

# OMEGA INVERTER TECHNOLOGY

INVERTER  
TECHNOLOGY  
EXPERT

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



TEFC

## TEFC SERIES Floor Ceiling Air Conditioners 3D Inverter Heat Pump

Cooling Nominal: 18,000-60,000 Btuh (5.3-17.5 kW)

Heating Nominal: 20,150-60,000 Btuh (5.9-17.5 kW)

### Product Features

- ✓ Up to 19 SEER in cooling mode.
- ✓ Ideal for Small Commercial & industrial Applications
- ✓ Auto Restart.
- ✓ Low Voltage Start Up.
- ✓ Automatic Defrosting.
- ✓ Factory Tested.
- ✓ Low Temperature Cooling Down to -5° C & High
- ✓ Temperature Cooling up to 50° C ambient

### Outdoor Unit Features

- ✓ DC Inverter Rotary Compressor.
- ✓ Available 380~415V/3/50Hz in 048 & 060 Models.
- ✓ DC Outdoor Fan Motor on 018~036 Models.
- ✓ Electronic Expansion Valve.
- ✓ Super Quiet Operation.
- ✓ High Efficiency Coils with Hydrophilic Fins.
- ✓ Corrosion Resisting Cabinet with Protective Coating.
- ✓ High & Low Pressure Protection.
- ✓ Discharge Temperature Protection.
- ✓ Phase Loss & Overcurrent Protection.
- ✓ PFC & IPM Module Protection.
- ✓ Self-Diagnostics.

### Indoor Unit Features

- ✓ Wireless Remote Control (Standard).
- ✓ Wired LCD Remote Control (Optional).
- ✓ Auto Setting for Cooling, Heating, Dehumidifying, Fan.
- ✓ Sleep Mode.
- ✓ Easy Maintenance and Cleanable Cartridge Filters.
- ✓ Easy Connect Flare Connections.
- ✓ Low Temperature Dry Function.
- ✓ Central Controller & Long Distance Monitoring Option.
- ✓ Anti-Freezing & Anti-High Temperature Protection.
- ✓ Sensor Malfunction Alarm.
- ✓ Communication Malfunction Alarm.
- ✓ Programmable 24 hours On/Off Timer.



OMEGA



OTEC  
AIR CONDITIONING

A Product of  
**OMEGA**  
Environmental  
Technologies LLC.

ISO 14001 ISO 9001



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## INDOOR UNIT

MODEL NO.	TE	FC018P	FC024P	FC036P	FC048P	FC060P		
		0A-GWJ053	0A-GWJ070	0A-GWJ105	3A-GWI140	3A-GWG175		
Cooling Capacity Btuh (kw)	Nominal	18,000 (5.3)	24,000(7.0)	36,000 (10.5)	48,000 (14.0)	54,645 (16.0)		
	Minimum	7,854 (2.00)	11,950 (3.5)	22,540 (6.60)	24,415 (7.15)	26,645 (7.80)		
Heating Capacity Btuh (kw)	Nominal	20,150 (5.90)	26,300 (7.70)	39,275 (11.5)	42,700 (12.5)	60,000 (17.6)		
	Minimum	10,245 (3.00)	15,375 (4.50)	25,100 (7.35)	27,325 (8.00)	29,050 (8.50)		
Efficiency	SEER	Btuh/w (w/w)		19 (5.5)	19 (5.5)	19 (5.5)	18 (5.1)	16 (4.8)
Refrigerant Control		Electronic Expansion Valve @ Outdoor Unit						
Fan	Type	Centrifugal						
	Speed / QTY	3 / 1		3 / 1		3 / 2		
	Air Flow CFM (m³/hr) - Hi	530 (900)	675 (1150)	1059 (1800)	1180 (2000)	1180 (2000)		
	Noise Level (dbA) Hi/Lo	47 / 36	43 / 49	45 / 51	45 / 52	46 / 52		
	Motor Power Output (W)	120 x 1	120 x 1	120 x 1	85 x 2	85 x 2		
Coil Type:		Grooved Copper Tubes - Aluminum Blue Slit Fin						
Air Filter		Cleanable Cartridge Type						
Electrical	Voltage-Phase-Frequency	220~240/1/N/A(3D)			220~240/1/50Hz			
	Range (min-max)	198 ~ 264						
	FLA	0.54	0.54	0.54	0.77	0.77		
Controls		Wireless Remote Control						
Refrigerant Connections inches (mm)		See Outdoor Unit Data						
Drain Connections inches (mm)		1 (25)						
Dimensions inches (mm)	Height	26 3/4 (680)	26 3/4 (680)	26 3/4 (680)	26 3/4 (680)	26 3/4 (680)		
	Width	49 (1245)	49 (1245)	49 (1245)	65 3/4 (1670)	65 3/4 (1670)		
	Depth	9 1/2 (240)	9 1/2 (240)	9 1/2 (240)	9 1/2 (240)	9 1/2 (240)		
Net Weight Lbs (kgs)		75 (34)	77 (35)	77 (35)	108 (49)	108 (49)		

## OUTDOOR UNIT

MODEL NO.	TCHE	018P	024P	036P	048P	060P
		0A-GLJ053	0A-GLJ070	0A-GLJ105	7A-GLI140	7A-GLG175
Compressor Type		DC Inverter Rotary				
Outdoor Fan	No of Fans	1	1	1	2	2
	Noise Level (dbA)	63	67	68	70	70
Coil Type:		Grooved Copper Tubes - Aluminum Blue Slit Fin				
Compressor	Rated Amps (RLA)	7.1	8.7	15.1	6.85	6.85
	Power Input Nom. (W)	1005	2150	2575	3430	3430
Electrical	Voltage-Phase-Frequency	220~240/1/N/A(3D)			380~415/3/50	
	Range (min-max)	198 ~ 264			342 ~ 457	
	Min. Circuit Amps (MCA)	9.3	11.5	19.5	9.6	9.6
	Max Fuse Amps (MOCP)	15	25	30	25	25
Refrigerant R410 ( oz./kgs. )		6.3 / 1.8	84.4 / 2.4	134.5 / 3.8	144.2 / 4.1	144.2 / 4.1
Refrigerant Connections		Flare				
MAX Pipe Distance Ft.(m)	Type	1/4 (6.35)				
	Liquid	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
Dimensions inches (mm)	Suction	1/2 (12.7)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)
	Height	33 (10)	33 (10)	67 (20)	67 (20)	67 (20)
Dimensions inches (mm)	Length	49 (15)	67 (20)	164 (50)	164 (50)	164 (50)
	Height	27 5/8 (700)	33 1/8 (843)	37 5/8 (955)	52 1/2 (1335)	52 1/2 (1335)
	Width	36 1/2 (925)	37 3/4 (958)	41 3/8 (1050)	37 3/8 (950)	37 3/8 (950)
Net Weight	Depth	14 3/8 (366)	15 1/2 (392)	13 5/8 (347)	15 1/4 (388)	15 1/4 (388)
	Lbs (kgs)	99.1 (45 )	129.8 (59)	176.1 (80)	217.8 (99)	217.8 (99)



18,000 btuh



24,000 btuh



36,000 btuh



48,000 - 60,000 btuh



Standard Wireless Controller



Optional Wired Controller

### 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-1116.

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ISO 14001 ISO 9001

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# INVERTER FLOOR/CEILING INDOOR UNITS 220/1/50 Hz.



MODEL		TEFC048P3A-GWI140	TEFC060P3A-GWG175	
Indoor power supply		V/Ph/Hz	220~240V/1Ph/50Hz	
Cooling	Capacity	KW	7.15-14.0-15.6	
	Power input	W	1.22-4.86-5.58	
	Current input	A	8.95	
	SEER	Btu/w	18.0	
Heating	Capacity	KW	8.0-15.2-17.2	
	Input	W	1.2-4.31-5.28	
	Rated current	A	8.05	
	COP	W/W	3.53	
Max. power input		W	6100	
Max. current input		A	11.4	
Indoor fan motor	Power output	W	85	
	Capacitor	μF	5	
	Speed	r/min	1560/1430/1300	
	Insulation class		B	B
Indoor coil	Number of rows		4	
	Tube pitch(a)xrow pitch(b)	mm	22x19.1	
	Fin spacing	mm	1.7	
	Fin type		Hydrophilic	Hydrophilic
	Tube outside dia. and type	mm	Φ7.94	Φ7.94
			inner grooved	inner grooved
	Coil (L*H*W)	mm	1382x242x76.2	1382x242x76.2
Number of circuits		4	4	
Indoor air flow (High speed)		m <sup>3</sup> /h	2000	
Indoor noise level	power level	dB(A)	56-67	
	pressure level		45-52	
Indoor unit	Dimension (W*H*D)	(mm)	1670x680x240	
	Packing (W*H*D)	(mm)	1750x765x330	
	Net/Gross weight	(Kg)	49/55.5	
Max pressure		MPa	4.5	
Refrigerant type			R410A	
Refrigerant piping	Liquid side/Gas side	mm	Φ9.52/Φ15.88	
Drain pipe		mm	DN25	
Standard controller (Optional )			Wireless Remote Control (Wired Controller)	
Operation temp		°C	16~32	
Ambient temp	cooling	°C	-5~50	
	heating	°C	-15~30	
Application area		m <sup>2</sup>	56-93	
Loading Quantity(20'/40'/40'HQ)		set	38/79/88	



# INVERTER OUTDOOR UNITS

## 380/415V - 3 - 50 Hz



MODEL		TCHE04807A-GLI140	TCHE060P7A-GLG175
Outdoor power supply		V/Ph/Hz	380~415/3/50
Cooling	Capacity	KW	14.0(7.15-15.6)
	Power input	W	4600
	Current input	A	7.8
Heating	Capacity	KW	15.2(8.0-17.2)
	Power input	W	4050
	Current input	A	6.9
Compressor	Type (Inverter)		Hermetic Rotary
	Frequency range	rps	12-120
	Capacity Range	W	7150-15600
	Input	W	3430
	Current(RLA)	A	6.85
	Refrigerant oil	ml	1400
Outdoor fan motor	Power output	W	77
	Speed	r/min	780/630
	Insulation class		B
Outdoor coil	Number of rows		2
	Tube pitch(a)xrow pitch(b)	mm	25×21.65
	Fin spacing	mm	1.6
	Fin type		Hydrophilic
	Tube outside dia. and type	mm	9.52
			inner grooved
	Coil (L*H*W)	mm	1275x802x43.3
Number of circuits		7	
Outdoor air flow(High speed)		m <sup>3</sup> /h	7200
Outdoor noise level	power level	dB(A)	70
	pressure level		58
Outdoor unit	Dimension(W*H*D)	mm	950×1335×388
	Packing(W*H*D)	mm	964x1445x402
	Net/Gross weight	kg	98.5/106.5
Refrigerant type/quantity		g	R410A/4100
Throttle part			EXV
Design pressure		MPa	4.5/1.6
Max pressure		MPa	4.5
Connection wire	Power wiring	mm <sup>2</sup>	5×2.5
	Signal wiring	mm <sup>2</sup>	3×1.0
Refrigerant piping	Liquid side/Gas side	mm	Φ9.52/Φ15.88
	Max. pipe length	m	50
	Max. high drop	m	20
Ambient temp	cooling	°C	-5~50
	heating	°C	-15~30
Loading Quantity (20'/40'/40' HQ)		set	30/62/69