VARIABLE REFRIGERANT FLOW SYSTEMS



VRF V0STAT54P-3 Non-Programmable Wired Controller

COMMERCIAL PRODUCT SPECIFICATIONS

Bulletin No. 210899 April 2019



FEATURES

- Wall-mount, wired, non-programmable local Controller for VRF Heat Recovery and Heat Pump indoor units
- Controls up to 16 VRF Indoor Units
- · Controller can be set as a Master or Sub
- Two controllers can operate one indoor unit
- If multiple indoor units are connected to one Controller, return air sensing is at the Controller
- If a single unit is connected to a single Controller, return air sensing can be set to the Controller or the indoor unit return air sensor
- Remote static pressure adjustment for ducted indoor units eliminates the need to adjust it at the unit
- User can assign indoor unit addresses at the Controller
- Displays error codes for Outdoor Unit, Indoor Unit and Mode Selection Box as an aid in troubleshooting
- **Backlight** Allows easy operation in a dark room. The controller lights when any button is pressed and remains lit during control access
- LCD Display Displays indicators for operation modes, locks, cooling and heating setpoint temperatures, room temperature, operating mode, swing, fan speed
- Function Buttons POWER, MODE, TEMPERATURE UP/ DOWN ARROWS (for adjustment), FAN SPEED

- Controller Locked Indicator Certain functions can be disabled with the lock function (mode operation, fan speed, temperature increase/decrease, swing, power, lock/unlock all buttons)
- Centralized Controller Lock Indicator Certain functions on individual Controllers can be disabled from the Centralized Controller
- · Power Button Turns system on or off
- Mode Button Press to select operation mode, icon on screen displays active mode
 - Cool
 - Heat
 - Auto
- In Auto Mode separate heating and cooling setpoints can be selected. Press Mode button to switch between heating and cooling setpoints.
- · Dry System operates in dehumidification mode



• Fan (Only)

FEATURES (continued)

- Up/Down Arrow Buttons Increase or decrease temperature setpoint and navigation for Controller adjustments
- Fan Speed Button Sets fan speed (Low/Medium/High)
- Louver Swing Operation Enable automatic louver swing function on certain indoor units

Press Up/Down Arrows simultaneously to start/stop swing louver operation or to set a specific angle.

- Non-Volatile Memory Maintains the last setpoint and mode of operation settings following power outages (no battery required)
- Dimensions (H x W x D) 3-3/8 x 3-3/8 x 3/4 in. Additional hardware is furnished for installation.
- Wiring Controller uses low voltage, 18-gauge, stranded 4-wire shielded cable (not furnished)

NOTE - See the Installation Instructions for complete details on Controller setup, Indoor Unit Query access, Indoor Unit Information access and Error Code Query information.

CONTROLLER SETTINGS

0



Settings Number	Function	Description		
1	Power Off Memory Settings for Auto Mode Retains operation mode, setpoints and fan speed settings	On/Off, default is On		
2	Temperature Unit	°F or °C, <i>default is °F</i>		
3	Master and Sub-Controller	Master or Sub-Controller, default is Master		
4	Maximum Heating Setpoint	Adjustable, 62 to 86°F, <i>default is 86°F</i>		
5	Minimum Cooling Setpoint Adjustable, 62 to 86°F, default is 62°F			
6	Indoor Unit Addressing	0 to 63		
7	Indoor Display (display) Enable or disable the LCD display	OFF or Normal, <i>default is Normal</i>		
8	Indoor Display (buzzer) Enable or disable the buzzer OFF or Normal, <i>default is Normal</i>			
9	Room Temperature Sensor Location Controller or Individual Indoor Unit	default is Controller		
If more	If more than one indoor unit is controlled by this controller, sensor location must be set to Controller.			
10	Room Temperature Calibration	Adjustable, –5 to 5°F, <i>default is 0°F</i>		
11	Setpoint Control Resolution Cooling/Heating operation will begin at setpoint or above setpoint	Adjustable, 1 or 2°F, <i>default is 1°F</i>		
12	Auto Mode Changeover Time Adjustable, 15 to 90 minutes in 15 minute increments, <i>default minutes</i>			
13	Auto Mode Deadband Limit 3 to 7°F, default is 3°F			
14	Auto Mode Deadband Limit Type	Minimum or Fixed, <i>default is Minimum</i>		
15	External Static Pressure (Ducted Indoor Units Only)	Adjustable, 0 to 25 in.w.g., <i>default is 25 in. w.g.</i>		
Only of	, ne ducted indoor unit per controller can be connected	d.		

V0STAT54P-3 Wired Controller / Page 2

Settings Number	Function	Description	
16	Draft Prevention	Adjustable, 59, 68, 75 and 79°F, <i>default is 59°F</i>	
Preve Blowe	nts cold air from blowing into a conditioned space or er either runs at low speed or off.	during heating mode if coil temperature is lower than the setpoint value.	
17	Indoor Fan Cooling Setting	Sets the fan operation when cooling setpoint is satisfied (Low, Medium, High or Maintain the last speed setting)	
18	Indoor Fan Heating Setting	Sets the fan operation when heating setpoint is satisfied (Low, Medium, High or Maintain the last speed setting)	
19	(Reserved)		
20	(Reserved)		
21	(Reserved)		
22	Auxiliary/Alternative Heater Installation	No Aux/Alt, Aux/Alt Heat Installed (indoor unit or duct) or other Aux/ Heat Installation, <i>default is No Aux/Alt heat</i>	
23	Auxiliary Heat On	Auxiliary heat is energized when room temperature value is lower than the setpoint, adjustable, 2 to 7°F, <i>default is 3°F</i>	
24	Auxiliary Heat Off	Auxiliary heat is de-energized when room temperature value is higher than the setpoint, adjustable, –4° to 7°F, <i>default is 1°F</i>	
25	Dehumidifier Contact Enabled	Enables/Disables dehumidifier contact, default is Disabled	
26	Dehumidifier Contact Control Cut-Off Enabled	Enables/Disables the dehumidifier contact control cut-off, <i>default is Disabled</i>	
27	Dehumidifier Contact Control Cut-Off Value Setting	Sets the lowest limit for dehumidifier cut-off (setpoint less this setting), adjustable, 3 to 6°F, <i>default is 4°F</i>	
28	Unoccupied Heating Setback	Setpoint for unoccupied heating adjustable, 54 to 70°F, default is 62°	
29	Lock All Buttons	Unlock or Lock all Controller buttons, default is unlocked	
30	Lock Mode Button	Unlock or Lock Mode button, <i>default is unlocked</i>	
31	Lock ON/OFF Button	Unlock or Lock ON/OFF button, <i>default is unlocked</i>	
32	Lock Up/Down Buttons	Unlock or Lock UP/DOWN Arrow buttons, default is unlocked	
33	Lock Swing	Unlock or Lock Swing button, <i>default is unlocked</i>	
34	Reset Controller	Reset Controller to factory default settings, default is unlocked	

Factory Reset does not affect Indoor Unit settings.

INDOOR UNIT QUERY



- View the current information for:
 - Indoor Unit Address Number
 - Total Indoor Unit quantity
- Current Indoor Unit order number

INDOOR UNIT INFORMATION



- View the current operation status of each indoor unit connected to the controller
 - Query Number (see table)
 - Indoor Unit Status (Mode, Cool Setpoint, Heat Setpoint, Fan Speed, Swing)
 - Room Temperature Sensor Location
 Controller or Indoor Unit

Query No.	Screen Location	Description	Value
1	Upper	Cooling Setpoint	62~86°F
	Lower	Heating Setpoint	(17~30°C)
2	Upper	Indoor Room Temperature Sensor	
	Lower	T2 (middle of evaporator)	
3	Upper	T2A (evaporator inlet)	
	Lower	T2B (evaporator outlet)	
4	Upper	Indoor EXV Opening Position (thousands+hundreds)	
	Lower	Indoor EXV Opening Position (tens+ones)	
	Upper	Room Temperature Sensor Location	
5	Lower	Controller Room Temperature Sensor	
0	Upper	Contact No. 01	
6	Lower	Contact No. 01 Status	
7	Upper	Contact No. 02	
1	Lower	Contact No. 02 Status	
8	Upper	Contact No. 03	
0	Lower	Contact No. 03 Status	
9	Upper	Contact No. 04	
9	Lower	Contact No. 04 Status	
10	Upper	Contact No. 05	
	Lower	Contact No. 05 Status	
11	Upper		
	Lower	Indoor unit type	¹ 1 - 8
12	Upper	Indoor unit capacity/kBtu (thousands+hundreds)	
12	Lower	Indoor unit capacity/kBtu (tens + ones)	
13	Upper		
13	Lower	Controller software version	

Query No.	Screen Location	Description	Value
4.4	Upper		
14	Lower	Indoor unit software version	
45	Upper		
15	Lower	Master indoor unit address	2
¹ See Indoor Unit Table			

See Indoor Unit Table

² -- (dashes) = No Master Indoor Unit.

Indoor Unit Type

Value	Description
1	V33B - 3x3 Cassette
2	VWMB - Wall-Mounted
3	VMDB - Medium Static Pressure Ducted
5	VVCB - Vertical Air Handler
6	VHIB - High Static Pressure Ducted
7	V22B - 2x2 Compact Cassette
8	VCFB - Ceiling & Floor
9	Reserved
14	Reserved
21	Reserved

ERROR CODE QUERY



- View the error code history for the Indoor Unit, Outdoor Unit, MS Box or Controller on the system
- Displays last ten error codes
- **NOTE** See the Installation Instructions for a complete list of error codes.



Visit us at <u>www.Lennox.com</u> For the latest technical information, <u>www.LennoxCommercial.com</u> Contact us at 1-800-4-LENNOX

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.