted  
Inverter Air Conditioners 50 Hz  
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Long Piping Distance (80 ~ 160 ft)



2.6 - 9.0 kW



10.5 - 16.0 kW



Wired Controller  
VAECR-D001 (Standard)

### Notes:

- Nominal capacities are based on ARI standards 210/240-89, air entering the indoor coil operating at high fan speed for 220V-240V setting. Cooling: 80/67° F (27/19° C) DB/WB indoor & 95° F (35° C) outdoor ambient temperature.
- Ratings are based on indoor and outdoor connected by 16ft (5m) of tubing.
- Refrigerant metering device is installed at the outdoor unit as standard.
- Flare fittings are provided for connecting indoor and outdoor units.
- Insulation of both liquid and suction line is required.
- Outdoor units are shipped with full operating charge.
- For details of model number nomenclature, please refer to publication OMGNM-1120.

### INDOOR UNIT

MODEL NO.	IEMP	009J 3A-DCG026	012J 3A-DCG035	018J 3A-DCG053	024J 3A-DCG071	031J 3A-DCG090	036J 3A-DCG105	042J 3A-DCG120	048J 3A-DCG140	060J 3A-DCG160
Cooling Capacity	Nominal	9,000 (2.60)	12,000 (3.50)	18,000 (5.30)	24,000 (7.10)	31,000 (9.00)	36,000 (10.5)	42,000 (12.0)	48,000 (14.0)	60,000 (16.0)
	Minimum	2,390 (0.70)	2,560 (0.75)	3,755 (1.10)	8,190 (2.40)	9,210 (2.70)	10,235 (3.00)	10,235 (3.00)	14,330 (4.20)	15,115 (4.43)
BTU/h (kW)	Maximum	11,940 (3.50)	12,625 (3.70)	20,130 (5.90)	27,980 (8.20)	32,755 (9.60)	38,215 (11.2)	40,945 (12.0)	47,085 (13.8)	52,885 (15.5)
Efficiency	SEER	16.0 (4.69)								
Refrigerant Control		Electronic Expansion Valve @ Outdoor Unit								
Fan		Coaxial Turbo Fan								
Fan	Type									
	Speed / QTY	3 / 1	3 / 1	3 / 1	3 / 1	3 / 1	3 / 1	3 / 1	3 / 1	3 / 1
	Air Flow CFM (m³/hr) - Hi	280 (480)	325 (550)	440 (750)	590 (1000)	880 (1500)	880 (1500)	880 (1500)	880 (1500)	1180 (2000)
Noise Level (dba)	Lo/Hi	23 / 33	25 / 34	28 / 37	29 / 38	36 / 45	36 / 45	36 / 45	36 / 46	36 / 46
Coil Type:		Grooved Copper Tubes - Aluminum Blue Slit Fin								
Air Filter		Cleanable Cartridge Type								
Electrical	Voltage-Phase-Frequency	220-240V / 1Ph / 50Hz								
	Range (min-max)	198 ~ 264								
	FLA	0.42	0.42	0.45	0.57	1.28	1.28	1.28	1.28	1.55
Controls		Wired Remote Control								
Refrigerant Connections inches (mm)		See Outdoor Unit Data								
Drain Connections inches (mm)		1 (25)								
Dimensions in (mm)	Body Height	8 1/4 (210)	8 1/4 (210)	8 1/4 (210)	8 1/4 (210)	10 5/8 (270)	10 5/8 (270)	10 5/8 (270)	10 5/8 (270)	11 3/4 (300)
	Width	27 1/2 (700)	27 1/2 (700)	36 1/4 (920)	44 7/8 (1140)	44 7/8 (1140)	44 7/8 (1140)	44 7/8 (1140)	44 7/8 (1140)	55 1/8 (1400)
	Depth	17 3/4 (450)	17 3/4 (450)	17 3/4 (450)	17 3/4 (450)	28 (710)	28 (710)	28 (710)	28 (710)	36 3/8 (925)
Body Net Weight Lbs (kgs)		36.4 (16.5)	36.4 (16.5)	45.2 (20.5)	55.1 (25.0)	81.6 (37.0)	86.0 (39.0)	86.0 (39.0)	86.0 (39.0)	102.5 (46.5)

### OUTDOOR UNIT

MODEL NO.	ICHD	009J 0A-DMG026	012J 0A-DMG035	018J 0A-DMG053	024J 0A-DMG071	031J 0A-DMG090	036J 0A-DMG105	042J 0A-DMG120	048J 0A-DMG140	060J 0A-DMG160
Compressor Type		DC Inverter Rotary								
Outdoor Fan	No of Fans	1	1	1	1	1	1	1	1	1
	Noise Level (dba)	50	50	54	55	55	59	59	59	60
Coil Type:		Grooved Copper Tubes - Aluminum Blue Slit Fin								
Compressor	Rated Amps (RLA)	5.60	5.80	7.85	8.85	11.8	14.5	23.0	27.5	27.1
	Power Input Nom. (W)	649	1159	1602	2115	3060	3109	4559	5809	6600
Electrical	Voltage-Phase-Frequency	220-240V / 1Ph / N/A 3D								
	Range (min-max)	198 ~ 264								
	Min. Circuit Amps (MCA)	8.80	8.80	12.9	17.5	23.0	27.0	27.0	32.0	33.0
	Max Fuse Amps (MOCP)	15	15	20	25	30	30	30	40	40
Refrigerant R410 (oz./kgs.)		28.2 / 0.80	28.2 / 0.80	51.2 / 1.45	56.5 / 1.60	70.6 / 2.00	105.9 / 3.00	105.9 / 3.00	112.9 / 3.20	134.1 / 3.80
Refrigerant Connections		Flare								
Connections inches (mm)	Liquid	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
	Suction	3/8 (9.52)	3/8 (9.52)	1/2 (12.7)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)
MAX Pipe Distance Ft(m)	Height	32.8 (10)	32.8 (10)	49.2 (15)	49.2 (15)	65.6 (20)	65.6 (20)	65.6 (20)	82.0 (25)	82.0 (25)
	Length	49.2 (15)	49.2 (15)	82.0 (25)	82.0 (25)	98.4 (30)	98.4 (30)	98.4 (30)	164.0 (50)	164.0 (50)
Dimensions inches (mm)	Height	21 1/8 (555)	21 1/8 (555)	21 1/8 (555)	28 (712)	28 (712)	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)	34 1/8 (865)
	Width	28 3/8 (722)	28 3/8 (722)	31 1/4 (795)	35 7/8 (910)	35 7/8 (910)	37 3/8 (950)	37 3/8 (950)	37 3/8 (950)	41 (1040)
	Depth	10 1/4 (260)	10 1/4 (260)	11 1/4 (287)	13 5/8 (345)	13 5/8 (345)	14 1/8 (360)	14 1/8 (360)	14 1/8 (360)	16 1/8 (410)
Net Weight Lbs (kgs)		55.1 (25.0)	56.2 (25.5)	73.9 (33.5)	103.6 (47.0)	112.4 (51.0)	149.9 (68.0)	149.9 (68.0)	173.1 (78.5)	200.6 (91.0)



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