# **Technical Product Guide**

+Multi Zone Inverter Heat Pump Systems

World Class Comfort







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# SUPERIOR DESIGNS PROVIDE EASY SOLUTIONS TO COMPLEX PROBLEMS

GREE Ductless Multi Zone systems provide quiet comfort and energy efficient heating and cooling in up to five different rooms – *without ductwork*. For most residential and light commercial applications, this is the ideal solution to balance comfort, efficiency and ease of installation. This Inverter-driven system offers Seasonal Energy Efficiency Ratings (SEER) up to 16. With individual room control and variable speed compressor operation, comfort is boosted throughout your home or office, while utility bills are held in check.



Gree's exclusive G-10 Inverter technology powers the twin rotary compressor inside the Multi Zone outdoor compressor section. The G-10 Inverter constantly adjusts the compressor speed to maintain a comfortable room temperature. This saves energy, reduces outdoor noise and maintains a steady room temperature by eliminating the harsh starts and stops of conventional systems.

When laying out a new project, you'll appreciate the flexibility of Gree's Multi Zone Systems. A single outdoor unit can simultaneously power up to five indoor units while eliminating expensive ductwork. Without those ducts, your installation is simpler, faster and more cost-effective. And the flexibility doesn't stop there, as you can also mix and match your choice of Wall Mount, Ceiling Cassette, Concealed Duct, Universal Floor/Ceiling and Mini Floor Console indoor units to create a unique heating and cooling system to perfectly fit any project.

#### No pipe sweating

No sweating is needed for the pipe connection between the indoor and outdoor units. All piping connections are flared to simplify and ease the piping installation.

# Outdoor Unit

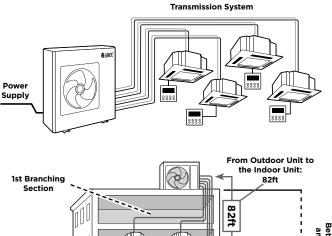
#### **Simple Wiring**

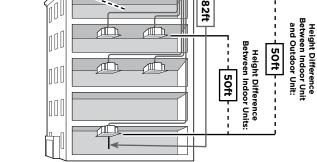
No special or hard-to-find communication wire is needed between the indoor and outdoor units. The system uses common 14-4 AWG stranded copper THHN 600V wire. The system's communication is ready as soon as the electrical wiring between the indoor and outdoor units is complete.

#### **High Lift Design**

Gree's High Lift design allows for extended piping length, up to 262 feet total, as well as 50 feet of vertical lift from the condensing units. This allows for greater flexibility in the layout of the system.

### Allows up to 262 feet of pipe length





#### **Energy Saving**

Multi Zone systems allow each room to be individually controlled. Only those rooms requiring air conditioning (or heating) are cooled (or heated), and all of it is accomplished without ductwork. In addition, Gree's G-10 inverter technology reduces energy waste, maximizes efficiency and achieves up to 16 SEER.

#### Self-Diagnostics System

Each indoor and outdoor unit continuously runs a series of multi-point diagnostic tests on the system, to automatically scan for unacceptable operating conditions or malfunctions. If such conditions occur, the system takes corrective action or stops. The fault code will be shown on the indoor, outdoor and wired controller displays. Problems and system status are displayed with comprehensive diagnostic codes to simplify system troubleshooting and shorten repair times.

Diagnostic Code	Malfunction
E1	Compressor High Pressure Protection
E2	Indoor Coil Anti-Freeze Protection
E3	Low Pressure Protection
E4	High Discharge Temperature Protection
E5	Compressor High Temperature Protection
E6	Indoor/Outdoor Communication Failure
E7	Heating & Cooling Modes Conflict
E9	Condensate Water Too High
F4	Outdoor Coil Sensor Failure

#### **Flexible Design**

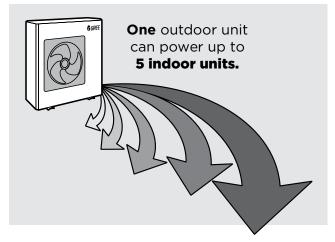
Gree's Multi Zone systems have many advantages for both the property owner and the installer. Up to five indoor units, powered by a single outdoor unit, results in flexible zoning solutions for almost any application. Various styles of indoor units may be mixed and matched in any combination to create a unique, multiple zone heating and cooling system. Choose from Wall Mount, Ceiling Cassette, Slim Duct, Universal Floor/Ceiling and Mini Floor Console indoor units. All are lightweight and compact enough to be installed on the wall or in any ceiling space.

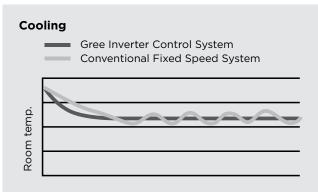
#### **Intelligent Control**

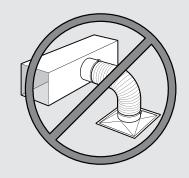
Gree's Multi Zone components use state-of-the art intelligent controls to generate the ultimate in room comfort. G-10 Inverter technology delivers the exact level of required capacity (from 10% to 100%) to maintain room temperature and humidity in the comfort range. The optimized PID controls maintain the room temperature within less than  $\pm 1.0^{\circ}$ F of the room setpoint temperature. The result is a virtually constant room temperature with a conventional fixed speed ON/OFF system.

#### **Ductless Saves Money**

Realize energy savings by eliminating heat loss from inefficient and leaky ductwork. The average ducted air distribution system could reduce overall system efficiency by up to 30 percent. Eliminating ductwork allows you to downsize equipment while upsizing performance.









# **MULTI OUTDOOR UNITS**

Models: MULTI18HP230V1AO MULTI24HP230V1AO MULTI30HP230V1AO MULTI36HP230V1AO MULTI42HP230V1AO





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Each +Multi heat pump is powered by Gree's energy efficient G-10 Inverter and a variable speed compressor. These units can heat and cool up to five zones without distribution boxes, and all offer the G-10 advantages of energy savings, noise reduction and room temperature consistency. Each outdoor coil also features a corrosion-resistant Acrylic Resin coating to withstand corrosive environments and to further promote energy efficiency.

# FEATURES AND BENEFITS

#### **High Efficiency G-10 Inverter**

The G-10 Inverter uses a broad range of variable frequencies to drive the compressor, marking the highest level of inverter control technology available today. Unlike conventional technology that generally regulates room temperature by running at maximum capacity and then shutting off completely, G-10 Inverter technology eliminates these harsh starts/stops. This cutting edge functionality results in quicker arrival at desired temperatures and superior maintenance of consistent comfort levels. Higher efficiency and significant energy savings? Yes, it yields those too.

#### **Heat Pump Advantage**

Multi Zone heat pumps, powered by the G-10 Inverter, provide the same heating capacity as electric heat, while using as little as 1/3 the electricity.

#### **Intelligent Defrost**

The Intelligent Defrost function increases room comfort and saves energy by eliminating unnecessary defrost cycles. In heating mode, the control system monitors the outdoor coil for frost buildup, and the system switches to defrost mode only when frost buildup is actually detected. This avoids unnecessary and wasteful defrosts.

#### **Time Guard**

Among the system's many safeties is a Time Guard function to prevent rapid cycling of the compressor. A protective three-minute time delay restricts compressor restarts after shutoff.

#### **Acrylic Resin Coated Coils**

The system's corrosion-resistant Acrylic Resin coil coating (1500hr salt spray rating) is made with an anti-corrosion epoxy. This technology maintains excellent heat transfer properties while extending coil life against damage from salt air and salt water in seacoast installations.

#### Low Voltage Start Up

Having stable electrical power is not always an option. The Gree Multi Zone units will operate from 170v to 265v which is suitable for unstable power supply areas.

#### Self-Diagnosis

With an on-board computer using real-time diagnostics, the Gree Multi Zone system helps to prolong its own life. The automatic diagnosis feature continuously scans for unacceptable operating conditions or malfunctions. If such conditions occur, the system takes corrective action or stops. Fault codes are shown on the unit display to facilitate easy troubleshooting and repair.

#### **Agency Listings**

All systems are listed with AHRI (Air conditioning, Heating, and Refrigeration Institute) and are ETL Certified per standards.

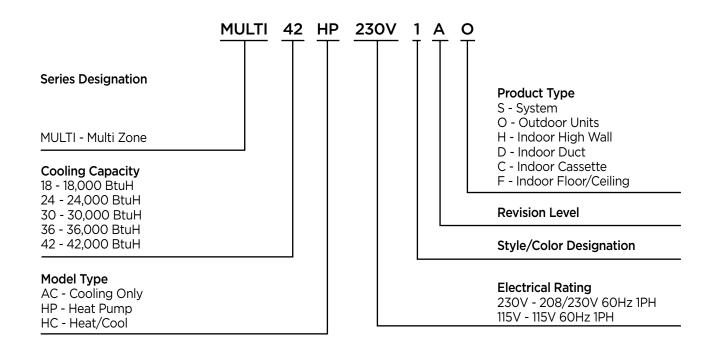
#### 7/5 Year Limited Warranty

Enjoy one of the most comprehensive warranties in the industry. Seven (7) years on compressor and Five (5) years on all parts.





# NOMENCLATURE



# AHRI CERTIFICATION

MODEL NUMBER	BRAND	AHRI CERTIFICATION
MULTI18HP230V1AO	GREE	7084754
MULTI24HP230V1AO	GREE	7084908
MULTI30HP230V1AO	GREE	7084759
MULTI36HP230V1AO	GREE	7084898
MULTI42HP230V1AO	GREE	7084899
MULTI48HP230V1AO	GREE	7117354
MULTI56HP230V1AO	GREE	7117355

# Cooling

			COOLING CAPACITY		OUTDOO	
MODEL NUMBER	SEER	EER	RATED (BtuH)	RANGE (BtuH)	OPERATIN MIN	MAX
MULTI18HP230V1A	16	10.2	18,000	(7,000-21,000)	23 °F	118 °F
MULTI24HP230V1A	16	8.2	26,000	(7,500-33,000)	23 °F	118 °F
MULTI30HP230V1A	16	7.3	29,000	(7,500-34,000)	23 °F	118 °F
MULTI36HP230V1A	16	8.0	34,000	(8,530-34,120)	23 °F	118 °F
MULTI42HP230V1A	16	9.3	40,000	(8,530-46,403)	23 °F	118 °F

# Heating

		HEATING CAPACITY		OUTDOOR TEMP	
MODEL NUMBER	HSPF	RATED (BtuH)	RANGE (BtuH)	OPERATII MIN	NG RANGE MAX
MULTI18HP230V1A	8.2	19,000	(8,530-22,600)	5 °F	80 °F
MULTI24HP230V1A	8.2	29,000	(7,500-35,000)	5 °F	80 °F
MULTI30HP230V1A	8.2	30,400	(7,500-36,000)	5 °F	80 °F
MULTI36HP230V1A	8.2	35,800	(10,663-40,944)	5 °F	80 °F
MULTI42HP230V1A	8.2	44,500	(10,663-47,768)	5 °F	80 °F

#### Notes:

Ratings are based on: Cooling Standard: 80°F (26.7°C) db, 67°F (19.4°C) wb air entering indoor unit and 95°F (35°C) db air entering outdoor unit. Heating Standard: 70°F (21.1°C) db air entering indoor unit and 47°F (8.3°C) db, 43°F (6.1°C) wb air entering outdoor unit.
Ratings are based on 25 ft. (7.62 m) of interconnecting refrigerant lines.

3. All system ratings are based on fan coil units operating at high fan speed. Consult Physical Data tables for air flows at selected fan speeds.

#### Legend:

EER - Energy Efficiency Ratio

HSPF - Heating Seasonal Performance Ratio

SEER - Seasonal Energy Efficiency Ratio

MODEL NUMBER	BRAND	NUMBER OF PORTS FOR INDOOR UNITS
MULTI18HP230V1AO	EXV	2
MULTI24HP230V1AO	EXV	3
MULTI30HP230V1AO	EXV	4
MULTI36HP230V1AO	EXV	4
MULTI42HP230V1AO	EXV	5

# **AIR FLOW DATA**

# **Outdoor Unit**

MODEL NUMBER	AIR FLOW (CFM)
MULTI18HP230V1A	1,530
MULTI24HP230V1A	1,530
MULTI30HP230V1A	1,530
MULTI36HP230V1A	2,177
MULTI42HP230V1A	3,237

# SOUND DATA

#### **Outdoor Unit**

MODEL NUMBER	SOUND POWER	SOUND PRESSURE
MULTI18HP230V1A	66 dBA	56 dBA
MULTI24HP230V1A	66 dBA	56 dBA
MULTI30HP230V1A	66 dBA	56 dBA
MULTI36HP230V1A	69 dBA	59 dBA
MULTI42HP230V1A	68 dBA	58 dBA

Note:

1. Sound pressure ratings are estimated sound pressure measurements, 3 feet from unit.

2. Sound power ratings are per AHRI 270 and AHRI 350.

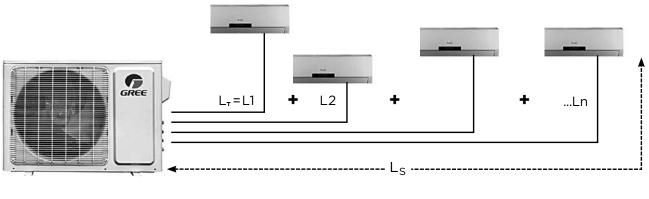
# **PRODUCT WEIGHT**

MODEL NUMBER	PRODUCT NET OPERATING	WEIGHT GROSS SHIPPING
MULTI18HP230V1A	95 lbs.	106 lbs.
MULTI24HP230V1A	135 lbs.	146 lbs.
MULTI30HP230V1A	153 lbs.	165 lbs.
MULTI36HP230V1A	161 lbs.	172 lbs
MULTI42HP230V1A	225 lbs.	247 lbs.

# **Refrigerant Charge**

MODEL NUMBER	REFRIGERANT TYPE	FACTORY SYSTEM CHARGE	MAX TOTAL PIPE LENGTH W/O ADDING REFRIGERANT	ADDITIONAL CHARGE LEVEL
MULTI18HP230V1A	R-410A	48 oz.	33 ft.	0.2 oz./ft.
MULTI24HP230V1A	R-410A	78 oz.	98 ft.	0.2 oz./ft.
MULTI30HP230V1A	R-410A	78 oz.	131 ft.	0.2 oz./ft.
MULTI36HP230V1A	R-410A	102 oz.	131 ft.	0.2 oz./ft.
MULTI42HP230V1A	R-410A	169 oz.	164 ft.	0.2 oz./ft.

# **PIPING LENGTH REQUIREMENTS**

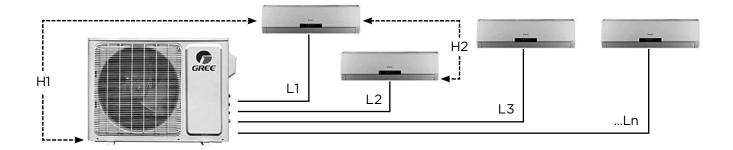


L<sub>TOTAL</sub>=L1 + L2 + .....L<sub>n</sub>

# **Refrigerant Piping Lengths**

MODEL NUMBER	MIN PIPE LENGTH PER INDOOR UNIT (Ln)	MAX PIPE LENGTH PER INDOOR UNIT (Ln)	MAX TOTAL PIPE LENGTH PER INDOOR UNIT (L <sub>TOTAL</sub> )
MULTI18HP230V1A	10 ft.	33 ft.	66 ft.
MULTI24HP230V1A	10 ft.	66 ft.	230 ft.
MULTI30HP230V1A	10 ft.	66 ft.	230 ft.
MULTI36HP230V1A	10 ft.	82 ft.	230 ft.
MULTI42HP230V1A	10 ft.	82 ft.	262 ft.

# **PIPING HEIGHT REQUIREMENTS**



# **Refrigerant Piping Height**

MODEL NUMBER	MAX ELEVATION BETWEEN OUTDOOR & INDOOR UNITS (H1)	MAX ELEVATION BETWEEN INDOOR UNITS (H1)
MULTI18HP230V1A	33 ft.	16 ft.
MULTI24HP230V1A	66 ft.	25 ft.
MULTI30HP230V1A	66 ft.	25 ft.
MULTI36HP230V1A	82 ft.	25 ft.
MULTI42HP230V1A	82 ft.	25 ft.

# **Outdoor Unit**

MODEL NUMBER	RATED POWER SUPPLY (volt-phase-hz)	VOLTAGE RANGE (volts)	RATED INP (KV COOLING	UT POWER V) HEATING
MULTI18HP230V1A	208/230v-1ph-60hz	187-253	1.7	1.6
MULTI24HP230V1A	208/230v-1ph-60hz	187-253	3.1	2.8
MULTI30HP230V1A	208/230v-1ph-60hz	187-253	3.5	2.9
MULTI36HP230V1A	208/230v-1ph-60hz	187-253	4.3	3.6
MULTI42HP230V1A	208/230v-1ph-60hz	187-253	4.4	4.6

# **Outdoor Unit**

MODEL NUMBER	RATED INPUT CU COOLING	JRRENT (amps) HEATING	MIN CIRCUIT AMP (MCA)	MAX FUSE SIZE (amps)
MULTI18HP230V1A	7.6	7.5	13	20
MULTI24HP230V1A	13.5	12.4	20	30
MULTI30HP230V1A	15.3	12.6	26	45
MULTI36HP230V1A	19.2	15.8	28	45
MULTI42HP230V1A	19.5	20.5	29	50

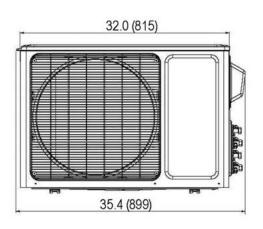
# **Outdoor Unit**

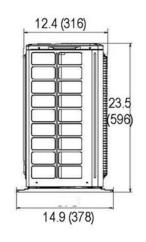
MODEL NUMBER	COMPR RLA (amps)	RESSOR LRA (amps)	OU <sup>.</sup> RLA (amps)	TDOOR HP	R FAN INPUT POWER (watts)
MULTI18HP230V1A	9.6	27	0.5	1/12	60
MULTI24HP230V1A	14.7	45	0.6	1/12	60
MULTI30HP230V1A	19.6	45	0.6	1/12	60
MULTI36HP230V1A	21.0	45	0.7	1/8	120
MULTI42HP230V1A	21.5	67	1.1	1/6	140

Legend: RLA - Rated Load Amps HP - Horse Power

# DIMENSIONAL SPECIFICATIONS

# Model No: MULTI18HP230V1A

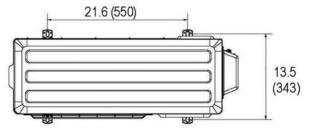




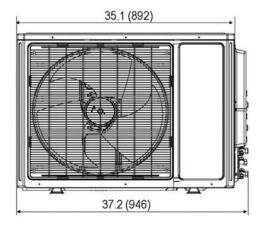
18,000 BtuH

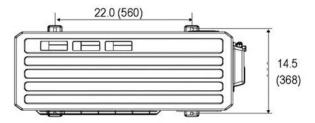
Suction/Gas Line Port Size	
Port A	3/8-in OD Flared
Port B	3/8-in OD Flared

Liquid Line Port Size	
Port A	1/4-in OD Flared
Port B	1/4-in OD Flared

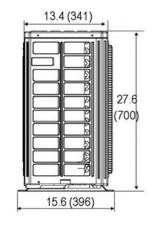


### Model No: MULTI24HP230V1A





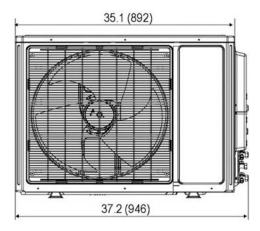
### 24,000 BtuH



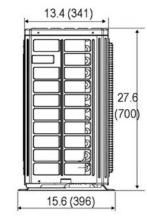
Suction/Gas Line Port Size		
Port A	3/8-in OD Flared	
Port B	3/8-in OD Flared	
Port C	3/8-in OD Flared	

Liquid Line Port Size	
Port A	1/4-in OD Flared
Port B	1/4-in OD Flared
Port C	1/4-in OD Flared

# Model No: MULTI30HP230V1A

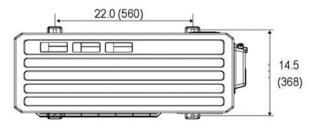


# 30,000 BtuH



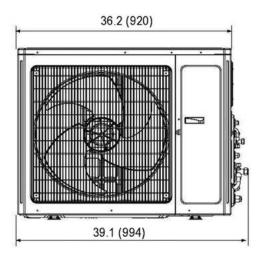
Suction/Gas Line Port Size		
Port A	3/8-in OD Flared	
Port B	3/8-in OD Flared	
Port C	3/8-in OD Flared	
Port D	3/8-in OD Flared	

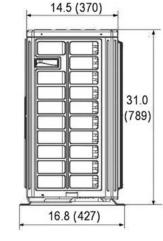
Liqui	Liquid Line Port Size	
Port A	1/4-in OD Flared	
Port B	1/4-in OD Flared	
Port C	1/4-in OD Flared	
Port D	1/4-in OD Flared	



# Model No: MULTI36HP230V1A

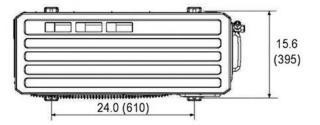






Suction/Gas Line Port Size		
Port A	3/8-in OD Flared	
Port B	3/8-in OD Flared	
Port C	1/2-in OD Flared	
Port D	5/8-in OD Flared	

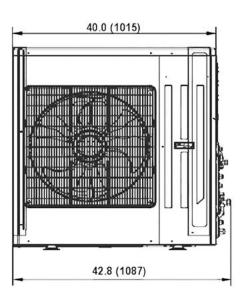
Liquid Line Port Size		
Port A	1/4-in OD Flared	
Port B	1/4-in OD Flared	
Port C	1/4-in OD Flared	
Port D	3/8-in OD Flared	

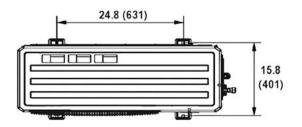


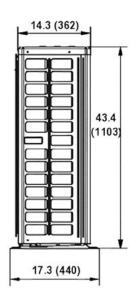


# DIMENSIONAL SPECIFICATIONS

# Model No: MULTI42HP230V1A 42,000 BtuH





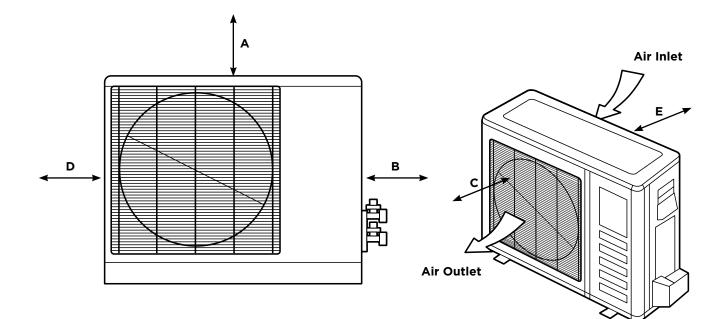


Suction/Gas Line Port Size				
3/8-in OD Flared				
3/8-in OD Flared				
1/2-in OD Flared				
1/2-in OD Flared				
5/8-in OD Flared				

Liquid Line Port Size				
Port A	1/4-in OD Flared			
Port B	1/4-in OD Flared			
Port C	1/4-in OD Flared			
Port D	1/4-in OD Flared			
Port E	3/8-in OD Flared			

# MINIMUM OUTDOOR CLEARANCE SPECIFICATIONS

The unit installation must meet or exceed the following minimum clearances for proper operation.

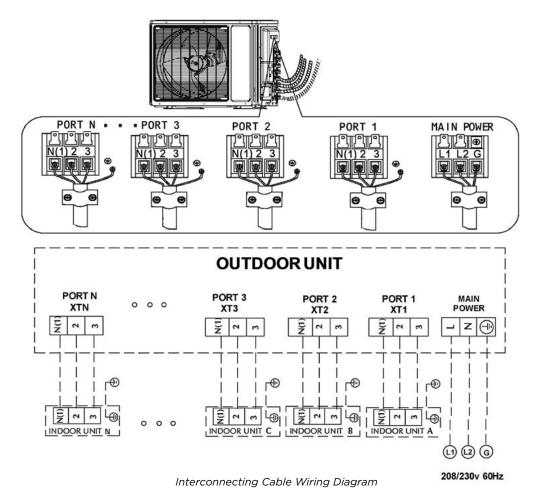


Outdoor Unit	Minimum Distance
Α	20 in
в	24 in
С	78 in
D	12 in
E	20 in

# **ELECTRICAL WIRING**



The main power is supplied to the outdoor unit. System must be on a single dedicated circuit. Use appropriate wire size and circuit breaker (or fuse) size for proper system overcurrent protection. Follow all local building codes and NEC (National Electrical Code) regulations.

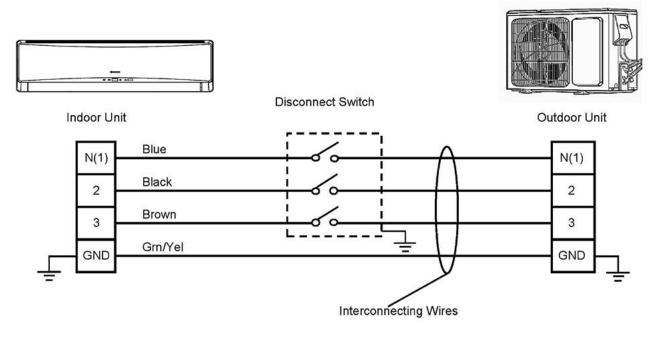


The indoor units are powered by the outdoor unit. The interconnecting cable between the outdoor and indoor units must be a 14/4 AWG stranded copper conductors THHN 600V unshielded wire. The interconnecting cable should not be buried underground and must be recognized by UL or ETL and CSA certified.

Note: Use shield cable if installation is in close proximity of RF and EMI transmitting devices.

# **ELECTRICAL WIRING**

Local codes may require a disconnect switch within sight of the indoor unit. For these installations, use a DFS Disconnect Switch Accessory Kit (Part No: DFS-SWITCH-A) to break wires going to the N(1), 2, 3, terminals on the indoor unit, as shown in the wiring diagram below:



Interconnecting Cable with Disconnect Switch Wiring Diagram

# **CONDENSATE REMOVAL**

Install condensate drain to bottom of outdoor unit to safely and effectively route condensate water to a safe location. Use a flexible condensate drain hose to fit over the factory 5/8-inch (16mm) drainage port.

The high wall indoor units have an internal condensate trap. Adding an external trap is not required.

All condensate drains must meet local codes and regulations. If adequate gravity drainage cannot be provided, a field-installed condensate pump must be used. Refer to manufacturer's installation instructions, specifications and operating details supplied with condensate pump.

# INDOOR UNIT COMBINATIONS

#### **SELECTION CRITERIA**

When selecting a variable speed system, match the system capacity to the calculated load of the building. Since a variable speed system can accommodate a wide range of loads, it is important to understand the percentage of time that the system will be required to run at both maximum and minimum load points. Generally there will be more load diversification in residential applications (shifting from low load to high load). Commercial applications tend to be more steady during normal daytime hours, and go to low load levels after hours. The tables below are guidelines for selecting the proper size.

# Model No: MULTI18HP230V1A

18,000 BtuH

# **Cooling Capacity (BtuH)**

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)
9K	9,000	5,118~11,940	9,000	
12K	12,000	6,824~15,000	12,000	
9K+9K	18,000	7,000~21,000	9,000	9,000
9K+12K	21,000	7,100~22,000	9,000	12,000
12K+12K	24,000	7,200~22,000	12,000	12,000

# Heating Capacity (BtuH)

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)
9K	9,500	5,460~15,360	9,500	
12K	13,000	6,150~16,400	13,000	
9K+9K	19,000	8,530~22,600	9,500	9,500
9K+12K	22,500	8,530~22,600	9,500	13,000
12K+12K	26,000	8,530~22,600	13,000	13,000

Note: It is critical to size the outdoor unit for the entire building load and each indoor unit for its individual zone load.

#### Capacity data is based on the following conditions:

Cooling Nominal Test Conditions Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

#### Model No: MULTI24HP230V1A

24,000 BtuH

### **Cooling Capacity (BtuH)**

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)
9K+9K	18,000	6,824~26,600	9,000	9,000	
9K+12K	21,000	7,165~27,300	9,000	12,000	
12K+12K	24,000	7,200~30,000	12,000	12,000	
9K+18K	25,000	7,300~32,000	8,400	16,600	
12K+18K	25,000	7,400~32,500	10,000	15,000	
18K+18K	25,500	7,500~32,500	12,750	12,750	
9K+9K+9K	26,000	7,500~34,000	8,667	8,667	8,667
9K+9K+12K	26,000	7,500~34,000	8,000	8,000	10,000
9K+12K+12K	26,000	7,500~34,000	6,000	10,000	10,000
9K+9K+18K	26,000	7,500~34,000	7,000	7,000	12,000
12K+12K+12K	26,000	7,500~34,000	8,667	8,667	8,667

# Heating Capacity (BtuH)

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)
9K+9K	19,000	71,00~33,000	9,500	9,500	
9K+12K	22,500	7,100~33,500	9,500	13,000	
12K+12K	26,000	7,200~34,000	13,000	13,000	
9K+18K	27,000	7,300~34,000	9,000	18,000	
12K+18K	28,000	7,400~34,000	11,200	16,800	
18K+18K	28,500	7,400~34,400	14,250	14,250	
9K+9K+9K	29,000	7,500~35,000	9,667	9,667	9,667
9K+9K+12K	29,000	7,600~35,000	9,000	9,000	11,000
9K+12K+12K	29,000	7,600~35,000	6,000	11,500	11,500
9K+9K+18K	29,000	7,600~35,000	6,000	6,000	17,000
12K+12K+12K	29,000	7,600~35,000	9,667	9,667	9,667

Note: It is critical to size the outdoor unit for the entire building load and each indoor unit for its individual zone load.

Capacity data is based on the following conditions: Cooling Nominal Test Conditions Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

# INDOOR UNIT COMBINATIONS

#### Model No: MULTI30HP230V1A

30,000 BtuH

# **Cooling Capacity (BtuH)**

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)
9K+9K	18,000	6,824~26,600	9,000	9,000		
9K+12K	21,000	7,165~27,300	9,000	12,000		
12K+12K	24,000	7,200~30,000	12,000	12,000		
9K+18K	25,000	7,300~32,000	8,400	16,600		
12K+18K	25,500	7,400~32,500	10,000	15,000		
18K+18K	26,000	7,500~32,500	12,750	12,750		
9K+9K+9K	26,000	7,500~34,000	8,667	8,667	8,667	
9K+9K+12K	26,000	7,500~34,000	8,000	8,000	10,000	
9K+12K+12K	26,000	7,500~34,000	6,000	10,000	10,000	
9K+9K+18K	26,000	7,500~34,000	7,000	7,000	12,000	
12K+12K+12K	26,000	7,500~34,000	8,667	8,667	8,667	
9K+12K+18K	27,000	7,500~34,000	6,800	7,200	13,000	
12K+12K+18K	28,000	7,500~34,000	6,500	6,500	15,000	
9K+9K+9K+9K	29,000	7,500~34,000	7,250	7,250	7,250	7,250
9K+9K+9K+12K	29,000	7,500~34,000	7,000	7,000	7,000	8,000
9K+9K+12K+12K	29,000	7,500~34,000	6,800	6,800	7,700	7,700

# Heating Capacity (BtuH)

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)
9K+9K	19,000	7,100~33,000	9,500	9,500		
9K+12K	22,500	7,100~33,500	9,500	13,000		
12K+12K	26,000	7,200~34,000	13,000	13,000		
9K+18K	27,000	7,300~34,000	9,000	18,000		
12K+18K	28,000	7,400~34,000	11,200	16,800		
18K+18K	28,500	7,400~34,400	14,250	14,250		
9K+9K+9K	29,000	7,500~35,000	9,667	9,667	9,667	
9K+9K+12K	29,000	7,600~35,000	9,000	9,000	11,000	
9K+12K+12K	29,000	7,600~35,000	6,000	11,500	11,500	
9K+9K+18K	29,000	7,600~35,000	6,000	6,000	17,000	
12K+12K+12K	29,000	7,600~35,000	9,667	9,667	9,667	

### Model No: MULTI30HP230V1A 30,000 BtuH (cont.)

# Heating Capacity (BtuH)

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)
9K+12K+18K	29,000	7,600~35,000	6,802	9,309	12,888	
12K+12K+18K	29,000	7,600~35,000	8,567	8,567	11,862	
9K+9K+9K+9K	30,500	7,600~36,000	7,625	7,625	7,625	7,625
9K+9K+9K+12K	30,500	7,600~36,000	7,100	7,100	7,100	9,200
9K+9K+12K+12K	31,000	7,600~36,000	6,500	6,500	9,000	9,000

Note: It is critical to size the outdoor unit for the entire building load and each indoor unit for its individual zone load.

Capacity data is based on the following conditions:

Cooling Nominal Test Conditions Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB Heating Normal Test Conditions Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F W

# Model No: MULTI36HP230V1A

#### 36,000 BtuH

# **Cooling Capacity (BtuH)**

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)
9K+9K	17,060	10,236~26,614	8,530	8,530		
9K+12K	20,472	10,236~27,297	8,530	12,283		
9K+18K	24,226	10,236~31,391	7,506	16,719		
9K+24K (2)	27,297	10,236~31,391	6,824	20,472		
12K+12K	20,472	10,236~31,391	10,236	10,236		
12K+18K	27,297	10,236~32,415	10,577	13,648		
12K+24K (2)	27,297	10,236~32,415	10,236	17,060		
18K+18K	27,297	10,236~32,415	13,648	13,648		
18K+24K (2)	27,297	10,236~32,415	12,283	15,354		
24K +24K (2)	27,297	10,236~32,415	13,648	13,648		
9K+9K+9K	24,567	10,236~30,709	8,189	8,189	8,189	
9K+9K+12K	24,567	10,236~30,709	6,994	7,336	10,236	
9K+9K+18K	29,685	10,236~32,756	7,165	7,165	15,354	
9K+9K+24K (2)	29,685	10,236~32,756	6,312	6,312	17,060	
9K+12K+12K	29,685	10,236~32,756	7,506	11,089	11,089	
9K+12K+18K	29,685	10,236~32,756	6,141	10,065	13,477	
9K+12K+24K (2)	29,685	10,236~32,756	5,459	8,018	16,207	
9K+18K+18K	29,685	10,236~32,756	5,971	11,771	11,771	
9K+18K+24K (2)	29,685	10,236~32,756	5,459	9,042	15,184	

# INDOOR UNIT COMBINATIONS

# Model No: MULTI36HP230V1A

36,000 BtuH (cont.)

# **Cooling Capacity (BtuH)**

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)
12K+12K+12K	29,685	10,236~32,756	9,895	9,895	9,895	
12K+12K+18K	29,685	10,236~32,756	8,530	8,530	12,624	
12K+12K+24K (2)	29,685	10,236~32,756	7,506	7,506	14,672	
12K+18K+18K	29,685	10,236~32,756	9,212	12,283	12,283	
18K+18K+18K	29,685	10,236~32,756	9,895	9,895	9,895	
9K+9K+9K+9K	33,438	10,236~34,121	8,359	8,359	8,359	8,359
9K+9K+9K+12K	33,438	10,236~34,121	7,506	7,506	7,506	10,918
9K+9K+9K+18K	33,438	10,236~34,121	6,824	6,824	6,824	12,283
9K+9K+9K+24K (2)	33,438	10,236~34,121	6,141	6,141	6,141	15,013
9K+9K+12K+12K	33,438	10,236~34,121	6,824	6,824	9,895	9,895
9K+9K+12K+18K	33,438	10,236~34,121	6,312	6,312	8,871	12,283
9K+9K+18K+18K	33,438	10,236~34,121	5,459	5,459	11,260	11,260
9K+12K+12K+12K	33,438	10,236~34,121	7,847	8,530	8,530	8,530
9K+12K+12K+18K	33,438	10,236~34,121	6,141	7,506	7,506	12,283
12K+12K+12K+12K	33,438	10,236~34,121	8,359	8,359	8,359	8,359

# Heating Capacity (BtuH)

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)
9K+9K	22,178	15,354~29,003	11,089	11,089		
9K+12K	26,614	15,354~32,756	11,089	15,968		
9K+18K	31,494	15,354~33,780	9,758	21,735		
9K+24K (2)	32,756	15,354~33,780	8,189	24,567		
12K+12K	26,614	15,354~33,780	13,307	13,307		
12K+18K	32,756	15,354~33,780	12,693	16,378		
12K+24K (2)	32,756	15,354~33,780	12,283	20,472		
18K+18K	32,756	15,354~33,780	16,378	16,378		
18K+24K (2)	32,756	15,354~33,780	14,740	18,425		
24K +24K (2)	32,756	15,354~33,780	16,378	16,378		
9K+9K+9K	27,024	15,354~33,780	9,008	9,008	9,008	

### Model No: MULTI36HP230V1A

# 36,000 BtuH (cont.)

# Heating Capacity (BtuH)

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)
9K+9K+12K	27,024	15,354~33,780	7,694	8,069	11,260	
9K+9K+18K	35,622	15,354~37,533	8,598	8,598	18,425	
9K+9K+24K (2)	35,622	15,354~37,533	7,574	7,574	20,472	
9K+12K+12K	35,622	15,354~37,533	9,008	13,307	13,307	
9K+12K+18K	35,622	15,354~37,533	7,370	12,078	16,173	
9K+12K+24K (2)	35,622	15,354~37,533	6,551	9,622	19,449	
9K+18K+18K	35,622	15,354~37,533	7,165	14,126	14,126	
9K+18K+24K (2)	35,622	15,354~37,533	6,551	10,850	18,220	
12K+12K+12K	35,622	15,354~37,533	11,874	11,874	11,874	
12K+12K+18K	35,622	15,354~37,533	10,236	10,236	15,149	
12K+12K+24K (2)	35,622	15,354~37,533	9,008	9,008	17,606	
12K+18K+18K	35,622	15,354~37,533	11,055	14,740	14,740	
18K+18K+18K	35,622	15,354~37,533	11,874	11,874	11,874	
9K+9K+9K+9K	40,126	15,354~40,945	10,031	10,031	10,031	10,031
9K+9K+9K+12K	40,126	15,354~40,945	9,008	9,008	9,008	13,102
9K+9K+9K+18K	40,126	15,354~40,945	8,189	8,189	8,189	14,740
9K+9K+9K+24K (2)	40,126	15,354~40,945	7,370	7,370	7,370	18,016
9K+9K+12K+12K	40,126	15,354~40,945	8,189	8,189	11,874	11,874
9K+9K+12K+18K	40,126	15,354~40,945	7,574	7,574	10,645	14,740
9K+9K+18K+18K	40,126	15,354~40,945	6,551	6,551	13,512	13,512
9K+12K+12K+12K	40,126	15,354~40,945	9,417	10,236	10,236	10,236
9K+12K+12K+18K	40,126	15,354~40,945	7,370	9,008	9,008	14,740
12K+12K+12K+12K	40,126	15,354~40,945	10,031	10,031	10,031	10,031

**Notes:** 1) It is critical to size the outdoor unit for the entire building load and each indoor unit for its individual zone load. 2) 24K size is reserved for Ceiling Cassettes, Concealed Ducts, and Floor/Ceilings units only. Not Wall Mount units.

#### Capacity data is based on the following conditions:

Cooling Nominal Test Conditions:	Heating Normal Test Conditions
Indoor: 80°F DB/67°F WB	Indoor: 70°F DB/60°F WB
Outdoor: 95°F DB/75°F WB	Outdoor: 47°F DB/43°F W

# INDOOR UNIT COMBINATIONS

### Model No: MULTI42HP230V1A

42,000 BtuH

# **Cooling Capacity (BtuH)**

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)	INDOOR UNIT E (BtuH)
9K+9K	20,472	11,942~30,709	8,530	8,530			
9K+12K	20,472	11,942~30,709	8,530	11,942			
9K+18K	24,226	11,942~30,709	7,506	16,719			
9K+24K (2)	27,297	11,942~30,709	6,824	20,472			
12K+12K	20,472	11,942~27,297	10,236	10,236			
12K+18K	27,297	11,942~30,709	10,577	16,719			
12K+24K (2)	32,415	11,942~37,533	10,236	22,178			
18K+18K	32,415	11,942~37,533	16,207	16,207			
18K+24K (2)	32,415	11,942~37,533	13,989	18,766			
24K +24K (2)	32,415	11,942~37,533	16,207	16,207			
9K+9K+9K	24,567	11,942~30,709	8,189	8,189	8,189		
9K+9K+12K	24,567	11,942~30,709	6,994	7,336	10,236		
9K+9K+18K	32,415	11,942~37,533	8,018	8,018	16,378		
9K+9K+24K (2)	35,486	11,942~41,628	8,189	8,189	19,107		
9K+12K+12K	29,685	11,942~32,756	8,530	10,577	10,577		
9K+12K+18K	35,486	11,942~41,628	8,530	10,918	16,037		
9K+12K+24K (2)	39,580	11,942~46,405	7,847	9,553	22,178		
9K+18K+18K	39,580	11,942~46,405	7,165	15,013	15,013		
9K+18K+24K (2)	39,580	11,942~46,405	6,824	13,648	19,107		
9K+24K+24K (2)	39,580	11,942~46,405	5,800	16,890	16,890		
12K+12K+12K	35,486	11,942~41,628	11,771	11,771	11,942		
12K+12K+18K	35,486	11,942~41,628	10,918	10,918	13,648		
12K+12K+24K (2)	39,580	11,942~46,405	10,065	10,065	19,449		
12K+18K+18K	39,580	11,942~46,405	9,553	15,013	15,013		
12K+18K+24K (2)	39,580	11,942~46,405	9,042	14,160	16,378		
12K+24K+24K (2)	39,580	11,942~46,405	8,530	15,525	15,525		
18K+18K+18K	39,580	11,942~46,405	13,136	13,136	13,307		
18K+18K+24K (2)	39,580	11,942~46,405	12,283	12,283	15,013		
9K+9K+9K+9K	35,486	11,942~41,628	8,871	8,871	8,871	8,871	
9K+9K+9K+12K	35,486	11,942~41,628	8,189	8,189	8,189	10,918	
9K+9K+9K+18K	39,580	11,942~46,405	7,847	7,847	7,847	16,037	
9K+9K+9K+24K (2)	39,580	11,942~46,405	6,824	6,824	6,824	19,107	
9K+9K+12K+12K	35,486	11,942~41,628	7,165	7,165	10,577	10,577	
9K+9K+12K+18K	39,580	11,942~46,405	6,824	6,824	10,577	15,354	
9K+9K+12K+24K (2)	39,580	11,942~46,405	6,312	6,312	9,553	17,572	
9K+9K+18K+18K	39,580	11,942~46,405	6,483	6,483	13,307	13,307	
9K+9K+18K+24K (2)	39,580	11,942~46,405	6,141	6,141	10,407	16,890	
9K+12K+12K+12K	39,580	11,942~46,405	7,847	10,577	10,577	10,577	
9K+12K+12K+18K	39,580	11,942~46,405	7,165	8,700	8,700	15,013	
9K+12K+12K+24K (2)	39,580	11,942~46,405	6,483	7,933	7,933	17,231	
9K+12K+18K+18K	39,580	11,942~46,405	6,483	8,189	12,454	12,454	

# Model No: MULTI42HP230V1A

# 42,000 BtuH (cont.)

# **Cooling Capacity (BtuH)**

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)	INDOOR UNIT E (BtuH)
9K+18K+18K+18K	39,580	11,942~46,405	5,800	11,260	11,260	11,260	
12K+12K+12K+12K	39,580	11,942~46,405	9,895	9,895	9,895	9,895	
12K+12K+12K+18K	39,580	11,942~46,405	8,359	8,359	8,359	14,501	
12K+12K+12K+24K(2)	39,580	11,942~46,405	7,506	7,506	7,506	17,060	
12K+12K+18K+18K	39,580	11,942~46,405	7,847	7,847	11,942	11,942	
9K+9K+9K+9K+9K	39,580	11,942~46,405	7,916	7,916	7,916	7,916	7,916
9K+9K+9K+9K+12K	39,580	11,942~46,405	7,421	7,421	7,421	7,421	9,895
9K+9K+9K+9K+18K	39,580	11,942~46,405	6,824	6,824	6,824	6,824	12,283
9K+9K+9K+9K+24K(2)	39,580	11,942~46,405	6,483	6,483	6,483	6,483	13,648
9K+9K+9K+12K+12K	39,580	11,942~46,405	7,165	7,165	7,165	9,042	9,042
9K+9K+9K+12K+18K	39,580	11,942~46,405	6,483	6,483	6,483	8,274	11,857
9K+9K+9K+18K+18K	39,580	11,942~46,405	6,483	6,483	6,483	10,065	10,065
9K+9K+12K+12K+12K	39,580	11,942~46,405	6,483	6,483	8,871	8,871	8,871
9K+9K+12K+12K+18K	39,580	11,942~46,405	5,971	5,971	8,018	8,018	11,601
9K+12K+12K+12K+12K	39,580	11,942~46,405	6,483	8,274	8,274	8,274	8,274
9K+12K+12K+12K+18K	39,580	11,942~46,405	6,141	7,592	7,592	7,592	10,662
12K+12K+12K+12K+12K	39,580	11,942~46,405	7,916	7,916	7,916	7,916	7,916

# Heating Capacity (BtuH)

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)	INDOOR UNIT E (BtuH)
9K+9K	25,591	15,354~33,780	10,662	14,928			
9K+12K	25,591	15,354~33,780	10,662	14,928			
9K+18K	30,282	15,354~33,780	9,383	20,899			
9K+24K (2)	34,121	15,354~33,533	8,530	25,591			
12K+12K	25,591	15,354~30,026	12,795	12,795			
12K+18K	34,121	15,354~37,533	13,222	20,899			
12K+24K (2)	40,519	15,354~42,651	12,795	27,723			
18K+18K	40,519	15,354~42,651	20,261	20,261			
18K+24K (2)	40,519	15,354~42,651	17,487	23,458			
24K+24K (2)	40,519	15,354~42,651	20,261	20,261			
9K+9K+9K	30,709	15,354~40,945	10,236	10,236	10,236		
9K+9K+12K	30,709	15,354~40,945	8,745	9,171	12,795		
9K+9K+18K	40,519	15,354~42,651	10,024	10,024	20,472		
9K+9K+24K (2)	44,357	15,354~45,040	10,236	10,236	23,884		
9K+12K+12K	37,107	15,354~40,945	10,662	13,222	13,222		
9K+12K+18K	44,357	15,354~45,040	10,662	13,648	20,046		
9K+12K+24K (2)	45,040	15,354~47,769	8,929	10,871	25,239		
9K+18K+18K	45,040	15,354~47,769	8,155	17,084	17,084		
9K+18K+24K (2)	45,040	15,354~47,769	7,766	15,532	21,742		
9K+24K+24K (2)	45,040	15,354~47,769	6,599	19,220	19,220		
12K+12K+12K	44,357	15,354~45,040	14,716	14,716	14,928		

# INDOOR UNIT COMBINATIONS

#### Model No: MULTI42HP230V1A

42,000 BtuH (cont.)

# Heating Capacity (BtuH)

INDOOR UNITS COMBINATIONS	RATED SYSTEM CAPACITY (BtuH)	CAPACITY RATING (MIN - MAX) (BtuH)	INDOOR UNIT A (BtuH)	INDOOR UNIT B (BtuH)	INDOOR UNIT C (BtuH)	INDOOR UNIT D (BtuH)	INDOOR UNIT E (BtuH)
12K+12K+18K	44,357	15,354~45,040	13,648	13,648	17,060		
12K+12K+24K (2)	45,040	15,354~47,769	11,454	11,454	22,131		
12K+18K+18K	45,040	15,354~47,769	10,871	17,084	17,084		
12K+18K+24K (2)	45,040	15,354~47,769	10,291	16,112	18,637		
12K+24K+24K (2)	45,040	15,354~47,769	9,707	17,668	17,668		
18K+18K+18K	45,040	15,354~47,769	14,948	14,948	15,143		
18K+18K+24K (2)	45,040	15,354~47,769	13,979	13,979	17,084		
9K+9K+9K+9K	44,357	15,354~47,769	11,089	11,089	11,089	11,089	
9K+9K+9K+12K	44,357	15,354~47,769	10,236	10,236	10,236	13,648	
9K+9K+9K+18K	45,040	15,354~47,769	8,929	8,929	8,929	18,248	
9K+9K+9K+24K (2)	45,040	15,354~47,769	7,766	7,766	7,766	21,742	
9K+9K+12K+12K	44,357	15,354~47,769	8,956	8,956	13,222	13,222	
9K+9K+12K+18K	45,040	15,354~47,769	7,766	7,766	12,038	17,473	
9K+9K+12K+24K (2)	45,040	15,354~47,769	7,182	7,182	10,871	19,995	
9K+9K+18K+18K	45,040	15,354~47,769	7,377	7,377	15,143	15,143	
9K+9K+18K+24K (2)	45,040	15,354~47,769	6,988	6,988	11,843	19,220	
9K+12K+12K+12K	45,040	15,354~47,769	8,929	12,038	12,038	12,038	
9K+12K+12K+18K	45,040	15,354~47,769	8,155	9,902	9,902	17,084	
9K+12K+12K+24K (2)	45,040	15,354~47,769	7,377	9,028	9,028	19,609	
9K+12K+18K+18K	45,040	15,354~47,769	7,377	9,318	14,170	14,170	
9K+18K+18K+18K	45,040	15,354~47,769	6,599	12,812	12,812	12,812	
12K+12K+12K+12K	45,040	15,354~47,769	11,260	11,260	11,260	11,260	
12K+12K+12K+18K	45,040	15,354~47,769	9,513	9,513	9,513	16,501	
12K+12K+12K+24K (2)	45,040	15,354~47,769	8,540	8,540	8,540	19,415	
12K+12K+18K+18K	45,040	15,354~47,769	8,929	8,929	13,590	13,590	
9K+9K+9K+9K+9K	45,040	15,354~47,769	9,008	9,008	9,008	9,008	9,008
9K+9K+9K+9K+12K	45,040	15,354~47,769	8,445	8,445	8,445	8,445	11,260
9K+9K+9K+9K+18K	45,040	15,354~47,769	7,766	7,766	7,766	7,766	13,979
9K+9K+9K+9K+24K (2)	45,040	15,354~47,769	7,377	7,377	7,377	7,377	15,532
9K+9K+9K+12K+12K	45,040	15,354~47,769	8,155	8,155	8,155	10,291	10,291
9K+9K+9K+12K+18K	45,040	15,354~47,769	7,377	7,377	7,377	9,414	13,491
9K+9K+9K+18K+18K	45,040	15,354~47,769	7,377	7,377	7,377	11,454	11,454
9K+9K+12K+12K+12K	45,040	15,354~47,769	7,377	7,377	10,096	10,096	10,096
9K+9K+12K+12K+18K	45,040	15,354~47,769	6,793	6,793	9,124	9,124	13,201
9K+12K+12K+12K+12K	45,040	15,354~47,769	7,377	9,414	9,414	9,414	9,414
9K+12K+12K+12K+18K	45,040	15,354~47,769	6,988	8,639	8,639	8,639	12,133
12K+12K+12K+12K+12K	45,040	15,354~47,769	9,008	9,008	9,008	9,008	9,008

**Notes:** 1) It is critical to size the outdoor unit for the entire building load and each indoor unit for its individual zone load. 2) 24K size is reserved for Ceiling Cassettes, Concealed Ducts, and Floor/Ceilings units only. Not Wall Mount units.

#### Capacity data is based on the following conditions:

Cooling Nominal Test Conditions: Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

#### Model No: MULT18HP230V1A

18,000 BtuH

# **Cooling Performance**

OUTDOOR AMBIENT	INDOOR ENTERING AIR TEMPERATURES (DB) 50% RH							
TEMPERATURE (DB)		2°F	67		72			
	TC	SHC	TC	SHC	тс	SHC		
25°F	22,145	16,443	23,936	17,330	25,587	18,422		
35°F	21,641	16,423	23,047	16,825	24,167	17,473		
45°F	20,572	15,799	22,000	16,324	23,571	17,089		
55°F	19,805	15,329	21,119	15,839	22,640	16,528		
65°F	19,130	14,864	21,049	15,977	22,320	16,316		
75°F	18,378	14,371	19,800	15,226	21,296	15,716		
85°F	17,640	14,006	18,900	14,591	20,520	15,329		
95°F	16,740	13,375	18,000	14,382	19,692	14,789		
105°F	15,840	12,862	17,060	13,614	18,540	14,239		
115°F	14,939	12,309	15,839	12,829	16,919	13,248		

# **Heating Performance**

OUTDOOR AMBIENT	INDOOR ENTERING AIR TEMPERATURES (DB)							
TEMPERATURE (DB) (80% RH)	65°F		70	-	75°F			
	TC	SHC	TC	SHC	TC	SHC		
5°F	15,608	15,608	14,731	14,731	14,370	14,370		
15°F	16,684	16,684	15,221	15,221	15,130	15,130		
25°F	17,702	17,702	16,802	16,802	15,846	15,846		
35°F	18,691	18,691	17,300	17,300	16,574	16,574		
45°F	19,667	19,667	19,000	19,000	17,849	17,849		
55°F	19,693	19,693	19,124	19,124	18,287	18,287		
65°F	19,600	19,600	19,314	19,314	18,719	18,719		

TC- Total Capacity (BtuH) SHC- Sensible Capacity (BtuH)

#### Capacity data is based on the following conditions:

Cooling Nominal Test Conditions Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

# **EXTENDED PERFORMANCE RATINGS**

#### Model No: MULT24HP230V1A 24,000 BtuH

# **Cooling Performance**

OUTDOOR AMBIENT	INDOOR ENTERING AIR TEMPERATURES (DB) 50% RH								
TEMPERATURE (DB)		62°F		°F	72°F				
	TC	SHC	тс	SHC	TC	SHC			
25°F	31,988	23,751	34,575	25,032	36,959	26,610			
35°F	31,260	23,723	33,291	24,302	34,907	25,238			
45°F	29,716	22,821	31,777	23,579	34,047	24,684			
55°F	28,608	22,142	30,506	22,879	32,703	23,873			
65°F	27,633	21,471	30,405	23,077	32,240	23,567			
75°F	26,546	20,759	28,600	21,994	30,760	22,701			
85°F	25,480	20,231	27,300	21,075	29,640	22,141			
95°F	24,180	19,320	26,000	20,774	28,444	21,361			
105°F	22,880	18,579	24,643	19,665	26,780	20,567			
115°F	21,578	17,780	22,878	18,531	24,438	19,135			

# **Heating Performance**

OUTDOOR AMBIENT	INDOOR ENTERING AIR TEMPERATURES (DB)							
TEMPERATURE (DB) (80% RH)	65°F TC SHC		70 TC	°F SHC	75°F TC SHC			
		5110		5110		JIIC		
5°F	23,823	23,823	22,484	22,484	21,933	21,933		
15°F	25,465	25,465	23,232	23,232	23,092	23,092		
25°F	27,019	27,019	25,645	25,645	24,186	24,186		
35°F	28,528	28,528	26,405	26,405	25,297	25,297		
45°F	30,018	30,018	29,000	29,000	27,243	27,243		
55°F	30,058	30,058	29,189	29,189	27,912	27,912		
65°F	29,916	29,916	29,479	29,479	28,571	28,571		

TC- Total Capacity (BtuH) SHC- Sensible Capacity (BtuH)

#### Capacity data is based on the following conditions:

Cooling Nominal Test Conditions Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

#### Model No: MULTI30HP230V1A 30

## 30,000 BtuH

# **Cooling Performance**

OUTDOOR AMBIENT	INDOOR ENTERING AIR TEMPERATURES (DB) 50% RH							
TEMPERATURE (DB)	62°F		67		72°F			
• •	TC	SHC	TC	SHC	TC	SHC		
25°F	35,679	26,492	38,564	27,920	41,224	29,681		
35°F	34,867	26,460	37,132	27,106	38,935	28,150		
45°F	33,144	25,454	35,444	26,300	37,976	27,532		
55°F	31,909	24,697	34,026	25,519	36,476	26,628		
65°F	30,821	23,948	33,913	25,740	35,960	26,287		
75°F	29,609	23,154	31,900	24,531	34,310	25,320		
85°F	28,420	22,565	30,450	23,507	33,060	24,696		
95°F	26,970	21,549	29,000	23,171	31,726	23,826		
105°F	25,520	20,722	27,486	21,934	29,870	22,940		
115°F	24,068	19,832	25,518	20,669	27,258	21,343		

# **Heating Performance**

OUTDOOR AMBIENT	INDOOR ENTERING AIR TEMPERATURES (DB)					
TEMPERATURE (DB) (80% RH)	65 TC	5°F SHC	70 TC	°F SHC	75 TC	°F SHC
	10	0110		0110		0110
5°F	24,974	24,974	23,570	23,570	22,992	22,992
15°F	26,694	26,694	24,354	24,354	24,207	24,207
25°F	28,324	28,324	26,883	26,883	25,353	25,353
35°F	29,905	29,905	27,679	27,679	26,518	26,518
45°F	31,467	31,467	30,400	30,400	28,558	28,558
55°F	31,509	31,509	30,598	30,598	29,260	29,260
65°F	31,360	31,360	30,902	30,902	29,950	29,950

TC- Total Capacity (BtuH) SHC- Sensible Capacity (BtuH)

#### Capacity data is based on the following conditions:

Cooling Nominal Test Conditions Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

# **EXTENDED PERFORMANCE RATINGS**

### Model No: MULTI36HP230V1A 36,000 BtuH

# **Cooling Performance**

OUTDOOR AMBIENT	INDOOR ENTERING AIR TEMPERATURES (DB) 50% RH					
TEMPERATURE (DB)	62°F		67°F		72°F	
	TC	SHC	TC	SHC	TC	SHC
25°F	41,830	31,059	45,213	32,734	48,331	34,798
35°F	40,878	31,022	43,534	31,780	45,648	33,004
45°F	38,859	29,843	41,555	30,834	44,523	32,279
55°F	37,410	28,955	39,892	29,919	42,765	31,219
65°F	36,135	28,077	39,760	30,178	42,160	30,819
75°F	34,714	27,146	37,400	28,761	40,225	29,686
85°F	33,320	26,456	35,700	27,560	38,760	28,954
95°F	31,620	25,264	34,000	27,166	37,196	27,934
105°F	29,920	24,295	32,225	25,716	35,020	26,895
115°F	28,220	23,253	29,920	24,235	31,960	25,025

# **Heating Performance**

OUTDOOR AMBIENT TEMPERATURE (DB) (80% RH)	INDOOR ENTERING AIR TEMPERATURES (DB)					
	65 TC	5°F SHC	70 TC	°F SHC	75 TC	°F SHC
5°F	26,628	26,628	25,131	25,131	24,515	24,515
15°F	28,463	28,463	25,967	25,967	25,811	25,811
25°F	30,200	30,200	28,664	28,664	27,033	27,033
35°F	31,886	31,886	29,513	29,513	28,275	28,275
45°F	33,552	33,552	32,414	32,414	30,450	30,450
55°F	33,597	33,597	32,414	32,414	31,198	31,198
65°F	33,438	33,438	32,949	32,949	31,934	31,934

TC- Total Capacity (BtuH) SHC- Sensible Capacity (BtuH)

#### Capacity data is based on the following conditions:

Cooling Nominal Test Conditions Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

# Model No: MULTI42HP230V1A 42,000 BtuH

# **Cooling Performance**

OUTDOOR AMBIENT	INDOOR ENTERING AIR TEMPERATURES (DB) 50% RH					
TEMPERATURE (DB)	62°F		67°F		72°F	
	TC	SHC	TC	SHC	тс	SHC
25°F	49,212	36,540	53,192	38,511	56,860	40,939
35°F	48,092	36,497	51,216	37,388	53,704	38,828
45°F	45,716	35,110	48,888	36,275	52,380	37,976
55°F	44,012	34,065	46,932	35,199	50,312	36,728
65°F	42,512	33,032	46,776	35,503	49,600	36,258
75°F	40,840	31,937	44,000	33,836	47,324	34,925
85°F	39,200	31,125	42,000	32,424	45,600	34,063
95°F	37,200	29,723	40,000	31,960	43,760	32,864
105°F	35,200	28,582	37,912	30,254	41,200	31,642
115°F	33,200	27,357	35,200	28,512	37,600	29,441

# **Heating Performance**

OUTDOOR AMBIENT	INDOOR ENTERING AIR TEMPERATURES (DB)					
TEMPERATURE (DB) (80% RH)	6 TC	5°F SHC	70 TC	°F SHC	75 TC	°F SHC
				ene		••
5°F	34,729	34,729	32,776	32,776	31,973	31,973
15°F	37,122	37,122	33,867	33,867	33,664	33,664
25°F	39,388	39,388	37,384	37,384	35,257	35,257
35°F	41,586	41,586	38,491	38,491	36,876	36,876
45°F	43,759	43,759	42,275	42,275	39,713	39,713
55°F	43,818	43,818	42,275	42,275	40,690	40,690
65°F	43,611	43,611	42,973	42,973	41,649	41,649

TC- Total Capacity (BtuH) SHC- Sensible Capacity (BtuH)

#### Capacity data is based on the following conditions:

Cooling Nominal Test Conditions Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB



# MULTI WALL MOUNT UNITS

Models: NEO09HP230V1AH NEO12HP230V1AH NEO18HP230V1AH





# +Multi Wall Mount Units

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# +Multi Wall Mount Units



When it comes to fighting the heat, you need the NEO +Multi Wall Mount at your side. Don't be fooled by its compact design. Our +Multi Wall Mount is energy efficient, yet powerful for year round comfort. Gree's whisper quiet fan technology silences distracting noise. Its attractive compact design mounts in a small wall space near the ceiling, and fits seamlessly into any decor. The fully featured +Multi Wall Mount can be operated by an infrared remote controller or tether controller, allowing you to easily manage a variety of useful features to further enhance room comfort.

## FEATURES AND BENEFITS

#### **Whisper Quiet**

Gree systems are both energy efficient and quiet. Wall mounted units operate with sound levels starting as low as 32 dB(A).

#### **Subtle Appearance**

Designed for a comfortable fit in virtually any living space. This slim compact cabinet sits inconspicuously on the wall, and blends into most interior designs.

#### **Multi-Speed Fan**

The indoor fan can run at up to four different speeds (Low, Medium, High or Turbo) for either COOLING or HEATING mode for maximum comfort and quiet operation.

#### **Time Guard**

Among the system's many safeties is a Time Guard function to prevent rapid cycling of the compressor. A protective five-minute time delay restricts compressor restarts after shutoff.

#### **Power Failure Mode**

Power interruptions are no problem. User selections and system parameters are stored in non-volatile memory. These parameters are retained during a power failure. When power is returned, the system will automatically return to the last operating mode.

#### Controller

The unit comes with a factory supplied wired Tether Controller or Wireless Remote Controller. Note: the controllers are mutually exclusive. They cannot be used at the same time.

#### **IR Wireless Remote Controller**

The Gree multi-functional infrared hand held wireless controller is sleek, ergonomically designed, easy to use and has a large backlit LCD display.

#### **Tether Controller (Optional)**

The Gree tether controller mounts to the wall up to 25 feet from the unit. It provides complete control over operation mode, desired temperature, fan speed, airflow direction and more.

#### **Mode Button**

The units can be set to five different operating modes: HEAT, COOL, DRY, FAN ONLY and AUTO. Note: AUTO MODE has fixed setpoints of 68° F heating and 78° F cooling, which are not changeable. The system will automatically select heating or cooling to maintain room temperature within this band.

#### **Intelligent Pre-Heating**

The Multi Zone system guards against the annoying COLD BLOW in heating mode, and constantly monitors the discharge air temperature. It will delay the indoor fan until the indoor coil has warmed up to prevent blowing uncomfortable cool air into the room.

#### **Timer Mode**

The unit can be programmed to turn ON or OFF after a specific amount time. The time period is adjustable between one half and 24 hours.

#### I Feel Mode

The unit will sense room temperature at the remote controller instead of at the indoor unit. It then adjusts airflow and temperature accordingly for the ultimate in personal comfort control and energy savings.

#### Swing Louver

The unit has adjustable swing louvers which can be controlled from the wired tether or wireless controllers. Vertical swing louver allows five different vertical (up & down) air discharge directions including Continuous Sweep. Maximize comfort by adjusting the direction of airflow in the room by moving the louvers up or down.

#### **Privacy Lock Mode**

Both wired tether and wireless controllers have a Privacy Lock to avert unauthorized access and stop tampering with system settings.

#### Sleep Mode

The unit will automatically adjust room temperature during sleep time. This slight change in temperature will not affect your comfort level due to the natural effects that sleeping has on the body, but it will save on energy consumption and will lower electric bills.

#### Fahrenheit °F / Celsius °C

The wired tether and wireless controllers can be set to display in either °F or °C.

#### **Polymeric Air Filters**

Two-piece removable polymeric air filters easily slide in and out from the front of the indoor unit and are interchangeable. The front panel does not need to be removed to access or change the filters. The filters are washable and permanent.

#### Self-Diagnosis

With an on-board computer using real-time diagnostics, the Gree Multi Zone system helps to prolong its own life. The automatic diagnosis feature continuously scans for unacceptable operating conditions or malfunctions. If such conditions occur, the system takes corrective action or stops. Fault codes are shown on the unit display to facilitate easy troubleshooting and repair.

#### **Agency Listings**

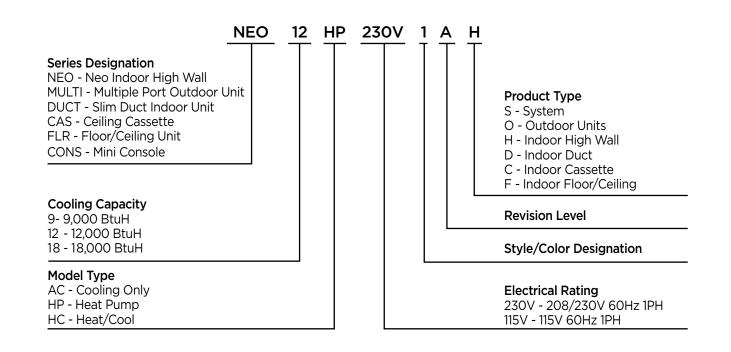
All systems are listed with AHRI (Air conditioning, Heating, and Refrigeration Institute) and are ETL Certified per UL Standards.

#### 7/5 Year Limited Warranty

Enjoy one of the most comprehensive warranties in the industry. Seven (7) years on compressor and Five (5) years on all parts.

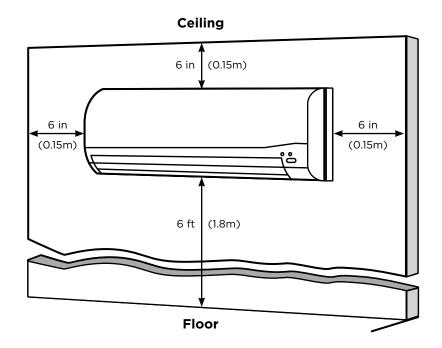
# +Multi Wall Mount Units

## NOMENCLATURE



## MINIMUM INDOOR CLEARANCE SPECIFICATIONS

The unit installation must meet or exceed the following minimum clearances for proper operation.



## **Indoor High Wall Units**

MODEL NUMBER	COOLING CAPACITY (BtuH)	HEATING CAPACITY (BtuH)	DEHUMIDIFICATION (Pts./hr.)
NEO09HP230V1AH	9,000	9,800	2.5
NEO12HP230V1AH	12,000	13,000	3.0
NEO18HP230V1AH	18,000	19,800	3.8

### **Indoor High Wall Units**

MODEL NUMBER	AIR FILTER TYPE	AIR FLOW	FAN TYPE
NEO09HP230V1AH	Polymeric Mesh	4-way	Crossflow
NEO12HP230V1AH	Polymeric Mesh	4-way	Crossflow
NEO18HP230V1AH	Polymeric Mesh	4-way	Crossflow

## **Indoor High Wall Units**

	COOLING (CFM)				
MODEL NUMBER	LOW FAN	MEDIUM FAN	HIGH FAN	TURBO FAN	
NEO09HP230V1AH	218	253	277	306	
NEO12HP230V1AH	217	253	277	335	
NEO18HP230V1AH	324	383	459	500	

## **Indoor High Wall Units**

		HEATING	G (CFM)	
MODEL NUMBER	LOW FAN	MEDIUM FAN	HIGH FAN	TURBO FAN
NEO09HP230V1AH	218	253	277	306
NEO12HP230V1AH	217	253	277	335
NEO18HP230V1AH	324	383	459	500

## AIR THROW DATA

## **Indoor High Wall Units**

		APPROXIMATE	AIR THROW	
MODEL NUMBER	LOW	MEDIUM	HIGH	TURBO
NEO09HP230V1AH	18 ft.	21 ft.	24 ft.	28 ft.
NEO12HP230V1AH	18 ft.	21 ft.	24 ft.	30 ft.
NEO18HP230V1AH	22 ft.	27 ft.	33 ft.	39 ft.

## SOUND DATA

## **Indoor High Wall Units**

	LOW	FAN	MEDIU	JM FAN	HIGH	I FAN	TURB	O FAN
MODEL NUMBER	SOUND POWER	SOUND PRESSURE	SOUND POWER	SOUND PRESSURE	SOUND POWER	SOUND PRESSURE	SOUND POWER	SOUND PRESSURE
NEO09HP230V1AH	42 dBA	32 dBA	45 dBA	35 dBA	48 dBA	38 dBA	52 dBA	42 dBA
NEO12HP230V1AH	43 dBA	33 dBA	46 dBA	36 dBA	49 dBA	39 dBA	54 dBA	44 dBA
NEO18HP230V1AH	45 dBA	35 dBA	50 dBA	40 dBA	54 dBA	44 dBA	59 dBA	49 dBA

**Note:** 1. Sound pressure ratings are estimated sound pressure measurements, 3 feet from unit. 2. Sound power ratings are per AHRI 270 and AHRI 350

## **ELECTRICAL DATA**

## **Indoor High Wall Units**

	RATED POWER SUPPLY	VOLTAGE RANGE	INDOOR FAN		
MODEL NUMBER	(volt-phase-hz)	(volts)	RLA (amps)	POWER (watts)	
NEO09HP230V1AH	208/230v-1ph-60hz	187-253	0.2	20.0	
NEO12HP230V1AH	208/230v-1ph-60hz	187-253	0.2	20.0	
NEO18HP230V1AH	208/230v-1ph-60hz	187-253	0.3	20.0	

Legend: RLA - Rated Load Amps

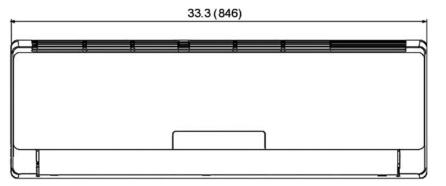
## **PRODUCT WEIGHT**

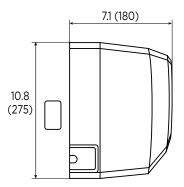
## **Indoor High Wall Units**

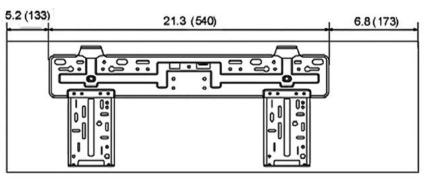
	PRODUCT WEIGHT				
MODEL NUMBER	NET OPERATING	GROSS SHIPPING			
NEO09HP230V1AH	22 lbs.	29 lbs.			
NEO12HP230V1AH	22 lbs.	29 lbs.			
NEO18HP230V1AH	24 lbs.	31 lbs.			

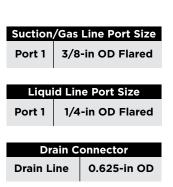
## Model No: NEO09HP230V1AH Model No: NEO12HP230V1AH

## 9,000 BtuH 12,000 BtuH



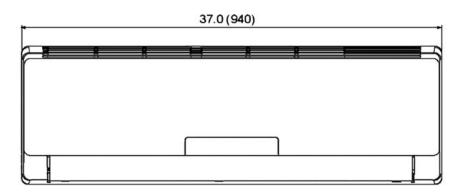


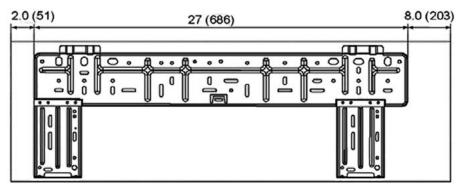


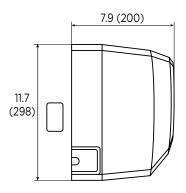


Model No: NEO18HP230V1AH









Suction	Suction/Gas Line Port Size				
Port 1	1/2	-in OD Flared			
Liqui	d Lin	ie Port Size			
Port 1	1/4-in OD Flared				
	Drain Connector				
Dr	ain C	onnector			
Dra	ain C	onnector			



## **MULTI CEILING CASSETTES**

Models: CAS12HP230V1AC CAS18HP230V1AC CAS24HP230V1AC





# +Multi Ceiling Cassettes

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## +Multi Ceiling Cassettes



Gree's +Multi Ceiling Cassette will inconspicuously provide quiet performance through innovative design. The +Multi Ceiling Cassette is extremely suitable for any room, and can be easy installed in suspended ceilings with only a discreet decorative discharge grille visible. Gree's fan technology quietly and evenly distributes conditioned air throughout the room, and an internal condensate lift pump reliably disposes condensate water to a safe location. The +Multi Ceiling Cassette is ideal for light commercial applications which require comfort control in large, open spaces. Each +Multi Ceiling Cassette can be operated by an infrared remote control or wired tether controller, allowing maximum flexibility for any application.

## FEATURES AND BENEFITS

#### **Whisper Quiet**

Gree systems are both energy efficient and quiet. Wall mounted units operate with sound levels starting as low as 35 dB(A).

#### **Subtle Appearance**

This flexible ceiling mount unit conveniently disappears above the surface of any room's hard or drop ceiling.

#### Convenient Size (12K and 18K only)

The Gree ceiling cassettes can be easily mounted in a hard ceiling (with an access panel for servicing or in 2'x2' drop ceiling. They provide great air distribution, quiet operating and a less obtrusive style.

#### **Multi-Speed Fan**

The indoor fan can run at up to three different speeds (Low, Medium, or High) for either COOLING or HEATING mode for maximum comfort and quiet operation.

#### 4-Way Discharge Air

The Gree ceiling cassette is designed to bring return air in through the center and quietly discharge the air out along each of the four exterior sides.

#### **Decorative Discharge Air Grille (sold separately)**

The cassette Decorative Grille is made of strong resilient polymer. It's designed to fit attractively in any interior décor. The Decorative Grille is sold separately and is required to complete installation of the systems.

#### **Built-In Condensate Lift Pump**

The unit features a built-in drain pump that lifts condensation up to 11 inches above the drain pan to a gravity condensate drain system. In most cases, the internal condensate lift mechanism will avoid the need for an external condensate pump.

#### **Condensate Sentry**

The unit's fail-safe mechanism recognizes when there is a high level in the condensate pan and shuts off the system to prevent overflow problems.

#### **Intelligent Pre-Heating**

The Multi Zone system guards against the annoying COLD BLOW in heating mode. The system constantly monitors the discharge air temperature. It will delay the indoor fan until the indoor coil has warmed up to prevent blowing uncomfortable cool air into the room.

#### Controller

The unit comes with a factory supplied wired Tether Controller or Wireless Remote Controller. Note: the controllers are mutually exclusive. They cannot be used at the same time.

#### **IR Wireless Remote Controller**

The Gree multi-functional infrared hand held wireless controller is sleek, ergonomically designed, easy to use and has a large backlit LCD display.

#### **Tether Controller (Optional)**

The Gree wired tether controller mounts to the wall up to 25 feet from the unit. It provides complete control over operation mode, desired temperature, fan speed, airflow direction and more.

#### **Mode Button**

The units can be set to five different operating modes: HEAT, COOL, DRY, FAN ONLY and AUTO. Note: AUTO MODE has fixed setpoints of 68° F heating and 78° F cooling, which are not changeable. The system will automatically select heating or cooling to maintain room temperature within this band.

#### **Timer Mode**

The unit can be programmed to turn ON or OFF after a specific amount time. The time period is adjustable between one half and 24 hours.

#### I Feel Mode

The unit will sense room temperature at the remote controller instead of at the indoor unit. It then adjusts airflow and temperature accordingly for the ultimate in personal comfort control and energy savings.

#### Swing Louver

The unit has adjustable swing louvers which can be controlled from the wired tether or wireless controllers. Vertical swing louver allows five different air discharge directions including Continuous Sweep. Maximize comfort by adjusting the direction of airflow in the room by moving the louvers up or down.

#### **Privacy Lock Mode**

Both wired tether and wireless controllers have a Privacy Lock to avert unauthorized access and stop tampering with system settings.

#### **Sleep Mode**

The unit will automatically adjust room temperature during sleep time. This slight change in temperature will not affect your comfort level due to the natural effects that sleeping has on the body, but it will save on energy consumption and will lower electric bills.

#### Fahrenheit °F / Celsius °C

The wired tether and wireless controllers can be set to display in either °F or °C.

## FEATURES AND BENEFITS

#### **Power Failure Mode**

Power interruptions are no problem. User selections and system parameters are stored in non-volatile memory. These parameters are retained during a power failure. When power is returned, the system will automatically return to the last operating mode.

#### **Polymeric Air Filter**

One piece removable polymeric air filter easily slides in and out from the ceiling cassette. The filter is washable and permanent.

#### **Self-Diagnosis**

With an on-board computer using real-time diagnostics, the Gree Multi Zone system helps to prolong its own life. The automatic diagnosis feature continuously scans for unacceptable operating conditions or malfunctions. If such conditions occur, the system takes corrective action or stops. Fault codes are shown on the unit display to facilitate easy troubleshooting and repair.

#### Fresh Air Intake (24K model only)

The 24K size ceiling cassette has a ventilation air knockout that allows a 4 inch flex duct connection and a field supplied duct booster fan. The maximum fresh air allowed is 10% of unit high speed fan airflow rating.

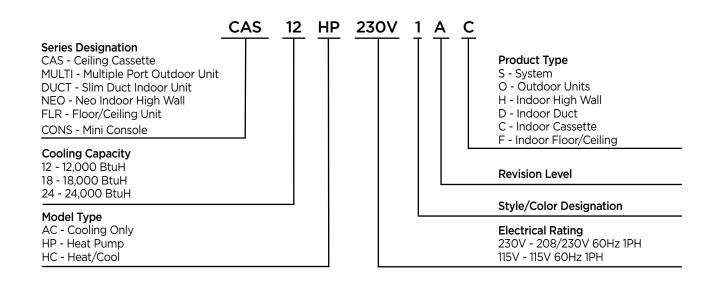
#### **Agency Listings**

All systems are listed with AHRI (Air conditioning, Heating, and Refrigeration Institute) and are ETL certified per UL Standards.

#### 7/5 Year Limited Warranty

Enjoy one of the most comprehensive warranties in the industry. Seven (7) years on compressor and Five (5) years on all parts.

## NOMENCLATURE



## **Ceiling Cassette**

MODEL NUMBER	COOLING CAPACITY (BtuH)	HEATING CAPACITY (BtuH)	DEHUMIDIFICATION (Pts./hr.)
CAS12HP230V1AC	11,946	13,652	3.0
CAS18HP230V1AC	15,359	17,065	3.8
CAS24HP230V1AC	22,867	27,304	4.4

## **Ceiling Cassette**

MODEL NUMBER	AIR FILTER TYPE	AIR FLOW	FAN TYPE
CAS12HP230V1AC	Polymeric Mesh	4-way	Axial
CAS18HP230V1AC	Polymeric Mesh	4-way	Axial
CAS24HP230V1AC	Polymeric Mesh	4-way	Axial

## **Ceiling Cassette**

MODEL NUMBER	LOW FAN	COOLING (CFM) MEDIUM FAN	HIGH FAN
CAS12HP230V1AC	251	292	353
CAS18HP230V1AC	251	292	353
CAS24HP230V1AC	465	509	694

## **Ceiling Cassette**

MODEL NUMBER	HEATING (CFM) LOW FAN MEDIUM FAN HIGH FAN				
	LOW TAN	MEDIONTAN	montan		
CAS12HP230V1AC	251	292	353		
CAS18HP230V1AC	251	292	353		
CAS24HP230V1AC	465	509	694		

## SOUND DATA

### **Ceiling Cassette**

MODEL NUMBER	LOW	FAN	AN MEDIUM FAN		HIGH FAN	
	SOUND POWER	SOUND PRESSURE	SOUND POWER	SOUND PRESSURE	SOUND POWER	SOUND PRESSURE
CAS12HP230V1AC	52 dBA	42 dBA	54 dBA	44 dBA	56 dBA	46 dBA
CAS18HP230V1AC	52 dBA	42 dBA	54 dBA	44 dBA	56 dBA	46 dBA
CAS24HP230V1AC	55 dBA	35 dBA	47 dBA	37 dBA	49 dBA	39 dBA

**Note:** 1. Sound pressure ratings are estimated sound pressure measurements, 3 feet from unit. 2. Sound power ratings are per AHRI 270 and AHRI 350

## **ELECTRICAL DATA**

### **Ceiling Cassette**

MODEL NUMBER	RATED POWER SUPPLY (volt-phase-hz)	VOLTAGE RANGE (volts)		OOR FAN POWER (watts)
CAS12HP230V1AC	208/230v-1ph-60hz	187-253	0.2	11.0
CAS18HP230V1AC	208/230v-1ph-60hz	187-253	0.2	11.O
CAS24HP230V1AC	208/230v-1ph-60hz	187-253	0.4	50.0

Legend: RLA - Rated Load Amps

## **PRODUCT WEIGHT**

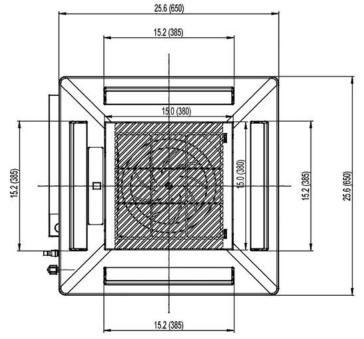
## **Ceiling Cassette**

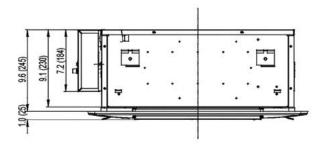
	PRODUCT WEIGHT			
MODEL NUMBER	NET OPERATING	GROSS SHIPPING		
CAS12HP230V1AC	40 lbs.	51 lbs.		
CAS18HP230V1AC	40 lbs.	51 lbs.		
CAS24HP230V1AC	62 lbs.	77 lbs.		

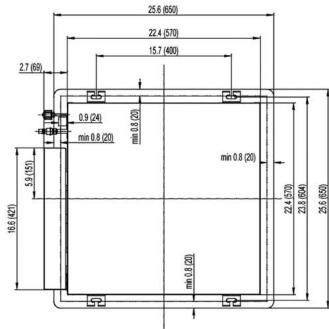
## **Decorative Grill**

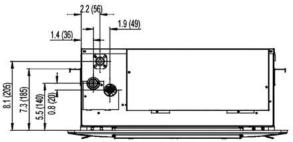
	PRODUCT WEIGHT			
MODEL NUMBER	NET OPERATING	GROSS SHIPPING		
CAS12HP230V1AC	6 lbs.	8 lbs.		
CAS18HP230V1AC	6 lbs.	8 lbs.		
CAS24HP230V1AC	6.5 lbs.	10 lbs.		











Suction/Gas Line Port Size				
3/8-in OD Flared				
1/2-in OD Flared				
ne Port Size				
1/4-in OD Flared				
1/4-in OD Flared				
Connection				
1.2-in OD Flared				
1.2-in OD Flared				

## +Multi Ceiling Cassettes

## DIMENSIONAL SPECIFICATIONS

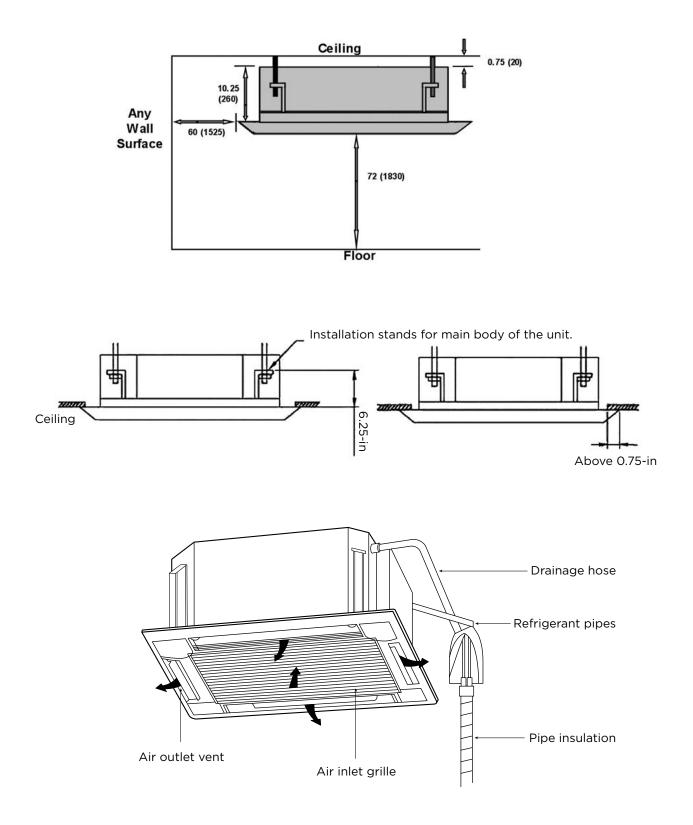
nin 0.8 (20)

#### Model No: CAS24HP230V1AC 24,000 BtuH 19.4 (492) -4.9 (125) 9.5 (242) 3.0 (76 24.0 (610) 37.4 (950) 19.4 (492) 19.4 (492) 19.4 (492) 24.0 (610) 37.4 (950) Suction/Gas Line Port Size 11.6 (294) 10.0 (255) 2.0 (52) Ø1.0 (25) 5/8-in OD Flared Port 1 10.2 (260) 9.5 (240) 8.5 (215) Liquid Line Port Size 63 (160) 075(19) 52 (131) 15 3/8-in OD Flared Port 1 19 8 1 Drain Connector Drain Line 1.2-in OD 37.4 (950) 33.1 (840) 30.8 (782) 21.0 (534) min 0.8 (20) -min 0.8 (20) 37.4 (950) 33.1 (840) 21.4 (544) 26.8 (681) 22.6 (574) 11.9 (303) 5 SE

8.2 (209) \_\_\_\_\_ 14.8 (376) 4.6 (118)

## MINIMUM INDOOR CLEARANCE SPECIFICATIONS

The unit installation must meet or exceed the following minimum clearances for proper operation.

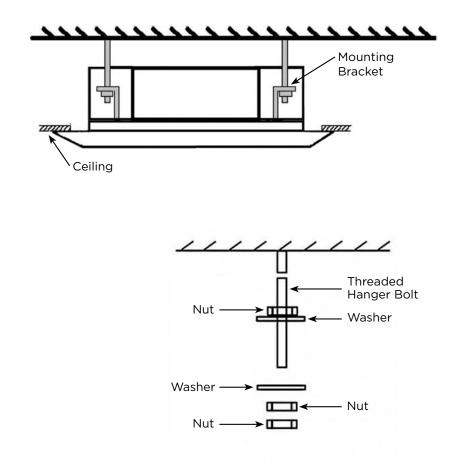


## +Multi Ceiling Cassettes

## INSTALLATION OF MOUNTING HANGERS

Depending on the type of ceiling, threaded hanger bolts (field supplied) are recommended for securing Ceiling Cassette to the ceiling or support studs.

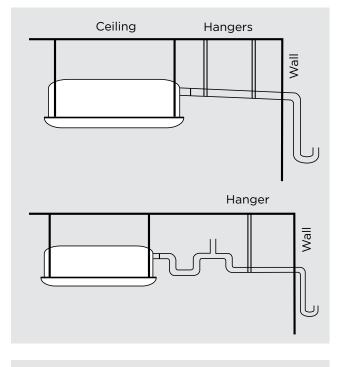
Proper mounting hardware is critical which includes upper nuts, lower flat washers (with insulation), top flat washers (without insulation), top nuts and locking nuts (double) on the threaded hanger bolts as show in diagram below.



It's recommended to build the condensate drain system with hard polyvinyl chloride (PVC) pipe and matching connectors. Use pipe with either the same diameter or larger than the unit drainage port.

#### **Gravity Drainage Systems with P-trap & Vent**

Pitch the condensate drain pipes at a gradual 2.5% pitch (Example: 1/4-in. drop over a 10-in. length) without obstructions. Use pipe hanger/brackets to support the condensate drain pipe from drooping. Insulate all pipes to prevent sweating and water damage.



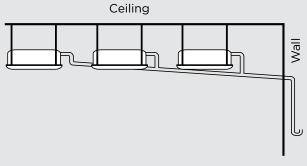
#### **Multiple Units with Common Drain**

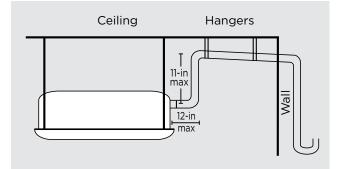
The following is the recommended condensate drainage system for multiple units that share a common drain line. Connecting multiple units to one trap allows air to be pulled through one or more of the units, bypassing the trap. An alternate method is having individual drains and traps for each unit.



If a gradual pitch from the drainage port is not obtainable, the Ceiling Cassette contains an internal condensate pump with limited head or lift. The condensate drain pipe may have a vertical height of 11-in. (280 mm) maximum above the unit drainage port within the first 12-in. (300 mm) as long as the remaining condensate drain pipe gradually descends from that point and aligns with drainage port.

Use an auxiliary condensate pump with float valve for vertical height greater than 11-in. (280 mm) above the unit drainage port. A float valve is recommended to shut off the system if the auxiliary pump fails.







## MULTI SLIM CONCEALED DUCTS

Models: DUCT09HP230V1AD DUCT12HP230V1AD DUCT18HP230V1AD DUCT24HP230V1AD





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Compact and powerful, the Gree Multi+ Concealed Duct indoor units offer the ultimate in flexibility and discretion. These slim indoor units are designed to be concealed above suspended ceilings or within open closet spaces to deliver conditioned air via ducting and suitable ceiling or wall grilles. This arrangement provides immense flexibility, in terms of both the distribution of conditioned air and the type of grille or diffuser that best complements the room's styling. Each unit comes with an easy-to-operate wall mounted wired tether controller.

## FEATURES AND BENEFITS

#### **Whisper Quiet**

Not only are the Gree systems energy efficient but they are quiet too. Wall mounted units operate with sound levels starting as low as 31 dB(A).

#### **Convenient Size (12K and 18K only)**

The Gree ceiling cassettes can be easily mounted in a hard ceiling (with an access panel for servicing) or in 2'x2' drop ceiling. They provide great air distribution, quiet operation and a less obtrusive style.

#### **Multi Fan Speeds**

The indoor fan can run at up to three different speeds (Low, Medium or High) for either COOLING or HEATING mode for maximum comfort and quiet operation.

#### **Built In Condensate Lift Pump**

The unit features a built-in drain pump that lifts condensation up to 11 inches above the drain pan to a gravity condensate drain system. In most cases, the internal condensate lift mechanism will avoid the need for an external condensate pump.

#### **Condensate Sentry**

The unit's fail-safe mechanism recognizes when there is a high level in the condensate pan and shuts off the system to prevent overflow problems.

#### **Intelligent Pre-Heating**

The Multi Zone system guards against the annoying COLD BLOW in heating mode. The system constantly monitors the discharge air temperature. It will delay the indoor fan until the indoor coil has warmed up to prevent blowing uncomfortable cool air into the room.

#### **Tether Controller**

The Gree wired tether controller mounts to the wall up to 25 feet from the unit. It provides complete control over your unit's operation mode, desired temperature, fan speed, airflow direction and more.

#### **Mode Button**

The units can be set to five different operating modes: HEAT, COOL, DRY, FAN ONLY and AUTO. Note: AUTO MODE has fixed setpoints of 68° F heating and 78° F cooling, which are not changeable. The system will automatically select heating or cooling to maintain room temperature within this band.

#### **Timer Mode**

The unit can be programmed to turn ON or OFF after a specific amount of time. The time period is adjustable between one half and 24 hours.

#### **Sleep Mode**

The unit will automatically adjust room temperature during your sleep time. This slight change in temperature will not affect your comfort level due to the natural effects that sleeping has on the body, but it will save on energy consumption and will lower electric bills.

#### Fahrenheit °F / Celsius °C

The wired tether controller can be set to display in either °F or °C.

#### **Power Failure Mode**

Power interruptions are no problem. User selections and system parameters are stored in non-volatile memory. These parameters are retained during a power failure. When power is returned, the system will automatically return to the last operating mode.

#### **Self-Diagnosis**

With an on-board computer using real-time diagnostics, the Gree Multi Zone system helps to prolong its own life. The automatic diagnosis feature continuously scans for unacceptable operating conditions or malfunctions. If such conditions occur, the system takes corrective action or stops. Fault codes are shown on the unit display to facilitate easy troubleshooting and repair.

#### **Privacy Lock Mode**

The wired tether controller has a Privacy Lock. The Privacy Lock averts unauthorized access and stops tampering with system settings.

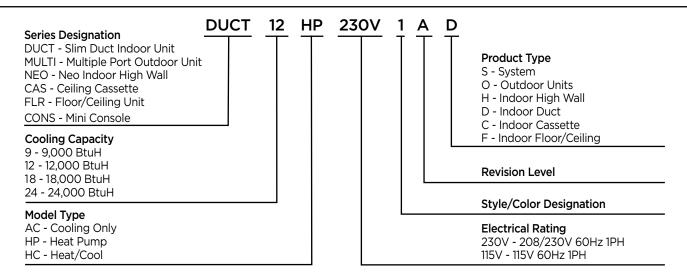
#### **Agency Listings**

All systems are listed with AHRI (Air conditioning, Heating, and Refrigeration Institute) and are ETL certified per UL Standards.

#### 7/5 Year Limited Warranty

Enjoy one of the most comprehensive warranties in the industry. Seven (7) years on compressor and Five (5) years on all parts.

## NOMENCLATURE



## PERFORMANCE SPECIFICATIONS AND DATA

### **Slim Concealed Duct**

MODEL NUMBER	COOLING CAPACITY (BtuH)	HEATING CAPACITY (BtuH)	DEHUMIDIFICATION (Pts./hr.)
DUCT09HP230V1AD	8,533	9,556	1.69
DUCT12HP230V1AD	11,946	13,140	2.96
DUCT18HP230V1AD	15,359	18,772	3.80
DUCT24HP230V1AD	24,232	27,304	5.28

#### **Slim Concealed Duct**

MODEL NUMBER	LOW FAN	COOLING (CFM) MEDIUM FAN	HIGH FAN
DUCT09HP230V1AD	147	177	265
DUCT12HP230V1AD	177	235	324
DUCT18HP230V1AD	294	353	412
DUCT24HP230V1AD	324	441	589

## **Slim Concealed Duct**

MODEL NUMBER	LOW FAN	HEATING (CFM) MEDIUM FAN	HIGH FAN
DUCT09HP230V1AD	147	177	265
DUCT12HP230V1AD	177	235	324
DUCT18HP230V1AD	294	353	412
DUCT24HP230V1AD	324	441	589

## **Slim Concealed Duct**

MODEL NUMBER	LOW	FAN	MEDIL	JM FAN	HIGH	FAN
	SOUND POWER	SOUND PRESSURE	SOUND POWER	SOUND PRESSURE	SOUND POWER	SOUND PRESSURE
DUCT09HP230V1AD	41	31	44	34	47	37
DUCT12HP230V1AD	42	32	45	35	49	39
DUCT18HP230V1AD	43	33	47	37	51	41
DUCT24HP230V1AD	44	34	48	38	52	42

Note:1. Sound pressure ratings are estimated sound pressure measurements, 3 feet from unit.2. Sound power ratings are per AHRI 270 and AHRI 350

## **ELECTRICAL DATA**

### **Slim Concealed Duct**

MODEL NUMBER	RATED POWER SUPPLY (volt-phase-hz)	VOLTAGE RANGE (volts)		OR FAN POWER (watts)
DUCT12HP230V1AD	208/230v-1ph-60hz	187-253	0.35	80
DUCT12HP230V1AD	208/230v-1ph-60hz	187-253	0.35	80
DUCT18HP230V1AD	208/230v-1ph-60hz	187-253	0.43	100
DUCT24HP230V1AD	208/230v-1ph-60hz	187-253	0.54	124

Legend: RLA - Rated Load Amps

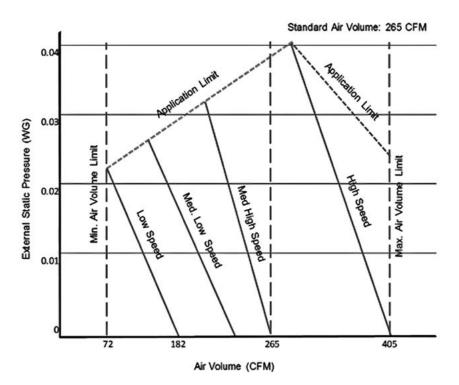
## **PRODUCT WEIGHT**

### **Slim Concealed Duct**

	PRODUCT WEIGHT		
MODEL NUMBER	NET OPERATING	GROSS SHIPPING	
DUCT09HP230V1AD	49 lbs.	60 lbs.	
DUCT12HP230V1AD	51 lbs.	64 lbs.	
DUCT18HP230V1AD	60 lbs.	79 lbs.	
DUCT24HP230V1AD	68 lbs.	90 lbs.	

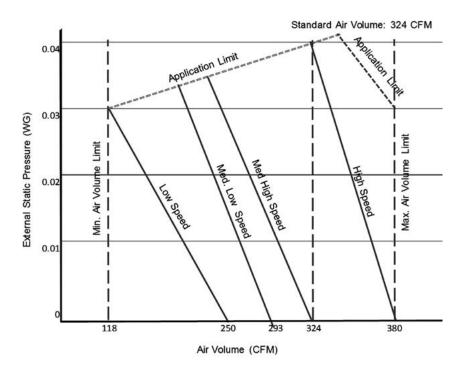
## INDOOR FAN PERFORMANCE AND AIR FLOW

Model No: DUCT09HP230V1AD 9,000 BtuH

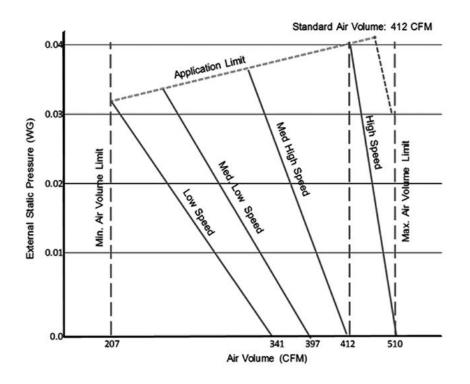


Model No: DUCT12HP230V1AD



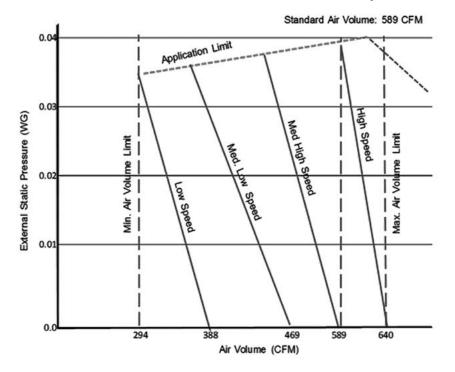


Model No: DUCT18HP230V1AD 18,000 BtuH



Model No: DUCT24HP230V1AD

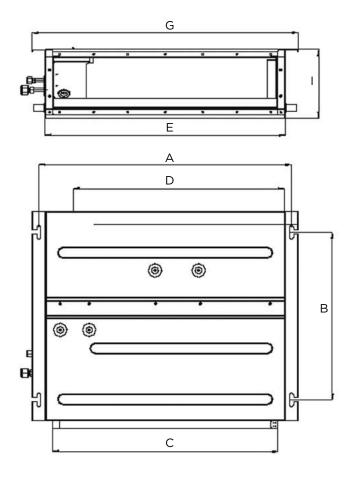
24,000 BtuH

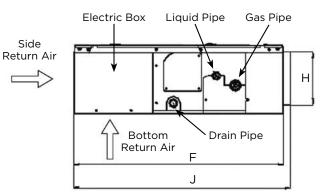


## DIMENSIONAL SPECIFICATIONS

## Model No: DUCT09HP230V1AD Model No: DUCT12HP230V1AD

## 9,000 BtuH 12,000 BtuH





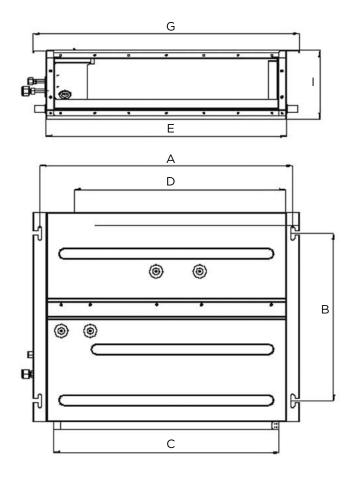
Dimension	(mm)	(inches)
Α	742	29.2
В	491	19.3
С	662	26.1
D	620	24.4
E	700	27.6
F	615	24.2
G	782	30.8
Н	156	6.1
I	200	7.9
J	635	25.0

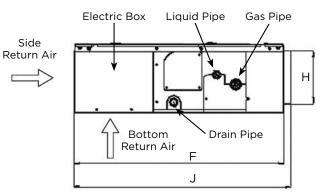
Suction/Gas Line Port Size		
Port 1	3/8-in OD Flared	

Liquid Line Port Size			
Port 1 1/4-in OD Flared			
Drain Connector			
1.0-in OD			

**Note:** Size refrigerant lines based on evaporator port sizes.

## Model No: DUCT18HP230V1AD 18,000 BtuH





Dimension	(mm)	(inches)
Α	942	37.1
В	491	19.3
С	862	33.9
D	820	32.3
E	900	35.4
F	615	24.2
G	982	38.7
н	156	6.1
I	200	7.9
J	635	25.0

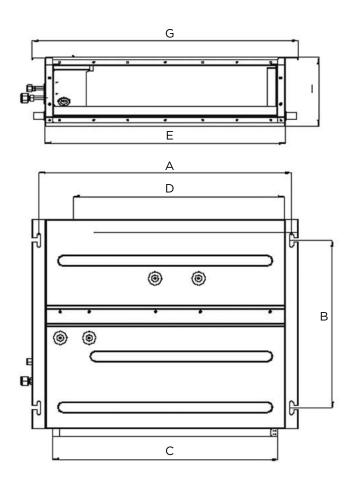
Suction/Gas Line Port Size		
Port 1	1/2-in OD Flared	

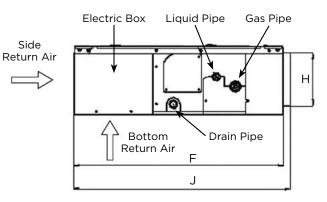
Liquid Line Port Size			
Port 1	1/4-in OD Flared		
Drain Connector			
Drain Line	1.0-in OD		

**Note:** Size refrigerant lines based on evaporator port sizes.

## **DIMENSIONAL SPECIFICATIONS**

## Model No: DUCT24HP230V1AD 24,000 BtuH

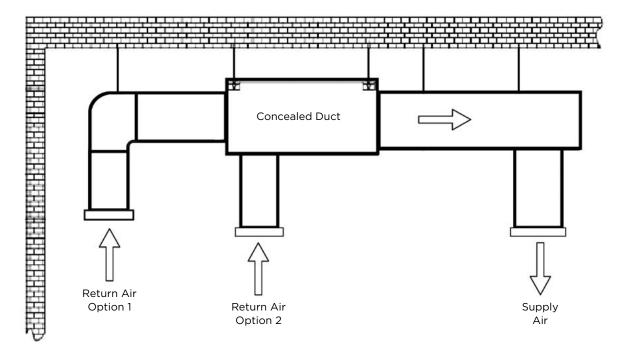




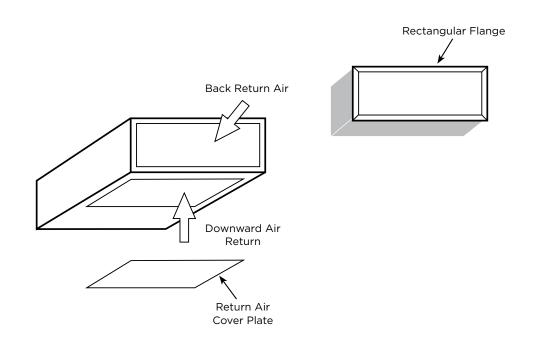
Dimension	(mm)	(inches)
Α	1124	44.3
В	491	19.3
С	1062	41.8
D	1020	40.2
Е	1100	43.3
F	615	24.2
G	1182	46.5
н	156	6.1
I	200	7.9
J	635	25.0

Suction/Gas Line Port Size			
-			
Port 1	5/8-in OD Flared		
	· · · · · · · · · · · · · · · · · · ·		
Liqui	d Line Port Size		
Port 1	3/8-in OD Flared		
Due			
Drain Connector			
Drain Line	1.0-in OD		
	1.0-111 OD		
	I		

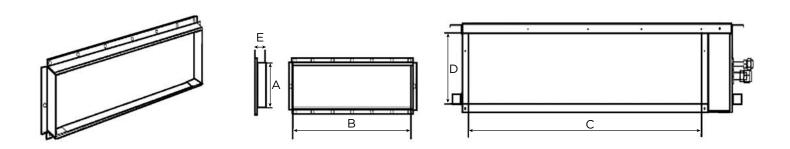
**Note:** Size refrigerant lines based on evaporator port sizes.



Typical Ductwork Layout



## DUCT SIZING SPECIFICATIONS



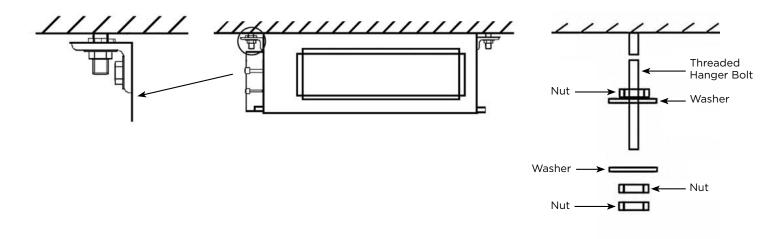
#### **Dimensions**

MODEL NUMBER		Y DUCT /mm) B	RETURN (in/m C		FLANGE (in/mm) E
DUCT09P230V1AD	6.1/156	26.1/662	22.8/580	6.4/162	0.8/21
DUCT12P230V1AD	6.1/156	26.1/662	22.8/580	6.4/162	0.8/21
DUCT18P230V1AD	6.1/156	33.9/862	30.7/780	6.4/162	0.8/21
DUCT24P230V1AD	6.1/156	41.8/1062	38.6/980	6.4/162	0.8/21

## INSTALLATION OF MOUNTING HANGERS

Depending on the type of ceiling, threaded hanger bolts (field supplied) are recommended for securing the Concealed Duct to the ceiling or support studs.

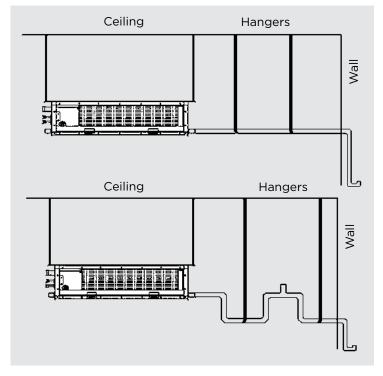
Proper mounting hardware is critical, which includes upper nuts, lower flat washers (with insulation), top flat washers (without insulation), top nuts and locking nuts (double) on the threaded hanger bolts as show in diagram below.



It's recommended to build the condensate drain system with hard polyvinyl chloride (PVC) pipe and matching connectors. Use pipe with either the same diameter or larger than the unit drainage port.

## Gravity Drainage Systems with P-trap & Vent

Pitch the condensate drain pipes at a gradual 2.5% pitch (Example: 1/4-in. drop over a 10-in. length) without obstructions. Use pipe hanger/ brackets to support the condensate drain pipe from drooping. Insulate all pipes to prevent sweating and water damage.



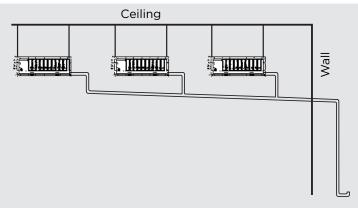
#### **Multiple Units with Common Drain**

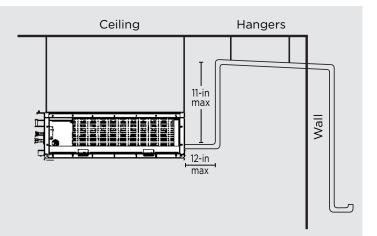
The following is the recommended condensate drainage system for multiple units that share a common drain line. Connecting multiple units to one trap allows air to be pulled through one or more of the units, bypassing the trap. An alternate method is having individual drains and traps for each unit.

#### Vertical Lift Drainage System

If a gradual pitch from the drainage port is not obtainable, the Concealed Duct contains an internal condensate pump with limited head or lift. The condensate drain pipe may have a vertical height of 11-in. (280 mm) maximum above the unit drainage port within the first 12-in. (300 mm) as long as the remaining condensate drain pipe gradually descends from that point and aligns with drainage port.

Use an auxiliary condensate pump with float valve for vertical height greater than 11-in. (280 mm) above the unit drainage port. A float valve is recommended to shut off the system if the auxiliary pump fails.







## MULTI UNIVERSAL FLOOR/CEILING

Models: FLR09HP230V1AF FLR12HP230V1AF FLR18HP230V1AF FLR24HP230V1AF





# +Multi Universal Floor/Ceiling

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## +Multi Universal Floor/Ceiling



Our Multi+ Universal Floor/Ceiling indoor units are designed to be suspended from a ceiling or mounted low on a wall. The slender and lightweight design is perfect for restaurants or hallways where wall space is limited. Aesthetically pleasing to the eye, the Multi+ Universal Floor/Ceiling units are a great fit beneath windows, in public or light commercial applications. Each unit can be operated by an infrared remote controller or wired tether controller to allow maximum flexibility in any application.

## FEATURES AND BENEFITS

#### **Whisper Quiet**

Not only are the Gree systems energy efficient but they are quiet too. Wall mounted units operate with sound levels starting as low as 36 dB(A).

#### **Modern Appearance**

Designed to be a comfortable fit in virtually any living space. This slim compact cabinet sits inconspicuously on the wall, and blends into most interior designs.

#### **Unit Display**

Gree wall mounted units have a large easy to read display and indicator lights giving instant feedback on room setpoint, operating mode and much more. The display can also be turned off based on your personal preference.

#### **Multi Fan Speeds**

The indoor fan can run at up to three different speeds (Low, Medium or High) for either COOLING or HEATING mode for maximum comfort and quiet operation.

#### **Time Guard**

The Multi Zone system is equipped with many system safeties to provide safe, reliable operation and comfort. The Time Guard function prevents rapid cycling of the compressor. The system has a protective five-minute time delay to restart the compressor after it has turned off.

#### **Power Failure Mode**

Power interruptions are no problem. User selections and system parameters are stored in non-volatile memory. These parameters are retained during a power failure. When power is returned, the system will automatically return to the last operating mode.

#### **Intelligent Pre-Heating**

The Multi Zone system guards against the annoying COLD BLOW in heating mode. The system constantly monitors the discharge air temperature. It will delay the indoor fan until the indoor coil has warmed up to prevent blowing uncomfortable cool air into the room.

#### Controller

The unit comes with a factory supplied wired Tether Controller or Wireless Remote Controller. Note: the controllers are mutually exclusive. They cannot be used at the same time.

#### **IR Wireless Remote Controller**

The Gree multi-functional infrared hand held wireless controller is sleek, ergonomically designed, easy to use and has a large backlit LCD display.

#### **Tether Controller**

The Gree tether controller mounts to the wall up to 25 feet from the unit. It provides complete control over operation mode, desired temperature, fan speed, airflow direction and more.

#### **Mode Button**

The units can be set to five different operating modes: HEAT, COOL, DRY, FAN ONLY and AUTO. Note: AUTO MODE has fixed setpoints of 68° F heating and 78° F cooling, which are not changeable. The system will automatically select heating or cooling to maintain room temperature within this band.

#### **Timer Mode**

The unit can be programmed to turn ON or OFF after a specific amount time. The time period is adjustable between one half and 24 hours.

#### **Swing Louver**

The unit has adjustable swing louvers which can be controlled from the wired tether or wireless controllers. Vertical swing louver allows five different vertical (up & down) air discharge directions including Continuous Sweep. Maximize comfort by adjusting the direction of airflow in the room by moving the louvers up or down.

#### **Privacy Lock Mode**

Both wired tether and wireless controllers have a Privacy Lock to avert unauthorized access and stop tampering with system settings.

#### **Sleep Mode**

The unit will automatically adjust room temperature during sleep time. This slight change in temperature will not affect your comfort level due to the natural effects that sleeping has on the body, but it will save on energy consumption and will lower electric bills.

#### Fahrenheit °F / Celsius °C

The wired tether and wireless controllers can be set to display in either °F or °C.

#### **Easy To Clean Air Filter**

A removable air filter easily slides in and out from the front of the indoor unit. The front panel does not need to be removed to access or change the filter. The filter is washable and permanent.

# +Multi Universal Floor/Ceiling

# FEATURES AND BENEFITS

#### **Self-Diagnosis**

With an on-board computer using real-time diagnostics, the Gree Multi Zone system helps to prolong its own life. The automatic diagnosis feature continuously scans for unacceptable operating conditions or malfunctions. If such conditions occur, the system takes corrective action or stops. Fault codes are shown on the unit display to facilitate easy troubleshooting and repair.

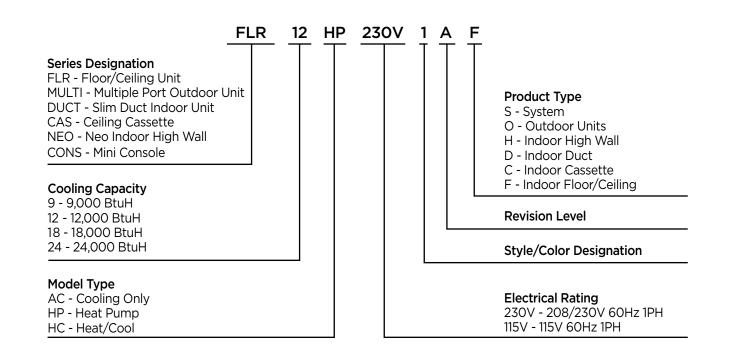
#### **Agency Listings**

All systems are listed with AHRI (Air conditioning, Heating, and Refrigeration Institute) and are ETL certified per UL Standards.

#### 7/5 Year Limited Warranty

Enjoy one of the most comprehensive warranties in the industry. Seven (7) years on compressor and Five (5) years on all parts.

### NOMENCLATURE



### **Universal Floor/Ceiling**

MODEL NUMBER	COOLING CAPACITY (BtuH)	HEATING CAPACITY (BtuH)	DEHUMIDIFICATION (Pts./hr.)
FLR09HP230V1AF	8,533	9,556	1.7
FLR12HP230V1AF	11,946	13,140	3.0
FLR18HP230V1AF	17,065	18,772	3.8
FLR24HP230V1AF	22,867	27,304	5.1

### **Universal Floor/Ceiling**

MODEL NUMBER	AIR FILTER TYPE	AIR FLOW	FAN TYPE
FLR09HP230V1AF	Polymeric Mesh	4-way	Centrifugal
FLR12HP230V1AF	Polymeric Mesh	4-way	Centrifugal
FLR18HP230V1AF	Polymeric Mesh	4-way	Centrifugal
FLR24HP230V1AF	Polymeric Mesh	4-way	Centrifugal

### **Universal Floor/Ceiling**

	COOLING (CFM)		HEATING (CFM)		M)	
MODEL NUMBER	LOW FAN	MEDIUM FAN	HIGH FAN	LOW FAN	MEDIUM FAN	HIGH FAN
FLR09HP230V1AF	265	324	383	265	324	383
FLR12HP230V1AF	265	324	383	265	324	383
FLR18HP230V1AF	294	412	559	294	412	559
FLR24HP230V1AF	412	530	736	412	530	736

# +Multi Universal Floor/Ceiling

### SOUND DATA

### **Universal Floor/Ceiling**

	LOW FAN		MEDIUM FAN		HIGH FAN	
MODEL NUMBER	SOUND POWER	SOUND PRESSURE	SOUND POWER	SOUND PRESSURE	SOUND POWER	SOUND PRESSURE
FLR09HP230V1AF	46 dBA	36 dBA	48 dBA	38 dBA	50 dBA	40 dBA
FLR12HP230V1AF	46 dBA	36 dBA	48 dBA	38 dBA	50 dBA	40 dBA
FLR18HP230V1AF	50 dBA	40 dBA	52 dBA	42 dBA	55 dBA	45 dBA
FLR24HP230V1AF	54 dBA	44 dBA	56 dBA	46 dBA	58 dBA	48 dBA

**Note:** 1. Sound pressure ratings are estimated sound pressure measurements, 3 feet from unit.

2. Sound power ratings are per AHRI 270 and AHRI 350

## **ELECTRICAL DATA**

### **Universal Floor/Ceiling**

MODEL NUMBER	RATED POWER SUPPLY (volt-phase-hz)	VOLTAGE RANGE (volts)	IND RLA (amps)	OOR FAN POWER (watts)
FLR09HP230V1AF	208/230v-1ph-60hz	187-253	0.30	55
FLR12HP230V1AF	208/230v-1ph-60hz	187-253	0.30	55
FLR18HP230V1AF	208/230v-1ph-60hz	187-253	0.60	110
FLR24HP230V1AF	208/230v-1ph-60hz	187-253	0.60	145

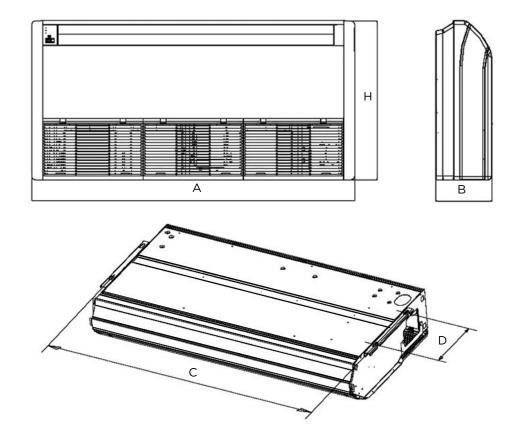
Legend: RLA - Rated Load Amps

## **PRODUCT WEIGHT**

### **Universal Floor/Ceiling**

	PRODUCT WEIGHT			
MODEL NUMBER	NET OPERATING	GROSS SHIPPING		
FLR09HP230V1AF	88 lbs.	110 lbs.		
FLR12HP230V1AF	88 lbs.	110 lbs.		
FLR18HP230V1AF	88 lbs.	110 lbs.		
FLR24HP230V1AF	100 lbs.	120 lbs.		

# **DIMENSIONAL SPECIFICATIONS**



### Dimensions

MODEL NUMBER	Α	В	С	D	н
FLR09HP230V1AF	48/1220	8.9/225	45.6/1158	11/280	27.6/700
FLR12HP230V1AF	48/1220	8.9/225	45.6/1158	11/280	27.6/700
FLR18HP230V1AF	48/1220	8.9/225	45.6/1158	11/280	27.6/700
FLR24HP230V1AF	48/1220	8.9/225	45.6/1158	11/280	27.6/700

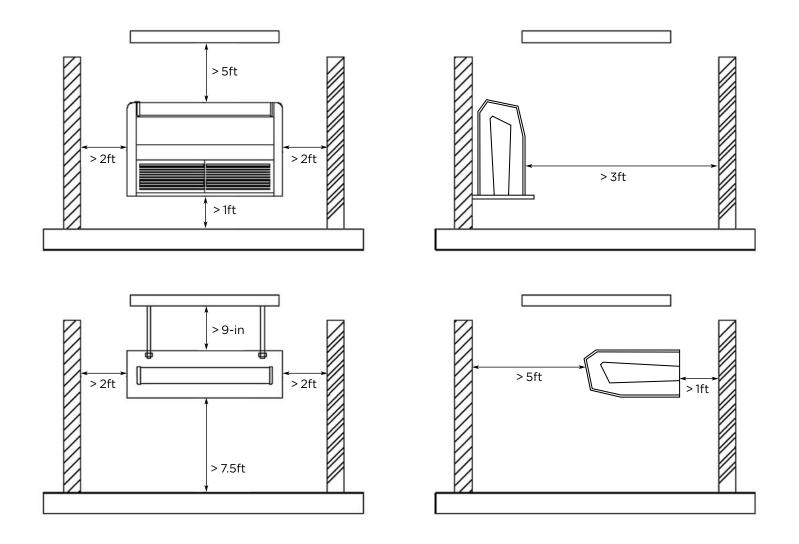
MODEL NUMBER	SUCTION/GAS LINE PORT SIZE	LIQUID LINE PORT SIZE	DRAIN CONNECTOR
FLR09HP230V1AF	3/8-in OD Flared	1/4-in OD Flared	0.67in/17mm OD
FLR12HP230V1AF	3/8-in OD Flared	1/4-in OD Flared	0.67in/17mm OD
FLR18HP230V1AF	1/2-in OD Flared	1/4-in OD Flared	0.67in/17mm OD
FLR24HP230V1AF	5/8-in OD Flared	3/8-in OD Flared	0.67in/17mm OD

**Note:** Size refrigerant lines based on evaporator port sizes.

# +Multi Universal Floor/Ceiling

# MINIMUM INDOOR CLEARANCE SPECIFICATIONS

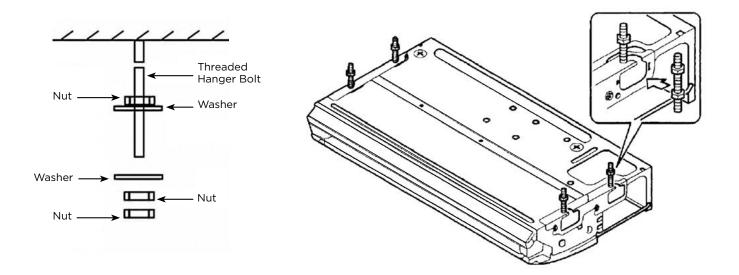
The unit installation must meet or exceed the following minimum clearances for proper operation.



## INSTALLATION OF MOUNTING HANGER

Depending on the type of ceiling, threaded hanger bolts (field supplied) are recommended for securing Floor/Ceiling unit to the ceiling or support studs.

Proper mounting hardware is critical which includes upper nuts, lower flat washers (with insulation), top flat washers (without insulation), top nuts and locking nuts (double) on the threaded hanger bolts as shown in diagram below.





## MULTI MINI-FLOOR CONSOLES

Models: CONS09HP230V1AF CONS12HP230V1AF CONS18HP230V1AF





# +Multi Mini-Floor Consoles

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# +Multi Mini-Floor Consoles



Gree's +Multi Mini Console indoor units are aesthetically pleasing and the perfect size for any room. The space saving design provides energy efficient solutions for difficult areas that may not have abundant space on the ceiling or walls. It can be mounted as low as six inches above the floor and has front panel access to the filter for ease of cleaning. Each +Multi Mini Console unit can be operated by an infrared remote controller.

## FEATURES AND BENEFITS

#### Whisper Quiet

Gree systems are energy efficient and quiet. Wall mounted units operate with sound levels starting as low as 25 dB(A).

#### **Modern Appearance**

Designed to be a comfortable fit in virtually any living space. This slim compact cabinet sits inconspicuously on the wall, and blends into most interior designs.

#### **Unit Display**

Gree wall mounted units have a large, easy-to-read display and indicator lights giving instant feedback on room setpoint, operating mode and much more. The display can also be turned off based on your personal preference.

#### **Multi-Speed Fan**

The indoor fan can run at up to four different speeds (Low, Medium, High or Turbo) for either COOLING or HEATING mode for maximum comfort and quiet operation.

#### **Time Guard**

Among the system's many safeties is a Time Guard function to prevent rapid cycling of the compressor. A protective five-minute time delay restricts compressor restarts after shutoff.

#### **Power Failure Mode**

Power interruptions are no problem. User selections and system parameters are stored in non-volatile memory. These parameters are retained during a power failure. When power is returned, the system will automatically return to the last operating mode.

#### **Intelligent Pre-Heating**

The Multi Zone system guards against the annoying COLD BLOW in heating mode, and constantly monitors the discharge air temperature. It will delay the indoor fan until the indoor coil has warmed up to prevent blowing uncomfortable cool air into the room.

#### **IR Wireless Remote Controller**

The Gree Multi-functional infrared hand held wireless controller is sleek, ergonomically designed, easy to use and has a large backlit LCD display.

### **Mode Button**

The units can be set to five different operating modes: HEAT, COOL, DRY, FAN ONLY and AUTO. Note: AUTO MODE has fixed setpoints of 68° F heating and 78° F cooling, which are not changeable. The system will automatically select heating or cooling to maintain room temperature within this band.

### **Timer Mode**

The unit can be programmed to turn ON or OFF after a specific amount time. The time period is adjustable between one half and 24 hours.

### **Swing Louver**

The unit has adjustable swing louvers which can be controlled from the wireless controller. Vertical swing louver allows five different vertical (up & down) air discharge directions including Continuous Sweep. Maximize comfort by adjusting the direction of airflow in the room by moving the louvers up or down.

### **Privacy Lock Mode**

The wireless controller has a Privacy Lock to avert unauthorized access and stop tampering with system settings.

### **Sleep Mode**

The unit will automatically adjust room temperature during sleep time. This slight change in temperature will not affect your comfort level due to the natural effects that sleeping has on the body, but it will save on energy consumption and will lower electric bills.

### Fahrenheit °F / Celsius °C

The wireless controller can be set to display in either °F or °C.

### **Easy To Clean Air Filters**

Removable air filters easily slide in and out from the front of the indoor unit. The front panel does not need to be removed to access or change the filter. The filters are washable and permanent.

### Self-Diagnosis

With an on-board computer using real-time diagnostics, the Gree Multi Zone system helps to prolong its own life. The automatic diagnosis feature continuously scans for unacceptable operating conditions or malfunctions. If such conditions occur, the system takes corrective action or stops. Fault codes are shown on the unit display to facilitate easy troubleshooting and repair.

### **Agency Listings**

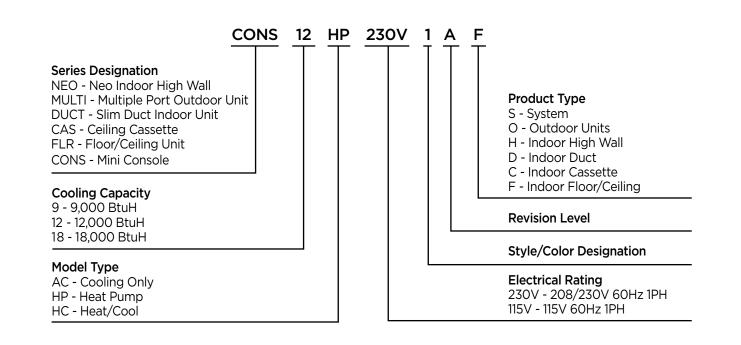
All systems are listed with AHRI (Air conditioning, Heating, and Refrigeration Institute) and are ETL Certified per UL Standards.

### 7/5 Year Limited Warranty

Enjoy one of the most comprehensive warranties in the industry. Seven (7) years on compressor and Five (5) years on all parts.

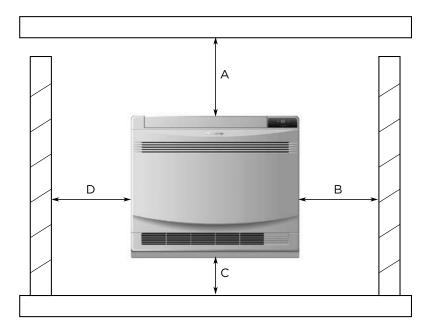
# +Multi Mini-Floor Consoles

## NOMENCLATURE



### MINIMUM INDOOR CLEARANCE SPECIFICATIONS

The unit installation must meet or exceed the following minimum clearances for proper operation.



Dimension	(inches)	(mm)
Α	59	1500
В	59	1500
С	6	150
D	59	1500

### **Mini-Floor Console**

MODEL NUMBER	COOLING CAPACITY (BtuH)	HEATING CAPACITY (BtuH)	DEHUMIDIFICATION (Pts./hr.)
CONS09HP230V1AF	8,874	9,556	1.7
CONS12HP230V1AF	11,946	12,969	3.0
CONS18HP230V1AF	18,089	19,795	3.8

### **Mini-Floor Console**

MODEL NUMBER	AIR FILTER TYPE	AIR FLOW	FAN TYPE
CONS09HP230V1AF	Polymeric Mesh	4-way	Centrifugal
CONS12HP230V1AF	Polymeric Mesh	4-way	Centrifugal
CONS18HP230V1AF	Polymeric Mesh	4-way	Centrifugal

### **Mini-Floor Console**

MODEL NUMBER	LOW FAN	MEDIUM 1 FAN	COOLING MEDIUM 2 FAN	G (CFM) MEDIUM 3 FAN	MEDIUM 4 FAN	HIGH FAN
CONS09HP230V1AF	147	165	194	241	253	294
CONS12HP230V1AF	165	212	235	283	306	353
CONS18HP230V1AF	188	241	265	324	365	383

### **Mini-Floor Console**

	HEATING (CFM)					
MODEL NUMBER	LOW FAN	MEDIUM 1 FAN	MEDIUM 2 FAN	MEDIUM 3 FAN	MEDIUM 4 FAN	HIGH FAN
CONS09HP230V1AF	147	165	194	241	253	294
CONS12HP230V1AF	165	212	235	283	306	353
CONS18HP230V1AF	188	241	265	324	365	383

### **AIR THROW DATA**

### **Mini-Floor Console**

	HEATING (CFM)					
MODEL NUMBER	LOW FAN	MEDIUM 1 FAN	MEDIUM 2 FAN	MEDIUM 3 FAN	MEDIUM 4 FAN	HIGH FAN
CONS09HP230V1AF	2.0	3.6	2.9	3.6	3.9	4.5
CONS12HP230V1AF	2.5	3.1	3.4	4.1	4.6	5.0
CONS18HP230V1AF	3.0	3.4	4.1	4.4	5.1	5.5

### SOUND DATA

### **Mini-Floor Console - Sound Pressure**

MODEL NUMBER	LOW FAN	MEDIUM 1 FAN	MEDIUM 2 FAN	MEDIUM 3 FAN	MEDIUM 4 FAN	HIGH FAN
CONS09HP230V1AF	25 dBA	26 dBA	30dBA	36 dBA	38 dBA	40 dBA
CONS12HP230V1AF	27 dBA	32 dBA	35 dBA	38 dBA	40 dBA	43 dBA
CONS18HP230V1AF	33 dBA	35 dBA	37 dBA	44 dBA	46 dBA	48 dBA

### **Mini-Floor Console - Sound Power**

MODEL NUMBER	LOW FAN	MEDIUM 1 FAN	MEDIUM 2 FAN	MEDIUM 3 FAN	MEDIUM 4 FAN	HIGH FAN
CONS09HP230V1AF	35 dBA	36 dBA	40dBA	46 dBA	48 dBA	50 dBA
CONS12HP230V1AF	37 dBA	42 dBA	45 dBA	48 dBA	50 dBA	53 dBA
CONS18HP230V1AF	43 dBA	45 dBA	47 dBA	54 dBA	56 dBA	58 dBA

**Note:** 1. Sound pressure ratings are estimated sound pressure measurements, 3 feet from unit. 2. Sound power ratings are per AHRI 270 and AHRI 350.

# ELECTRICAL DATA

### **Mini-Floor Console**

MODEL NUMBER	RATED POWER SUPPLY (volt-phase-hz)	VOLTAGE RANGE (volts)		OOR FAN POWER (watts)
CONS09HP230V1AF	208/230v-1ph-60hz	187-253	0.3	30.0
CONS12HP230V1AF	208/230v-1ph-60hz	187-253	0.3	30.0
CONS18HP230V1AF	208/230v-1ph-60hz	187-253	0.3	30.0

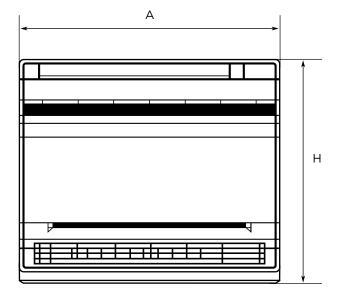
Legend: RLA - Rated Load Amps

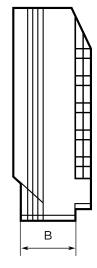
### **PRODUCT WEIGHT**

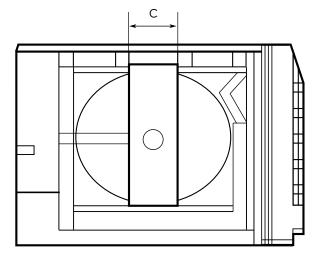
### **Mini-Floor Console**

	PRODUCT WEIGHT			
MODEL NUMBER	NET OPERATING	GROSS SHIPPING		
CONS09HP230V1AF	30 lbs.	40 lbs.		
CONS12HP230V1AF	30 lbs.	40 lbs.		
CONS18HP230V1AF	30 lbs.	40 lbs.		

# **DIMENSIONAL SPECIFICATIONS**







Dimension	(inches)	(mm)
Α	27.6	700
В	8.5	215
с	7.875	200
н	23.6	600

MODEL NUMBER	SUCTION/GAS LINE PORT SIZE	LIQUID LINE PORT SIZE	DRAIN CONNECTOR
CONS09HP230V1AF	3/8-in OD Flared	1/4-in OD Flared	0.67in/17mm OD
CONS12HP230V1AF	3/8-in OD Flared	1/4-in OD Flared	0.67in/17mm OD
CONS18HP230V1AF	1/2-in OD Flared	1/4-in OD Flared	0.67in/17mm OD

**Note:** Size refrigerant lines based on evaporator port sizes.



## WIRED TETHER CONTROLLER

Part Numbers: MC20700140 - XK-19 MC207059 - XK-41





# **Wired Tether Controller**

## **Table of Contents**

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System Wiring Diagram
Installation
Limited Warranty Statement

# **Wired Tether Controller**



### **REFERENCE TABLE**

INDOOR UNIT	TETHER CO TYPE	ONTROLLER PART NUMBER
NEO WALL MOUNT	XK-41	MC207059
CEILING CASSETTE	XK-19	MC207001140
SLIM CONCEALED DUCT	XK-19	MC207001140
UNIVERSAL FLOOR CEILING	XK-19	MC207001140
MINI-FLOOR CONSOLE	XK-19	MC207001140

### FEATURES AND BENEFITS

### **Attractive Appearance**

The XK series features a sleek, unobtrusive design that fits seamlessly into any décor.

### **Easy To Install**

The XK series Wired Tether Controllers have been designed for fast and easy installation to save you time and money. Each XK wired controller comes with keyed connectors and 26 feet of cable. Its flexible design allows it to be mounted either flush to the wall or using an electrical box.

#### **Command Center**

Enjoy the convenience of a fully functional command center with a large LCD display to set up and operate your duct free system. The XK series allows you fast and easy access to a large number of system features and functions:

Note: Some indoor units may not support specific system features or functions. Always refer to the indoor unit Owner's Manual.

### On/Off

The XK series allows you to start and stop your system. The system will always start up in the last operating mode with the last room setpoint.

#### **Operating Mode**

The system allows users to effortlessly select an operating mode (Cooling, Heating, Dry, Fan Only or Auto mode) with a single key stroke.

### **Command Center (cont.)**

#### **Fan Speed**

The system fan speed (High, Medium, Low or Auto) can be adjusted for peak room comfort and quietness.

#### **Room Setpoint**

The XK series makes dialing in the correct room setpoint temperature a breeze. Most indoor units allow a room setpoint from  $61^{\circ}$  F to  $86^{\circ}$  F ( $16^{\circ}$  to  $30^{\circ}$  C).

#### **Timer Mode**

When needed, the XK series allows you the ability to program a time period (one-half to 24 hours) to which your system will automatically turn ON or OFF.

#### **Sleep Mode**

The XK series will automatically adjust room temperature during your sleep time. This slight change in temperature will not affect your comfort level due to the natural effects that sleeping has on the body, but it will save on energy consumption and will lower electric bills.

#### Turbo Mode

Whether you need to heat up or cool down a room quickly, Turbo Mode will force your system to run at higher speeds to reach the desired room temperature faster.

#### X-Fan Mode

The X-Fan function can be activated from the XK series to remove moisture buildup when the system is turned OFF. This helps prevent mold and mildew growth on your indoor coil and fan.

#### **Privacy Lock**

The XK series has a Privacy Lock that can be set to prevent unauthorized access to the unit controls and prevents tampering with system settings.

#### **Power Failure Recovery**

Power interruptions are no problem for the XK series wired controller. All user selections and system parameters are stored in non-volatile memory. When power is returned, the system will automatically return to the last operating mode.

#### **Swing Louver Control**

The XK series provides control over the motorized discharge air louver to optimize air distribution throughout the room.

#### **Fahrenheit or Celsius Display**

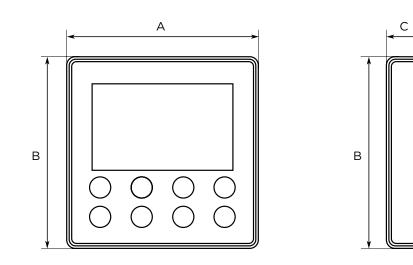
Whether you are more comfortable reading temperatures in Fahrenheit or Celsius, the XK series can quickly be set up to display either one.

#### **Diagnostic Center**

The system has an on-board computer that continuously scans for unacceptable operating conditions or malfunctions. If such conditions occur, the system takes corrective action or stops. The fault or status codes will be shown on XK series wired tether controller display to facilitate easy troubleshooting and repair.

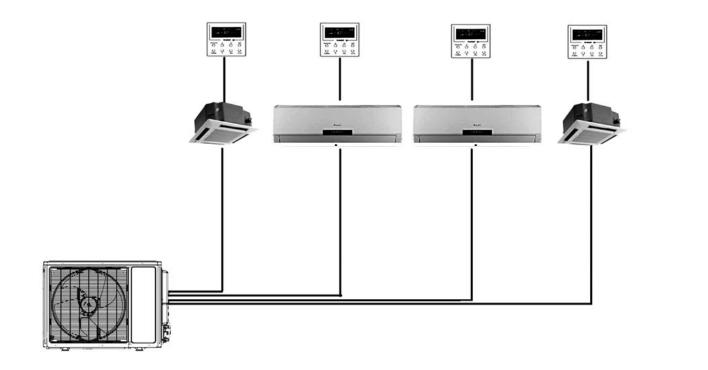
# **Wired Tether Controller**

# DIMENSIONAL SPECIFICATIONS



ТҮРЕ	PART NUMBER	A in (mm)	B in (mm)	C in (mm)
XK-41	MC207059	3.625 (92)	3.625 (92)	1.375 (35)
XK-19	MC207001140	3.625 (92)	3.625 (92)	1.375 (35)

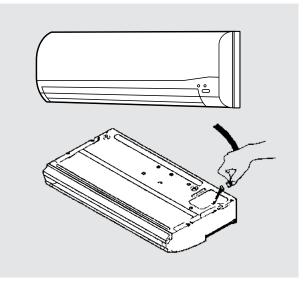
# SYSTEM WIRING DIAGRAM



The following is a brief XK-19 and XK-41 Wired Tether Controller installation overview. See Wired Controller Installation Manual for more detailed instructions on installation, start-up, and setup.

### **Connecting Indoor Unit**

Select a proper location on the wall for mounting the Tether Controller. Install switch box, if required by code. Locate the 26-ft communication cable that came with the Tether Controller. Run communication cable (as desired) between indoor unit and selected wall mounting location. Locate the Tether Controller connector in the control box area of the indoor unit. Carefully connect communication cable to indoor unit.



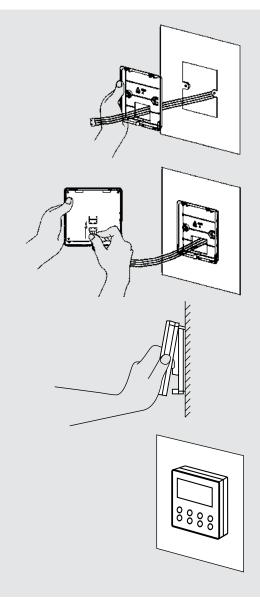
### **Wired Tether Controller Installation**

Pull communication cable through switch box (if one is used) and Wired Tether Controller backplate. Securely fasten backplate to the switch box or wall.

Carefully connect communication cable to rear of Wired Tether Controller panel. Push extra cable into wall and secure controller panel to backplate mounted on the wall.

**NOTE:** Do not cut and splice communication cable.

Follow the start-up setup instructions supplied with the Wired Tether Controller.



# **Limited Warranty Statement**



### **DUCTLESS HEAT PUMP MULTI-SPLIT SYSTEMS**

Effective on new GREE Ductless purchases on or after March 1, 2013

MULTI18HP230V1AO MULTI24HP230V1AO MULTI30HP230V1AO MULTI36HP230V1AO MULTI42HP230V1AO

NEO09HP230V1AH NEO12HP230V1AH NEO18HP230V1AH CAS12HP230V1AC CAS18HP230V1AC CAS24HP230V1AC

DUCT09HP230V1AD DUCT12HP230V1AD DUCT18HP230V1AD DUCT24HP230V1AD FLR09HP230V1AF FLR12HP230V1AF FLR18HP230V1AF FLR24HP230V1AF

CONS09HP230V1AF CONS12HP230V1AF CONS18HP230V1AF

GREE distributor (hereinafter "Company") warrants this product against failure due to defect in materials or workmanship under normal use and maintenance as follows. All warranty periods begin on the date of original installation. If the date cannot be verified, the warranty period begins one hundred twenty (120) days from date of manufacture. If a part fails due to defect during the applicable warranty period Company will provide a new or remanufactured part, at Company's option, to replace the failed defective part at no charge for the part. This limited warranty is subject to all provisions, conditions, limitations and exclusions listed below.

- A warranty period of Seven (7) years on compressor to the original registered end user.
- A warranty period of Five (5) years on all parts to the original registered end user.
- A warranty period of One (1) year on the remote control provided with the original unit.
- Limited warranty applies only to systems that are properly installed by a state certified or licensed HVAC contractor, under applicable local and state law in accordance with all applicable building codes and permits; GREE installation and operation instructions and good trade practices.
- Warranty applies only to products remaining in their original installation location.
- Defective parts must be returned to the distributor through a registered servicing dealer for credit.

All implied warranties and/or conditions (including implied warranties or conditions of merchantability and fitness for a particular use or purpose) are limited to the duration of this limited warranty, some states or provinces do not allow limitations on how long an implied warranty or condition lasts, so the above may not apply to you. The express warranties made in this warranty are exclusive and may not be altered, enlarged, or changed by any distributor, dealer, or other person, whatsoever.

### THIS WARRANTY DOES NOT COVER:

- 1. Labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing or handling of either defective parts, or replacement parts, or new units.
- 2. Product cleaning required prior to warranty service and repair.
- 3. Normal maintenance as outlined in the installation and servicing instructions or Owner's Manual, including filter cleaning and/or replacement and lubrication.
- 4. Failure, damage or repairs due to faulty installation, misapplication, abuse, improper servicing, unauthorized alteration or improper operation.
- 5. Failure to start due to voltage conditions, blown fuses, open circuit breakers, or damages due to the inadequacy or interruption of electrical service.
- 6. Failure or damage due to floods, winds, fires, lightning, accidents, corrosive environments (rust, etc.) or other conditions beyond the control of the Company.
- 7. Failure or damage of coils or piping due to corrosion on installations within one (1) mile of sea coast or corrosive body.
- 8. Parts not supplied or designated by Company, or damages resulting from their use.
- 9. Products installed outside continental USA and Canada.
- 10. Electricity or fuel costs, or increases in electricity or fuel costs for any reason whatsoever, including additional or unusual use of supplemental electric heat.
- 11. Any cost to replace, refill or dispose of refrigerant, including the cost of refrigerant.
- 12. Shipping damage or damage as a result of transporting the unit.
- 13. Accessories such as condensate pumps, line sets and so forth are not covered.
- 14. Any special, indirect or consequential property or commercial damage of any nature whatsoever. Some states or provinces do not allow the exclusion of incidental or consequential damages, so the above limitation may not apply to you.

### FOR WARRANTY SERVICE OR REPAIR:

Contact your installing contractor. You may find the installer's name on the equipment or in your Owner's packet.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province.

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