

4DHP2 MULTI-ZONE PRODUCT SPECIFICATIONS

UP TO 24.1 SEER
UP TO 5 ZONES DUCTLESS HEAT PUMP SYSTEMS

FORM NO. 4DHP2MULTI-100 (04/2022)



Wireless
Remote Controller
(furnished with
Wall-Mount and
Cassette Models)



D22C1/D33C2 Cassette
Non-Ducted Indoor Unit



DWM2 Wall-Mounted
Non-Ducted Indoor Unit



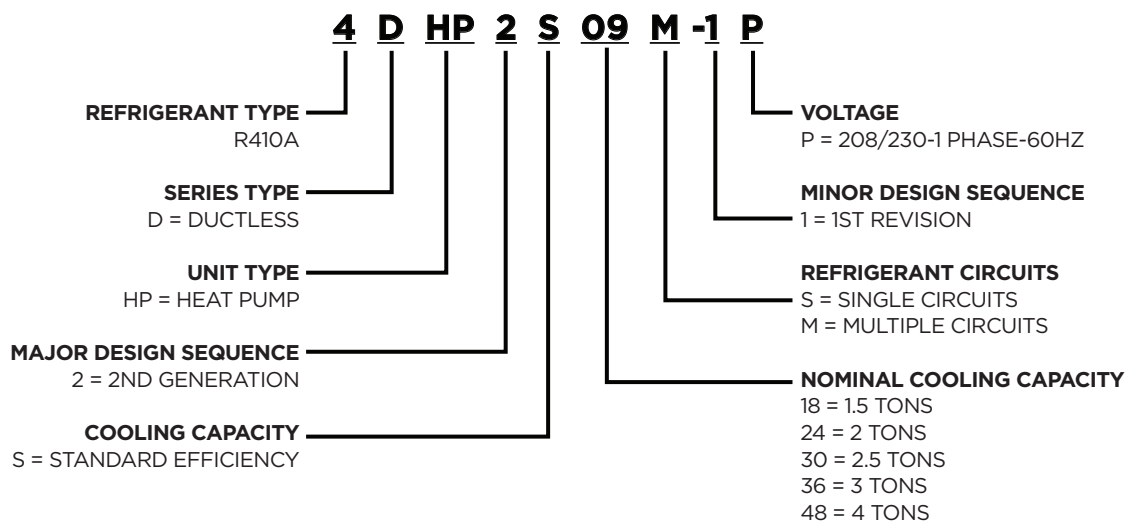
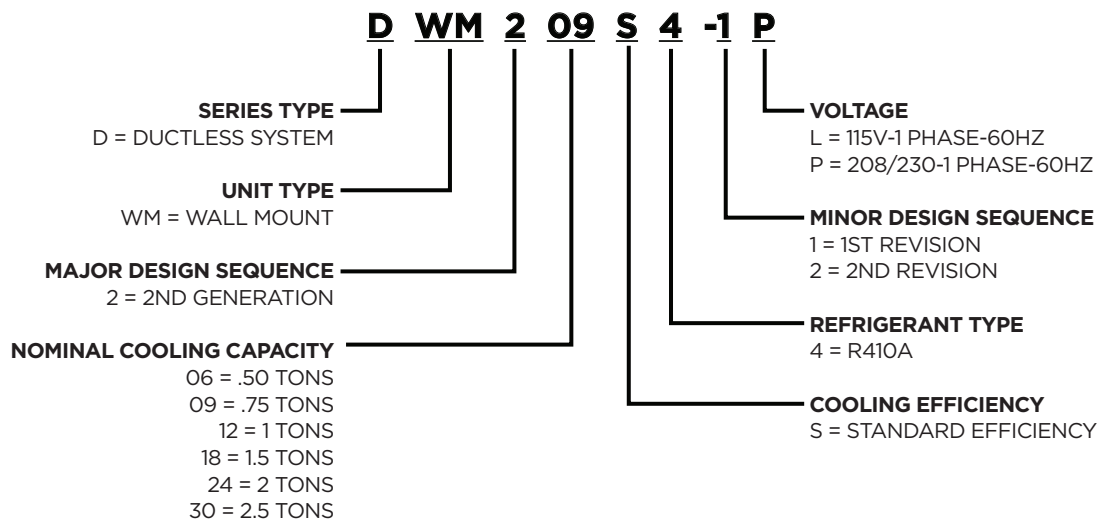
DMD2 Medium Static Ducted Indoor Unit
with Wired Remote Controller (furnished)



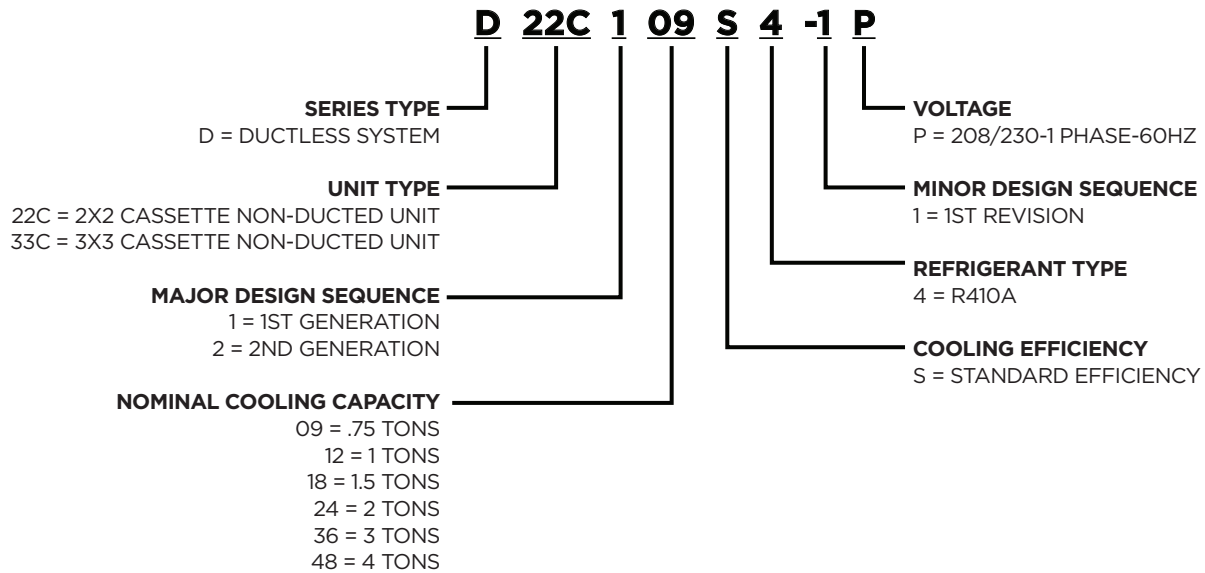
4DHP2S09 thru 36 Heat Pump Outdoor Units



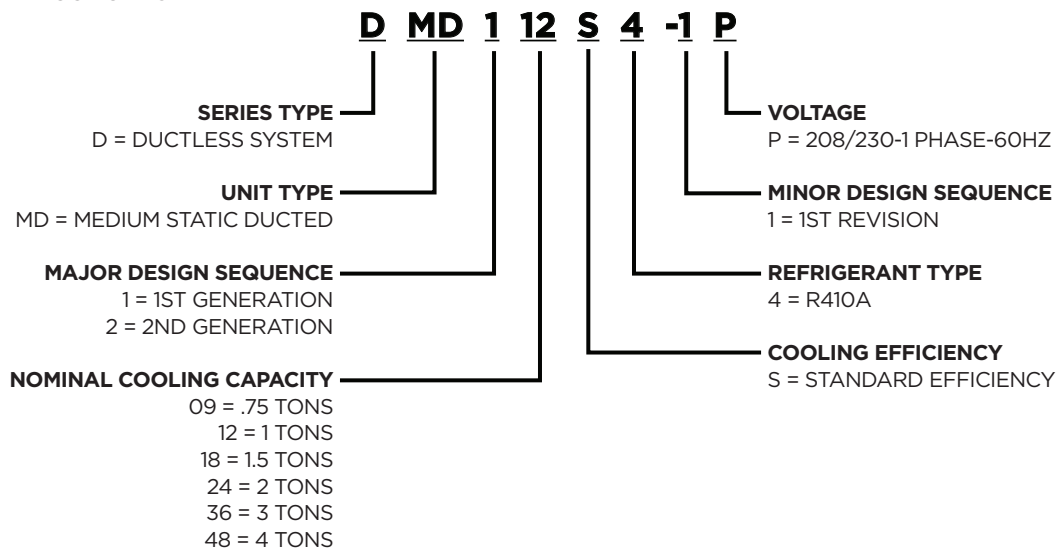
4DHP2S48 Heat Pump Outdoor Unit

MODEL NUMBER GUIDE**OUTDOOR MULTI-ZONE HEAT PUMP UNITS****WALL-MOUNTED INDOOR UNITS**

CASSETTE INDOOR UNITS



DUCTED INDOOR UNITS



CONTENTS

AHRI RATINGS.	27
AIR THROW DATA.	50
- CASSETTE INDOOR UNITS	52
- WALL-MOUNTED INDOOR UNITS	50
APPROVALS AND WARRANTY	5
BLOWER DATA	53
- MEDIUM STATIC DUCTED INDOOR UNITS	53
DIMENSIONS	58
- CASSETTE INDOOR UNITS	63
- MEDIUM STATIC DUCTED INDOOR UNITS	65
- OUTDOOR UNITS	58
- WALL-MOUNTED INDOOR UNITS	61
- WALL-MOUNTED INDOOR UNITS - WALL PLATES	62
FEATURES	5
- INDOOR UNITS.	7
- OUTDOOR UNITS	5
INSTALLATION CLEARANCES.	66
- CASSETTE INDOOR UNITS	67
- MEDIUM STATIC DUCTED INDOOR UNITS	68
- OUTDOOR UNITS	66
- WALL-MOUNTED INDOOR UNITS	67
LINE SET AND ELEVATION GUIDELINES	69
MULTI-ZONE SYSTEM COMBINATIONS	30
OPTIONAL ACCESSORIES - ORDER SEPARATELY	28
OUTDOOR TO INDOOR UNIT LINE CONNECTIONS - TWO ZONES	36
REMOTE CONTROLLERS - FURNISHED.	9
SOUND LEVELS - TEST CONDITIONS	29
SPECIFICATIONS	22
- CASSETTE INDOOR UNITS	25
- MEDIUM STATIC DUCTED INDOOR UNITS	26
- OUTDOOR UNITS - 1.5 TON 2 TON 2.5 TON	22
- OUTDOOR UNITS - 3 TON 4 TON	23
- WALL-MOUNTED INDOOR UNITS	24

APPROVALS AND WARRANTY

APPROVALS

- AHRI Standard 210/240 certified with Addenda 1 and 2
- ENERGY STAR® certified
- Rated According to U.S. Department of Energy (DOE) test procedures
- Indoor and outdoor units and components UL and CEC bonded for grounding to meet safety standards for servicing
- ETL certified for the U.S. and Canada
- Meets 2014 Florida Building Code Wind Design Criteria
 - Ultimate Wind Speed – 186 miles per hour
 - Risk Categories – III and IV
 - Wind Exposures – C and D
 - Mean Roof Heights – Up to 60 feet above ground

WARRANTY

- Compressor - Limited seven years
- All other covered components - Limited five years

NOTE - Refer to Equipment Limited Warranty certificate included with unit for specific details.

FEATURES

APPLICATIONS

- 1.5 through 4 ton
- Single phase power supply (208/230V)
- Outdoor unit sound levels as low as 58.5 dBA
- Indoor unit sound levels as low as 22.5 dBA
- Ductless mini-split systems provide a wide range of capacities and applications and provide an alternative when a ducted system is impractical or cost prohibitive
- Depending on capacity, multi-zone heat pumps allow up to five indoor units (5 zones) to be connected to one outdoor unit
- Units shipped completely factory assembled, internally piped, and wired

NOTE - Outdoor unit is designed for outdoor location only.

NOTE - it is recommended that Medium Static Ducted Indoor Units not be installed in unconditioned spaces with temperatures above 100°F.

REFRIGERATION SYSTEM

R-410A Refrigerant

- Non-chlorine, ozone friendly
- Unit is factory pre-charged

Outdoor Coil

- Aluminum fins fitted to copper tubes
- Wire grille guard provided

Outdoor Fan

- Direct drive fan moves large air volumes uniformly through entire outdoor coil for high refrigeration capacity
- Fan guard provided

OUTDOOR UNITS

Refrigerant Line Connections, Service Valve

- Flare connection lines are located on side of unit cabinet
- Fully serviceable brass service valve prevents corrosion and provides access to refrigerant system

COMPRESSOR

Variable Frequency Rotary Compressor

- Compressor features high efficiency operation
- Balanced for reduced vibration and quiet operation
- Brushless DC motor uses powerful Neodymium magnets, which are approximately 15-20 times stronger than ferrite magnets used in conventional AC compressors

Compressor Crankcase Heater

- Protects against liquid refrigerant migration that can occur during low ambient operation

CONTROLS

DC Inverter Control

- Provides continuous operation, while adjusting capacity according to room temperature
- The accurate sensing of cooling loads prevents frequent changes in capacity and ensures efficient, economical operation

Inverter Module Protection

- Protects against differences in current, voltage and temperature
- Displays code on the indoor unit indicating a need for servicing

FEATURES**OUTDOOR UNITS****CONTROLS (continued)****Outdoor Unit Microprocessor**

- Electronic expansion valve control
- Automatic compressor timed-off protection (3 minutes)
- Temperature sensor
- LEDs on control display error codes and assist in troubleshooting
- 4-Way reversing valve control

Electronic Expansion Valve

- Furnished on all models

Compressor Overcurrent Protection

- Overcurrent protection can result due to any of the following:
 - Ambient temperature is too high
 - Locked rotor on the compressor
 - Outdoor air is blocked or restricted

Condenser High Temperature Protection

- Condenser high temperature can occur due to any of the following conditions:
 - High outdoor ambient
 - Outdoor fan blocked
 - Outdoor coil blocked
- The outdoor coil thermistor continuously monitors the temperature and communicates with the microprocessor
- Depending on the temperature measured, the compressor will be allowed to increase the frequency if needed to meet the load or is forced to run at the current or reduced frequency
- If the temperature becomes excessively high the compressor will be de-energized

Compressor Discharge Temperature Protection

- The compressor discharge line thermistor continuously monitors the temperature and communicates with the microprocessor
- Depending on the temperature measured, the compressor will be allowed to increase the frequency to meet the load or is forced to run at the current or reduced frequency
- If the temperature becomes excessively high, the compressor will be de-energized

Voltage Protection

- Protects unit from low or high voltage fluctuations

Terminal Strip

- Furnished for easy wiring connections

Automatic Piping/Wiring Correction

- Automatically checks piping/wiring connections
- A "Check Switch" on outdoor unit control reviews zone wiring and piping connections and displays "CE" if all connections are correct
- If a unit(s) is not connected to the correct zone the control will automatically remap the wiring to the correct zone based on indoor unit size

Defrost Control

- Defrost cycle is automatically enabled if there is a build-up of frost on the outdoor coil
- Outdoor fan operation is terminated during the defrost cycle
- Indoor fan changes to ultra low speed during the defrost cycle to help bring warm refrigerant back to the outdoor coil to assist during defrost operation
- Defrost LED is lit on the indoor unit panel on the front cover during a defrost cycle

Reversing Valve

- 4-way interchange reversing valve effects a rapid change in direction of refrigerant flow resulting in quick changeover from cooling to heating and vice versa
- Valve operates on pressure differential between outdoor unit and indoor unit of the system

CABINET

- Constructed of heavy gauge steel
- Tabs on unit base allow secure mounting to slab
- Condensate drain outlets furnished on unit base

NOTE - Drain must be field furnished.

- Pan heater prevents ice build-up in the bottom of the unit during heating operation
- Access cover for power and control wiring connections
- Access cover for service valves

FEATURES

INDOOR UNITS

WALL-MOUNTED INDOOR UNITS

- Low-sound, three-speed Wall Mount with LED display offers three access points for refrigerant outlet pipes: left, right or rear
- The front panel can be raised for accessible wiring and maintenance
- Swing louver angles to 90°
- Unit installs horizontally on a vertical wall
- **Pre-Heat Function** - Delays the operation of the fan until the indoor coil has reached a pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode
- **LED Readout** - Mounted on unit. LED displays unit operation status, and codes for maintenance and servicing
- **Auto Restart** - Automatically restores the previous function setting if power is interrupted
- **Cooling Override** - Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation
- **Flare Connections** - Equipped with liquid and gas flare fittings for quick and secure piping
- **Multi-Refrigerant Outlet** - Allows left, right, or rear access for refrigeration line connection
- **Three Speed Fan** - Fan functions at three speeds: low, medium and high
- **Air Filter** - Cleanable air filter is furnished as standard
- **Wireless Remote Controller** - Furnished as standard, see page 9

CASSETTE INDOOR UNITS

- Low-sound and encased in galvanized steel, the Cassette unit with LED display offers 360° airflow for immediate, equal distribution of wide-range cooling and heating
- 360° Airflow Panel - Allows for even, wide-range cooling and heating
- **Pre-Heat Function** - Delays the operation of the fan until the indoor coil has reached a pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode
- **LED Readout/Infrared Receiver Panel** - Mounted on unit. LEDs display unit operation status, and codes for maintenance and servicing
- **Infrared receiver** for use with wireless remote controller (furnished)
- **Auto Restart** - Automatically restores the previous function setting if power is interrupted
- **Cooling Override** - Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation
- **Built-In Condensate Pump** - 27-1/2 in. maximum lift
- **Compact Design** - Allows accessible wiring and space-saving installation with reduced width and depth
- **Flare Connections** - Equipped with liquid and gas flare fittings for quick and secure piping
- **Three Speed Fan** - Fan functions at three speeds: low, medium and high
- **Turbo Fan With Backward Curved Blades** - Reduces sound levels and air resistance
- **Air Filter** - Cleanable air filter is furnished as standard
- **Wireless Remote Controller** - Furnished as standard, see page 15 for D22C1 and page 12 for D33C2

NOTE - The cassette panel must be ordered separately. See Specifications table for ordering information.

FEATURES

INDOOR UNITS

MEDIUM STATIC DUCTED INDOOR UNITS

- Mode conflict will auto-reset once all units return to the same operating mode

- Slim, compact design for limited space requirements. Installs out of sight between the drop ceiling and ceiling slab with ducted distribution to the indoor space
- **Pre-Heat Function** - Delays the operation of the fan until the indoor coil has reached a pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode
- **LED Readout Panel** - Mounted in the unit control box unit. LEDs display unit operation status, and codes for maintenance and servicing
- **Auto Restart** - Automatically restores the previous function setting if power is interrupted
- **Cooling Override** - Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation
- **Built-In Condensate Pump** - 27-1/2 inch lift
- **Duct Connections** - Return air connections can be made horizontally or from the bottom of the unit with interchangeable panel
- **Flare Connections** - Equipped with liquid and gas flare fittings for quick and secure piping
- **Three Speed Fan** - Fan functions at three speeds: low, medium and high
- **Air Filter** - Cleanable air filter is furnished as standard
- **Wired Remote Controller** - Furnished as standard, see page 18

AUTO CHANGEOVER OPERATION

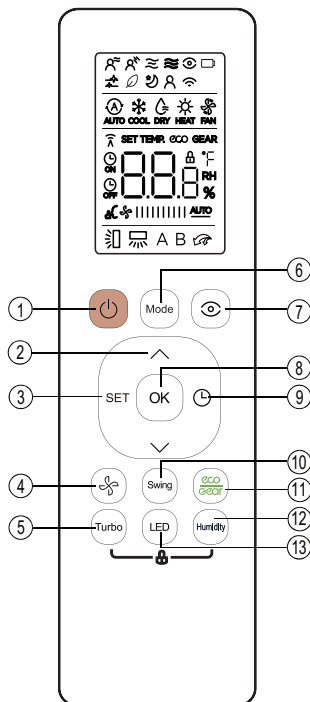
- If an indoor unit in the system is set to "AUTO" mode the unit will operate in cooling, heating or fan mode based on temperature setting
- Fan runs in auto mode
- Each indoor unit has a "mode conflict priority" setting set by a DIP switch or from the remote controller (default setting is heating mode)
- The system "mode conflict priority" is set by the indoor unit connected through the "A" terminal strip
- If the "A" terminal strip is not used, the unit at the "B" terminal strip and any subsequent terminal strips is utilized (depending on number of zones/indoor units)
- When a mode conflict happens (all units are not set to the same mode), the indoor units with the mode equal to the system "mode conflict priority" will continue to operate
- The indoor unit with the different mode will be turned off and the display will show "--" indicating a mode conflict for that particular indoor unit

REMOTE CONTROLLERS - FURNISHED

WIRELESS REMOTE CONTROLLER (RG10L-WMWH)

(FURNISHED WITH WALL-MOUNT INDOOR UNITS)

- Complete remote control of system
- Maximum operating range is 25 ft.
- Operates on two AAA 1.5V batteries (furnished)
- Wireless remote controller holder furnished
- Holder can be mounted on a wall for easy access
- Mounting screws furnished



1 ON/OFF Button

- Turns system on and off

2 UP/DOWN Buttons ^ v

- Increase or decrease the indoor temperature in one degree increments (maximum 86°F, minimum 60°F)

NOTE - Temperature cannot be adjusted in FAN mode.

NOTE - Press and hold and buttons together for 3 seconds to alternate the temperature display between the °C and °F scale.

3 SET Button

- Scrolls through unit operations in this order:

1. Breeze Away
2. Active Clean
3. Sleep
4. Follow Me

NOTE - The selected symbol will flash on the display area. Press the OK button to confirm.

4 FAN Button

- Cycles fan speeds in the following order:
 - AUTO → 20% → 40% → 60% → 80% → 100%

5 TURBO Button

- Enables the unit to reach the preset temperature during cooling or heating operation in the shortest time

6 MODE Button

- Select system operation modes
- Press button to cycle through each setting:
 - AUTO → COOL → DRY → HEAT → FAN

7 ECO INTELLIGENT EYE Button

- Detects motion in the room to reduce cooling mode when no activity is detected for 30 minutes

8 OK Button

- Confirms selected function

9 TIMER Button

- Initiates an auto-on or auto-off time sequence
- Press TIMER button to initiate the ON time sequence
- Press Temp. up or down button for multiple times to set the desired time to turn on the unit
- Press TIMER button to initiate the OFF time sequence.

NOTE - Each press of the button increases or decreases the time (depending on function) in 30 minute increments up to 10 hours.

Above 10 hours each press of the button will increase or decrease the auto-timed setting by 60 minutes up to 24 hours.

To cancel, set timer to 0.0 or turn remote off and on.

10 SWING Button

- Used to stop or start louver auto swing feature

11 ECO/GEAR Button

- Controls temperature/energy efficiency of the unit

NOTE - Only available in cooling mode.

ECO Operation

- Sets unit to 75°F unit operation if setpoint is lower
- Sets fan to Auto operation if setpoint is over 75°F

NOTE - If setpoint is manually changed to less than 75°F, ECO operation is canceled.

GEAR Operation

- Reduces electrical consumption to 75% or 50%

12 HUMIDITY Button

- Adjusts the room humidity during DRY mode from 35% to 85%
- Each press of the button increases the humidity in 5% increments

13 LED Button

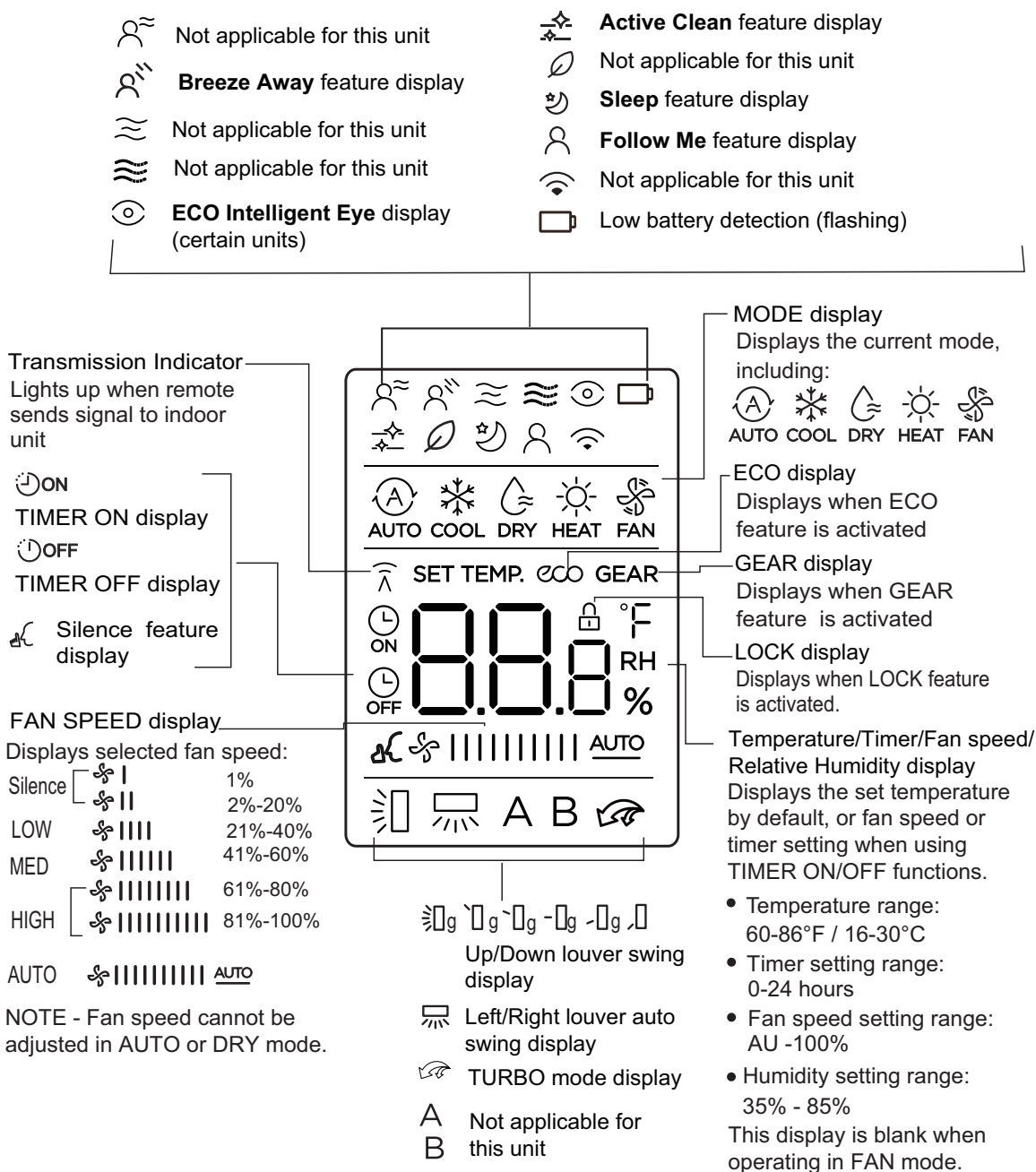
- Turns the LCD display backlight on the indoor unit on or off

NOTE - Press and hold the button for 5 seconds to display the actual room temperature. Press more than 5 seconds to revert back to display set temperature.

REMOTE CONTROLLERS - FURNISHED

WIRELESS REMOTE CONTROLLER INDICATORS (RG10L-WMWH)

Information is displayed when the Wireless Remote Controller is powered on.



Note:

All icons are shown for display purposes only.
During actual unit operation, only active icons are displayed.

REMOTE CONTROLLERS - FURNISHED

WIRELESS REMOTE CONTROLLER OPERATION (RG10L-WMWH)

Auto Operation

1. Press the **MODE** button to select Auto.
2. Press the **UP/DOWN** button to set the desired temperature.
3. Press the **ON/OFF** button to start the system.

Cooling /Heating/Fan Operation

1. Press the **MODE** button to select **COOL**, **HEAT** or **FAN** mode.
2. Press the **UP/DOWN** buttons to set the desired temperature.
3. Press the **FAN** button to select the fan speed.
4. Press the **ON/OFF** button to start the system.

Dehumidifying (DRY) Operation

1. Press the **MODE** button to select **DRY** mode.
2. Press the **UP/DOWN** buttons to set the desired temperature.
3. Press the **ON/OFF** button to start the system.

NOTE - Fan speed selection is disabled.

Timer ON/OFF Operation

1. Press the **TIMER** button. The remote controller shows **TIMER ON** or **TIMER OFF** icon
2. Press the **TIMER** button again to set desired time. Each time the button is pressed the time increases by 30 minutes between 0 and 10 hours and then by 60 minutes between 10 and 24 hours.
3. After setting the **TIMER ON** or **TIMER OFF** there will be a one second delay before the remote controller transmits the signal to the unit. After approximately 2 seconds the set temperature will re-appear on the LCD display window.

Silence Operation

1. Press the **FAN** button for more than 2 seconds to activate or disable the Silence function

Lock Function

1. Press the **TURBO** and **HUMIDITY** buttons together two times in less than one second to lock the Controller to prevent tampering
2. Press the **TURBO** and **HUMIDITY** together buttons again for two seconds to unlock the Controller

Swing Function

1. Press the **Swing** button to activate up/down louver operation. Louvers oscillate up and down automatically. Press and hold the **Swing** button again to disable.

NOTE - Pressing the **Swing** button multiple times will set the louvers at five different fixed airflow angles.

2. Press and hold **Swing** button for 2 seconds to activate left/right louver operation. Louvers swing left and right automatically.

SET BUTTON FUNCTIONS

Breeze Away

- Prevents unit from blowing air directly on a person

NOTE - Only available in **COOL**, **FAN** or **DRY** modes.

Active Clean

- Washes away dust, mold, and grease that may cause odors when it adheres to the indoor coil by automatically freezing and then rapidly thawing the coil
- Indoor unit displays "CL"
- After 20 to 45 minutes the unit will automatically turn cancel the operation

NOTE - Only available in **COOL** or **DRY** modes.

Sleep

- Enables the system to automatically increase cooling or decrease heating (in 2°F increments) per hour for the first 2 hours, then maintain a steady temperature for 5 hours
- System keeps the final operation mode after 8 total hours of operation

NOTE - To cancel, push the "MODE", "FAN SPEED" or "ON/OFF" buttons.

SLEEP mode is only available when the unit is in **COOL**, **HEAT** or **AUTO** mode

Follow Me

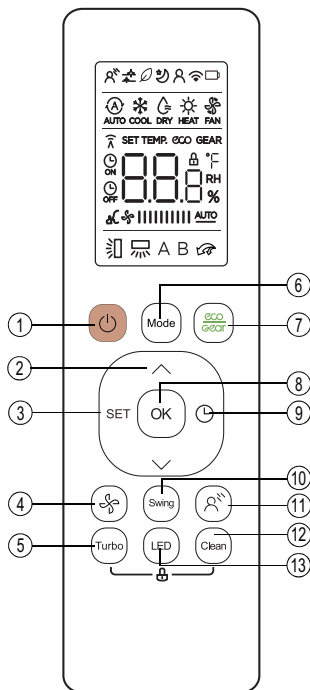
- Allows remote temperature sensing of the room at the remote controller location

REMOTE CONTROLLERS - FURNISHED

WIRELESS REMOTE CONTROLLER (RG10A-ACSWH)

(FURNISHED WITH D33C2 CASSETTE INDOOR UNITS)

- Complete remote control of system
- Maximum operating range is 25 ft.
- Operates on two AAA 1.5V batteries (furnished)
- Wireless remote controller holder furnished
- Holder can be mounted on a wall for easy access
- Mounting screws furnished



1 ON/OFF Button

- Turns system on and off

2 UP/DOWN Buttons ^ v

- Increase or decrease the indoor temperature in one degree increments (maximum 86°F, minimum 60°F)

NOTE - Temperature cannot be adjusted in FAN mode.

NOTE - Press and hold and buttons together for 3 seconds to alternate the temperature display between the °C and °F scale.

3 SET Button

- Scrolls through unit operations in this order:
 3. Sleep
 4. Follow Me

NOTE - The selected symbol will flash on the display area. Press the OK button to confirm.

4 FAN Button

- Cycles fan speeds in the following order:
 - AUTO → 20% → 40% → 60% → 80% → 100%

NOTE - Holding Fan button down for 2 seconds will activate **Silence** feature.

5 TURBO Button

- Enables the unit to reach the preset temperature during cooling or heating operation in the shortest time

6 MODE Button

- Select system operation modes
- Press button to cycle through each setting:
 - AUTO → COOL → DRY → HEAT → FAN

7 ECO/GEAR Button

- Controls temperature/energy efficiency of the unit

NOTE - Only available in cooling mode.

ECO Operation

- Sets unit to 75°F unit operation if setpoint is lower
- Sets fan to Auto operation if setpoint is over 75°F

NOTE - If setpoint is manually changed to less than 75°F, ECO operation is canceled.

GEAR Operation

- Reduces electrical consumption to 75% or 50%

8 OK Button

- Confirms selected function

9 TIMER Button

- Initiates an auto-on or auto-off time sequence
- Press TIMER button to initiate the ON time sequence
- Press Temp. up or down button for multiple times to set the desired time to turn on the unit
- Press TIMER button to initiate the OFF time sequence.

NOTE - Each press of the button increases or decreases the time (depending on function) in 30 minute increments up to 10 hours.

Above 10 hours each press of the button will increase or decrease the auto-timed setting by 60 minutes up to 24 hours.

To cancel, set timer to 0.0 or turn remote off and on.

10 SWING Button

- Used to stop or start louver auto swing feature

11 BREEZE AWAY Button

- Prevents unit from blowing air directly on a person

NOTE - Only available in COOL, FAN or DRY modes.

12 CLEAN Button

- Start/stop the Active Clean function (see description on page 14)

13 LED Button

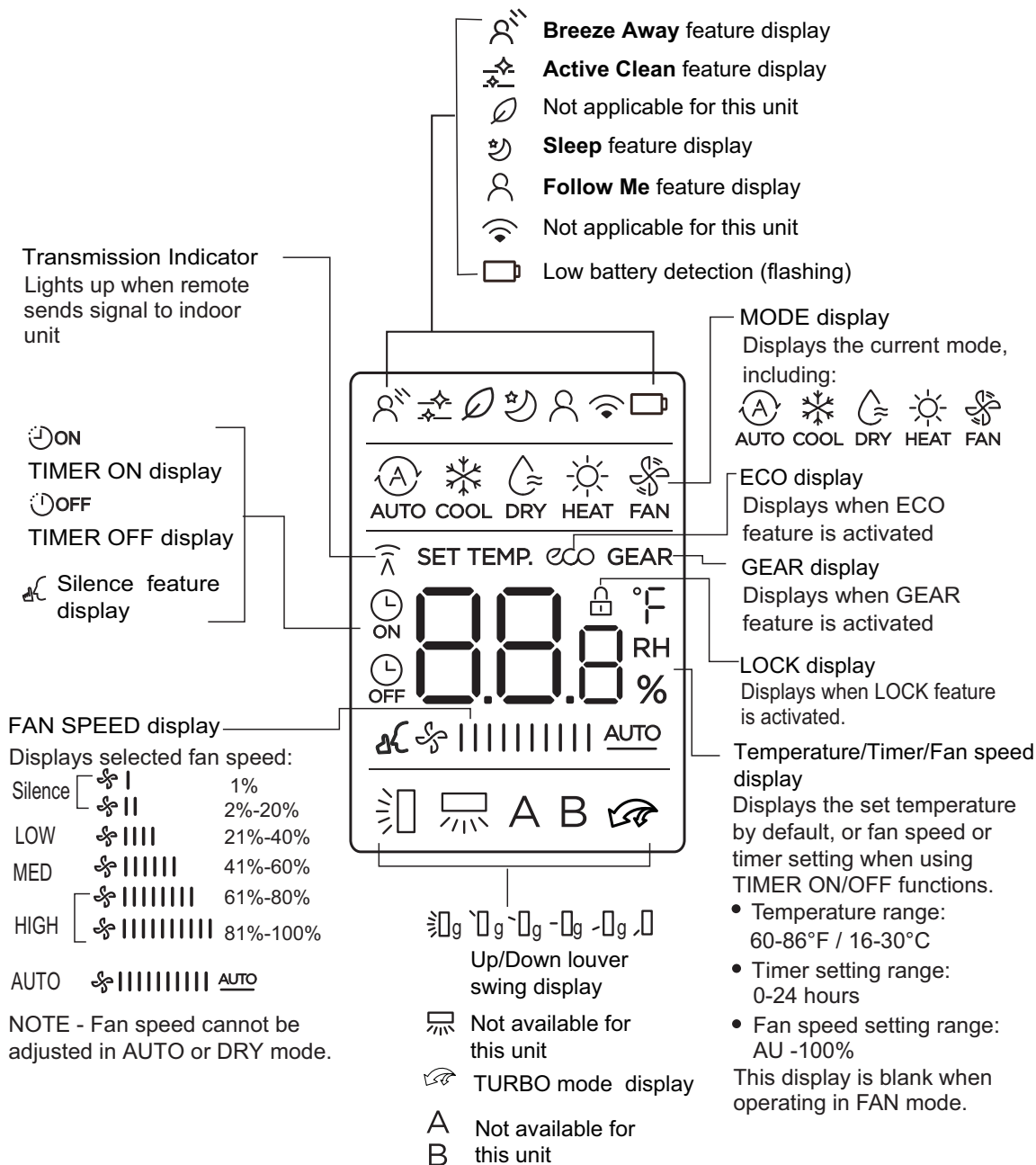
- Turns the LCD display backlight on the indoor unit on or off

NOTE - Press and hold the button for 5 seconds to display the actual room temperature. Press more than 5 seconds to revert back to display set temperature.

REMOTE CONTROLLERS - FURNISHED

WIRELESS REMOTE CONTROLLER INDICATORS (RG10A-ACSWH)

Information is displayed when the Wireless Remote Controller is powered on.



Note:

All icons are shown for display purposes only.
During actual unit operation, only active icons are displayed.

REMOTE CONTROLLERS - FURNISHED

WIRELESS REMOTE CONTROLLER OPERATION (RG10A-ACSWH)

Auto Operation

1. Press the **MODE** button to select Auto.
2. Press the **UP/DOWN** button to set the desired temperature.
3. Press the **ON/OFF** button to start the system.

Cooling /Heating/Fan Operation

1. Press the **MODE** button to select **COOL**, **HEAT** or **FAN** mode.
2. Press the **UP/DOWN** buttons to set the desired temperature.
3. Press the **FAN** button to select the fan speed in four steps- Auto, Low, Med or High.
4. Press the **ON/OFF** button to start the system.

Dehumidifying (DRY) Operation

1. Press the **MODE** button to select **DRY** mode.
2. Press the **UP/DOWN** buttons to set the desired temperature.
3. Press the **ON/OFF** button to start the system.

NOTE - Fan speed selection is disabled.

Timer ON/OFF Operation

1. Press the **TIMER** button. The remote controller shows **TIMER ON** or **TIMER OFF** icon
2. Press the **TIMER** button again to set desired time. Each time the button is pressed the time increases by 30 minutes between 0 and 10 hours and then by 60 minutes between 10 and 24 hours.
3. After setting the **TIMER ON** or **TIMER OFF** there will be a one second delay before the remote controller transmits the signal to the unit. After approximately 2 seconds the set temperature will re-appear on the LCD display window.

Silence Operation

1. Press the **FAN** button for more than 2 seconds to activate or disable the Silence function

Lock Function

1. Press the **TURBO** and **CLEAN** buttons together two times in less than one second to lock the Controller to prevent tampering
2. Press the **TURBO** and **CLEAN** together buttons again for two seconds to unlock the Controller

Swing Function

1. Press the **Swing** button to activate up/down louver operation. Louvers oscillate up and down automatically. Press and hold the Swing button again to disable.

NOTE - Pressing the Swing button multiple times will set the louvers at five different fixed airflow angles.

SET BUTTON FUNCTIONS

Sleep

- Enables the system to automatically increase cooling or decrease heating (in 2°F increments) per hour for the first 2 hours, then maintain a steady temperature for 5 hours
- System keeps the final operation mode after 8 total hours of operation

NOTE - To cancel, push the "MODE", "FAN SPEED" or "ON/OFF" buttons.

SLEEP mode is only available when the unit is in COOL, HEAT or AUTO mode

Follow Me

- Allows remote temperature sensing of the room at the remote controller location

CLEAN FUNCTION

Active Clean

- Washes away dust, mold, and grease that may cause odors when it adheres to the indoor coil by automatically freezing and then rapidly thawing the coil
- Indoor unit displays "CL"
- After 20 to 45 minutes the unit will automatically turn cancel the operation

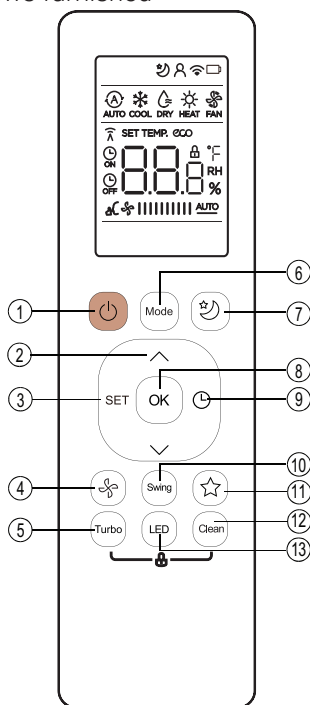
NOTE - Only available in COOL or DRY modes.

REMOTE CONTROLLERS - FURNISHED

WIRELESS REMOTE CONTROLLER (RG10B-ADC)

(FURNISHED WITH D22C1 CASSETTE UNITS. OPTIONAL FOR DUCTED INDOOR UNITS)

- Complete remote control of system
- Maximum operating range is 25 ft.
- Operates on two AAA 1.5V batteries (furnished)
- Wireless remote controller holder furnished
- Holder can be mounted on a wall for easy access
- Mounting screws furnished



1 ON/OFF Button

- Turns system on and off

2 UP/DOWN Buttons ^ v

- Increase or decrease the indoor temperature in one degree increments (maximum 86°F, minimum 62°F)

NOTE - Temperature cannot be adjusted in FAN mode.

NOTE - Press and hold and buttons together for 3 seconds to alternate the temperature display between the °C and °F scale.

3 SET Button

- Scrolls through unit operations in this order:

1. Follow Me

NOTE - The selected symbol will flash on the display area. Press the OK button to confirm.

4 FAN Button

- Cycles fan speeds in the following order:

• AUTO → LOW → MED → HIGH

NOTE - Holding Fan button down for 2 seconds will activate **Silence** feature.

5 TURBO Button

- Enables the unit to reach the preset temperature during cooling or heating operation in the shortest time

6 MODE Button

- Select system operation modes
- Press button to cycle through each setting:
 - AUTO → COOL → DRY → HEAT → FAN

7 SLEEP Button

Sleep

- Enables the system to automatically increase cooling or decrease heating (in 2°F increments) per hour for the first 2 hours, then maintain a steady temperature for 5 hours
- System keeps the final operation mode after 8 total hours of operation

8 OK Button

- Confirms selected function

9 TIMER Button

- Initiates an auto-on or auto-off time sequence
- Press TIMER button to initiate the ON time sequence
- Press Temp. up or down button for multiple times to set the desired time to turn on the unit
- Press TIMER button to initiate the OFF time sequence.

NOTE - Each press of the button increases or decreases the time (depending on function) in 30 minute increments up to 10 hours.

Above 10 hours each press of the button will increase or decrease the auto-timed setting by 60 minutes up to 24 hours.

To cancel, set timer to 0.0 or turn remote off and on.

10 SWING Button

- Used to stop or start louver auto swing feature

11 SHORTCUT Button

- Restore the current settings or resume the previous settings

12 CLEAN Button

- Start/stop the Self-Clean function
- Unit cleans itself automatically

NOTE - Only available in COOL or DRY modes.

NOTE - Not for DMD236-48 models.

13 LED Button

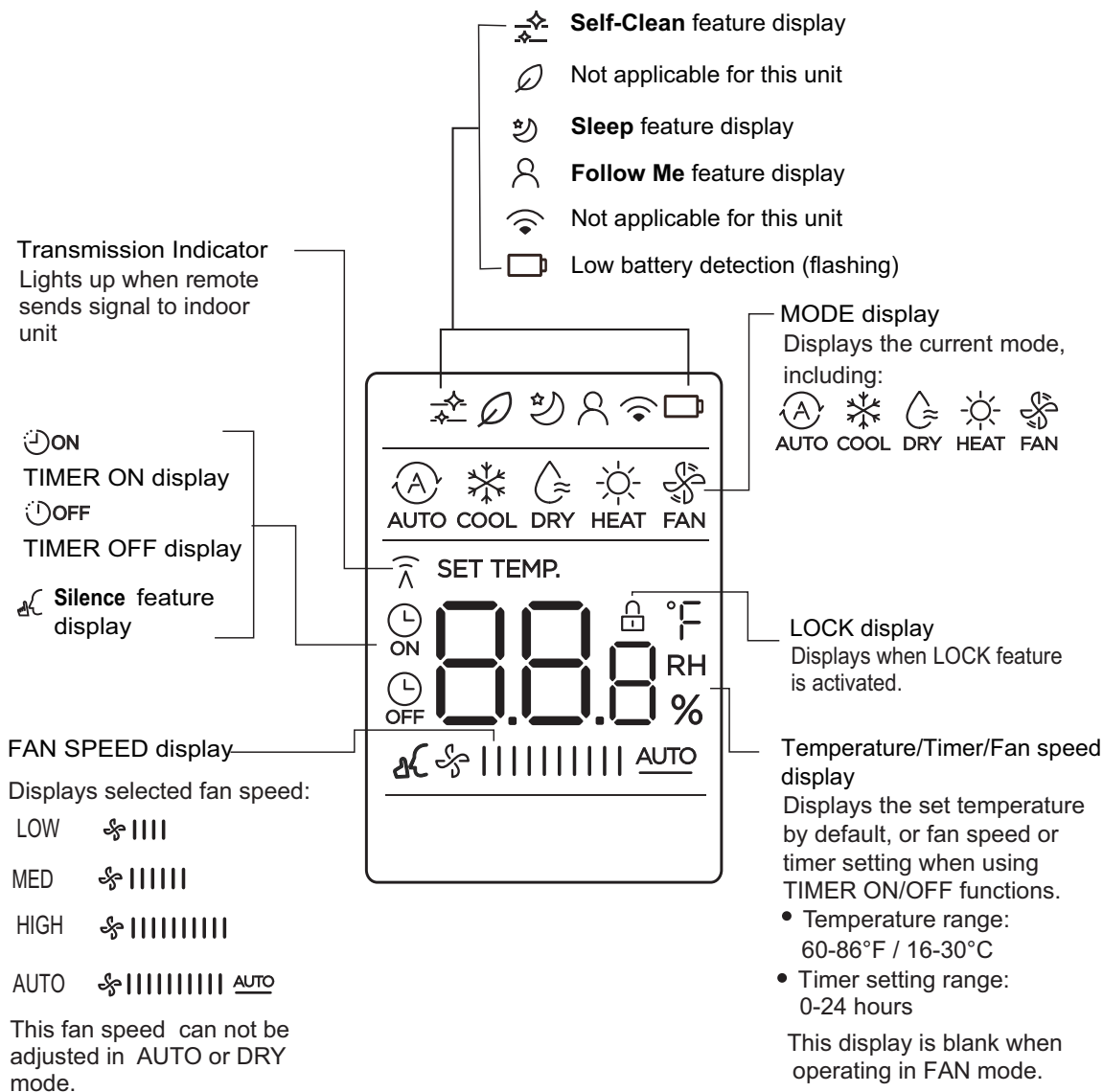
- Turns the LCD display backlight on the indoor unit on or off

NOTE - Press and hold the button for 5 seconds to display the actual room temperature. Press more than 5 seconds to revert back to display set temperature.

REMOTE CONTROLLERS - FURNISHED

WIRELESS REMOTE CONTROLLER INDICATORS (RG10B-ADC)

Information is displayed when the Wireless Remote Controller is powered on.



REMOTE CONTROLLERS - FURNISHED

WIRELESS REMOTE CONTROLLER OPERATION (RG10B-ADC)

Auto Operation

1. Press the **MODE** button to select Auto.
2. Press the **UP/DOWN** button to set the desired temperature.
3. Press the **ON/OFF** button to start the system.

Cooling /Heating/Fan Operation

1. Press the **MODE** button to select **COOL**, **HEAT** or **FAN** mode.
2. Press the **UP/DOWN** buttons to set the desired temperature.
3. Press the **FAN** button to select the fan speed in four steps- Auto, Low, Med or High.
4. Press the **ON/OFF** button to start the system.

Dehumidifying (DRY) Operation

1. Press the **MODE** button to select **DRY** mode.
2. Press the **UP/DOWN** buttons to set the desired temperature.
3. Press the **ON/OFF** button to start the system.

NOTE - Fan speed selection is disabled.

Timer ON/OFF Operation

1. Press the **TIMER** button. The remote controller shows **TIMER ON** or **TIMER OFF** icon
2. Press the **TIMER** button again to set desired time. Each time the button is pressed the time increases by 30 minutes between 0 and 10 hours and then by 60 minutes between 10 and 24 hours.
3. After setting the **TIMER ON** or **TIMER OFF** there will be a one second delay before the remote controller transmits the signal to the unit. After approximately 2 seconds the set temperature will re-appear on the LCD display window.

Silence Operation

1. Press the **FAN** button for more than 2 seconds to activate or disable the Silence function

Lock Function

1. Press the **TURBO** and **HUMIDITY** buttons together two times in less than one second to lock the Controller to prevent tampering
2. Press the **TURBO** and **HUMIDITY** together buttons again for two seconds to unlock the Controller

Swing Function

1. Press the **Swing** button to activate parallel louver operation. Louvers oscillate up and down automatically. Press and hold the Swing button again to disable.

NOTE - Pressing the Swing button multiple times will set the louvers at five different fixed airflow angles.

2. Press **Swing** button for 2 seconds to activate upright louver operation. Louvers swing left and right automatically.

SET BUTTON FUNCTIONS

Follow Me

- Allows remote temperature sensing of the room at the remote controller location

REMOTE CONTROLLERS - FURNISHED

WIRED REMOTE CONTROLLER

(FURNISHED WITH DUCTED INDOOR UNITS)

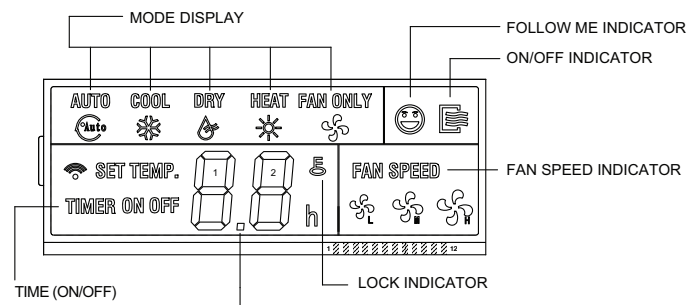
NOTE - Can be ordered separately for non-ducted indoor units.

FEATURES

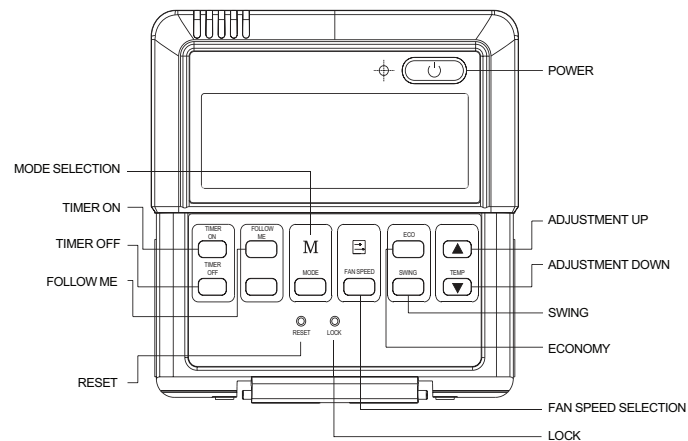
- Permanent Memory - Maintains clock, fan speed and mode of operation settings following power outages
- Dimensions (H x W x D) - 4-3/4 x 4-3/4 x 7/8 in.
- Additional hardware is furnished for installation
- Wiring - Controller uses 5-wire shielded 20 ft. (6 m) cable (furnished) for easy low voltage connection to the indoor unit
- Maximum cable length is 40 ft. (12 m)



DISPLAY



BUTTONS AND FUNCTIONS



MODE Button

- Select system operation modes. Push button to cycle through each setting

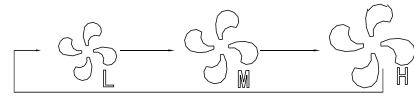


POWER Button

- Turns system on and off

FAN SPEED Button

- Selects fan speed. Each button press cycles through the following settings on display



NOTE - Not available in **AUTO** mode.

TIMER ON / TIMER OFF Buttons

- **TIMER ON** (initiates an auto-on time sequence)
- **TIMER OFF** (initiates an auto-off time sequence) can be used separately or together
- Each press of the button increases the time in 30 minute increments up to 10 hours
- Above 10 hours each press of the button will increase the auto-timed setting by 60 minutes up to 24 hours

NOTE - To cancel, set timer to 0.0.

UP/DOWN Buttons ▲ ▼

- Increase or decrease the indoor temperature in two degree increments (maximum 88°F, minimum 62°F).

NOTE - Temperature cannot be adjusted in **FAN** mode.

NOTE - Press and hold and buttons together for 3 seconds to alternate the temperature display between the °C and °F scale.

SWING Button

- Used to stop or start horizontal louver auto swing feature

ECONOMY Button

- Maintains the most comfortable temperature and saves energy

RESET Button (Recessed)

- Resets Controller to factory settings. Recessed to prevent tampering

LOCK Button (Recessed)

- Locks Controller buttons to prevent tampering with settings

OPTIONAL ACCESSORIES

Extension Cable for Wired Remote Controller

- 20 ft. cable for easy low voltage connection to the indoor unit
- Extends cable to maximum 40 ft. length

OPTIONAL ACCESSORIES - ORDER SEPARATELY

WIRED PROGRAMMABLE CONTROLLER



- Wired programmable local controller for mini-split indoor units with convenient timed schedules for daily operation
- Up to 8 events per day
- Schedule start time, mode, setpoint, and fan speed
- Compatible with all indoor units
- Copy/paste function for easy duplication of events to other days
- Built-in system diagnostics
- Large, back-lit, easy-to-read LCD screen with digital display

BUTTONS AND FUNCTIONS

POWER Button

- Turn system on and off

FAN SPEED Button

- Scroll through fan speeds (Auto - Low - Med - High)

MODE Button

- Use + and – buttons to scroll through available operation modes (Auto / Cool / Dry / Fan / Heat)

PLUS (+) and MINUS (–) Buttons

- Setpoint adjustment (62-86°F)
- Select days of the week when setting a schedule
- Select mode of operation

SWING Button

- Stop or start horizontal (up/down) louver auto swing
- Controls swing oscillation and louver angle in 6° increments

TIMER Button

- Sets current time of day (24 hour clock)
- Setup weekly schedules or to setup timed operation for the indoor unit
- Stop/Stop timed operation

DAY OFF / DEL Button

- Disable specific days/schedules of the week
- Delete a specific event

CONFIRM Button

- Confirms each step when managing schedules

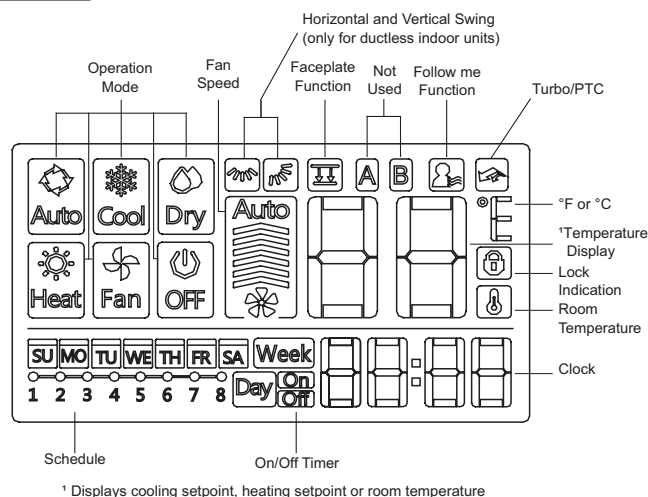
BACK/TURBO Button

- Turbo sets indoor unit fan speed to high for a factory-set time period

COPY/FOLLOW ME Button

- Toggles between room temperature sensing from the indoor unit or the controller

DISPLAY



- Audible tone when a button is pressed (can be disabled)
- Lock function disables buttons to prevent tampering
- Controller uses 4-wire shielded 20 ft. (6 m) cable (furnished) for easy low voltage connection to the indoor unit
- Adaptor cables are furnished for various indoor unit connections

NOTE - Cable for longer lengths must be ordered separately.

NOTE - Maximum cable length is 164 ft. (50 m).

- Hardware for mounting furnished
- Mounts to standard electrical junction box (not furnished)
- Lithium battery furnished
- Power Supply: 5 VDC
- Dimensions (H x W x D): 4-7/8 x 4-3/4 x 3/4 in. (124 x 121 x 19 mm)

OPTIONAL ACCESSORIES

Extension Cable for Wired Programmable Controller

- 20 ft. cable for easy low voltage connection to the indoor unit
- Extends cable to 40 ft. (12 m) length

OPTIONAL ACCESSORIES - ORDER SEPARATELY**OUTDOOR UNITS****Condenser Pad**

- Provides permanent foundation for outdoor units
- One-piece lightweight structural foam and molded from high-density polyethylene (HDPE)
- Lightweight, easy to carry and install
- Textured finish provides a non-skid surface so outdoor unit sits securely in one place
- UV stable

Disconnects

- Positive unit disconnect
- Single door enclosure
- Fused and non-fused models available

Fuses

- 30 and 60 amp fuses available

Indoor/Outdoor Wiring Cable

- 14-gauge, 4-conductor wire
- THHN (Thermoplastic High Heat-resistant Nylon-coated) wire
- Suitable for wet or dry locations
- Rated up to 600V

Refrigerant Line Sets

- Refrigerant lines are shipped refrigeration clean
- Lines are cleaned, dried, pressurized and sealed at factory

Wall Brackets

- Heavy duty 1/8 in. thick steel brackets for supporting outdoor units
- Mount at any height to allow for easy maintenance under units
- Pre-punched holes for easy installation
- Powder coated gray finish
- Load rating 600 lbs. per pair

Whips

- Heavy duty electrical whips are available in 8 and 10 gauge sizes
- 6 ft. lengths
- Weatherproof metal conduit

INDOOR UNITS**Condensate Pumps**

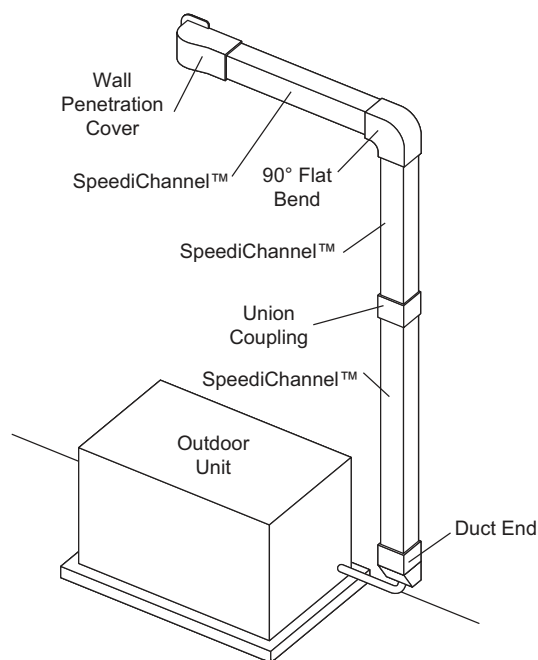
- Quietly and efficiently removes condensate
- See Optional Accessories Table for available pumps

A/C Easy Tee® Condensate Cleanout

- Condensate drain service port
- Flexible and easy to use with nitrogen, water or shop vac
- Screw cap on top allows easy access to condensate drain line

SPEEDICHANNEL™ SYSTEM

- SpeediChannel™ is a channel system covers system line sets
- Two-part system has a base and a cover
- Base is fastened to a wall or ceiling with plastic clips (SpeediClip™) that snap into a channel already molded into the base
- Cover fits on top of the base
- Manufactured from rigid PVC, which is UL rated and resistant to UV light
- System is a natural color that closely matches typical mini-split outdoor units
- Can be painted as desired to match any wall color

Typical Application

OPTIONAL ACCESSORIES - ORDER SEPARATELY**SPEEDICHANNEL™ SYSTEM (continued)****SpeediChannel™ Starter Kit**

- The starter kit includes (1) Coupling, (1) Wall Penetration, (1) Inside Elbow, (1) Long Radius Flat Bend, (10) Speediclips™, (10) 11 in. Cable Ties, and (1) SpeediChannel Instruction Booklet

Duct End

- Duct Ends are used to terminate a run of SpeediChannel™ to a small opening just large enough for the line set and condensate drain line to pass through

**Flat Wall Escutcheon**

- Flat Wall Escutcheons are used to cover a rough opening in a soffit, wall, ceiling penetration



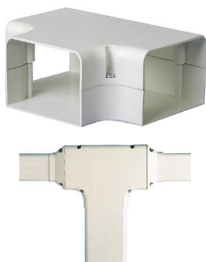
- One side of the escutcheon is flat to allow for a SpeediChannel™ to run along a wall and to penetrate through an adjacent wall or ceiling
- This is the most common type of wall penetration
- Furnished in two parts, the escutcheon easily snaps onto the SpeediChannel™

Flex Joint

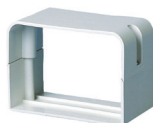
- A Flex Joint is an accordion-style piece of SpeediChannel™
- The flex joint can be extremely flexible when routing a SpeediChannel™ system around an obstacle
- Each joint is 20 in. long and can be combined together for longer flex runs
- The flex joint does not require the use of a union coupling
- The flex joint slides tightly inside the SpeediChannel™ system

T-Joint

- T-Joints are used for creating a tee connection between three pieces of SpeediChannel™
- Each tee is individually packed and furnished with stainless steel screws

**Union Coupling**

- Union Couplings are used for joining two pieces of SpeediChannel™
- Each coupling is individually packed and furnished with stainless steel screws

**Wall Penetration Cover**

- Wall penetration covers are used to transition from the SpeediChannel™ system to a through wall penetration
- Wall covers are designed to allow for easy installation, even after the line set has been installed
- A hooking and fastening arrangement allows for quick installation
- Each wall cover is individually packed, and furnished with stainless steel screws attach the wall cover to the base
- Three screws are necessary to fasten the wall cover to the wall construction, regardless of the type of installed system

**45° and 90° Flat Bend Elbows**

- 45° Flat Bends are used to route the SpeediChannel™ around obstacles
- Each bend is individually packed and furnished with stainless steel screws



45°



90°

90° Inside Elbow

- 90° Inside Elbows are used to route the SpeediChannel™ around an inside corner
- Each elbow is individually packed and furnished with stainless steel screws

**Mount Block White Qty. (2) 14 in. and (2) 36 in.**

- Mount Blocks are used as mounting bases when outdoor units must be bolted down
- End caps (for aesthetics) come furnished with mounting bolts
- Maximum load capacity is 900 pounds per mounting block
- Installation temperatures range from -4°F to 140°F
- Mount blocks fit all mini-split outdoor units with a sliding rail feature



SPECIFICATIONS		OUTDOOR UNITS - 1.5 TON 2 TON 2.5 TON		
Nominal Size - Tons		1.5	2	2.5
Outdoor Unit Model No.		4DHP2S18M	4DHP2S24M	4DHP2S30M
Number of Zones		2	Up to 3	Up to 3
Ambient Temperature Range - °F	Cooling	-13 - 122	-13 - 122	-13 - 122
	Heating	-13 - 86	-13 - 86	-13 - 86
Sound Data (dBA)	Cooling	58.5	61	61
	Heating	58.5	61	61
Refrigerant	Charge furnished (R-410A)	4 lbs. 1 oz.	5 lbs. 11 oz.	5 lbs. 11 oz.
	Maximum line length with furnished charge (per zone) - ft.	25	25	25
	Additional charge required per ft. - oz.	0.16	0.16	0.16
Compressor	No. and Type	(1) Rotary	(1) Rotary	(1) Rotary
	Refrigerant oil type	VG74	VG74	VG74
	Refrigerant oil charge - oz.	15.20	21.00	21.00
Connections	Liquid+Gas pipe (in.) flare	(2) 1/4 + (2) 3/8	(3) 1/4 + (3) 3/8	(3) 1/4 + (3) 3/8
	Max pipe. length for all rooms - ft.	131	197	197
	Max. pipe length for one indoor unit - ft.	82	98	98
	Max. height difference between indoor and outdoor units - ft.	49	49	49
	Max. height difference between indoor units - ft.	33	33	33
Outdoor Fan	(No.) Diameter - in.	(1) 21	(1) 22	(1) 22
	Total air volume - cfm	1765	2130	2130
	Motor rpm	750/500	1050/900/850	1050/900/850
Outdoor Coil	Number of rows	2	2	2
	Fins per inch	18	18	18
	Fin type	Hydrophilic Aluminum		
	Tube outside diameter - in.	3/8	3/8	3/8
	Tube type	Rifled Copper Tubing		
	Net face area - ft. ²	5.90	8.18	8.18
Design Pressure	PSIG	540 / 340	540 / 340	540 / 340
Shipping Data	Net/Shipping weight (lbs.)	100 / 109	140 / 151	140 / 151
ELECTRICAL DATA				
Electrical Characteristics - 60 Hz - 1 Phase		208/230V	208/230V	208/230V
¹ Maximum Overcurrent Protection (MOCP) amps		25	30	30
² Minimum circuit ampacity (MCA)		18	24.5	24.5
Outdoor Fan Motor	Output - W	80	120	120

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

¹ HACR type circuit breaker or fuse.

² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE - Adaptors are furnished for the gas pipe connections:

018 - (2) 3/8 x 1/2 in.

030 - (3) 3/8 x 1/2 in.

SPECIFICATIONS		OUTDOOR UNITS - 3 TON 4 TON	
Nominal Size - Tons		3	4
Outdoor Unit Model No.		4DHP2S36M	4DHP2S48M
Number of Zones		Up to 4	Up to 5
Ambient Temperature Range - °F	Cooling	-13 - 122	-13 - 122
	Heating	-13 - 86	-13 - 86
Sound Data (dBA)	Cooling	63	64
	Heating	63	64
Refrigerant	Charge furnished (R-410A)	8 lbs. 6 oz.	10 lbs. 2 oz.
	Maximum line length with furnished charge (per zone) - ft.	25	25
	Additional charge required per ft. - oz.	0.16	0.16
Compressor	No. and Type	(1) Rotary	(1) Rotary
	Refrigerant oil type	VG74	VG74
	Refrigerant oil charge - oz.	33.80	47.30
Connections	Liquid+Gas+Gas pipe (in.) flare	(4) 1/4 + (3) 3/8 / (1) 1/2"	(5) 1/4 + (3) 3/8 / (2) 1/2"
	Max pipe. length for all rooms - ft.	262	262
	Max. pipe length for one indoor unit - ft.	115	115
	Max. height difference between indoor and outdoor units - ft.	49	49
	Max. height difference between indoor units - ft.	33	33
Outdoor Fan(s)	(No.) Diameter - in.	(1) 22	(2) 22
	Total air volume - cfm	2150	4500
	Motor rpm	1000/900/750	800/700/600
Outdoor Coil	Number of rows	2.6	2
	Fins per inch	16	18
	Fin type	Hydrophilic Aluminum	
	Tube outside diameter - in.	3/8	3/8
	Tube type	Rifled Copper Tubing	
	Net face area - ft. ²	8.16	6.66+6.66
Design Pressure	PSIG	540 / 340	540 / 340
Shipping Data	Net/Shipping weight (lbs.)	169 / 181	224 / 255
ELECTRICAL DATA			
Electrical Characteristics - 60 Hz - 1 Phase		208/230V	208/230V
¹ Maximum Overcurrent Protection (MOCP) amps		40	50
² Minimum circuit ampacity (MCA)		25	35
Outdoor Fan Motor	Output - W	120	(2) 85

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

¹ HACR type circuit breaker or fuse.

² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE - Adaptors are furnished for the gas pipe connections:

036 - (3) 3/8 x 1/2 in. and (1) 1/2 x 3/8 in.

048 - (3) 3/8 x 1/2 in., (2) 1/2 x 3/8 in., (2) 1/4 x 3/8 in. and (2) 1/2 x 5/8 in.

SPECIFICATIONS	WALL-MOUNTED INDOOR UNITS			
----------------	---------------------------	--	--	--

		Model No.	DWM206S4	DWM209S4	DWM212S4
		Nominal Tons	0.50	0.75	1
		Power Supply - 60 hz - 1 phase	208/230V	208/230V	208/230V
		Rated load amps	0.25	0.25	0.25
		Output (W)	20	20	20
Room Temperature Range (°F)	Cooling		60 - 90	60 - 90	60 - 90
	Heating		32 - 86	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)			318/218/168	335/230/176	335/230/176
Sound Data (dBA) - Low/Medium/High			23/32/36	23/34/38	22.5/33.5/36
Piping Connections - Liquid/Gas - o.d. - flare - in.			1/4 / 3/8	1/4 / 3/8	1/4 / 1/2
Drain connection o.d. - in.			1	1	1
Net/Shipping weights - lbs.			23 / 29	23 / 29	23 / 29

SPECIFICATIONS	WALL-MOUNTED INDOOR UNITS			
----------------	---------------------------	--	--	--

		Model No.	DWM218S4	DWM224S4	DWM230S4
		Nominal Tons	1.5	2	2.5
Power Supply - 60 hz - 1 phase		Rated load amps	0.13	0.5	0.5
		Output (W)	30	58	58
Room Temperature Range (°F)	Cooling		60 - 90	60 - 90	60 - 90
	Heating		32 - 86	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)			524/76/306	611/414/319	646/505/382
Sound Data (dBA) - Low/Medium/High			32.5/43/46.5	34/39.5/44	33/40.5/46
Piping Connections - Liquid/Gas - o.d. - flare - in.			1/4 / 1/2	3/8 / 5/8	3/8 / 5/8
Drain connection o.d. - in.			1	1	1
Net/Shipping weights - lbs.			27 / 36	44 / 55	44 / 55

SPECIFICATIONS**CASSETTE INDOOR UNITS**

Model No.		D22C109S4	D22C112S4	D22C118S4
Nominal Tons		0.75	1	1.5
Power Supply - 60 hz - 1 phase		208/230V	208/230V	208/230V
Rated load amps		0.9	1.0	1.5
Output (W)		46	46	46
Room Temperature Range (°F)	Cooling	62 - 90	62 - 90	62 - 90
	Heating	32 - 86	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)		375/300/255	380/310/260	560/485/415
Sound Data (dBA) - Low/Medium/High		33/37/41	36/39/43	36/39/44
Piping Connections - Liquid/Gas - o.d. - flare - in.		1/4 / 3/8	1/4 / 1/2	1/4 / 1/2
Drain connection o.d. - in.		1	1	1
Net/Shipping weights - lbs.	Body	32 / 38	36 / 41	36 / 42

REQUIRED COMPONENTS - ORDERED SEPARATELY

Cassette Panel	13X04	13X04	13X04
Net/Shipping weights - lbs.	6 / 10	6 / 10	6 / 10

SPECIFICATIONS

Model No.		D33C224S4	D33C236S4
Nominal Tons		2	3
Power Supply - 60 hz - 1 phase		208/230V	208/230V
Rated load amps		1.0	1.0
Output (W)		45	125
Room Temperature Range (°F)	Cooling	60 - 90	60 - 90
	Heating	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)		706 / 635 / 547	947 / 853 / 753
Sound Data (dBA) - Low/Medium/High		43 / 46 / 49	52.5 / 50 / 46.5
Piping Connections - Liquid/Gas - o.d. - flare - in.		3/8 / 5/8	3/8 / 5/8
Drain connection o.d. - in.		1	1
Net/Shipping weights - lbs.	Body	48 / 56	60 / 69

REQUIRED COMPONENTS - ORDERED SEPARATELY

Cassette Panel	22V17	22V17
Net/Shipping weights - lbs.	14 / 20	14 / 20