















## Oasis E-Star Single Zone Units

### Heat Pump

21 SEER

Nominal Capacity: 1.5 Ton

Outdoor Unit Model# OHP14-18-12-22

Indoor Unit Model# DWHP14-18-12-25

Cooling operating range  
-13° ~ 122° F

Heating operating range  
-13° ~ 86° F



AHRI Certification # 205300189



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Ductless Mini-split System
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit











## Oasis E-Star Single Zone Units

### Heat Pump

20.7 SEER

Nominal Capacity: 2 Ton

Outdoor Unit Model# OHP14-24-12-22

Indoor Unit Model# DWHP14-24-12-25

Cooling operating range

-22° ~ 122° F

Heating operating range

-22° ~ 86° F



AHRI Certification # 205300190



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Ductless Mini-split System
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit

- Single phase power supply (208/230V)
- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- Quiet outdoor operation, as low as 61 dB(A)

Other Features

• **Stepless Frequency Adjustment**

Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

INDOOR UNITS - WALL-MOUNTED

- Pre-Heat Function
- LED Readout
- Auto Restart
- Cooling Override
- Flare Connections
- Three Speed Fan

Outdoor Color: Gray

Indoor Color: White

Cooling System Tons		2
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	24,000
SEER –AHRI Rating		20.7
EER		13.7
Heating Rated Capacity (@47° F Outdoor)	Btu/h	25,000
Heating Rated Capacity (@17° F Outdoor)	Btu/h	19,040
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	18,100
HSPF-4		11.5
COP (@47° F Outdoor)	W/W	3.28
COP (@17° F Outdoor)	W/W	2.20
COP (@5° F Outdoor)	W/W	2.07

Note: All Electrical installations in the field shall be performed according to electrical codes.



**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DWHP14-24-12-25
Outdoor unit model	OHP14-24-12-22

**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208/230V,1Ph,60Hz
<b>Cooling</b>		
Capacity	Btu/h	24000
Input	W	1750
Rated current	A	7.8

**Heating at 47**

Capacity	Btu/h	25000
Input	W	1955
Rated current	A	8.7
COP	W/W	3.747867463

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	18
MAX. FUSE	A	25
Connection wiring		14*4 AWG

**Compressor**

Model		ATF235D22UMT
Type		ROTARY
Brand		GMCC
Capacity	Btu/h	24345
Input	W	1970
Rated current(RLA)	A	12
Locked rotor Amp(LRA)	A	---
Thermal protector		---
Thermal protector position		---
Refrigerant oil/oil charge	ml	POE(VG74)/670

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG
Refrigerant type	oz	R410A/82.9
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.32
Liquid side/ Gas side	mm(in)	Φ9.52/Φ15.9(3/8"/5/8")
Max. refrigerant pipe length	ft	164
Max. difference in level	ft.	82

**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFP-60-8-1
Type		DC
Input		72.0
RLA	A	0.23
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	1200/1100/900
<b>Air flow &amp; Noise level</b>		
Indoor air flow (Hi/Lo)	CFM	695/624/485
Indoor noise level (Hi/Lo)	dB(A)	51.7/44.5/ 35.1

**Indoor unit**

Dimension(W*D*H)	inch	46.69x10.16x13.39
Packing (W*D*H)	inch	49.80x16.53x13.39
Net/Gross weight	lbs.	39.9/53.6

**OUTDOOR UNIT DATA**

<b>Outdoor fan motor</b>		
Model		ZKFN-120-8-2
Type		DC
Input		150
RLA	A	0.6
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	810
<b>Air flow &amp; Noise level</b>		
Outdoor air flow	CFM	2237
Outdoor noise level	dB(A)	61

**Outdoor unit**

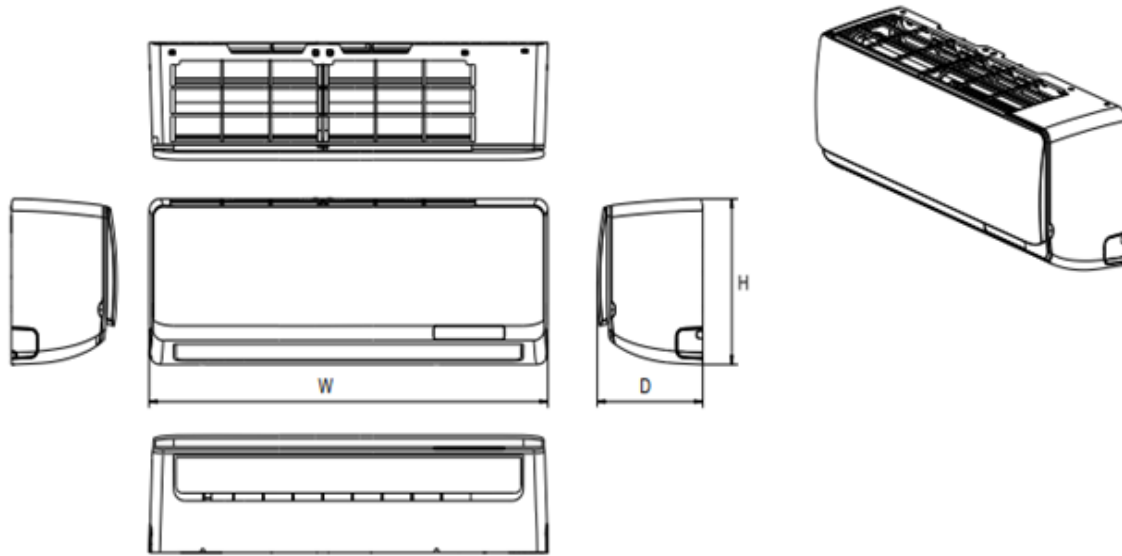
Dimension(W*D*H)	inch	37.24x16.14x31.89
Packing (W*D*H)	inch	42.91x19.69x34.45
Net/Gross weight	lbs.	136.69/148.59

**Operation temperature**

Indoor(cooling/ heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-13~122/ -13~86
Application area	sq.ft	344-505

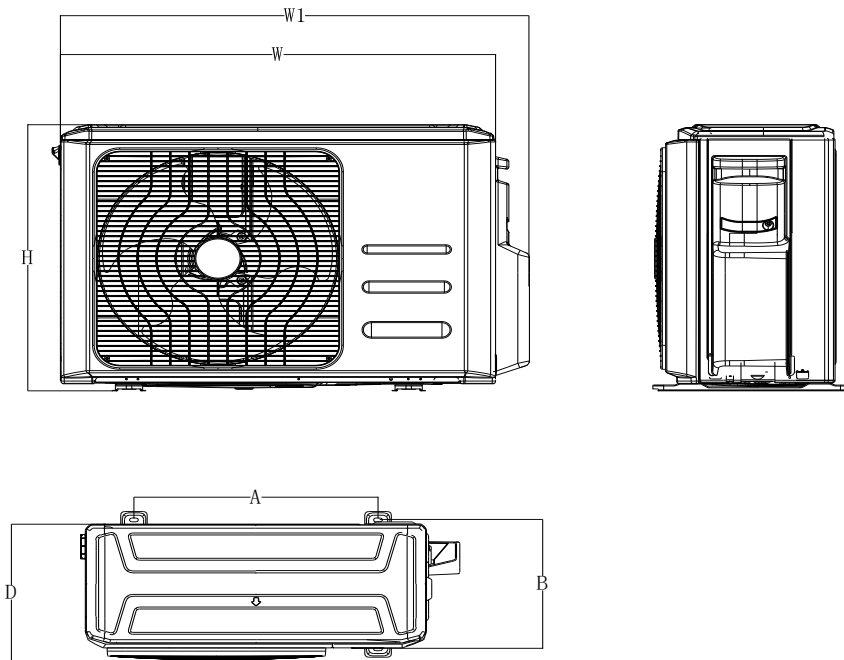


**INDOOR UNIT**



Model	W (inch)	D (inch)	H (inch)
DWHP14-24-12-25	46.69	10.16	13.39

**OUTDOOR UNIT**



Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
OHP14-24-12-22	37.2	16.1	31.9	40.6	26.5	15.9

## Oasis Hyper Heat Single Zone Units

### Heat Pump

22.5 SEER

Nominal Capacity: 1 Ton

Outdoor Unit Model# OHP14-12-12-25

Indoor Unit Model# DWHP14-12-12-25

Cooling operating range  
-13° ~ 122° F

Heating operating range  
-13° ~ 86° F



AHRI Certification # 205300192



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Ductless Mini-split System
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit

- Single phase power supply (208/230V)
- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- Quiet outdoor operation, as low as 57 dB(A)

Other Features

- **Extra Low Temperature heating**

The heat output for this system is 100% of rated capacity down to 5°F

Making this a primary heat source and eliminating the need for a backup heat source.

- **Stepless Frequency Adjustment**

Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

INDOOR UNITS - WALL-MOUNTED

- Pre-Heat Function
- LED Readout
- Auto Restart
- Cooling Override
- Flare Connections
- Three Speed Fan

Outdoor Color: Gray

Indoor Color: White

Cooling System Tons		1.0
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	12,000
SEER –AHRI Rating		22.5
EER		13
Heating Rated Capacity (@47° F Outdoor)	Btu/h	15,100
Heating Rated Capacity (@17° F Outdoor)	Btu/h	12,400
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	12,100
HSPF-4		12.0
COP (@47° F Outdoor)	W/W	3.29
COP (@17° F Outdoor)	W/W	2.12
COP (@5° F Outdoor)	W/W	1.95

Note: All Electrical installations in the field shall be performed according to electrical codes.



**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DWHP14-12-12-25
Outdoor unit model	OHP14-12-12-25

**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208-230V,1Ph,60Hz
<b>Cooling</b>		
Capacity	Btu/h	12000
Input	W	960
Rated current	A	4.2

**Heating at 47**

Capacity	Btu/h	12000
Input	W	975
Rated current	A	4.239130435
COP	W/W	3.55

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	9
MAX. FUSE	A	15
Connection wiring		14*4 AWG

**Compressor**

Model		ATM115D43UFZ2
Type		ROTARY
Brand		GMCC
Capacity	Btu/h	11430
Input	W	870
Rated current(RLA)	A	5.65
Locked rotor Amp(LRA)	A	---
Thermal protector		---
Thermal protector position		---
Refrigerant oil/oil charge	ml	ESTER OIL VG74 / 500

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG
Refrigerant type	oz	R410A/52.9
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.16
Liquid side/ Gas side	mm(in)	Φ6.35/Φ12.7(1/4"/1/2")
Max. refrigerant pipe length	ft	82
Max. difference in level	ft.	33

**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFP-20-8-6-7
Type		DC
Input		50.0
RLA	A	0.036
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	1170/900/700
<b>Air flow &amp; Noise level</b>		
Indoor air flow (Hi/Lo)	CFM	371/274/198
Indoor noise level (Hi/Lo)	dB(A)	45.1/35.8/28.6

**Indoor unit**

Dimension(W*D*H)	inch	32.87x7.80x11.02
Packing (W*D*H)	inch	35.83x10.63x13.98
Net/Gross weight	lbs.	19.8/26.7

**OUTDOOR UNIT DATA**

<b>Outdoor fan motor</b>		
Model		ZKFN-40-8-1L
Type		DC
Input		63
RLA	A	0.38
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	810
<b>Air flow &amp; Noise level</b>		
Outdoor air flow	CFM	1180
Outdoor noise level	dB(A)	57

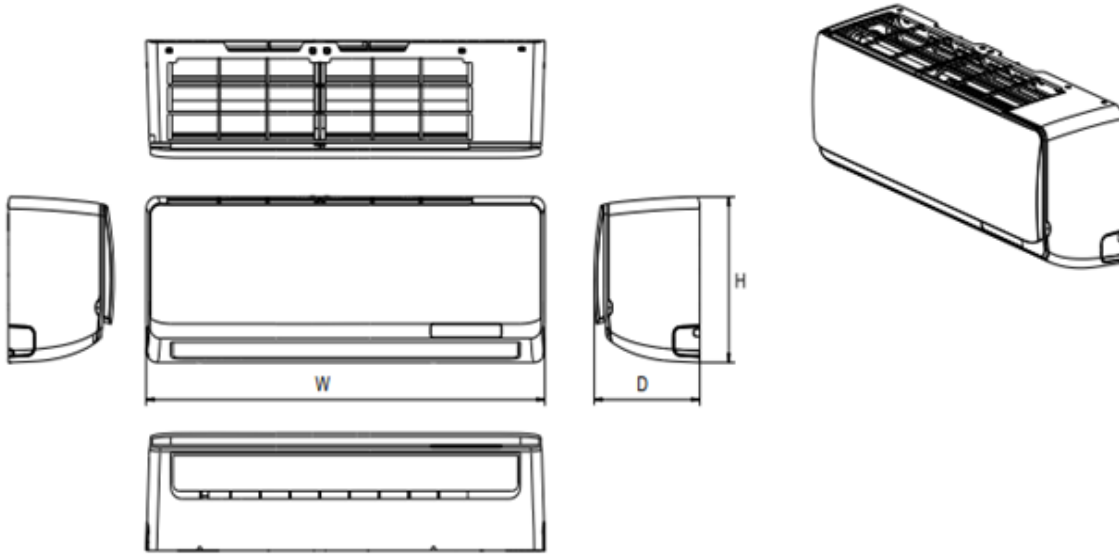
**Outdoor unit**

Dimension(W*D*H)	inch	31.5x13.11x21.81
Packing (W*D*H)	inch	36.22x15.35x24.21
Net/Gross weight	lbs.	88.18/93.7

**Operation temperature**

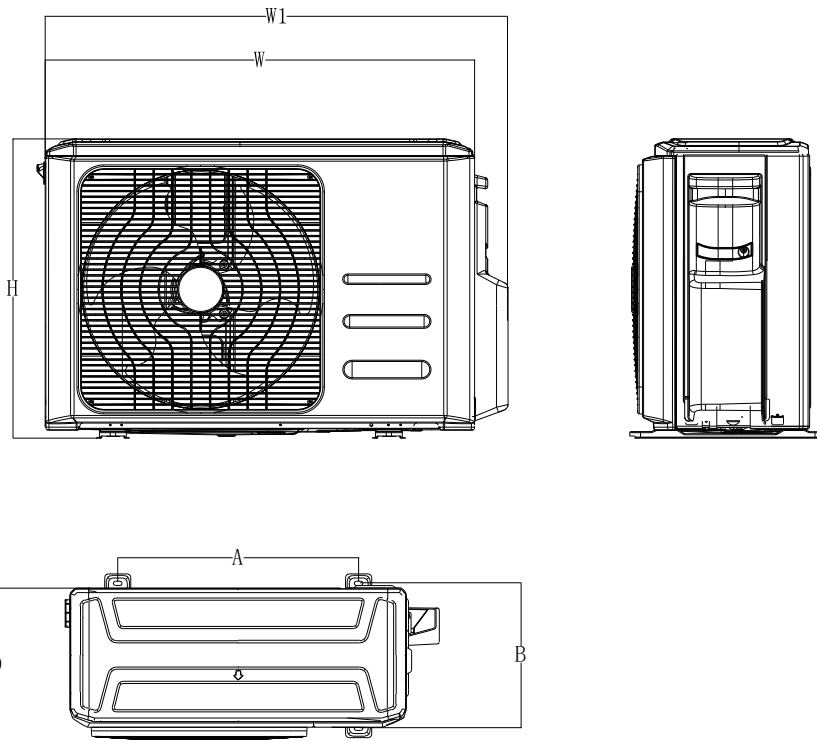
Indoor(cooling/ heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-22~122/ -22~86
Application area	sq.ft	172-247

**INDOOR UNIT**



Model	W (inch)	D (inch)	H (inch)
DWHP14-12-12-25	32.87	7.8	11.02

**OUTDOOR UNIT**



Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
OHP14-12-12-25	31.5	13.1	21.8	34.3	20.2	13.4

## Oasis Hyper Heat Single Zone Units

### Heat Pump

20 SEER

Nominal Capacity: 1.5 Ton

Outdoor Unit Model# OHP14-18-12-25

Indoor Unit Model# DWHP14-18-12-25

Cooling operating range

-13° ~ 122° F

Heating operating range

-13° ~ 86° F



AHRI Certification # 205300193



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Ductless Mini-split System
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit

- Single phase power supply (208/230V)
- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- 
- Quiet outdoor operation, as low as 57 dB(A)

Other Features

• **Extra Low Temperature heating**

The heat output for this system is 100% of rated capacity down to 5°  
Making this a primary heat source and eliminating the need for a backup heat source.

• **Stepless Frequency Adjustment**

Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

INDOOR UNITS - WALL-MOUNTED

- Pre-Heat Function
- LED Readout
- Auto Restart
- Cooling Override
- Flare Connections
- Three Speed Fan

Outdoor Color: Gray

Indoor Color: White



Cooling System Tons		1.5
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	18,000
SEER –AHRI Rating		20
EER		12.5
Heating Rated Capacity (@47° F Outdoor)	Btu/h	24,700
Heating Rated Capacity (@17° F Outdoor)	Btu/h	19,700
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	19,000
HSPF-4		10.3
COP (@47° F Outdoor)	W/W	3.13
COP (@17° F Outdoor)	W/W	2.12
COP (@5° F Outdoor)	W/W	1.95

Note: All Electrical installations in the field shall be performed according to electrical codes.



AIR CONDITIONERS

**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DWHP14-18-12-25
Outdoor unit model	OHP14-18-12-25

**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208-230V, 1Ph, 60Hz
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**Cooling**

Capacity	Btu/h	17000
Input	W	1360
Rated current	A	5.95

**Heating at 47**

Capacity	Btu/h	18000
Input	W	1685
Rated current	A	7.4
COP	W/W	3.13

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	18
MAX. FUSE	A	25
Connection wiring		14*4 AWG

**Compressor**

Model		ATF235D22UMT
Type		ROTARY
Brand		GMCC
Capacity	Btu/h	24345
Input	W	1970
Rated current(RLA)	A	12.9
Locked rotor Amp(LRA)	A	---
Thermal protector		---
Thermal protector position		---
Refrigerant oil/oil charge	ml	POE(VG74)/670

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG
Refrigerant type	oz	R410A/68.8
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.16
Liquid side/ Gas side	mm(in)	Φ6.35/Φ12.7(1/4"/1/2")
Max. refrigerant pipe length	ft	98
Max. difference in level	ft.	66

**INDOOR UNIT DATA**

**Indoor fan motor**

Model		ZKFP-58-8-1
Type		DC
Input		58.0
RLA	A	0.4
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	1100/900/700

**Air flow & Noise level**

Indoor air flow (Hi/Lo)	CFM	530/410/295
Indoor noise level (Hi/Lo)	dB(A)	46.2/36.3/30.9

**Indoor unit**

Dimension(W*D*H)	inch	38.98x8.58x12.40
Packing (W*D*H)	inch	41.93x11.81x15.75
Net/Gross weight	lbs.	26.9/34.8

**OUTDOOR UNIT DATA**

**Outdoor fan motor**

Model		ZKFN-50-8-2
Type		DC
Input		115
RLA	A	0.60
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	850

**Air flow & Noise level**

Outdoor air flow	CFM	1355
Outdoor noise level	dB(A)	59

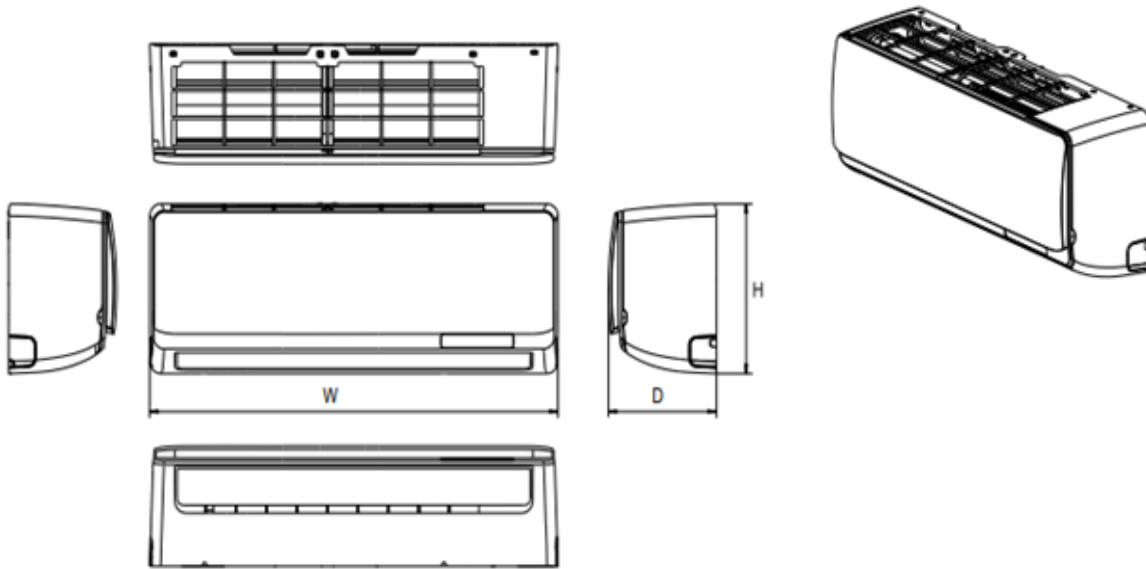
**Outdoor unit**

Dimension(W*D*H)	inch	33.27x14.29x27.64
Packing (W*D*H)	inch	37.99x15.55x30.11
Net/Gross weight	lbs.	107.4/115.1

**Operation temperature**

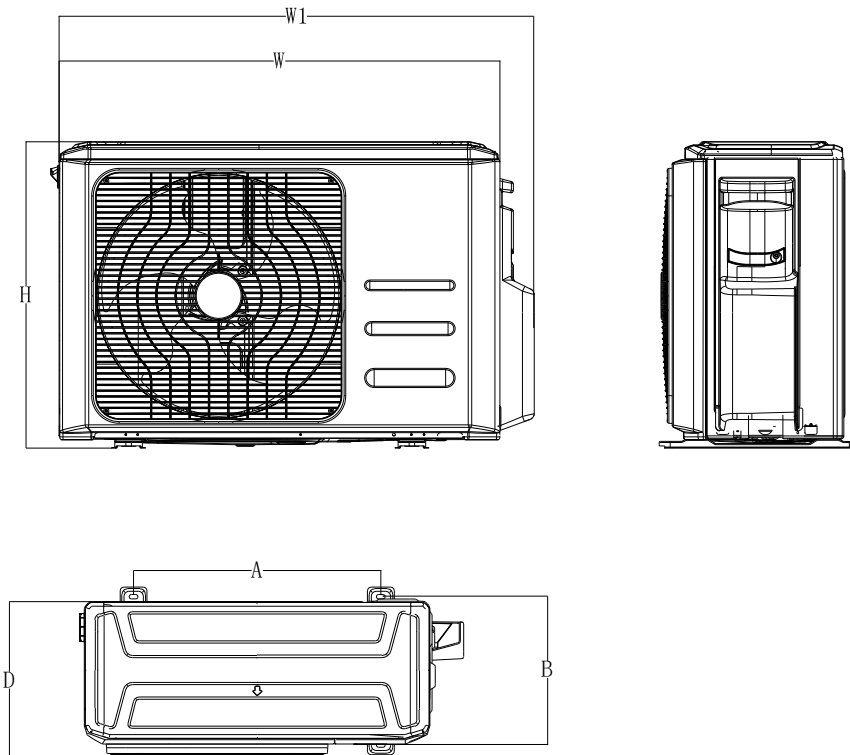
Indoor(cooling/ heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-22~-122/ -22~86
Application area	sq.ft	258-376

**INDOOR UNIT**



Model	W (inch)	D (inch)	H (inch)
DWHP14-18-12-25	38.98	8.58	12.4

**OUTDOOR UNIT**



Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
OHP14-18-12-25	33.3	14.3	27.6	36.0	21.3	13.8

## Oasis Hyper Heat Single Zone Units

### Heat Pump

20.5 SEER

Nominal Capacity: 2 Ton

Outdoor Unit Model# OHP14-24-12-25

Indoor Unit Model# DWHP14-24-12-25

Cooling operating range

-22° ~ 122° F

Heating operating range

-22° ~ 86° F



AHRI Certification # 205300194



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Ductless Mini-split System
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit

- Single phase power supply (208/230V)
- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- Quiet outdoor operation, as low as 61 dB(A)

Other Features

- **Extra Low Temperature heating**

The heat output for this system is 100% of rated capacity down to 5°

Making this a primary heat source and eliminating the need for a backup heat source.

- **Stepless Frequency Adjustment**

Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

INDOOR UNITS - WALL-MOUNTED

- Pre-Heat Function
- LED Readout
- Auto Restart
- Cooling Override
- Flare Connections
- Three Speed Fan

Outdoor Color: Gray

Indoor Color: White

Cooling System Tons		2
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	24,000
SEER –AHRI Rating		20.5
EER		13
Heating Rated Capacity (@47° F Outdoor)	Btu/h	30,200
Heating Rated Capacity (@17° F Outdoor)	Btu/h	26,300
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	26,030
HSPF-4		11.5
COP (@47° F Outdoor)	W/W	2.81
COP (@17° F Outdoor)	W/W	2.12
COP (@5° F Outdoor)	W/W	2.01

Note: All Electrical installations in the field shall be performed according to electrical codes.



**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DWHP14-24-12-25
Outdoor unit model	OHP14-23-12-25

**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208/230V,1Ph,60Hz	
<b>Cooling</b>			
Capacity	Btu/h	24000	
Input	W	1920	
Rated current	A	8.4	

**Heating at 47**

Capacity	Btu/h	24000	
Input	W	2500	
Rated current	A	10.9	
COP	W/W	2.81	

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	20	
MAX. FUSE	A	30	
Connection wiring		14*4 AWG	

**Compressor**

Model		ATF235D22UMT	
Type		ROTARY	
Brand		GMCC	
Capacity	Btu/h	24345	
Input	W	1970	
Rated current(RLA)	A	14	
Locked rotor Amp(LRA)	A	---	
Thermal protector		---	
Thermal protector position		---	
Refrigerant oil/oil charge	ml	POE(VG74)/670	

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG	
Refrigerant type	oz	R410A/91.7	
Refrigerant precharge	ft	25	
Additional charge per ft.	oz	0.32	
Liquid side/ Gas side	mm(in)	Φ9.52/Φ15.9(3/8"/5/8")	
Max. refrigerant pipe length	ft	164	
Max. difference in level	ft.	82	

**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFP-60-8-1
Type		DC
Input		72.0
RLA	A	0.23
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	1200/1100/900

**Air flow & Noise level**

Indoor air flow (Hi/Lo)	CFM	695/624/485
Indoor noise level (Hi/Lo)	dB(A)	44/41/38

**Indoor unit**

Dimension(W*D*H)	inch	46.69x10.16x13.39
Packing (W*D*H)	inch	49.80x16.53x13.39
Net/Gross weight	lbs.	39.9/53.6

**OUTDOOR UNIT DATA**

<b>Outdoor fan motor</b>		
Model		ZKFN-120-8-2
Type		DC
Input		150
RLA	A	0.5
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	810

**Air flow & Noise level**

Outdoor air flow	CFM	2354
Outdoor noise level	dB(A)	61

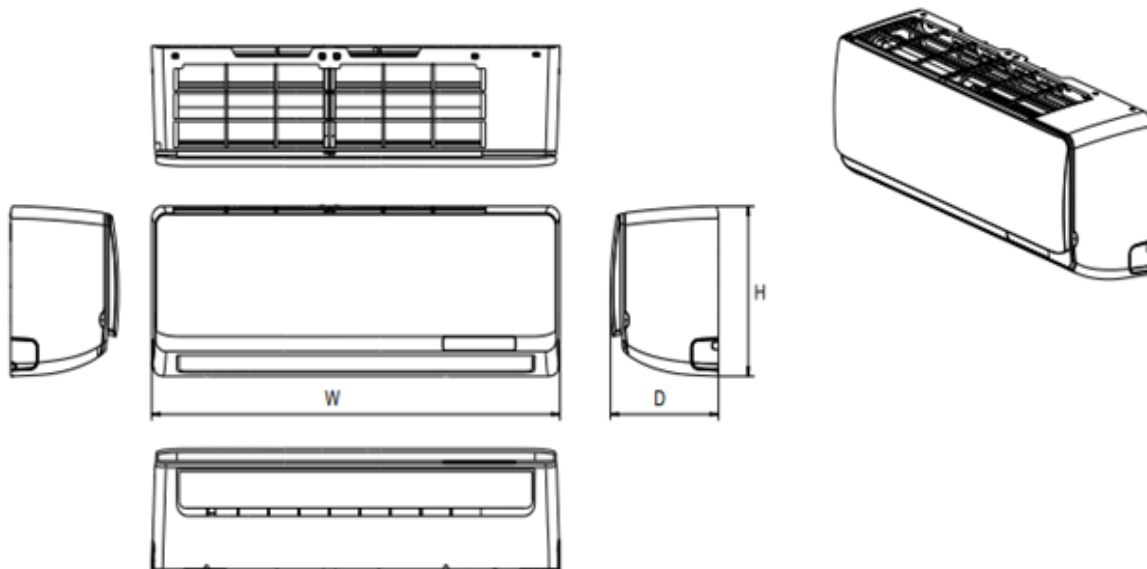
**Outdoor unit**

Dimension(W*D*H)	inch	37.24x16.14x31.89
Packing (W*D*H)	inch	42.91x19.69x34.45
Net/Gross weight	lbs.	135.58/148.81

**Operation temperature**

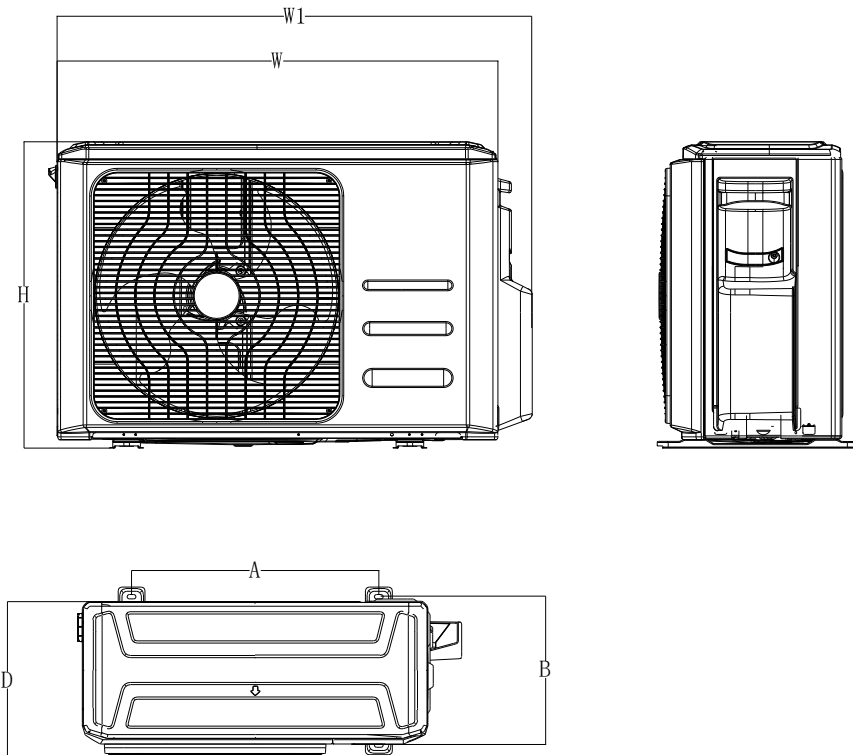
Indoor(cooling/ heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-22~122/ -22~86
Application area	sq.ft	344-505

**INDOOR UNIT**



Model	W (inch)	D (inch)	H (inch)
DWHP14-24-12-25	46.69	10.16	13.39

**OUTDOOR UNIT**



Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
OHP14-23-12-25	37.2	16.1	31.9	40.6	26.5	15.9



## Ducted E-Star Single Zone Units

### Heat Pump

21.5 SEER

Nominal Capacity: 1 Ton

Outdoor Unit Model# OHP14-12-12-22

Indoor Unit Model# DHP14-12-12-U

Cooling operating range  
-13° ~ 122° F

Heating operating range  
-13° ~ 86° F



AHRI Certification # 205300196



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit
- Single phase power supply (208/230V)

- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- Quiet outdoor operation, as low as 55 dB(A)

Other Features.

- **Stepless Frequency Adjustment**

Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

**INDOOR UNITS - MEDIUM STATIC DUCTED**

- Pre-Heat Function
- LED Readout Panel
- Auto Restart
- Cooling Override
- Duct Connections
- Flare Connections
- Three Speed Fan with Four Static Pressure Settings

Outdoor Color: Gray

Indoor Color: Galvanized Recessed

Cooling System Tons		1.0
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	12,000
SEER –AHRI Rating		21.5
EER		12.5
Heating Rated Capacity (@47° F Outdoor)	Btu/h	12,000
Heating Rated Capacity (@17° F Outdoor)	Btu/h	9,350
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	8,320
HSPF-4		11.5
COP (@47° F Outdoor)	W/W	3.73
COP (@17° F Outdoor)	W/W	2.37
COP (@5° F Outdoor)	W/W	2.08

Note: All Electrical installations in the field shall be performed according to electrical codes.



**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DHP14-12-12-U
Outdoor unit model	OHP14-12-12-22



**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208-230V,1Ph,60Hz
<b>Cooling</b>		
Capacity	Btu/h	12000
Input	W	960
Rated current	A	4.4

**Heating at 47**

Capacity	Btu/h	12000
Input	W	1072
Rated current	A	5.05
COP	W/W	3.29

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	12
MAX. FUSE	A	15
Connection wiring		14*4 AWG

**Compressor**

Model		ASM98D32UFZ
Type		ROTARY
Brand		GMCC
Capacity	Btu/h	11157
Input	W	800
Rated current(RLA)	A	6.8
Locked rotor Amp(LRA)	A	---
Thermal protector		---
Thermal protector position		---
Refrigerant oil/oil charge	ml	ESTER OIL VG74/370

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG
Refrigerant type	oz	R410A/40.6
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.16
Liquid side/ Gas side	mm(in)	Φ6.35/Φ12.7(1/4"/1/2")
Max. refrigerant pipe length	ft	82
Max. difference in level	ft.	33

**ESP**

ESP range	In. wg.	0-0.16
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**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFN-55-8-22
Type		DC
Input		130.0
RLA	A	1.11
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	1170/1030/850
<b>Air flow &amp; Noise level</b>		
Indoor air flow (Hi/Lo)	CFM	353/283/177
Indoor noise level (Hi/Lo)	dB(A)	38/26/33.5

**Indoor unit**

Dimension(W*D*H)	inch	27.56x17.72x7.87
Packing (W*D*H)	inch	33.86x21.26x10.83
Net/Gross weight	lbs.	37.5/48.3

**OUTDOOR UNIT DATA**

<b>Outdoor fan motor</b>		
Model		ZKFN-40-8-1L
Type		DC
Input		63
RLA	A	0.4
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	800
<b>Air flow &amp; Noise level</b>		
Outdoor air flow	CFM	1177
Outdoor noise level	dB(A)	55

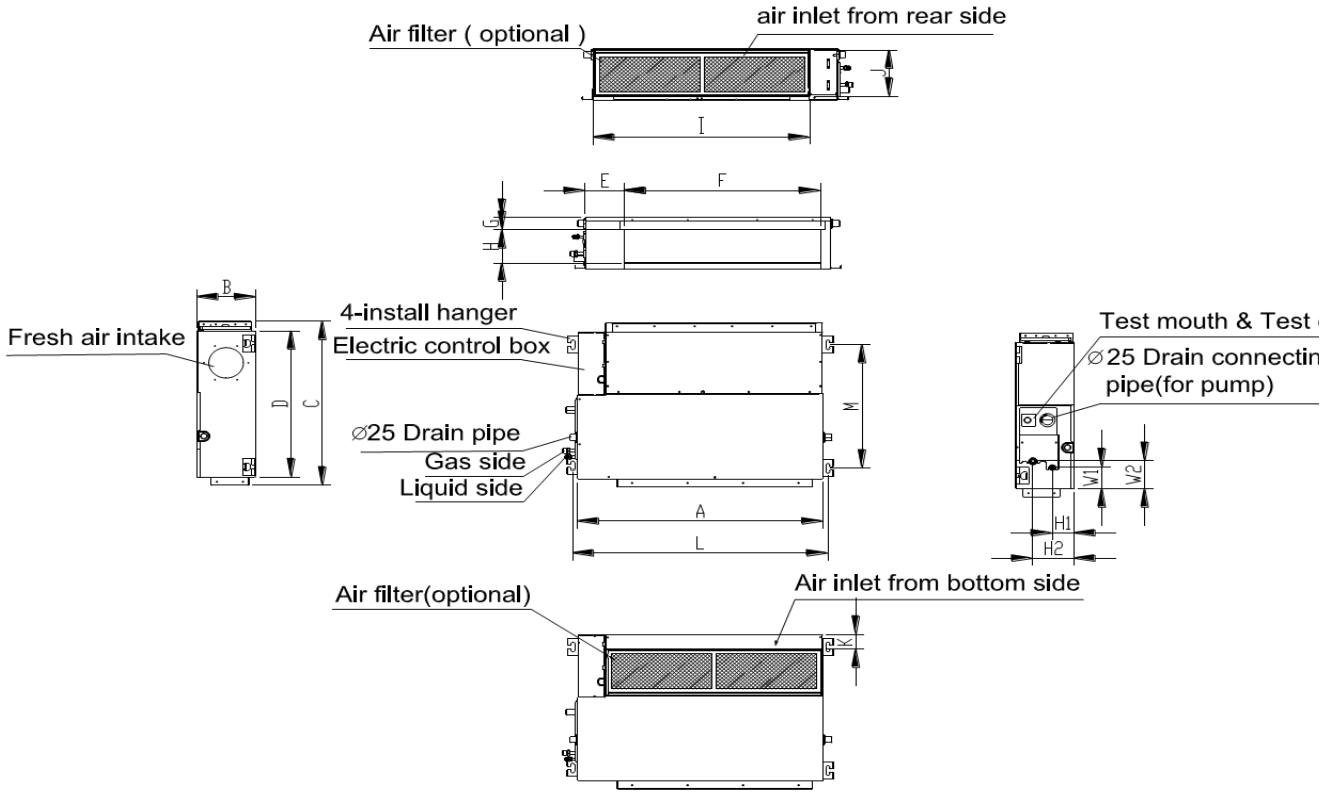
**Outdoor unit**

Dimension(W*D*H)	inch	31.5x13.11x21.81
Packing (W*D*H)	inch	36.22x15.35x24.21
Net/Gross weight	lbs.	76.72/82.67

**Operation temperature**

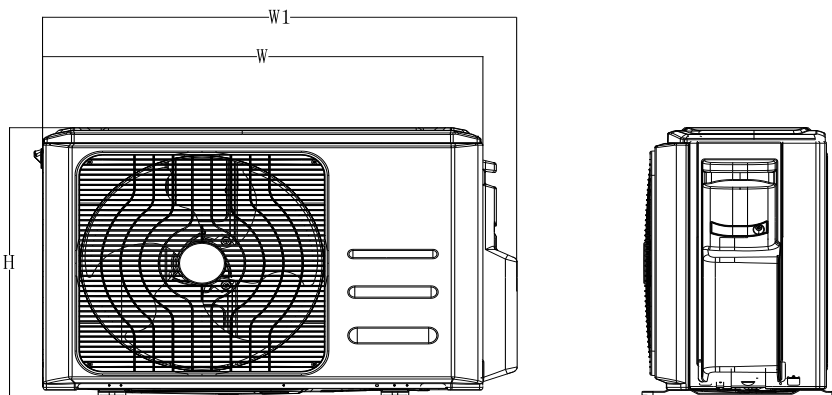
Indoor(cooling/ heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-13~122/ -13~86
Application area	sq.ft	172-252

Single Zone Minisplit Technical Data

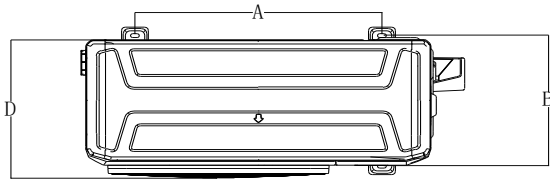


Capacity (Btu)	Outline dimension(mm)				Air outlet opening size				Air return opening size			Size of mounted plug		Size of gas and liquid valve			
	A	B	C	D	E	F	G	H	I	J	K	L	M	H1	H2	W1	W2
12000	700	200	506	450	137	537	30	152	599	186	50	741	360	84	140	84	84

**OUTDOOR UNIT**



Single Zone Minisplit Technical Data

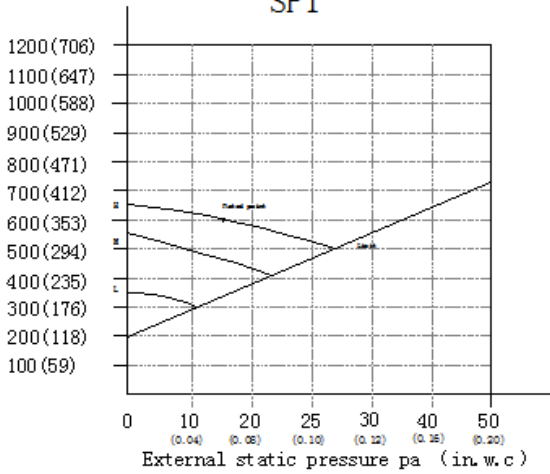


Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
MOB30-12HFN1-MTOW	31.50	13.11	21.81	34.3	20.2	13.4

**MTIU-12HWFN1-M**

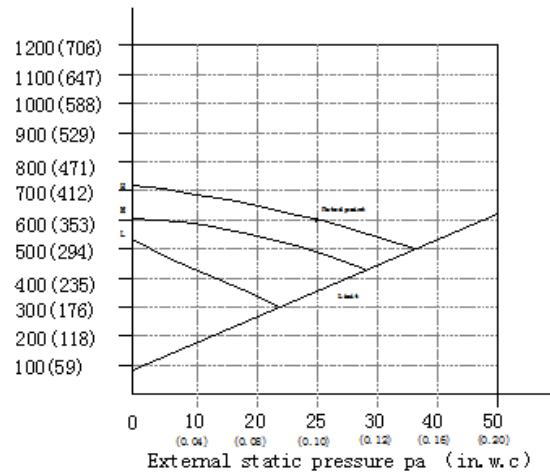
Air volume m<sup>3</sup>/h(CFM)

SP1

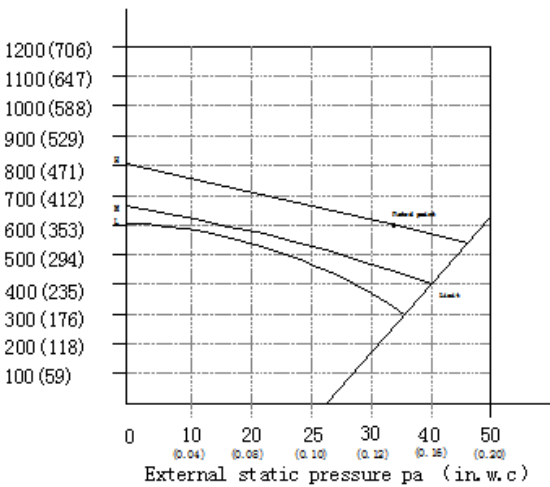


Air volume m<sup>3</sup>/h(CFM)

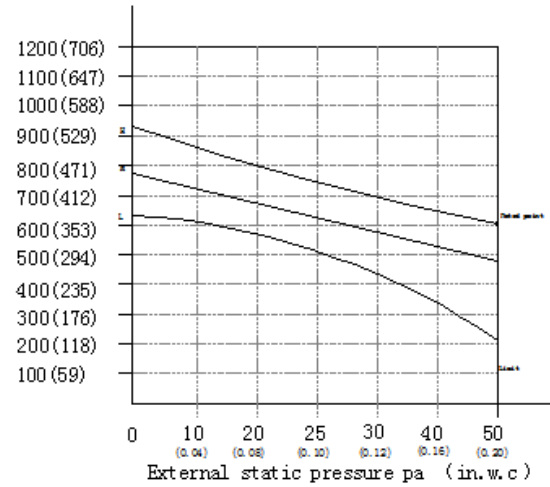
SP2



Air volume m<sup>3</sup>/h(CFM)



Air volume m<sup>3</sup>/h(CFM)



## Ducted E-Star Single Zone Units

### Heat Pump

19 SEER

Nominal Capacity: 1.5 Ton

Outdoor Unit Model# OHP14-18-12-22

Indoor Unit Model# DHP14-18-12-U

Cooling operating range  
-13° ~ 122° F

Heating operating range  
-13° ~ 86° F



AHRI Certification # 205300197



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit
- Single phase power supply (208/230V)

- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- Quiet outdoor operation, as low as 59 dB(A)

Other Features

- **Stepless Frequency Adjustment**

Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

INDOOR UNITS - MEDIUM STATIC DUCTED

- Pre-Heat Function
- LED Readout Panel
- Auto Restart
- Cooling Override
- Duct Connections
- Flare Connections
- Three Speed Fan with Four Static Pressure Settings

Outdoor Color: Gray

Indoor Color: Galvanized Recessed



Cooling System Tons		1.5
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	18,000
SEER –AHRI Rating		19
EER		12.5
Heating Rated Capacity (@47° F Outdoor)	Btu/h	18,000
Heating Rated Capacity (@17° F Outdoor)	Btu/h	15,450
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	12,450
HSPF-4		10.5
COP (@47° F Outdoor)	W/W	3.59
COP (@17° F Outdoor)	W/W	2.52
COP (@5° F Outdoor)	W/W	2.15

Note: All Electrical installations in the field shall be performed according to electrical codes.



**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DHP14-18-12-U
Outdoor unit model	OHP14-18-12-22



**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208-230V,1Ph,60Hz	
<b>Cooling</b>			
Capacity	Btu/h	18000	
Input	W	1440	
Rated current	A	6.6	

**Heating at 47**

Capacity	Btu/h	18000	
Input	W	1680	
Rated current	A	7.7	
COP	W/W	3.14	

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	15	
MAX. FUSE	A	20	
Connection wiring		14*4 AWG	

**Compressor**

Model		ASM135D23UFZ	
Type		ROTARY	
Brand		GMCC	
Capacity	Btu/h	13836	
Input	W	1035	
Rated current(RLA)	A	10.5	
Locked rotor Amp(LRA)	A	---	
Thermal protector		---	
Thermal protector position		---	
Refrigerant oil/oil charge	ml	ESTER OIL VG74/450	

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG	
Refrigerant type	oz	R410A/68.8	
Refrigerant precharge	ft	25	
Additional charge per ft.	oz	0.16	
Liquid side/ Gas side	mm(in)	Φ6.35/Φ12.7(1/4"/1/2")	
Max. refrigerant pipe length	ft	98	
Max. difference in level	ft.	0	

**ESP**

ESP range	In. wg.	0-0.40	
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**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFN-160-8-1-2
Type		DC
Input		90.0
RLA	A	1.2
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	850/700/450
<b>Air flow &amp; Noise level</b>		
Indoor air flow (Hi/Lo)	CFM	530/450/371
Indoor noise level (Hi/Lo)	dB(A)	39/37/35

**Indoor unit**

Dimension(W*D*H)	inch	34.65x28.53x8.27
Packing (W*D*H)	inch	42.13x28.53x10.63
Net/Gross weight	lbs.	54/66

**OUTDOOR UNIT DATA**

<b>Outdoor fan motor</b>		
Model		ZKFN-50-8-2
Type		DC
Input		115
RLA	A	0.60
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	850
<b>Air flow &amp; Noise level</b>		
Outdoor air flow	CFM	1470
Outdoor noise level	dB(A)	60

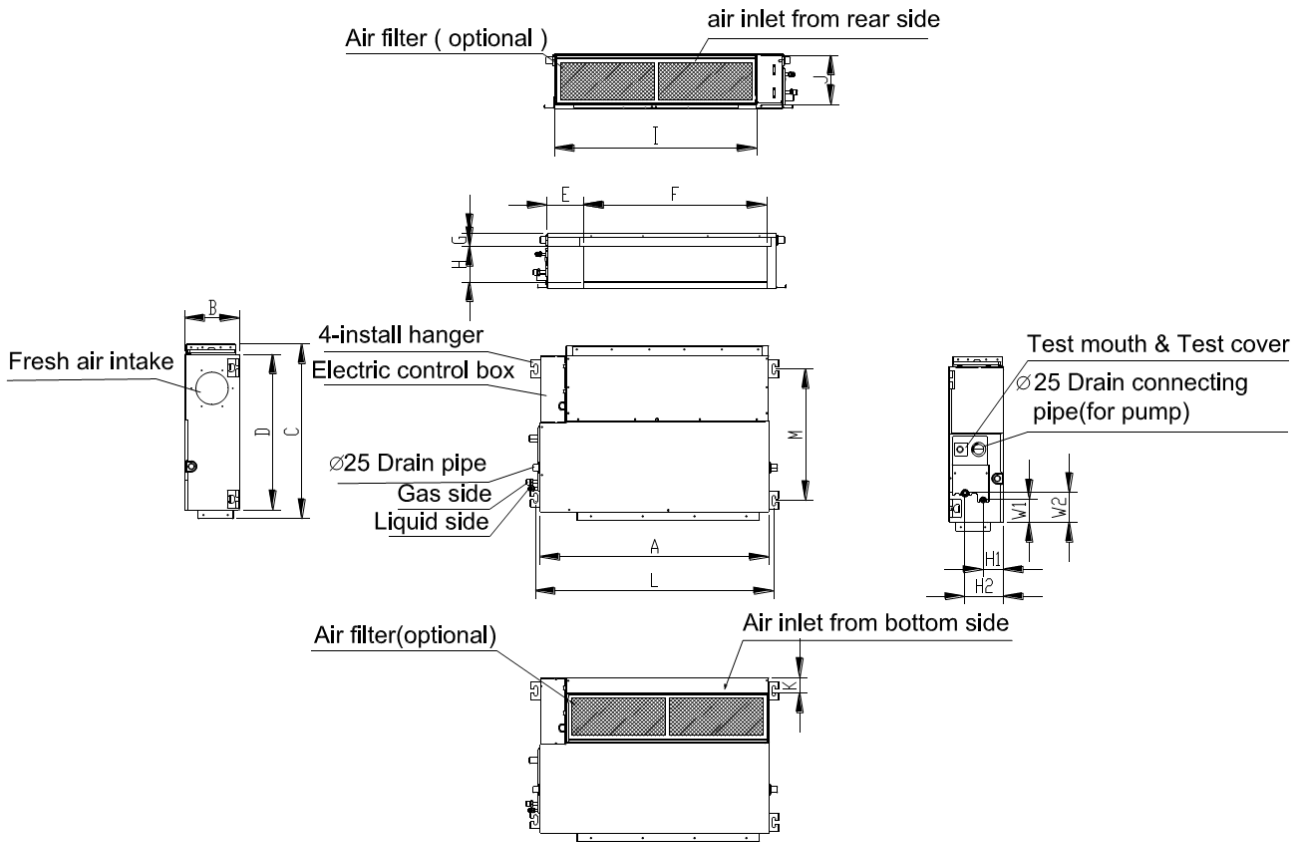
**Outdoor unit**

Dimension(W*D*H)	inch	33.27x14.29x27.64
Packing (W*D*H)	inch	37.99x15.55x29.72
Net/Gross weight	lbs.	106.9/112.5

**Operation temperature**

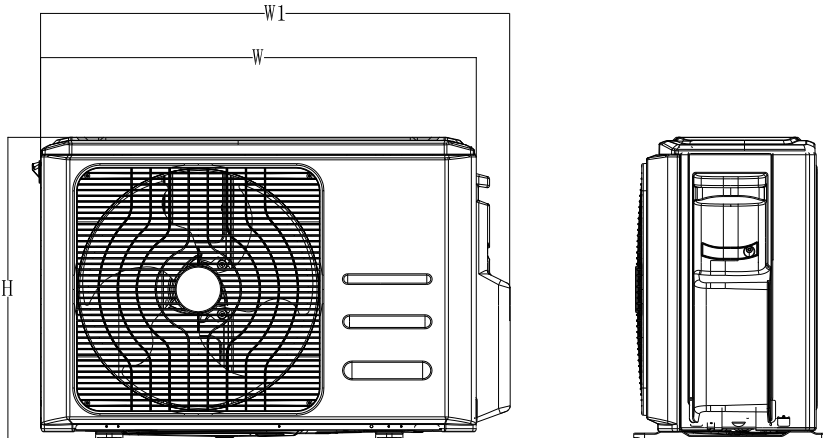
Indoor(cooling/ heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-13~122/ -13~86
Application area	sq.ft	258-376

**INDOOR UNIT**

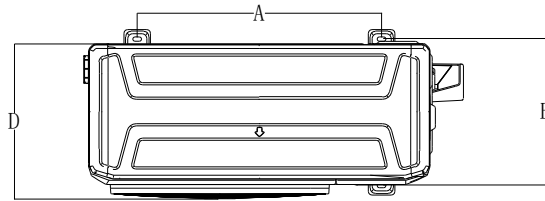


Capacity (Btu)	Outline dimension(mm)				Air outlet opening size				Air return opening size			Size of mounted plug		Size of gas and liquid valve			
	A	B	C	D	E	F	G	H	I	J	K	L	M	H1	H2	W1	W2
18000	880	210	674	600	140	706	50	136	782	190	40	920	508	78	148	88	112

**OUTDOOR UNIT**

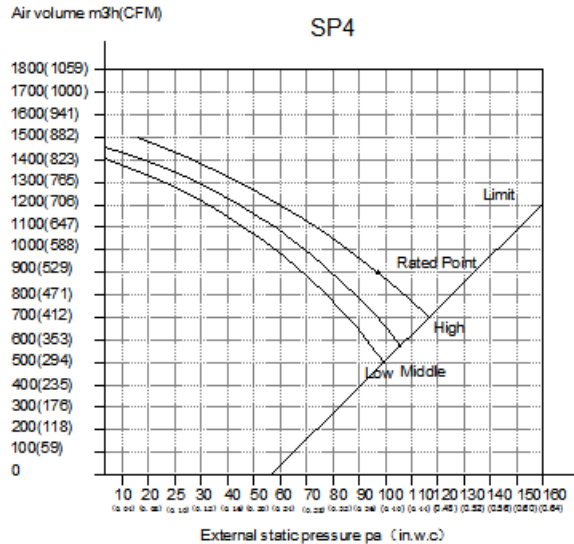
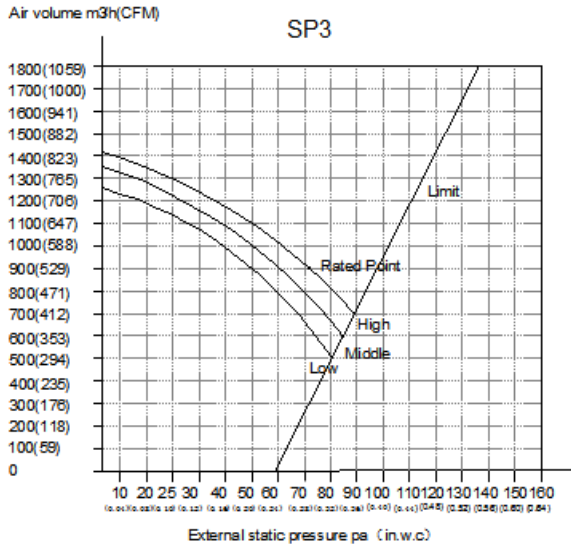
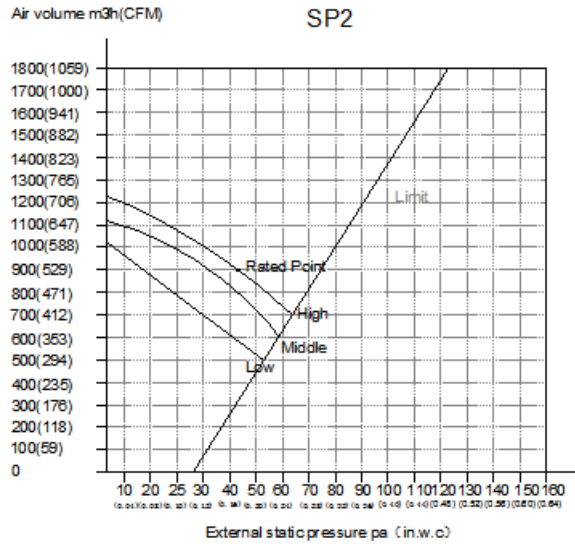
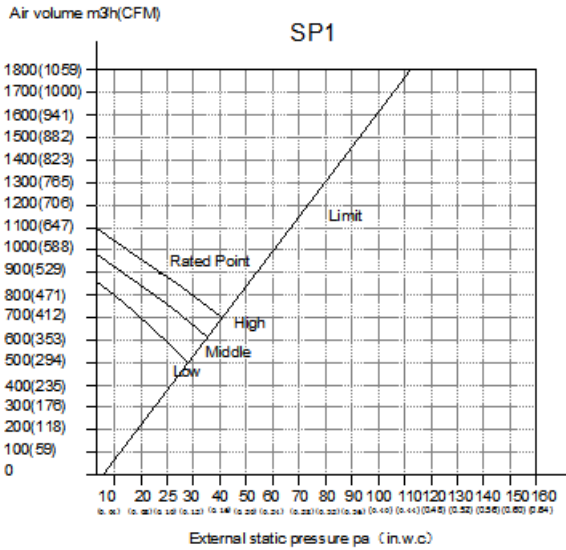


Single Zone Minisplit Technical Data



Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
OHP14-18-12-22	33.3	14.3	27.6	36.0	21.3	13.8

MTIU-18HWFN1-M



## Ducted E-Star Single Zone Units

### Heat Pump

21.5 SEER

Nominal Capacity: 2 Ton

Outdoor Unit Model# OHP14-24-12-22

Indoor Unit Model# DHP14-24-12-U

Cooling operating range  
-13° ~ 122° F

Heating operating range  
-13° ~ 86° F



AHRI Certification # 205300198



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit
- Single phase power supply (208/230V)

- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- Quiet outdoor operation, as low as 59 dB(A)

Other Features

- **Stepless Frequency Adjustment**

Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

INDOOR UNITS - MEDIUM STATIC DUCTED

- Pre-Heat Function
- LED Readout Panel
- Auto Restart
- Cooling Override
- Duct Connections
- Flare Connections
- Three Speed Fan with Four Static Pressure Settings

Outdoor Color: Gray

Indoor Color: Galvanized Recessed

Cooling System Tons		2
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	24,000
SEER –AHRI Rating		21.5
EER		12.5
Heating Rated Capacity (@47° F Outdoor)	Btu/h	24,400
Heating Rated Capacity (@17° F Outdoor)	Btu/h	19,450
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	16,890
HSPF-4		12.5
COP (@47° F Outdoor)	W/W	3.62
COP (@17° F Outdoor)	W/W	2.36
COP (@5° F Outdoor)	W/W	1.99

Note: All Electrical installations in the field shall be performed according to electrical codes.



**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DHP14-24-12-U
Outdoor unit model	OHP14-24-12-22



**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208/230V,1Ph,60Hz
<b>Cooling</b>		
Capacity	Btu/h	24000
Input	W	1920
Rated current	A	8.8

**Heating at 47**

Capacity	Btu/h	24400
Input	W	2030
Rated current	A	9.3
COP	W/W	3.52

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	18
MAX. FUSE	A	25
Connection wiring		14*4 AWG

**Compressor**

Model		ATF235D22UMT
Type		ROTARY
Brand		GMCC
Capacity	Btu/h	24345
Input	W	1970
Rated current(RLA)	A	12
Locked rotor Amp(LRA)	A	---
Thermal protector		---
Thermal protector position		---
Refrigerant oil/oil charge	ml	POE(VG74)/670

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG
Refrigerant type	oz	R410A/82.9
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.32
Liquid side/ Gas side	mm(in)	Φ9.52/Φ15.9(3/8"/5/8")
Max. refrigerant pipe length	ft	164
Max. difference in level	ft.	82

**ESP**

ESP range	In. wg.	0-0.64
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**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFN-160-8-1-2
Type		DC
Input		90.0
RLA	A	1.5
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	880/820/690

**Air flow & Noise level**

Indoor air flow (Hi/Lo)	CFM	776/694/435
Indoor noise level (Hi/Lo)	dB(A)	44/41/38

**Indoor unit**

Dimension(W*D*H)	inch	43x30x10
Packing (W*D*H)	inch	51x32x12
Net/Gross weight	lbs.	87/103

**OUTDOOR UNIT DATA**

<b>Outdoor fan motor</b>		
Model		ZKFN-120-8-2
Type		DC
Input		150
RLA	A	0.6
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	810

**Air flow & Noise level**

Outdoor air flow	CFM	2237
Outdoor noise level	dB(A)	61

**Outdoor unit**

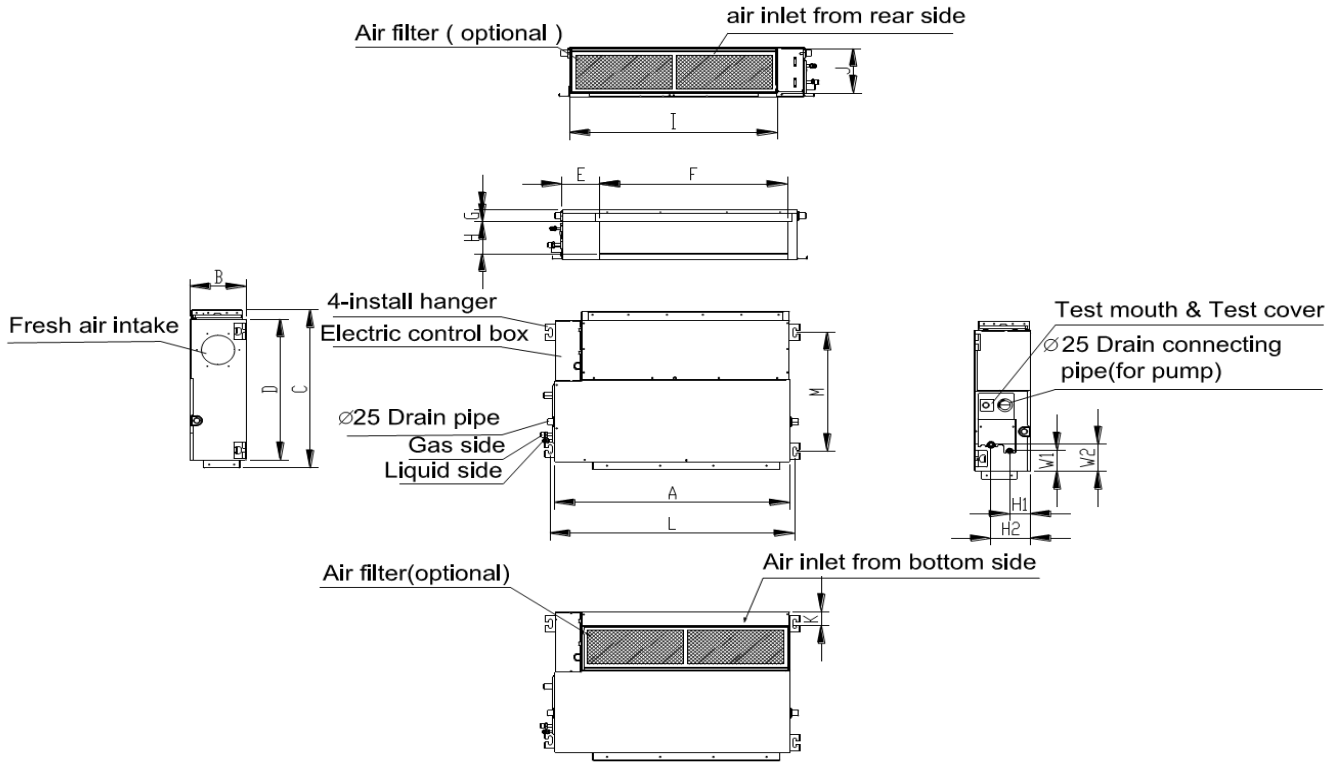
Dimension(W*D*H)	inch	37.24x16.14x31.89
Packing (W*D*H)	inch	42.91x19.69x34.45
Net/Gross weight	lbs.	136.69/148.59

**Operation temperature**

Indoor(cooling/heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-13~122/ -13~86
Application area	sq.ft	344-505

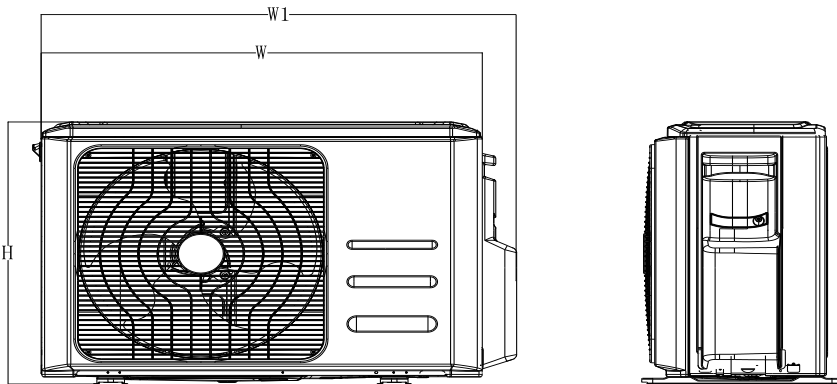


Single Zone Minisplit Technical Data

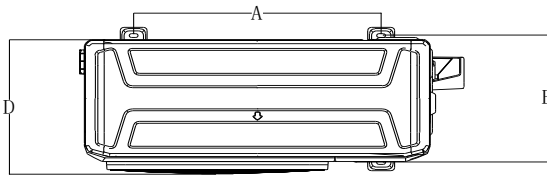


Capacity (Btu)	Outline dimension(mm)				Air outlet opening size				Air return opening size			Size of mounted plug		Size of gas and liquid valve			
	A	B	C	D	E	F	G	H	I	J	K	L	M	H1	H2	W1	W2
24000	1100	249	774	700	140	926	50	175	1001	228	5	1140	598	80	150	130	155

**OUTDOOR UNIT**

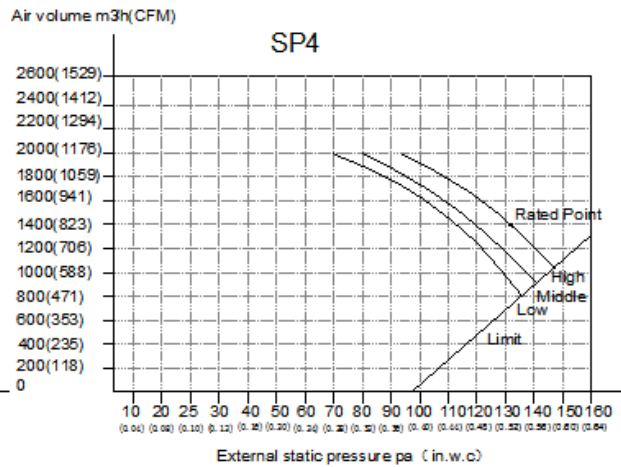
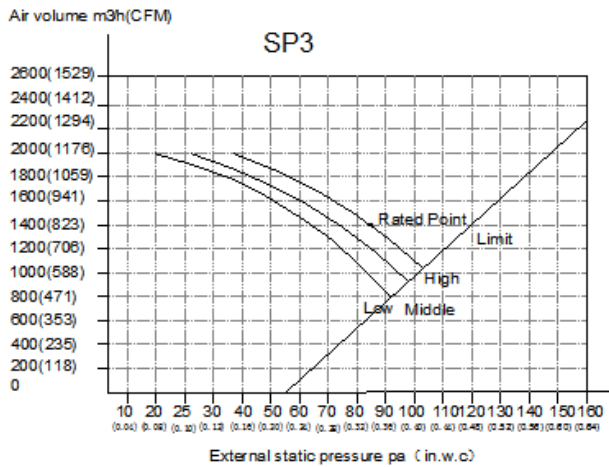
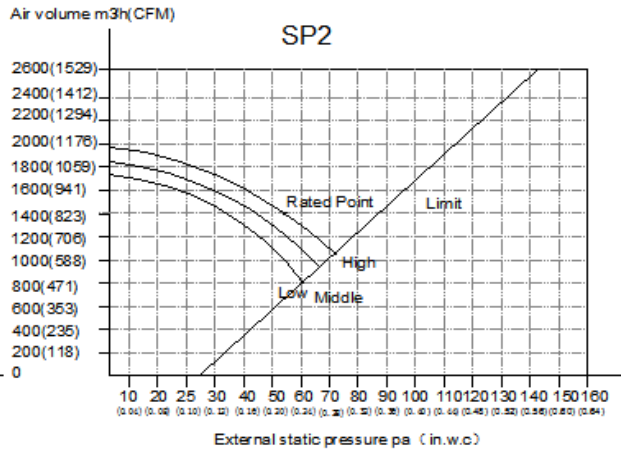
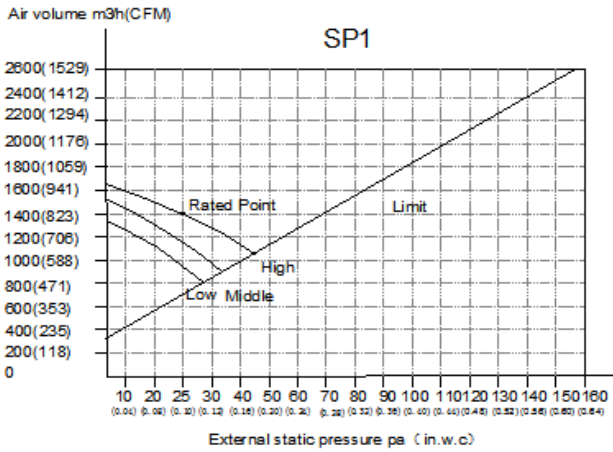


Single Zone Minisplit Technical Data



Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
MOD31-24HFN1-MTOW	37.2	16.1	31.9	40.6	26.5	15.9

MTIU-24HWFN1-M



## Ducted Hyper Heat Single Zone Units

### Heat Pump

20.5 SEER

Nominal Capacity: 1 Ton

Outdoor Unit Model# OHP14-12-12-25

Indoor Unit Model# DHP14-12-12-U

Cooling operating range

-22° ~ 122° F

Heating operating range

-22° ~ 86° F



AHRI Certification # 205300200



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit
- Single phase power supply (208/230V)

- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- Quiet outdoor operation, as low as 57 dB(A)

Other Features

- **Extra Low Temperature heating**  
The heat output for this system is 65% of rated capacity down to 5°
- **Stepless Frequency Adjustment**  
Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

INDOOR UNITS - MEDIUM STATIC DUCTED

- Pre-Heat Function
- LED Readout Panel
- Auto Restart
- Cooling Override
- Duct Connections
- Flare Connections
- Three Speed Fan with Four Static Pressure Settings

Outdoor Color: Gray

Indoor Color: Galvanized Recessed

Cooling System Tons		1.0
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	12,000
SEER –AHRI Rating		20.5
EER		12.5
Heating Rated Capacity (@47° F Outdoor)	Btu/h	15,200
Heating Rated Capacity (@17° F Outdoor)	Btu/h	13,600
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	12,300
HSPF-4		11.0
COP (@47° F Outdoor)	W/W	3.73
COP (@17° F Outdoor)	W/W	2.38
COP (@5° F Outdoor)	W/W	2.08

Note: All Electrical installations in the field shall be performed according to electrical codes.



**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DHP14-12-12-U
Outdoor unit model	OHP14-12-12-25



**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208-230V,1Ph,60Hz
<b>Cooling</b>		
Capacity	Btu/h	12000
Input	W	960
Rated current	A	4.4

**Heating at 47**

Capacity	Btu/h	12000
Input	W	1065
Rated current	A	4.88
COP	W/W	3.3

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	9
MAX. FUSE	A	15
Connection wiring		14*4 AWG

**Compressor**

Model		ATM115D43UFZ2
Type		ROTARY
Brand		GMCC
Capacity	Btu/h	11430
Input	W	870
Rated current(RLA)	A	5.65
Locked rotor Amp(LRA)	A	---
Thermal protector		---
Thermal protector position		---
Refrigerant oil/oil charge	ml	ESTER OIL VG74 / 500

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG
Refrigerant type	oz	R410A/52.9
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.16
Liquid side/ Gas side	mm(in)	Φ6.35/Φ12.7(1/4"/1/2")
Max. refrigerant pipe length	ft	82
Max. difference in level	ft.	33

**ESP**

ESP range	In. wg.	0-0.16
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**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFN-55-8-22
Type		DC
Input		130.0
RLA	A	1.11
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	1170/1030/850

**Air flow & Noise level**

Indoor air flow (Hi/Lo)	CFM	353/283/177
Indoor noise level (Hi/Lo)	dB(A)	38/26/33.5

**Indoor unit**

Dimension(W*D*H)	inch	27.56x17.72x7.87
Packing (W*D*H)	inch	33.86x21.26x10.83
Net/Gross weight	lbs.	37.5/48.3

**OUTDOOR UNIT DATA**

<b>Outdoor fan motor</b>		
Model		ZKFN-40-8-1L
Type		DC
Input		63
RLA	A	0.38
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	810

**Air flow & Noise level**

Outdoor air flow	CFM	1180
Outdoor noise level	dB(A)	57

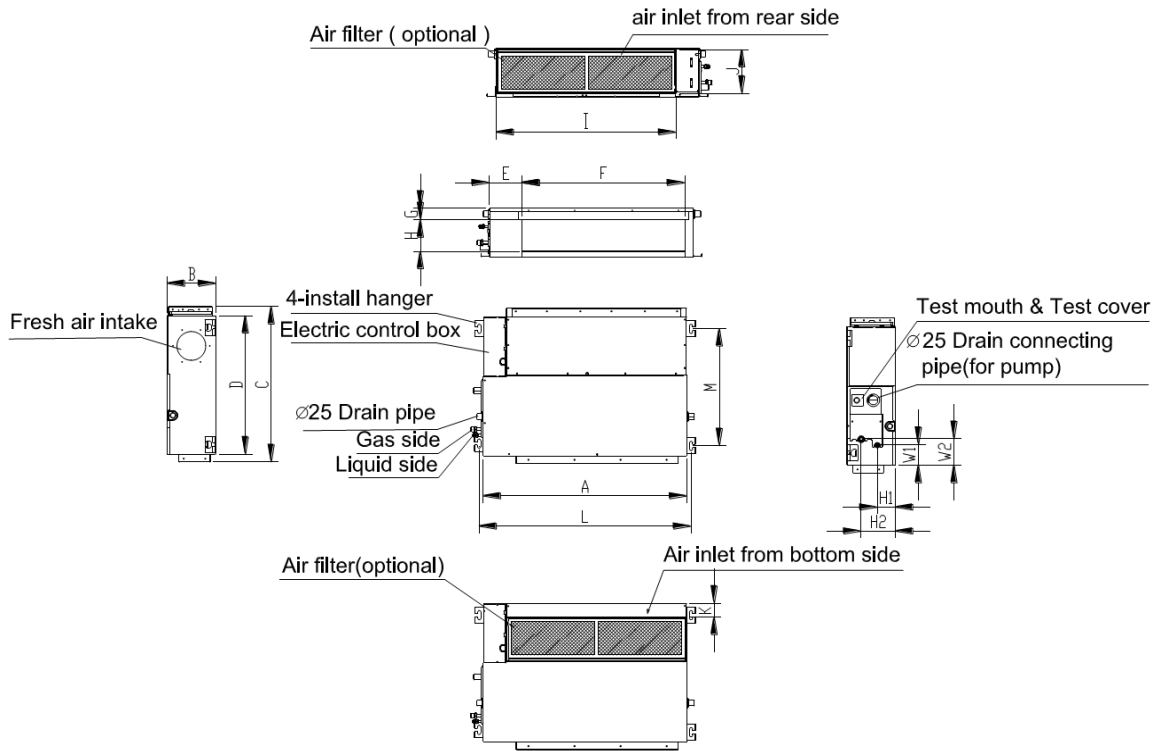
**Outdoor unit**

Dimension(W*D*H)	inch	31.5x13.11x21.81
Packing (W*D*H)	inch	36.22x15.35x24.21
Net/Gross weight	lbs.	88.18/93.7

**Operation temperature**

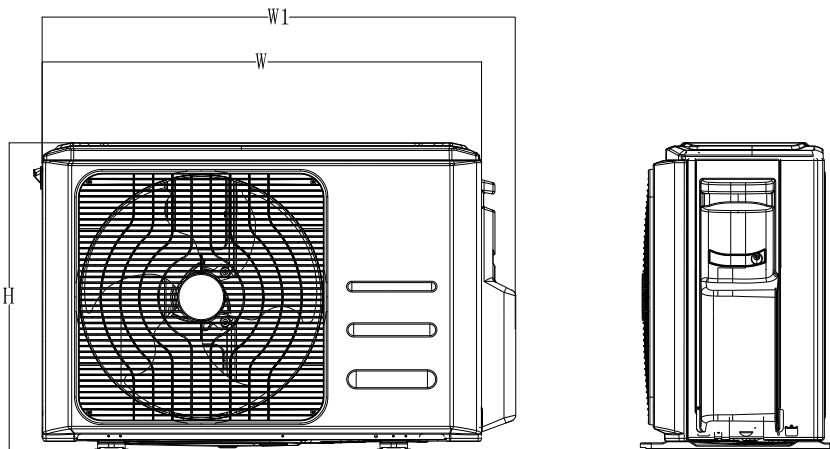
Indoor(cooling/heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-22~122/ -22~86
Application area	sq.ft	172-252

**INDOOR UNIT**

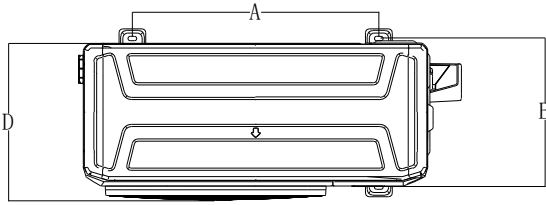


Capacity (Btu)	Outline dimension(mm)				Air outlet opening size				Air return opening size			Size of mounted plug		Size of gas and liquid valve			
	A	B	C	D	E	F	G	H	I	J	K	L	M	H1	H2	W1	W2
12000	700	200	506	450	137	537	30	152	599	186	50	741	360	84	140	84	84

**OUTDOOR UNIT**



Single Zone Minisplit Technical Data

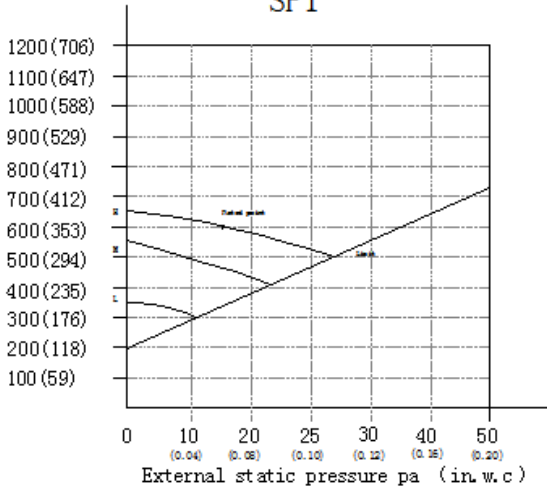


Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
OHP14-12-12-25	31.5	13.1	21.8	34.3	20.2	13.4

MTIU-12HWFN1-M

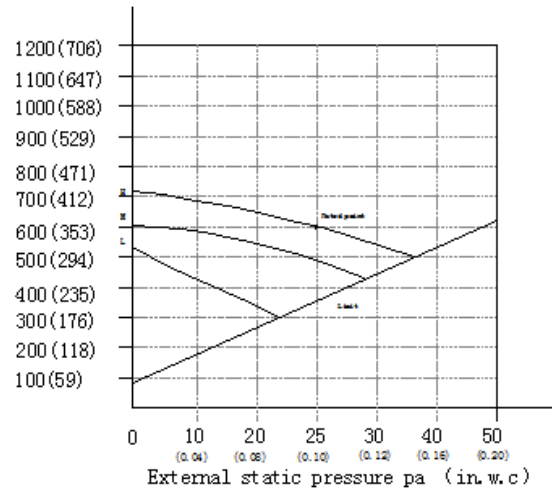
Air volume m<sup>3</sup>/h(CFM)

SP1

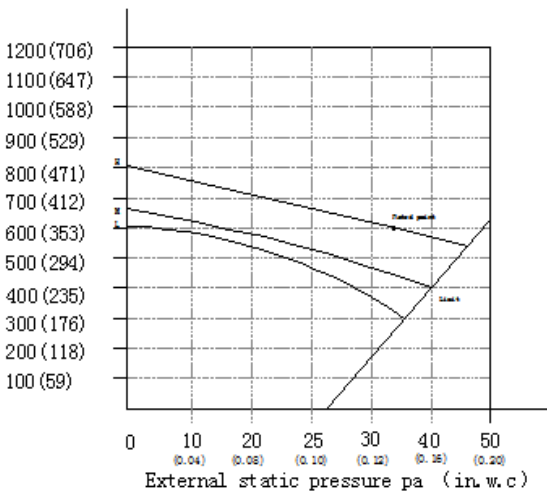


Air volume m<sup>3</sup>/h(CFM)

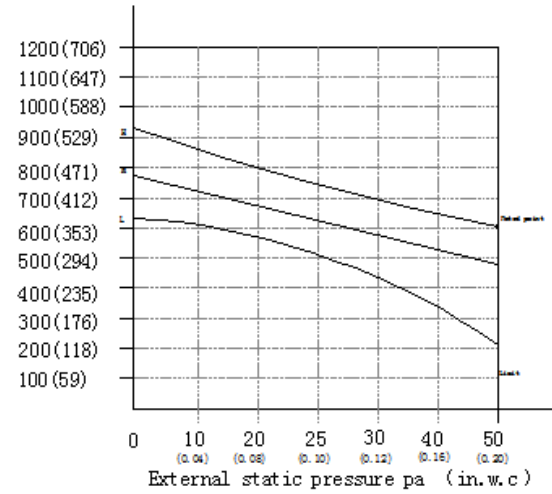
SP2



Air volume m<sup>3</sup>/h(CFM)



Air volume m<sup>3</sup>/h(CFM)





## Ducted Hyper Heat Single Zone Units

### Heat Pump

20 SEER

Nominal Capacity: 1.5 Ton

Outdoor Unit Model# OHP14-18-12-25

Indoor Unit Model# DHP14-18-12-U

Cooling operating range

-22° ~ 122° F

Heating operating range

-22° ~ 86° F



AHRI Certification # 205300201



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit
- Single phase power supply (208/230V)

- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- Quiet outdoor operation, as low as 59 dB(A)

Other Features

- **Extra Low Temperature heating**  
The heat output for this system is 65% of rated capacity down to 5°
- **Stepless Frequency Adjustment**  
Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

INDOOR UNITS - MEDIUM STATIC DUCTED

- Pre-Heat Function
- LED Readout Panel
- Auto Restart
- Cooling Override
- Duct Connections
- Flare Connections
- Three Speed Fan with Four Static Pressure Settings

Outdoor Color: Gray

Indoor Color: Galvanized Recessed

Cooling System Tons		1.5
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	18,000
SEER –AHRI Rating		20.5
EER		12.5
Heating Rated Capacity (@47° F Outdoor)	Btu/h	22,900
Heating Rated Capacity (@17° F Outdoor)	Btu/h	20,500
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	19,500
HSPF-4		11.0
COP (@47° F Outdoor)	W/W	3.59
COP (@17° F Outdoor)	W/W	2.52
COP (@5° F Outdoor)	W/W	2.15

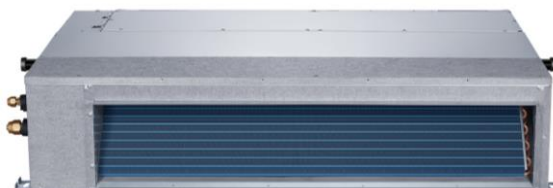
Note: All Electrical installations in the field shall be performed according to electrical codes.



**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DHP14-18-12-U
Outdoor unit model	OHP14-18-12-25



**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208-230V,1Ph,60Hz
<b>Cooling</b>		
Capacity	Btu/h	16500
Input	W	1320
Rated current	A	6.0

**Heating at 47**

Capacity	Btu/h	19000
Input	W	1900
Rated current	A	8.7
COP	W/W	2.93

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	18
MAX. FUSE	A	25
Connection wiring		14*4 AWG

**Compressor**

Model		ATF235D22UMT
Type		ROTARY
Brand		GMCC
Capacity	Btu/h	24345
Input	W	1970
Rated current(RLA)	A	12.9
Locked rotor Amp(LRA)	A	---
Thermal protector		---
Thermal protector position		---
Refrigerant oil/oil charge	ml	POE(VG74)/670

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG
Refrigerant type	oz	R410A/68.8
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.16
Liquid side/ Gas side	mm(in)	Φ6.35/Φ12.7(1/4"/1/2")
Max. refrigerant pipe length	ft	98
Max. difference in level	ft.	66

**ESP**

ESP range	In. wg.	0-0.40
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**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFN-160-8-1-2
Type		DC
Input		90.0
RLA	A	1.2
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	850/700/450
<b>Air flow &amp; Noise level</b>		
Indoor air flow (Hi/Lo)	CFM	530/450/371
Indoor noise level (Hi/Lo)	dB(A)	39/37/35

**Indoor unit**

Dimension(W*D*H)	inch	34.65x28.53x8.27
Packing (W*D*H)	inch	42.13x28.53x10.63
Net/Gross weight	lbs.	54/66

**OUTDOOR UNIT DATA**

<b>Outdoor fan motor</b>		
Model		ZKFN-50-8-2
Type		DC
Input		115
RLA	A	0.42
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	850
<b>Air flow &amp; Noise level</b>		
Outdoor air flow	CFM	1355
Outdoor noise level	dB(A)	59

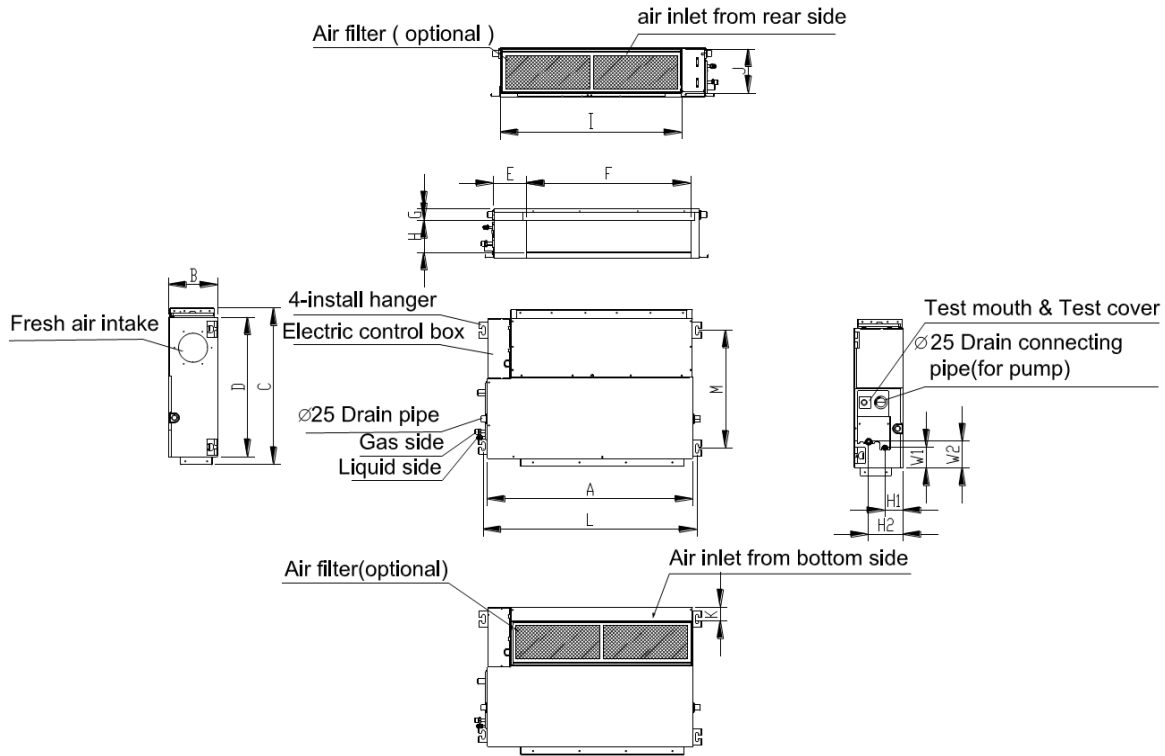
**Outdoor unit**

Dimension(W*D*H)	inch	33.27x14.29x27.64
Packing (W*D*H)	inch	37.99x15.55x30.11
Net/Gross weight	lbs.	107.4/115.1

**Operation temperature**

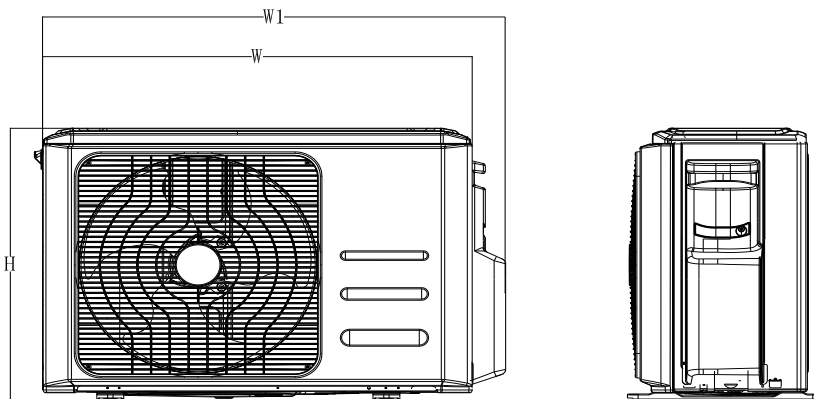
Indoor(cooling/ heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-22~-122/ -22~86
Application area	sq.ft	258-376

**INDOOR UNIT**

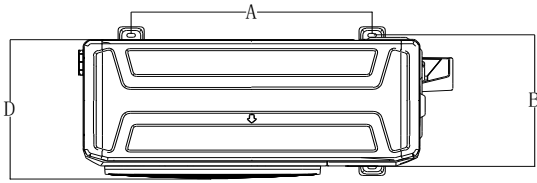


Capacity (Btu)	Outline dimension(mm)				Air outlet opening size				Air return opening size			Size of mounted plug		Size of gas and liquid valve			
	A	B	C	D	E	F	G	H	I	J	K	L	M	H1	H2	W1	W2
18000	880	210	674	600	140	706	50	136	782	190	40	920	508	78	148	88	112

**OUTDOOR UNIT**

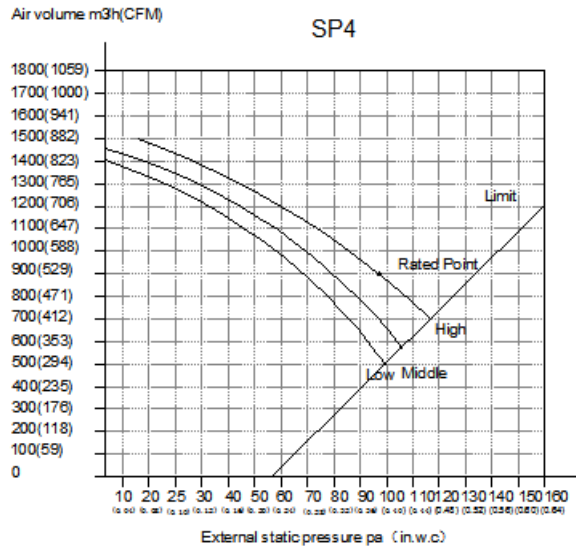
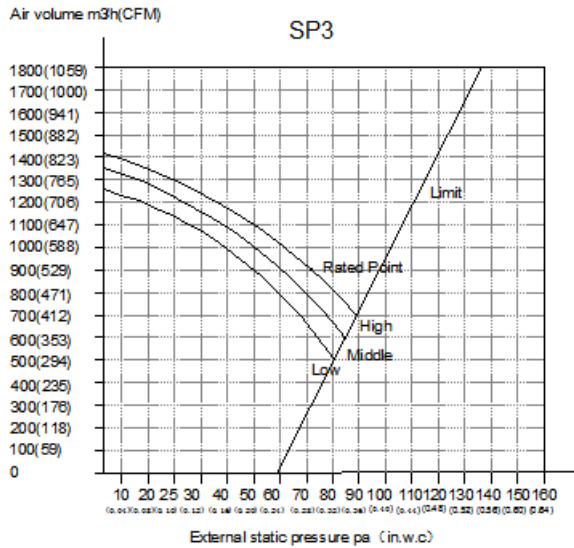
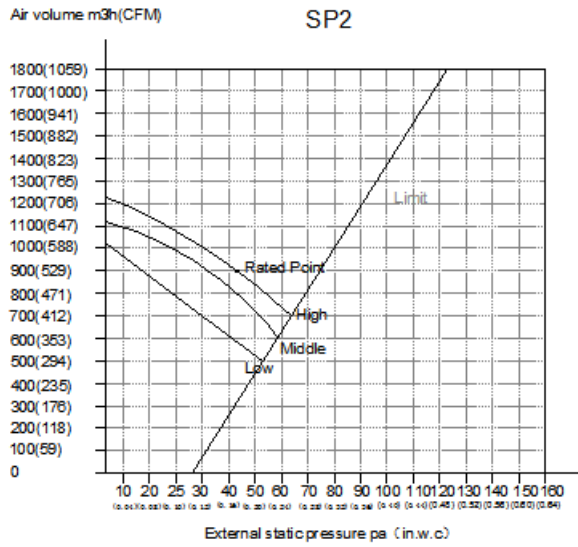
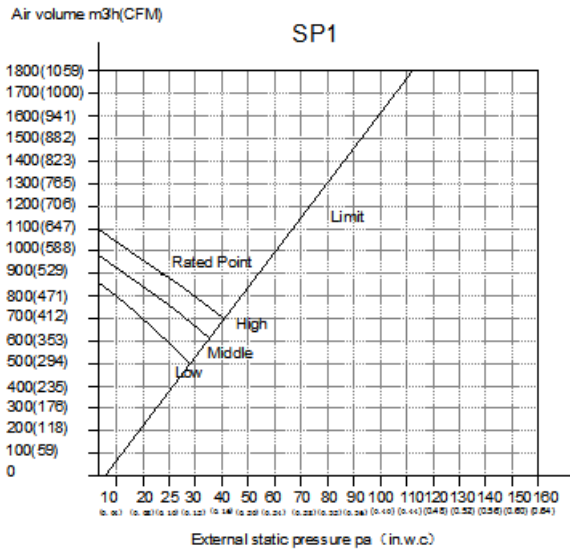


Single Zone Minisplit Technical Data



Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
OHP14-18-12-25	33.3	14.3	27.6	36.0	21.3	13.8

MTIU-18HWFN1-M



## Ducted Hyper Heat Single Zone Units

### Heat Pump

20.5 SEER

Nominal Capacity: 2 Ton

Outdoor Unit Model# OHP14-24-12-25

Indoor Unit Model# DHP14-24-12-U

Cooling operating range

-22° ~ 122° F

Heating operating range

-22° ~ 86° F



AHRI Certification # 205300202



E-Star



Summery Specification, (for Details please refer to Submittal Sheet)

Application: Residential, Commercial, Healthcare, Server Rooms

## FEATURES AND BENEFITS

### OUTDOOR UNITS

- Qualified for Rebate programs in most of NE States
- Equipment Limited Warranty: 5 year parts, One (1) year warranty on remote control unit
- Single phase power supply (208/230V)

- R410A Refrigerant
- Multi-Refrigerant Outlet
- Outdoor Coil: Aluminum fins fitted to copper tubes, Golden Hydrophilic pre-coated fins
- Wire grille guard provided
- Variable Frequency Rotary Compressor
- Compressor Crankcase Heater
- Auto Restart
- DC Inverter Control,
- Inverter module protection
- Electronic expansion valve
- Compressor overcurrent protection
- Condenser high temperature protection
- Compressor discharge temperature protection
- Voltage protection
- Terminal Strip
- Defrost control
- 4-way interchange reversing valve
- Multi-Refrigerant Outlet
- Quiet outdoor operation, as low as 59 dB(A)

Other Features

- **Extra Low Temperature heating**  
The heat output for this system is 65% of rated capacity down to 5°
- **Stepless Frequency Adjustment**  
Precise control of the system maintains stable and constant room temperature while reducing sound level and saving energy

INDOOR UNITS - MEDIUM STATIC DUCTED

- Pre-Heat Function
- LED Readout Panel
- Auto Restart
- Cooling Override
- Duct Connections
- Flare Connections
- Three Speed Fan with Four Static Pressure Settings

Outdoor Color: Gray

Indoor Color: Galvanized Recessed



Cooling System Tons		2
Cooling Rated Capacity (@ 95° F Outdoor)	Btu/h	24,000
SEER –AHRI Rating		20.5
EER		12.5
Heating Rated Capacity (@47° F Outdoor)	Btu/h	32,700
Heating Rated Capacity (@17° F Outdoor)	Btu/h	24,800
Heating Maximum Capacity (@5° F Outdoor)	Btu/h	24,400
HSPF-4		12.5
COP (@47° F Outdoor)	W/W	3.6
COP (@17° F Outdoor)	W/W	2.36
COP (@5° F Outdoor)	W/W	1.99

Note: All Electrical installations in the field shall be performed according to electrical codes.



**Submittal Data Sheet**

Project Name:		Approval:	
Location:		Date:	
Engineer:		Construction:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference:			

Model	
Indoor unit model	DHP14-24-12-U
Outdoor unit model	OHP14-24-12-25



**PERFORMANCE DATA**

Power supply	Ph-V-Hz	208/230V,1Ph,60Hz
<b>Cooling</b>		
Capacity	Btu/h	24000
Input	W	1920
Rated current	A	8.52

**Heating at 47**

Capacity	Btu/h	24000
Input	W	1846
Rated current	A	8.19
COP	W/W	3.81

**Electrical**

MINIMUM CIRCUIT AMPACITY	A	20
MAX. FUSE	A	30
Connection wiring		14*4 AWG

**Compressor**

Model		ATF235D22UMT
Type		ROTARY
Brand		GMCC
Capacity	Btu/h	24345
Input	W	1970
Rated current(RLA)	A	14
Locked rotor Amp(LRA)	A	---
Thermal protector		---
Thermal protector position		---
Refrigerant oil/oil charge	ml	POE(VG74)/670

**SYSTEM DATA**

Design pressure	PSIG	550/340 PSIG
Refrigerant type	oz	R410A/91.7
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.32
Liquid side/ Gas side	mm(in)	Φ9.52/Φ15.9(3/8"/5/8")
Max. refrigerant pipe length	ft	164
Max. difference in level	ft.	82

**ESP**

ESP range	In. wg.	0-0.64
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**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFN-160-8-1-2
Type		DC
Input		90.0
RLA	A	1.5
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed(Hi/Mi/Lo)	r/min	880/820/690

**Air flow & Noise level**

Indoor air flow (Hi/Lo)	CFM	776/694/435
Indoor noise level (Hi/Lo)	dB(A)	44/41/38

**Indoor unit**

Dimension(W*D*H)	inch	43x30x10
Packing (W*D*H)	inch	51x32x12
Net/Gross weight	lbs.	87/103

**OUTDOOR UNIT DATA**

<b>Outdoor fan motor</b>		
Model		ZKFN-120-8-2
Type		DC
Input		150
RLA	A	0.5
LRA	A	---
Winding Resistance	Ω	---
Capacitor	uF	---
Speed	r/min	810

**Air flow & Noise level**

Outdoor air flow	CFM	2354
Outdoor noise level	dB(A)	61

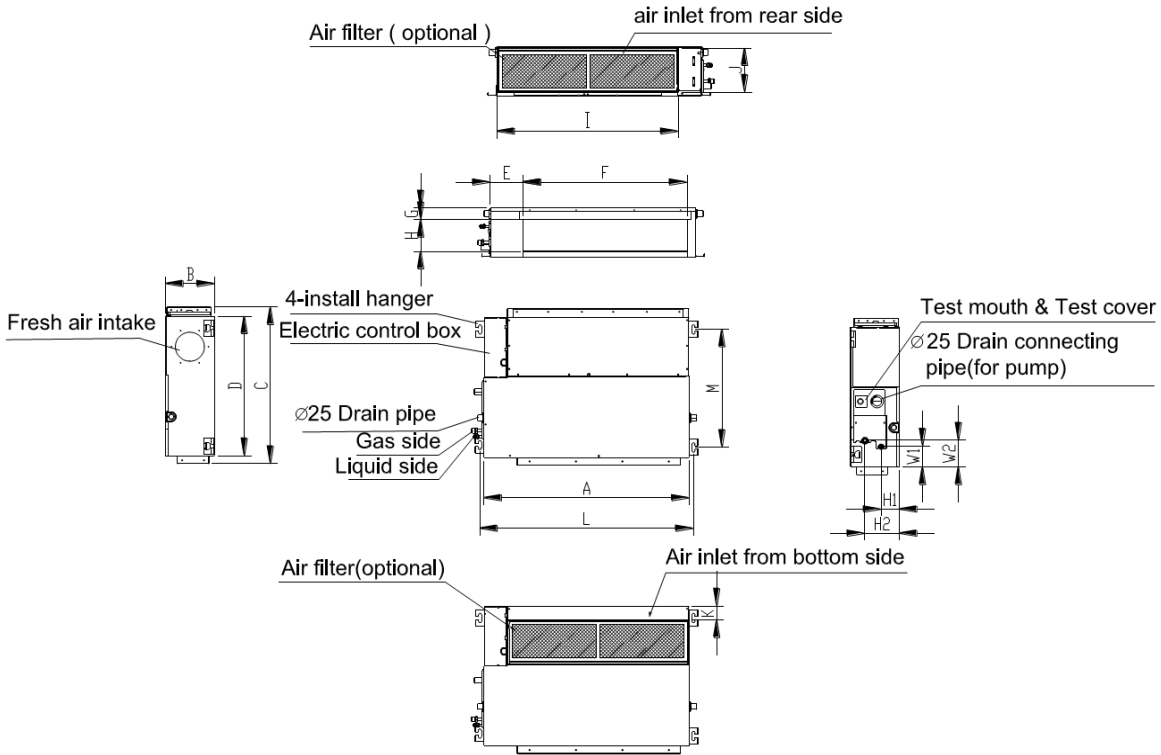
**Outdoor unit**

Dimension(W*D*H)	inch	37.24x16.14x31.89
Packing (W*D*H)	inch	42.91x19.69x34.45
Net/Gross weight	lbs.	135.58/148.81

**Operation temperature**

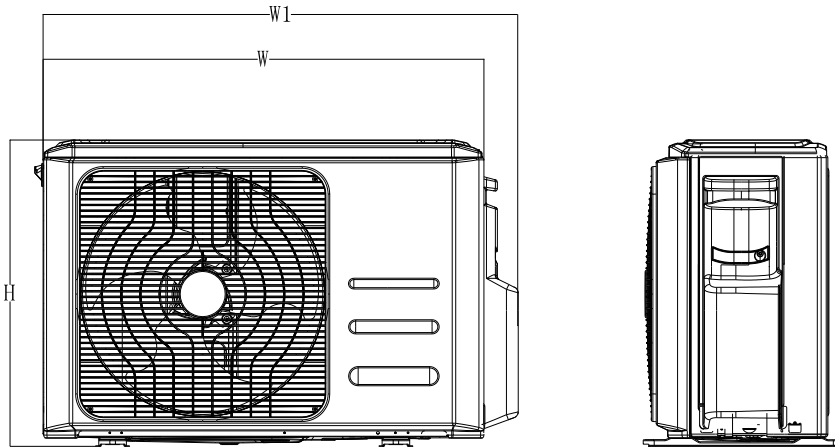
Indoor(cooling/ heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	-22~-122/ -22~86
Application area	sq.ft	344-505

**INDOOR UNIT**

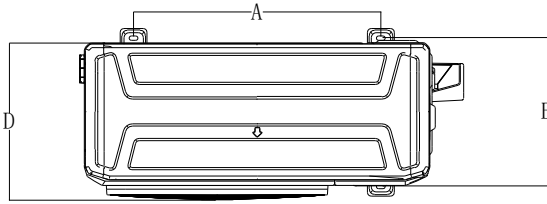


Capacity (Btu)	Outline dimension(mm)				Air outlet opening size				Air return opening size			Size of mounted plug		Size of gas and liquid valve			
	A	B	C	D	E	F	G	H	I	J	K	L	M	H1	H2	W1	W2
24000	1100	249	774	700	140	926	50	175	1001	228	5	1140	598	80	150	130	155

**OUTDOOR UNIT**



Single Zone Minisplit Technical Data



Model	W (inch)	D (inch)	H (inch)	W1 (inch)	A (inch)	B (inch)
OHP14-24-12-25	37.2	16.1	31.9	40.6	26.5	15.9

MTIU-24HWFN1-M<sup>1</sup>

