

# Installation and Application Guide

# BACnet Gateway V0CTRL86P Lennox VRF, Mini-VRF and Mini-Split

### THIS MANUAL MUST BE LEFT WITH THE OWNER FOR FUTURE REFERENCE

#### **Equipment List**

#### Package 1 of 1 consists of:

- 1 BACnet gateway
- 1 Instruction and Application Guide

#### General

The Lennox VRF, Mini-VRF and Mini-Split BACnet Gateway allows connection of those systems to a building management system (BMS) using BACnet protocols.

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#### **A** WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer or equivalent, service agency, or the gas supplier.

#### **A** WARNING

Do not operate device with wet hands.

#### **A** CAUTION

Before attempting to perform any service or maintenance, turn the electrical power to unit OFF at disconnect switch.

## **A** CAUTION

Do not install device in areas where heavy oil, vapor, or gases containing sulfur may exist or the controller may be damaged.

#### **A** CAUTION

Clean device using a clean, damp cloth. Do not spray cleanser on or around device.

#### **▲** IMPORTANT

These instructions are intended as a general guide and do not supersede local codes in any way. Consult authorities having jurisdiction before installation. Read all of the information in this manual before operating this equipment.

#### **Network Setting**

There is an Ethernet interface in the device (Eth0). The factory-set device address is 192.168.1.8.

#### Security

Default Admin User Name: admin Default Admin Password: 12345

#### **Specifications**

Function	Description
Input Supply Power	24VAC
BACnet Connection	BACnet/IP
I/O	4 port 485 interface
Operating Temperature Range	32°F ~ 122°F (0°C ~ 50°C)
Operating Humidity Range (Rh)	25% ~ 90%
Dimensions	10-1/2 in. X 10 in. X 2-3/8 in. (26 cm X 25 cm X 6 cm)

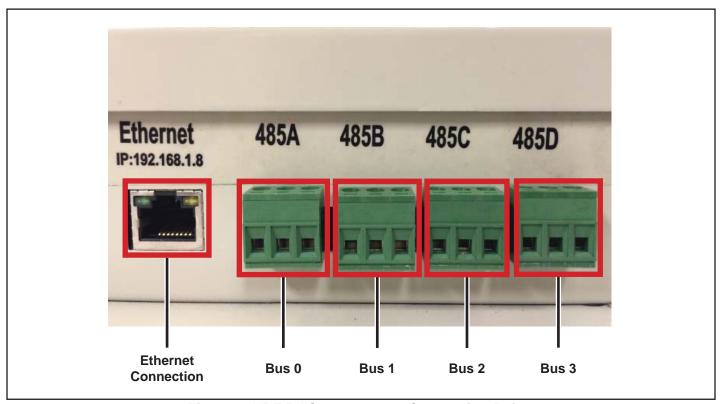
**NOTE -** Outdoor unit control & monitoring points are not available for Mini-Split systems. -1P Mini-VRF systems require the Mini-VRF Control Interface VOCTRL00P-1.

#### **System Connections**

The BACnet instance number is a four-digit number that identifies the BACnet gateway bus (port), the type of unit (indoor unit or outdoor unit) and the unit's address. Device ID = XXXX

X		Χ	Х	X
BACnet Bus (Port) Number		Unit Type	Unit A	ddress
(0.2)	0	Indoor Unit	(Indoor l	Jnit 0-63)
(0-3)	1	Outdoor Unit	(Outdoor	Unit 0-31)

Example - 0001 indicates BACnet device number 0, indoor unit type, indoor unit number 01.



**Figure 1. VRF BACnet Gateway Connection Points** 

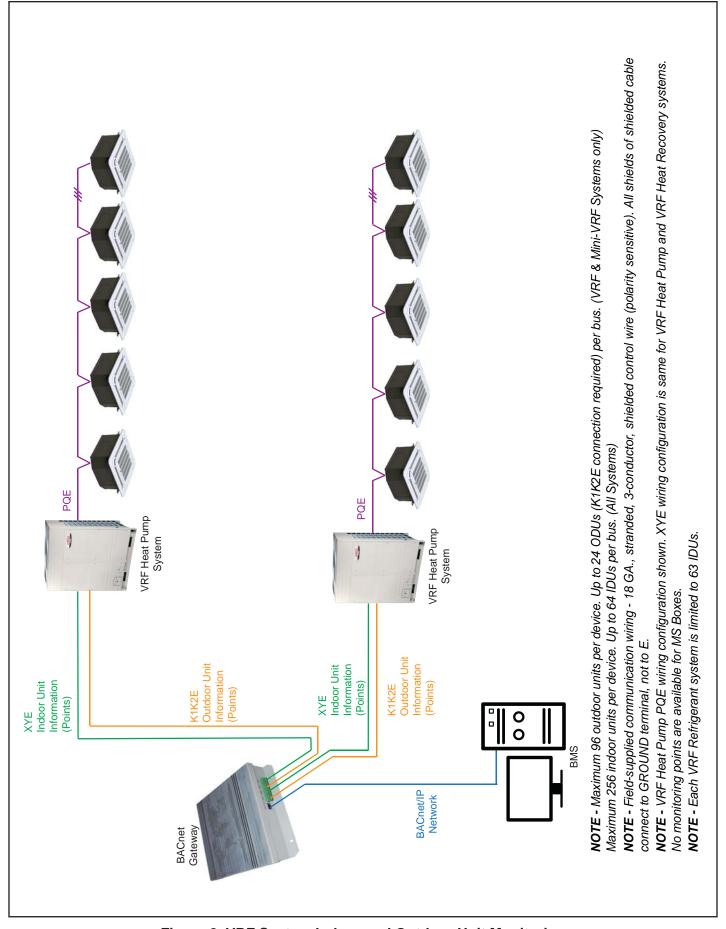
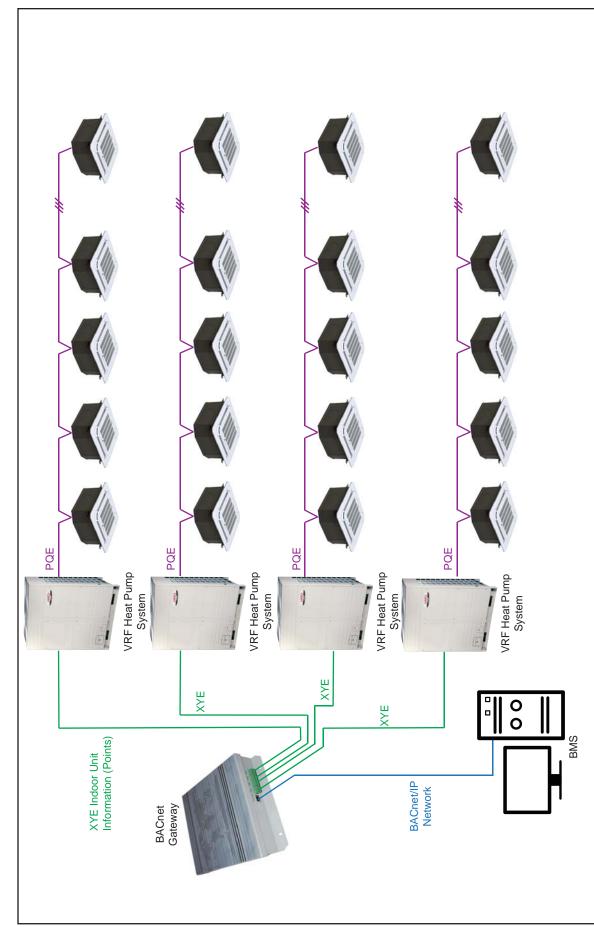


Figure 2. VRF System Indoor and Outdoor Unit Monitoring



NOTE - Maximum 96 outdoor units per device. Up to 24 ODUs (K1K2E connection required) per bus. (VRF & Mini-VRF Systems only) Maximum 256 indoor units per device. Up to 64 IDUs per bus. (All Systems) NOTE - Field-supplied communication wiring - 18 GA., stranded, 3-conductor, shielded control wire (polarity sensitive). All shields of shielded cable connect to GROUND terminal, not to E.

NOTE - VRF Heat Pump PQE wiring configuration shown. XYE wiring configuration is same for VRF Heat Pump and VRF Heat Recovery systems. NOTE - Each VRF Refrigerant system is limited to 63 IDUs. No monitoring points are available for MS Boxes.

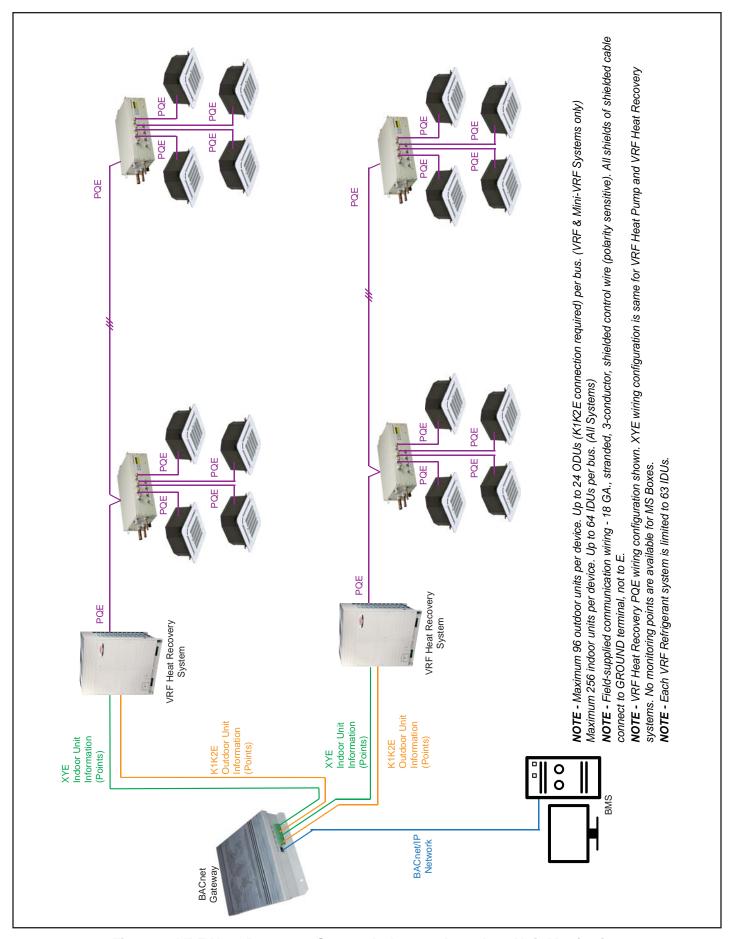


Figure 4. VRF Heat Recovery System Indoor and Outdoor Unit Monitoring

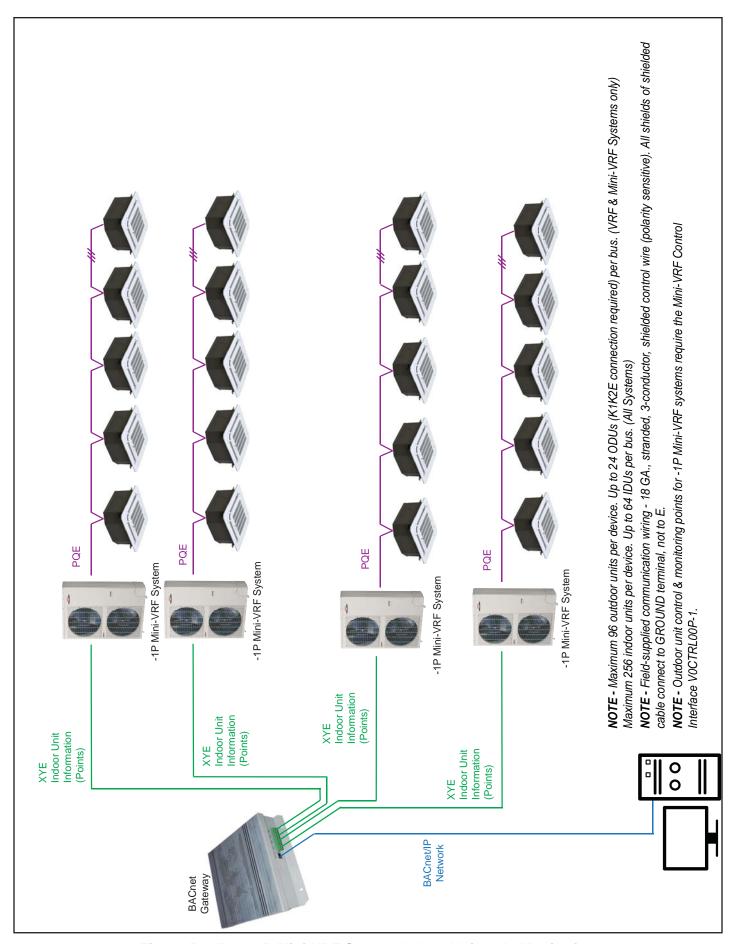


Figure 5. -1P or -2P Mini-VRF System Indoor Unit Only Monitoring

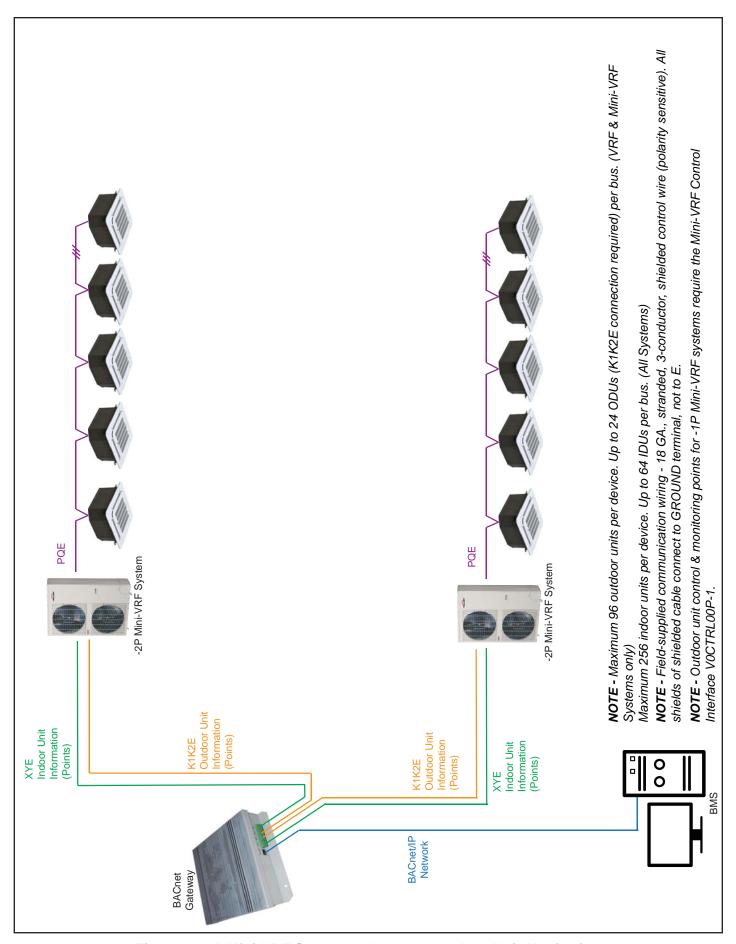


Figure 6. -2P Mini-VRF System Indoor and Outdoor Unit Monitoring

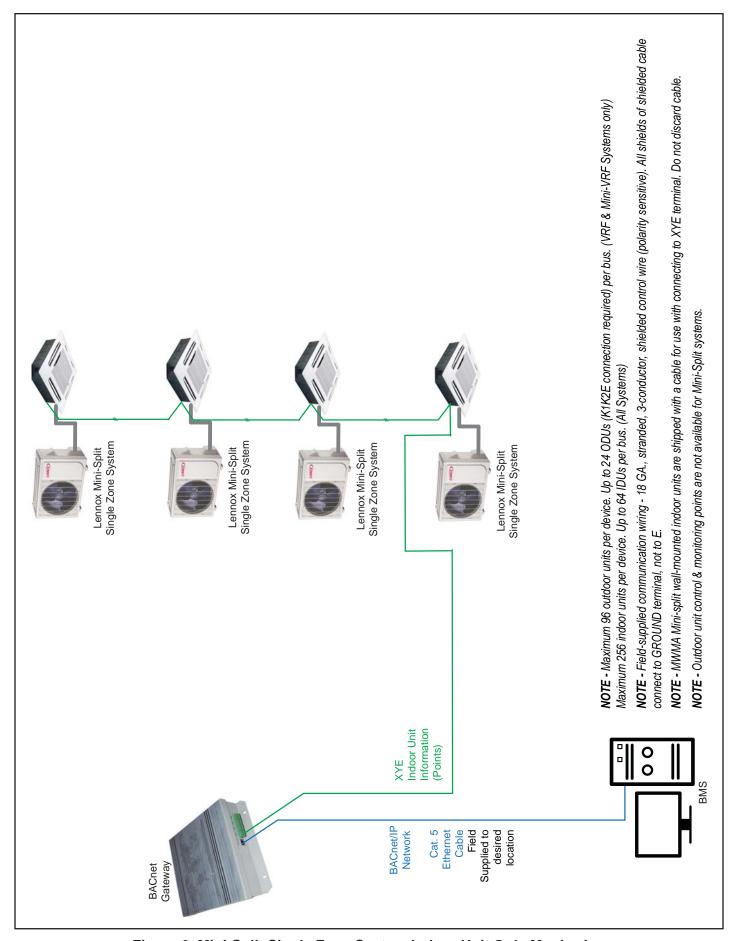


Figure 6. Mini-Split Single Zone System Indoor Unit Only Monitoring

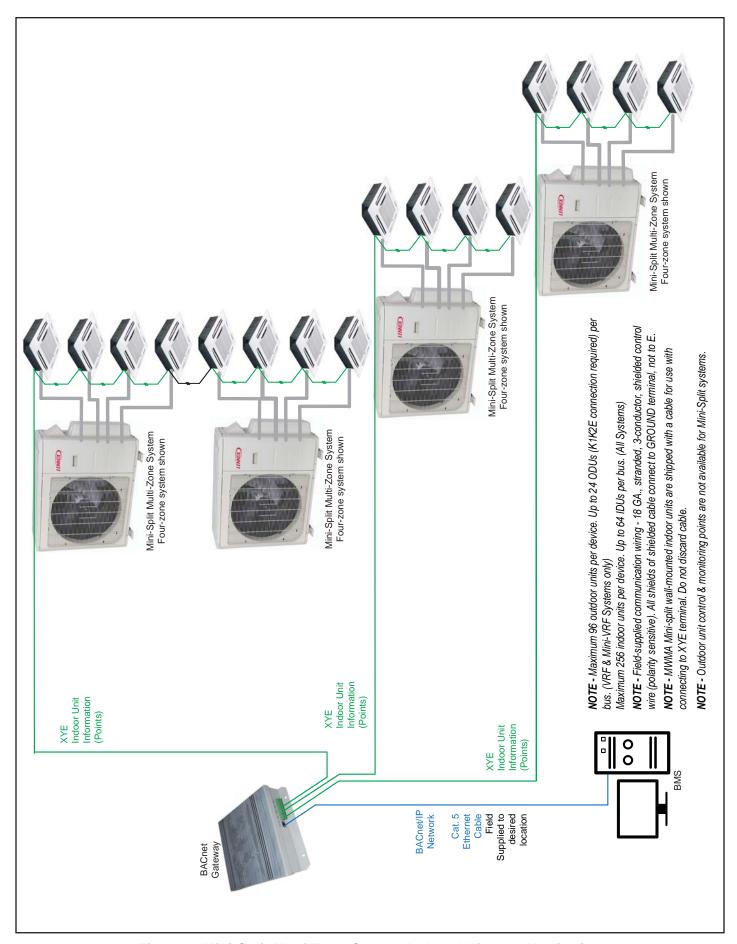


Figure 7. Mini-Split Multi-Zone System Indoor Unit Only Monitoring

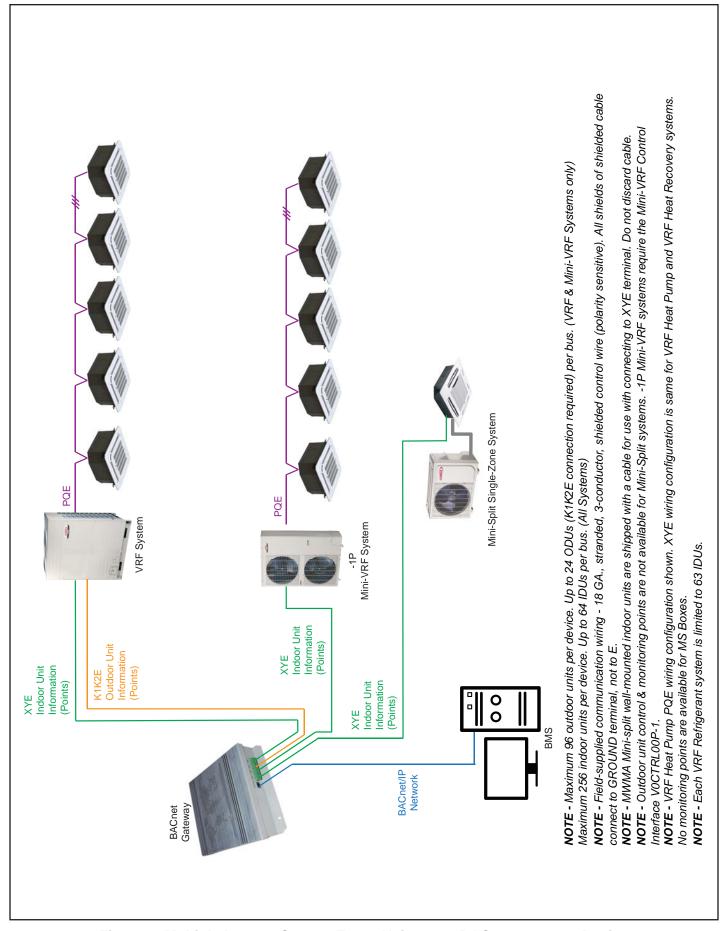


Figure 8. Multiple Lennox System Types Using One BACnet Gateway Device

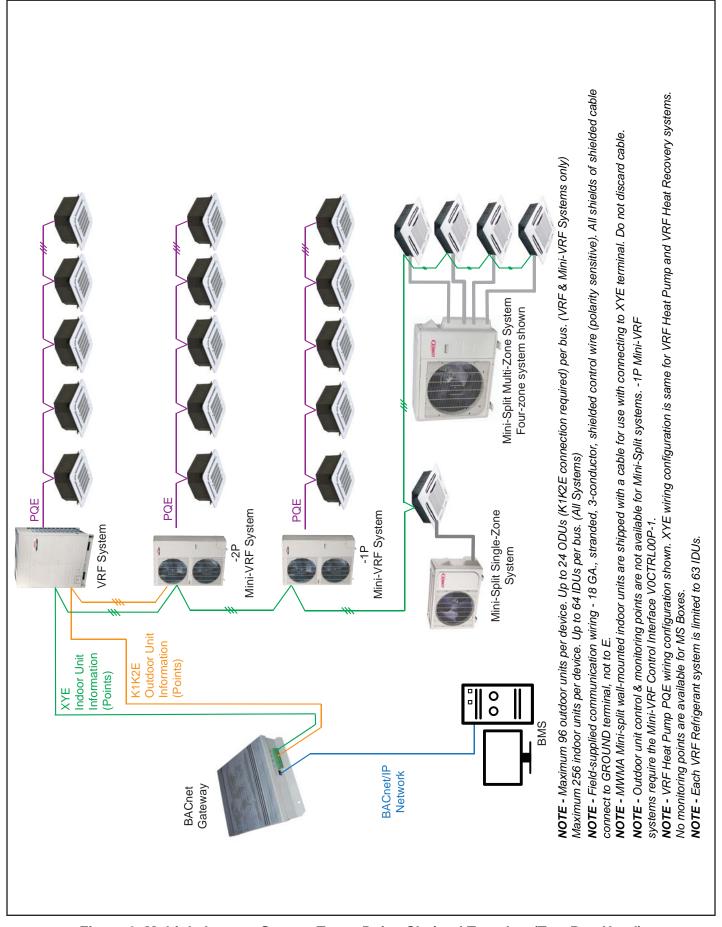


Figure 9. Multiple Lennox System Types Daisy Chained Together (Two Bus Used)

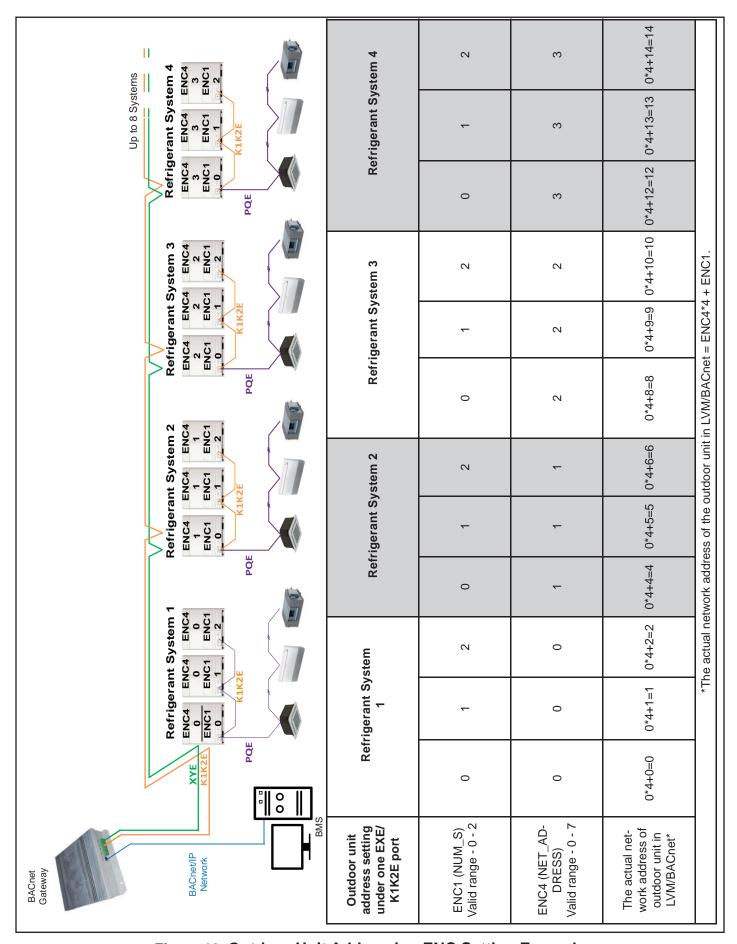


Figure 10. Outdoor Unit Addressing ENC Setting Example

#### **BACnet Object Points List**

	Indoor Unit Point List								
Item	Function Identifier	Object Name	Object Type	Possible Options					
1	Mode	AC_OModeSetting	МО	Heating	Cooling	Dehumidify (Dry)	Fan only	OFF	
2	Mode Status	AC_QueryMode	MI	Heating	Cooling	Dehumidify (Dry)	Fan only	OFF	
3	Fan Speed	AC_OFANSpeed	МО	High	Medium	Low	Stop		
4	Fan Speed Status	AC_QueryFANSpeed	MI	High	Medium	Low	Stop	OFF	
5	Setpoint	AC_OTempSetting	AO	°F					
6	Setpoint Status	AC_QueryTempSetting	Al	°F					
7	Room Temperature	AC_ITempIndoor	Al	°F					
8	Swing	AC_OSwing	ВО	In	active	А	ctive		
9	Error Code	AC_IMalfunction	MI	See "Iı		Table 9. Erroi page 18	Code	on '	
10	Protection Code	AC_IProtect	MI	See "Inc		able 10. Prote page 19	ection C	Code"	
11	Remote Control Lock	Remote_Control_lock	ВО	Inactive Active					
12	Turn Indoor Unit ON/OFF	AC_TurnOnOff	ВО	Inactive Active					
13	Turn All Indoor Units ON/OFF	ALL_AC_OnOff	ВО			А	ctive		

	Outdoor Unit Point List										
Item	Function Identifier	Object Name	Object Type	Possible Options							
1	Operation Mode	AC_IOperationMode	MI	Heating Cooling Stop							
2	Condenser Fan Speed	AC_IFANSpeed	MI	High	Medium	Low					
3	Ambient Temperature	AC_ITempOutdoor	AI	°F							
4	Indoor Quantity	AC_ITotalACs	Al		Number	of indoor uni	ts				
5	Compressor 1	AC_ICom1Current	Al		Curre	ent in Amps					
6	Compressor 2	AC_ICom2Current	Al		Curre	ent in Amps					
7	Compressor 3	AC_ICom3Current	Al		Curre	ent in Amps					
8	Error Code	AC_IMalfunction	MI	See "Outdoor Unit Table 8. Error Code" on page 25							
9	Protection Code	AC_IProtect	MI	See "Outdoor Unit Table 9. Protection Code" on page 26							

**NOTE -** Outdoor unit control & monitoring points are not available for Mini-Split systems. -1P Mini-VRF systems require the Mini-VRF Control Interface V0CTRL00P-1.

#### **Indoor Unit Instance Number Description**

	multi-state- multi-state- multi-state- multi-state- multi-state- input,3 input,4 output,1 output,2		AC_ AC_	QueryFanSpeed OModeSetting			ACAC_	AC_Iprotect QueryMode QueryFanSpeed OModeSetting OFanSpeed			AC AC	AC_Plotect QueryMode QueryFanSpeed OModeSetting OFanSpeed			AC AC	AC_Iprotect QueryMode QueryFanSpeed OModeSetting OFanSpeed		
	multi-state- input,1		AC_	Imalfunction			AC_	Imalfunction			AC	Imalfunction			AC	Imalfunction		
Sub Ojbects	binary- output,2		AC_	OElecHeat			AC	OElecHeat			AC	OElecHeat			AC.	OElecHeat		(4)
σ	binary- output,1			Oswing				Oswing				Oswing				Oswing		y search
	analog- output,1		AC_	OTempSetting			AC_	OTempSetting			AC	OTempSetting			AC	OTempSetting		utdoor unit networl
	analog-input,4			QueryTempSetting			AC_	QueryTempSetting				QueryTempSetting				QueryTempSetting		" Left two digits  Virtual BACnet Network number = 19(default), can be changed on configuration web page.  Virtual BACnet Network number = 19(default), can be changed on configuration web page.  Bright four digits  Bright four digits  "Bar" is the bus Number 0-3;  "Ta" is the bus Number 0-3;  "Ta" is the indoor unit address + ourdoor unit network address 0.31(ourdoor unit address + ourdoor unit network address 1.3)."
	analog- input,3		AC_	IOffTime			AC	lOffTime			ĄC	lOffTime			Ş	IOffTime		uration web
	analog- input,2		AC_	IOnTime			AC_					IOnTime				IOnTime		ed on config
	analog- input,1		AC_	ITemplndoor			AC	ITemplndoor			AC	ITemplndoor			Q	TempIndoor		"- Left two digits Virtual BACnet Network number = 19(default), can be changed on configuration web page.  Right four digits Device ID="BTXX": ""B" is the bus Number 0-3; ""T means type 0-indoor unit, 1-outdoor unit; "XX" is the indoor unit Number 0-63 or Outdoor unit actual network address 0-31(outdoor
	Device*	190000	190001	:	190063	191000	191001	÷	191063	192000	192001	:	192063	193000	193001	:	193063	= 19(default) utdoor unit;
Parent Object		indoor_0_0	indoor_0_1	:	indoor_1_63	indoor_1_0	indoor_1_1	:	indoor_1_63	indoor_2_0	indoor_2_1	:	indoor_2_63	indoor_3_0	indoor_3_1	:	indoor_3_63	twork number : ""; mber 0-3; indoor unit,1-0
Indoor unit	address	00	10		63	00	10	:	63	00	10	:	63	00	10	:	63	" Left two digits Virtual BACnet Network num Right four digits Device ID="BTXX": "B" is the bus Number 0-3; "T" means type 0-indoor un "XX": sithe indoor unit Num
Port No.			Port	-			Port	7			Port	က			Port	4		"* - Lef Virtual Right fr Device ""B" is ""T" m

#### **Indoor Unit Points**

#### Indoor Unit Table 1. Mode

Attribute Identifier	Data Type	Attribute value	Meaning	Read/Write
Object Identifier	BACnetObjectIdentifier	MultiState-output 1	-	R
Object Name	CharacterString	AC_OModeSetting	-	R
Object Type	BACnetObjectType	MultiState-output	-	R/W
Description	CharacterString	Operation mode setting	-	0
		1	Heat	
Ontions	Integer	2	Cool	0
Options	Integer	3	Dry	
		4	Fan	

#### **Indoor Unit Table 2. Mode Status**

Attribute identifier	Data type	Attribute value	Read/ Write	
Object Identifier	BACnetObjectIdentifier	MultiState-input 3	R	
Object Name	CharacterString	AC_QueryMode	R	
Object Type	BACnetObjectType	MultiState-input	R	
Description	CharacterString	QueryMode	0	
Ctatus Toyt	BACnet ARRAY[N]	("Lloct" "Cool" "Dru" "Fon only" Stop")	0	
Status Text	CharacterString	{"Heat","Cool","Dry", "Fan only", Stop"}	0	

#### Indoor Unit Table 3. Fan Speed

Attribute Identifier	Data type	Attribute value	Meaning	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-output 2	-	R
Object Name	CharacterString	AC_OFanSpeed	-	R
Object Type	BACnetObjectType	MultiState-output	-	R/W
Description	CharacterString	Fan Speed Setting	-	0
		1	High	
Options	Integer	2	Medium	0
		3	Low	

#### **Indoor Unit Table 4. Fan Speed Status**

Attribute identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 4	R
Object Name	CharacterString	AC_QueryFanSpeed	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	QueryFanSpeed	0
Status Text	BACnet ARRAY[N]	{"High","Middle","Low", "Stop"}	0
Status Text	CharacterString	{ might, ivilidate, Low, Stop }	

#### **Indoor Unit Table 5. Setpoint**

Attribute Identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-output 1	R
Object Name	CharacterString	AC_OTempSetting	R
Object Type	BACnetObjectType	Analog-output	R/W
Description	CharacterString	Setpoint	0
Unit	BACnetEngineering Units	Degree-Fahrenheit	R

**NOTE** - All values are degrees Fahrenheit (°F). You must send degrees Fahrenheit (°F) values and you will receive degrees Fahrenheit (°F). Range: 61°F - 90°F (16°C - 32°C).

#### **Indoor Unit Table 6. Setpoint Status**

Attribute identifier	Data type	Attribute value	Read/Write
Object identifier	BACnetObjectIdentifier	Analog-input 4	R
Object name	CharacterString	AC_QueryTempSetting	R
Object type	BACnetObjectType	Analog-input	R
Current value	REAL	0	R
Description	CharacterString	QueryTempsetting	0
Unit	BACnetEngineering Units	Degree-Fahrenheit	R

NOTE - The sent value is degrees Fahrenheit (°F).

#### **Indoor Unit Table 7. Room Temperature**

Attribute Identifier	Data Mode	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 1	R
Object Name	CharacterString	AC_ITempIndoor	R
Object Type	BACnetObjectType	Analog-input	R
Description	CharacterString	Indoor Temperature	0
Unit	BACnetEngineering Units	Degree-Fahrenheit	R

**NOTE** - The received value is degrees Fahrenheit (°F).

#### Indoor Unit Table 8. Swing

	middor offic rabio of t	·····9	
Attribute Identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Binary-output 1	R
Object Name	CharacterString	AC_OSwing	R
Object Type	BACnetObjectType	Binary-output	R/W
Description	CharacterString	Swing Setting	0
Inactive Text	CharacterString	Turn off	0
Active Text	CharacterString	Turn on	0

NOTE - inactive means swing OFF, active means swing ON.

#### **Indoor Unit Table 9. Error Code**

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 1	R
Object Name	CharacterString	AC_IMalfunction	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	Malfunction Status	0
		E0	
		E1	
		E2	
		E3	]
		E4	
		E5	
		E6	1
	DA On at A DD AVIAN	E7	
Status Text	BACnet ARRAY[N]	E8	0
	CharacterString	E9	1
		EA	
		EB	
		EC	
		ED	1
		EE	
		EF	1
		No	

#### **Indoor Unit Table 10. Protection Code**

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 2	R
Object Name	CharacterString	AC_IProtect	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	Protection Status	0
		P0	
		P1	
		P2	
		P3	
	DACC CA A DD AVINI	P4	
Status text	BACnet ARRAY[N]	P5	0
	CharacterString	P6	
		P7	
		P8	]
		PF	1
		No	

#### **Indoor Unit Table 11. Remote Control Lock**

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	Binary-output 4	R/W
Object Name	CharacterString	Remote_Control_lock	R
Object Type	BACnetObjectType	Binary-output	R
Description	CharacterString	Lock/Unlock remote control	0
Inactive text	CharacterString	unlock remote control	0
Active text	CharacterString	lock remote control	0

**NOTE** - Refer to the Lennox VRF Mobile App for error code descriptions.

NOTE - Lock All Functions of Wireless Remote Controller V0STAT52P-1.

#### Indoor Unit Table 12. Turn Indoor Unit ON/OFF

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	Binary-output 3	R/W
Object Name	CharacterString	AC_TurnOnOff	R
Object Type	BACnetObjectType	Binary-output	R
Description	CharacterString	Turn On/Off the AC	0
Inactive text	CharacterString	Turn off	0
Active text	CharacterString	Turn on	0

**NOTE -** Refer to the Lennox VRF Mobile App for error code descriptions.

#### Indoor Unit Table 13. Turn All Indoor Units ON/OFF

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	Binary-output 5	R/W
Object Name	CharacterString	ALL_AC_OnOff	R
Object Type	BACnetObjectType	Binary-output	R
Description	CharacterString	turn on/turn off ac all the bus	0
Inactive text	CharacterString		0
Active text	CharacterString	turn off ac all the bus	0

#### **Outdoor Unit Instance Number Description**

		Г								Ч		П										
	Multistate- input,4					<u></u>																
	Multistate- input,3					AC_	loutmalfunction									AC_	loutmalfunction					
	Analog- iutput,5					AC_	ICom3Current									AC_	ICom3Current					
ects	Analog- iutput,4					AC_	ICom2Current									AC_	ICom2Current					
Sub Objects	Analog- iutput, 3					AC										AC_						
	Analog- iutput,2					AC	ITotalACs									AC_						
	Analog- iutput,1					AC_	ITempOutoor									AC_	ITempOutoor					dress * 4);"
	Multistate- iutput, 2					AC_	FanSpeed									AC_	IFanSpeed					unit network ad
	Multistate- input,1					AC_	IOperationMode									AC_	IOperationMode					ddress + outdoor
	Device*	190100	190101	190102	190104	190105	190106	:	190128	190129	190130	191100	191101	191102	191104	191105	191106		191128	191129	191130	page.
	Parent Object	outdoor_0_0_0	outdoor_0_0_1	outdoor_0_0_2	outdoor_0_1_0	outdoor_0_1_1	outdoor_0_1_2	:	outdoor_0_7_0	outdoor_0_7_1	outdoor_0_7_2	outdoor_1_0_0	outdoor_1_0_1	outdoor_1_0_2	outdoor_1_1_0	outdoor_1_1_1	outdoor_1_1_2		outdoor_1_7_0	outdoor_1_7_1	outdoor_1_7_2	configuration web
	Outdoor unit actual network address	00+00*4=0	01+00*4=1	02+00*4=2	00+01*4=4	01+01*4=5	02+01*4=6	:	00+07*4=28	01+07*4=28	02+07*4=30	00+00*4=0	01+00*4=1	02+00*4=2	00+01*4=4	01+01*4=5	02+01*4=6		00+07*4=28	01+07*4=28	02+07*4=30	an be changed on
	Outdoor unit network address(E	00	00	00	10	М	М	::	20	20	20	00	00	00	10	10	10		20	20	20	"" - Left two digits Virtual BACnet Network number = 19(default), can be changed on configuration web page.  Right four digits Device ID="BTXX"". ""B" is the bus Number 0-3; ""T" means type 0-indoor unit, 1-outdoor unit actual network address 0-31 (outdoor unit address + outdoor unit network address * 4);"
ц	Outdoor unit address (Dip switc	00	01	02	00	10	02	:	00	10	02	00	10	02	00	01	02		00	10	02	"* - Left two digits Virtual BACnet Network number = 19(default Right four digits Device ID="BTXX"; ""B" is the bus Number 0-3; ""T" means type 0-indoor unit,1-outdoor unit; "XX" is the indoor unit Number 0-63 or Outd
	Refrigerant system		Sys 1			Sys		:		Sys 8			Sys			Sys		:		Sys		" Left two digits Virtual BACnet Netwo Right four digits Device ID="BTXx": "B" is the bus Numb "T" means type 0-In" "XX" is the indoor ur
	Port No.		_			Port	-									Port	8					"* - Lef Virtual Right fe Device ""B"" is

<sup>21</sup> 

-	07   02+07*4=30   outdoor_3_7_2   193130	07 01+07*4=28 outdoor_3_7_1 193129	07 00+07*4=28 outdoor_3_7_0 193128		00 00+00*4=0 outdoor_2_0_0   192100	Outdoor unit actual Parent Object Device* Multistate- Multistate- Analog- Analog- address intput,1 iutput,2 iutput,1 iutput,1 iutput,2 iutput,1 iutput,1 iutput,1 iutput,2 iutput,1 iutput,1 iutput,1 iutput,1 iutput,1 iutput,1 iutput,1 iutput,1 iutput,1 iutput,2 iutput,1 iut				8	Ans Iutp			Multistate- input,1  AC_ IOperationMode IOperationMode	Device* 192100 192100 192104 192105 192106 192106 192106 193100 193100 193106 193106 193106 193106 193106 193106	Parent Object  outdoor_2_0_0  outdoor_2_0_2  outdoor_2_1_0  outdoor_2_1_0  outdoor_2_1_0  outdoor_2_1_0  outdoor_2_7_0  outdoor_2_7_0  outdoor_3_0_0  outdoor_3_0_0  outdoor_3_1_0  outdoor_3_1_0  outdoor_3_1_0  outdoor_3_1_0  outdoor_3_1_2    outdoor_3_1_2  outdoor_3_1_2  outdoor_3_1_2  outdoor_3_1_2  outdoor_3_1_2  outdoor_3_1_2  outdoor_3_1_2  outdoor_3_1_2  outdoor_3_1_2	Outdoor unit actual network address  00+00'4=0 01+00'4=1 02+00'4=2 00+01'4=4 01+01'4=5 02+01'4=6 00+07'4=28 01+07'4=28 01+07'4=28 01+07'4=28 01+07'4=28 01+07'4=29 01+07'4=29 01+07'4=29 01+07'4=20 01+07'4=20 01+07'4=20 01+07'4=20 01+07'4=20 01+07'4=20 01+07'4=20 01+07'4=20 01+07'4=20 01+07'4=20	Outdoor unit network address(Dip saddress(Dip saddress(Di	3 Port No.  ** Po
00+07*4=28 outdoor_3_7_0 01+07*4=28 outdoor_3_7_1 02+07*4=30 outdoor_3_7_2	00+07*4=28 outdoor_3_7_0 01+07*4=28 outdoor_3_7_1	00+07*4=28 outdoor_3_7_0			01+00 <sup>1</sup> 4=1   0utdoor_2_0_1   192101   192102   192102   192102   192102   192102   192102   192102   192104   192104   192104   192104   192105	00+00*4=0   0utdoor_2_0_1   192101   192102   192102   192102   192102   192103   AC_	Device   Parent Object   Par							IOperationMode	193106		02+01*4=6	01	-
02+01*4=6         outdoor_3_1_2         193106         IComacutionMode         IFanSpeed         ITempOutoor         ITotalACs         ICom1Current         ICom3Current         Ioutmaffunction           00+07*4=28         outdoor_3_1_0         193129         193129         193130         193130         193130         193130         193130	02+01*4=6         outdoor_3_1_2         193106         IComationMode         IFanSpeed         ITempOutoor         ITotalACs         ICom1Current         ICom3Current         Ioutmaffunction           00+07*4=28         outdoor_3_1_0         193128         Image: Company of the compa	02+01*4=6         outdoor_3_1_2         193106         IOperationMode         IFanSpeed         ITempOutoor         ITotalACs         ICom1Current         ICom3Current         Ioutmaffunction	02+01*4=6         outdoor_3_1_2         193106         IOperationMode         IFanSpeed         ITempOutoor         ITotalACs         ICom1Current         ICom2Current         ICom3Current         Ioutmaffunction	02+014=6 outdoor_3_1_2 193106 IOperationMode   FanSpeed   ITempOutoor   ITotalACs   ICom1Current   ICom2Current   ICom3Current   Ioutmaffunction	01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192102         AC_         AC_         AC_         AC_         AC_           01+01*4=5         outdoor_2_1_0         192108         AC_         AC_         AC_         AC_         AC_           02+01*4=6         outdoor_2_1_0         192108         AC_         AC_         AC_         AC_         AC_           00+07*4=28         outdoor_2_1_0         192128         AC_         AC_         AC_         AC_         AC_           01+07*4=28         outdoor_2_1_0         192129         AC_         AC_         AC_         AC_         AC_           01+07*4=28         outdoor_2_1_1         192129         AC_         AC_         AC_         AC_         AC_           01+07*4=28         outdoor_2_1_1         192129         AC_         AC_         AC_         AC_         AC_           01+07*4=28         outdoor_2_1_1         193109         AC_         AC_         AC_         AC_         AC_           00+00*4*         0utdoor_3_0_2         193102         AC_         AC_         AC_         AC_         AC_	00+00 <sup>4</sup> +6   0utdoor_2_0_0   192100   192101   192101   192101   192101   192101   192101   192102   192102   192102   192102   192104   192104   192104   192104   192104   192104   192105   192104   192105   192108	Dutidocrapho   Duti							AC_	193105	outdoor_3_1_1	01+01*4=5	10	-
01+01*4=5   outdoor_3_1_1   193105   AC   AC   AC   AC   AC   AC   AC   A	01+01*4=5         outdoor_3.1_1         193105         AC.	01+0114=5         outdoor_3-1-1         193105         AC         A	01+01*4=5         outdoor_3.1_1         193105         AC	01+01*4=5         outdoor_3-1-2         193106         AC_	01+00*4=1         outdoor_2_0_2         192102         AC_	00+00*4=0         outdoor_2_0_0         192100           01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_1         192101           00+01*4=4         outdoor_2_1_0         192104           00+01*4=5         outdoor_2_1_1         192105           00+07*4=8         outdoor_2_1_2         192109           00+07*4=8         outdoor_2_1_2         192108           00+07*4=8         outdoor_2_1_2         192129           00+07*4=8         outdoor_2_1_2         192129           00+07*4=0         outdoor_2_1_2         192129           00+07*4=0         outdoor_2_1_2         193109           10+07*4=1         outdoor_3_0_1         193101           10+07*4=2         outdoor_3_0_2         193101	Outdoor   Outd								193104	outdoor_3_1_0	00+01*4=4	01	-
00+01*4=4         outdoor_3_1_0         193104         AC_	00+01*4=5         outdoor_3.1_0         193104         AC_	00+01*4=6         outdoor_3-1-0         193104         AC         A	00+01*4=4         outdoor_3.1_0         193104         AC_	00+01*4=4         outdoor_3.1_0         193104         AC_	01+00*4=1         outdoor_2_0_2         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104         AC	00+00*4=0         outdoor_2_0_0         192100         AC_	Outdoor   Outd								193102	outdoor_3_0_2	02+00*4=2	00	-
02+074=2         outdoor_3_0_2         193102           00+01*4=4         outdoor_3_1_0         193102         AC_	02+00*4=2         outdoor_3_0_2         193102           00+01*4=4         outdoor_3_1_1         193105         AC_	02+00*4=2         outdoor_3_0_2         193102           00+01*4=4         outdoor_3_1_0         193104         AC_	02+00*4=2         outdoor_3_0_2         193102         AC_	02+00*4=2         outdoor_3_0_2         193102         AC         A	01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192102         AC_	00+00*4=0 outdoor_2_0_1 192101  01+00*4=1 outdoor_2_0_2 192102  02+00*4=2 outdoor_2_0_2 192102  00+01*4=5 outdoor_2_1_2 192105  01+01*4=5 outdoor_2_1_2 192105  01+01*4=5 outdoor_2_1_2 192105  01+07*4=28 outdoor_2_1_2 192130  01+07*4=28 outdoor_2_1_2 192130  02+07*4=30 outdoor_2_1_2 192130  00+07*4=30 outdoor_2_1_2 192130  00+00*4=0 outdoor_2_1_2 192130	Dutidoor								193101	outdoor_3_0_1	01+00*4=1	00	-
01+00*4=1         outdoor_3_0_1         193101           02+00*4=2         outdoor_3_0_2         193102           00+01*4=4         outdoor_3_1_0         193105         AC         A	01+00*4=1         outdoor_3_0_1         193101           02+00*4=2         outdoor_3_0_2         193102           00+01*4=4         outdoor_3_1_0         193105         AC	01+00*4=1         outdoor_3_0_1         193101           02+00*4=2         outdoor_3_0_2         193102           00+01*4=4         outdoor_3_1_0         193105         AC	01+00*4=1         outdoor_3_0_2         193101           02+00*4=2         outdoor_3_0_2         193102           00+01*4=4         outdoor_3_1_0         193108         AC	01+00*4=1         outdoor_3_0_1         193104           02+01*4=4         outdoor_3_1_1         193105         AC_	01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           AC_         AC_ <t< td=""><td>00+00*4=0         outdoor_2_0_0         192100           01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192103           AC_         AC_         AC_         AC_         AC_         AC_         AC_           Ot-01*4=6         outdoor_2_1_2         192108         IPanSpeed         ITotalACs         ITotalACs         ICom1Current         ICom2Current         ICom3Current         Iountalination           00+07*4=28         outdoor_2_1_2         192128         AC_         AC_</td><td>  Outdoor   Dutdoor   Dutd</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>193100</td><td>outdoor_3_0_0</td><td>00+00*4=0</td><td>00</td><td>-</td></t<>	00+00*4=0         outdoor_2_0_0         192100           01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192103           AC_         AC_         AC_         AC_         AC_         AC_         AC_           Ot-01*4=6         outdoor_2_1_2         192108         IPanSpeed         ITotalACs         ITotalACs         ICom1Current         ICom2Current         ICom3Current         Iountalination           00+07*4=28         outdoor_2_1_2         192128         AC_	Outdoor   Dutdoor   Dutd								193100	outdoor_3_0_0	00+00*4=0	00	-
00+00*4=0         outdoor_3_0_4         193100           01+00*4=1         outdoor_3_0_4         193101           02+00*4=2         outdoor_3_0_4         193102           00+01*4=4         outdoor_3_1_0         193108         AC_	00+00*4=0         outdoor_3_0_t         193100           01+00*4=1         outdoor_3_0_t         193101           02+00*4=2         outdoor_3_1_t         193104           00+01*4=4         outdoor_3_1_t         193105         AC	00+00*4=0         outdoor_3_0_4         193100         AC         A	01+00*4=0 outdoor_3_0_1 193101  02+00*4=2 outdoor_3_0_2 193102  00+01*4=5 outdoor_3_1_1 193105  01+01*4=5 outdoor_3_1_2 193105  01+01*4=5 outdoor_3_1_2 193106	00+00*4=0         outdoor_3=0.2         193100           01+00*4=1         outdoor_3=0.2         193101           02+00*4=2         outdoor_3=0.2         193102           00+01*4=4         outdoor_3=1.2         193105         AC_	01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           AC_         AC_ <t< td=""><td>00+00*4=0         outdoor_2_0_1         192101           01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           01+01*4=5         outdoor_2_1_1         192105           02+01*4=6         outdoor_2_1_2         192106           02+01*4=6         outdoor_2_1_2         192106           00+07*4=28         outdoor_2_1_1         192128           01+07*4=28         outdoor_2_1_1         192128</td><td>  Dutidoor   Dutidoor</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>192130</td><td>outdoor_2_7_2</td><td>02+07*4=30</td><td>20</td><td>-</td></t<>	00+00*4=0         outdoor_2_0_1         192101           01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           01+01*4=5         outdoor_2_1_1         192105           02+01*4=6         outdoor_2_1_2         192106           02+01*4=6         outdoor_2_1_2         192106           00+07*4=28         outdoor_2_1_1         192128           01+07*4=28         outdoor_2_1_1         192128	Dutidoor								192130	outdoor_2_7_2	02+07*4=30	20	-
02+07*4=30         outdoor_27_2         192130         AC         A	02+07*4=30         outdoor_27_2         192130         AC         A	02+07*4=30         outdoor_27_2         192130         AC         A	02+07*4=30         outdoor_27_2         192130         AC_	02+07*4=30         outdoor_27_2         192130         AC_	01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           AC	00+00*4=0         outdoor_2_0_0         192100           01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192105         AC	Dutdoor   Dutdoor   Device*   Multistate-   Intput, 1   Intput, 2   Intput, 3   Intput, 4   Intput, 3   Intput, 3   Intput, 4   Intput, 3   Intput, 3   Intput, 4   Intput, 3   Intput, 4   Intput, 3   Intput, 3   Intput, 4   Intput, 3   Intput, 4   Intput, 4   Intput, 5   Intput, 5   Intput, 4   Intput, 5   Intput, 6   Intput, 7   Intput,								192129	outdoor_2_7_1	01+07*4=28	20	-
01+074=28         outdoor_2_7_2         192129         AC         A	01+07*4=28         outdoor_27_1         192129         AC         A	01+07*4=28         outdoor_27_1         192129         AC         A	01+07*4=28         outdoor_27.1         192129           02+07*4=30         outdoor_27.2         192130           00+00*4=0         outdoor_3.0_0         193100           01+00*4=4         outdoor_3.0_1         193104           00+01*4=4         outdoor_3.1_1         193105           01+01*4=5         outdoor_3.1_2         193106         AC_	01+07*4=28         outdoor_27.1         192129         AC         A	01+00*4=1         outdoor_2_0_2         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192103           AC_         AC_         AC_         AC_           AC_         AC_         AC_           AC_         AC_         AC_           AC_         AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_           AC_         AC_	00+00*4=0         outdoor_2=0_0         192100           01+00*4=1         outdoor_2=0_1         192101           02+00*4=2         outdoor_2=0_2         192102           00+01*4=4         outdoor_2=1_0         192105           AC_         AC_	Signation of continuity actual address of continuity actual address add								192128	outdoor_2_7_0	00+07*4=28	20	-
00+07*4=28         outdoor_2 7.0         192128         AC_	00+07*4=28         outdoor_2 7.7         192128         AC	00+07*4=28         outdoor_2 7_0         192128           01+07*4=28         outdoor_2 7_1         192129           02+07*4=30         outdoor_2 7_2         192130           00+00*4=0         outdoor_3 0_0         193100           00+00*4=1         outdoor_3 0_0         193102           00+01*4=4         outdoor_3 1_0         193105         AC_         AC_ </td <td>00+07*4=28         outdoor_2 7_0         192128           01+07*4=28         outdoor_2 7_1         192129           02+07*4=30         outdoor_2 7_2         192130           00+00*4=0         outdoor_3 0_0         193100           01+00*4=1         outdoor_3 0_0         193102           00+01*4=4         outdoor_3 1_0         193105           00+01*4=5         outdoor_3 1_0         193105           00+01*4=6         outdoor_3 1_0         193105           00+01*4=6         outdoor_3 1_0         193105           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC<td>00+07*4=28         outdoor_2 7_0         192128           01+07*4=28         outdoor_2 7_1         192129         AC_         AC_</td><td>01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192105         AC</td><td>00+00*4=0         outdoor_2=0_1         192100           01+00*4=1         outdoor_2=0_1         192101           02+00*4=2         outdoor_2=0_1         192102           Ac         Ac         Ac           Ac         Ac           O1+01*4=5         outdoor_2=1_1         192105         Ac         Ac         Ac         Ac         Ac         Ac           O2+01*4=6         outdoor_2=1_2         192106         Ac         Ac         Ac         Ac         Ac         Ac         Ac</td><td>  Device   Device   Device   Device   Multistate   Device   Multistate   Device   Intput, 2   Intput, 2   Intput, 3   Intput, 4   Intput, 5   Intput, 5   Intput, 4   Intput, 5   Intput, 5   Intput, 5   Intput, 6   Intput,</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>:</td><td></td><td></td><td>:</td><td>-</td></td>	00+07*4=28         outdoor_2 7_0         192128           01+07*4=28         outdoor_2 7_1         192129           02+07*4=30         outdoor_2 7_2         192130           00+00*4=0         outdoor_3 0_0         193100           01+00*4=1         outdoor_3 0_0         193102           00+01*4=4         outdoor_3 1_0         193105           00+01*4=5         outdoor_3 1_0         193105           00+01*4=6         outdoor_3 1_0         193105           00+01*4=6         outdoor_3 1_0         193105           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC         AC           AC         AC <td>00+07*4=28         outdoor_2 7_0         192128           01+07*4=28         outdoor_2 7_1         192129         AC_         AC_</td> <td>01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192105         AC</td> <td>00+00*4=0         outdoor_2=0_1         192100           01+00*4=1         outdoor_2=0_1         192101           02+00*4=2         outdoor_2=0_1         192102           Ac         Ac         Ac           Ac         Ac           O1+01*4=5         outdoor_2=1_1         192105         Ac         Ac         Ac         Ac         Ac         Ac           O2+01*4=6         outdoor_2=1_2         192106         Ac         Ac         Ac         Ac         Ac         Ac         Ac</td> <td>  Device   Device   Device   Device   Multistate   Device   Multistate   Device   Intput, 2   Intput, 2   Intput, 3   Intput, 4   Intput, 5   Intput, 5   Intput, 4   Intput, 5   Intput, 5   Intput, 5   Intput, 6   Intput,</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>:</td> <td></td> <td></td> <td>:</td> <td>-</td>	00+07*4=28         outdoor_2 7_0         192128           01+07*4=28         outdoor_2 7_1         192129         AC_	01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192105         AC	00+00*4=0         outdoor_2=0_1         192100           01+00*4=1         outdoor_2=0_1         192101           02+00*4=2         outdoor_2=0_1         192102           Ac         Ac         Ac           Ac         Ac           O1+01*4=5         outdoor_2=1_1         192105         Ac         Ac         Ac         Ac         Ac         Ac           O2+01*4=6         outdoor_2=1_2         192106         Ac         Ac         Ac         Ac         Ac         Ac         Ac	Device   Device   Device   Device   Multistate   Device   Multistate   Device   Intput, 2   Intput, 2   Intput, 3   Intput, 4   Intput, 5   Intput, 5   Intput, 4   Intput, 5   Intput, 5   Intput, 5   Intput, 6   Intput,								:			:	-
10-07-4-28   outdoor_2-7_0   192128		192128	<td> <td>01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           01+01*4=5         outdoor_2_1_1         192105           AC_         AC_   AC_ AC_ AC_ AC_</td><td>00+00*4=0         outdoor_2_0_0         192100           01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           AC_         AC_   AC_ AC_ AC_ AC_ AC_</td><td>  Outdoor   Device   Multistate   Iutput, 1   Iutput, 2   Iutput, 3   Iutput, 3   Iutput, 4   Iutput, 5   Iutput, 5   Iutput, 5   Iutput, 5   Iutput, 6   Iutput, 6   Iutput, 6   Iutput, 7   Iutput, 6   Iutput, 6   Iutput, 7   Iutput, 7   Iutput, 6   Iutput, 7   Iutput, 7   Iutput, 6   Iutput, 7   Iutput, 7   Iutput, 7   Iutput, 8   Iutput, 9   Iutput,</td><td> _</td><td>_</td><td>_</td><td>_</td><td>  ITempOutoor</td><td>_</td><td>IOperationMode</td><td>192106</td><td>outdoor_2_1_2</td><td>02+01*4=6</td><td>10</td><td>-</td></td>	<td>01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           01+01*4=5         outdoor_2_1_1         192105           AC_         AC_   AC_ AC_ AC_ AC_</td> <td>00+00*4=0         outdoor_2_0_0         192100           01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           AC_         AC_   AC_ AC_ AC_ AC_ AC_</td> <td>  Outdoor   Device   Multistate   Iutput, 1   Iutput, 2   Iutput, 3   Iutput, 3   Iutput, 4   Iutput, 5   Iutput, 5   Iutput, 5   Iutput, 5   Iutput, 6   Iutput, 6   Iutput, 6   Iutput, 7   Iutput, 6   Iutput, 6   Iutput, 7   Iutput, 7   Iutput, 6   Iutput, 7   Iutput, 7   Iutput, 6   Iutput, 7   Iutput, 7   Iutput, 7   Iutput, 8   Iutput, 9   Iutput,</td> <td> _</td> <td>_</td> <td>_</td> <td>_</td> <td>  ITempOutoor</td> <td>_</td> <td>IOperationMode</td> <td>192106</td> <td>outdoor_2_1_2</td> <td>02+01*4=6</td> <td>10</td> <td>-</td>	01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           01+01*4=5         outdoor_2_1_1         192105           AC_         AC_   AC_ AC_ AC_ AC_	00+00*4=0         outdoor_2_0_0         192100           01+00*4=1         outdoor_2_0_1         192101           02+00*4=2         outdoor_2_0_2         192102           00+01*4=4         outdoor_2_1_0         192104           AC_         AC_   AC_ AC_ AC_ AC_ AC_	Outdoor   Device   Multistate   Iutput, 1   Iutput, 2   Iutput, 3   Iutput, 3   Iutput, 4   Iutput, 5   Iutput, 5   Iutput, 5   Iutput, 5   Iutput, 6   Iutput, 6   Iutput, 6   Iutput, 7   Iutput, 6   Iutput, 6   Iutput, 7   Iutput, 7   Iutput, 6   Iutput, 7   Iutput, 7   Iutput, 6   Iutput, 7   Iutput, 7   Iutput, 7   Iutput, 8   Iutput, 9   Iutput,	 _	_	_	_	ITempOutoor	_	IOperationMode	192106	outdoor_2_1_2	02+01*4=6	10	-
1921/4=6   0utdoor_2_1_2   1921/6   1	1.0   1.0	02+01*4=6         outdoor_2_1_2         192106         IFanSpeed         ITempOutoor         ITotalACs         ICom2Current         ICom3Current         Icom3Current <t< td=""><td>02+074=26         outdoor_2_1_2         192106         Image: control or state of the control or sta</td><td>02+07*4=26         outdoor 2_7_2         192106         IFanSpeed         ITempOutoor         ITotalACs         ICom2Current         ICom3Current         Icom3Current         Interpolation           00+07*4=28         outdoor_2_7_2         192128         AC_         AC_</td><td>01+00*4=1 outdoor_2_0_1 02+00*4=2 outdoor_2_0_2 00+01*4=4 outdoor_2_1_0</td><td>00+00*4=0 outdoor_2_0_0 01+00*4=1 outdoor_2_0_1 02+00*4=2 outdoor_2_0_2 00+01*4=4 outdoor_2_0_0</td><td>  Outdoor   Parent Object   Pa</td><td></td><td></td><td></td><td></td><td>AC_</td><td></td><td>AC_</td><td>192105</td><td>outdoor_2_1_1</td><td>01+01*4=5</td><td>10</td><td></td></t<>	02+074=26         outdoor_2_1_2         192106         Image: control or state of the control or sta	02+07*4=26         outdoor 2_7_2         192106         IFanSpeed         ITempOutoor         ITotalACs         ICom2Current         ICom3Current         Icom3Current         Interpolation           00+07*4=28         outdoor_2_7_2         192128         AC_	01+00*4=1 outdoor_2_0_1 02+00*4=2 outdoor_2_0_2 00+01*4=4 outdoor_2_1_0	00+00*4=0 outdoor_2_0_0 01+00*4=1 outdoor_2_0_1 02+00*4=2 outdoor_2_0_2 00+01*4=4 outdoor_2_0_0	Outdoor   Parent Object   Pa					AC_		AC_	192105	outdoor_2_1_1	01+01*4=5	10	
02+07*4±5 0utdoor_2_1_1 192105	01+01*4=5   0utdoor_2_1_1   192105   AC_   AC_	O1+01*4=5   Outdoot_2_1_1   192106   OperationMode   FanSpeed   TempOutoor   TotalACs   AC.	01+01'4=5   outdoor_2_1_1   192105   AC.	01+01*4=6   0utdoor_2_1_2   192106   OPerationMode   FanSpeed   ITempOutoor   ITotalACs   AC.	02+00*4=1 outdoor_2_0_1 02+00*4=2 outdoor_2_0_2	00+00*4=0 outdoor_2_0_0 01+00*4=1 outdoor_2_0_1 02+00*4=2 outdoor_2_0_2	Outdoor unit actual network address address address 0 outdoor 2 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								192104		00+01*4=4	01	-
00+01*4=4   0utdoor_2_1_1   192106   AC_	0.0+01*4=4   0.utdoor_2_1_1   192105   AC_   A	01+01*4=4   0utdoor_2_1_0   192104   Mc	01+01*4=4   0utboot_2_1_1   192106   AC_	00+01*4=4         outdoor_2_1_0         192104         AC         A	01+00*4=1 outdoor_2_0_1	00+00*4=0 outdoor_2_0_0 01+00*4=1 outdoor_2_0_1	Outdoor Init actual Parent Object Device* Multistate- Input,1 intput,2 intput,3 intput,4 intput,5 intput,4 intput,5 intput,3 intput,3 intput,4 intput,5 intput,4 intput,5 intput,4 intput,5 intput,4 intput,5 intput,3 intput,6 intp								192102	outdoor_2_0_2	02+00*4=2	00	
02+00*4=2   0utdoor_2_0_2   192102   192102   192103   AC	0.04074=2	004074=2         0utdoor_2_1         192105         AC_	0.0+01^4=6   0.0tdoor_2_0_2   192102   192104   192105   AC_   A	02+00*4=2   01400r_2_0_2   192106   AC   AC   AC   AC   AC   AC   AC   A		00+00*4=0 outdoor_2_0_0	Outdoor unit actual parent Object Device* Multistate- Analog- Analog- Analog- Analog- Intput, 2 intput, 2 intput, 3 intput, 4 intput, 5 intput, 5 intput, 3 intput, 5 intput, 5 intput, 3 intput, 5 intput, 6 intput, 6 intput, 6 intput, 6 intput, 7 intput, 6 intput, 6 intput, 7 intput, 6 intput, 6 intput, 6 intput, 7 intput, 6 intput, 6 intput, 7 intput, 6 intput, 6 intput, 6 intput, 7 intput, 6 intput, 7 intput, 6 intput, 7 intput, 6 intput, 7 intput, 7 intput, 6 intput, 7 intput, 6 intput, 7 intput, 6 intput, 7 intput, 7 intput, 7 intput, 6 intput, 7 intput, 6 intput, 6 intput, 7								192101	outdoor_2_0_1	01+00*4=1	00	-
00+00*4=0 outdoor_2_0_0 192100  00+00*4=1 outdoor_2_0_0 192101  00+00*4=2 outdoor_2_0_0 192104  00+00*4=2 outdoor_2_0_0 192104  00+00*4=5 outdoor_2_0_0 192104  00+00*4=6 outdoor_2_0_0 193104  00+00*4=6 outdoor_3_0_0 193104  00+00*4=6 outdoor_3_0_0 193104  00+00*4=8 outdoor_3_0_0 193109  00+00*4=8 outdoor_3_1_1 193105  00+00*4=8 outdoor_3_1_1 193105	00+01*4=0 outdoor_2_0_1 192105 00+01*4=4 outdoor_2_0_1 192105 00+01*4=4 outdoor_2_0_1 192105 00+01*4=4 outdoor_2_1_1 192105 00+01*4=6 outdoor_2_1_2 193105 00+01*4=6 outdoor_3_1_2 193105 00+01*4=7 outdoor_3_1_2 193105 00+01*4=7 outdoor_3_1_2 193105 00+01*4=8 outdoor_3_1_2 193105 00+01*4=8 outdoor_3_1_2 193105 00+01*4=8 outdoor_3_1_2 193105 00+01*4=8 outdoor_3_1_2 193105 00+01*4=9 outdoor_3_1_1 193105	01+0074=0   01tdOor, 2_0_0_1   192101   192101   192102	00+0074=0         outdoor, 2 to 1         192100         AC_         AC_ <td>00+0074=0 outdoor_2_0_0 192100 00+0074=2 outdoor_2_0_1 192101 00+0074=2 outdoor_2_0_1 192102 00+0074=2 outdoor_2_1_1 192105 00+0074=2 outdoor_2_1_2 193105 00+0074=2 outdoor_2_1_2 193105 00+0074=2 outdoor_3_1_2 193105 00+0074=5 outdoor_3_1_1 193105</td> <td></td> <td></td> <td>Outdoor on the actual network address address address input,1 intput,2 intput,2 intput,3 intput,4 intput,5 intput,3 intput,4 intput,5 intput,3 intput,4 intput,5 intput,3 intput,6 intp</td> <td></td> <td>-</td>	00+0074=0 outdoor_2_0_0 192100 00+0074=2 outdoor_2_0_1 192101 00+0074=2 outdoor_2_0_1 192102 00+0074=2 outdoor_2_1_1 192105 00+0074=2 outdoor_2_1_2 193105 00+0074=2 outdoor_2_1_2 193105 00+0074=2 outdoor_3_1_2 193105 00+0074=5 outdoor_3_1_1 193105			Outdoor on the actual network address address address input,1 intput,2 intput,2 intput,3 intput,4 intput,5 intput,3 intput,4 intput,5 intput,3 intput,4 intput,5 intput,3 intput,6 intp												-
Parent Object   Device*   Mutistate   Mutistate   Intput,2   Intput,2   Intput,3   Intput,4   Intput,5   Intput,4   Intput,5   Intput,4   Intput,5   Intput,4   Intput,5   Intput,4   Intput,5   Intput,4   Intput,5   Intput,6   Intput,6   Intput,6   Intput,6   Intput,6   Intent,6   Int	Parent Object   Device   Multisate   Input,1   Input,2   Input,3   Input,4   Input,3   Input,3   Input,4   Input,3   Input,3   Input,4   Input,3   Input,3   Input,4   Input,3   Input,4   Input,3   Input,3   Input,4   Input,3   Input,4   Input,3   Input,4   Input,4   Input,3   Input,4   Input,3   Input,4   Input,3   Input,4   Input,4   Input,3   Input,3   Input,4   Input,3   Input,3   Input,4   Input,3   Input,4   Input,4   Input,4   Input,4   Input,3   Input,3   Input,4   Input,4	Parent Object   Device   Multistate   Multistate   Analog   Anal	Parent Object   Device   Multistate   Intput,1   Intput,2   Intput,3   Intput,3   Intput,3   Intput,3   Intput,3   Intput,4   Intput,3   Intput,3   Intput,3   Intput,4   Intput,3   Intput,3   Intput,4   Intput,3   Intput,3   Intput,4   Intput,3   Intput,4   Intput,5   Intput,4   Intput,5   Intput,4   Intput,5   Intertstated   Intertstate	Parent Object   Device*   Mutistate-   Mut	Parent Object Device* Multistate- Multistate- Analog- Analog- Analog- intput, 1 intput, 2 intput, 2 intput, 3 intput, 4 intput, 5 input, 3	Sub Oklode													

#### **Outdoor Unit Points**

**NOTE -** Outdoor unit control & monitoring points are not available for Mini-Split systems. -1P Mini-VRF systems require the Mini-VRF Control Interface V0CTRL00P-1.

#### **Outdoor Unit Table 1. Operation Mode**

Attribute Identifier	Data Mode	Attribute value	Meaning	Read/Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 1		R
Object Name	CharacterString	AC_IOperationMode		R
Object Type	BACnetObjectType	MultiState-input		R
Description	CharacterString	Operation mode		0
	BACnet ARRAY [N]	1	Heat	
Status text	CharacterString	2	Cool	0
	CharacterString	3	Stop	

#### **Outdoor Unit Table 2. Condenser Fan Speed**

Attribute Identifier	Data Mode	Attribute value	Meaning	Read/Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 2		R
Object Name	CharacterString	AC_IFanSpeed		R
Object Type	BACnetObjectType	MultiState-input		R
Description	CharacterString	Fan Speed		0
		1	High	
Options	Intogor	2	Medium	
	Integer	3	Low	0
		4	Stop	

#### **Outdoor Unit Table 3. Ambient Temperature**

Attribute Identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 1	R
Object Name	CharacterString	AC_ITempOutoor	R
Object Type	BACnetObjectType	Analog-input	R
Description	CharacterString	Outdoor Temperature	0
Unit	BACnetEngineering Units	Degree-Fahrenheit	R

NOTE - The received value is degrees Fahrenheit (°F).

#### **Outdoor Unit Table 4. Indoor Quantity**

Attribute Identifier	Data Mode	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 2	R
Object Name	CharacterString	AC_ITotalACs	R
Object Type	BACnetObjectType	Analog-input	R
Description	CharacterString Indoor unit qty		0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current INDOOR UNIT QUANTITY (Read only).		

#### **Outdoor Unit Table 5. Compressor 1**

Attribute Identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 3	R
Object Name	CharacterString	AC_ICom1Current	R
Object Type	BACnetObjectType	Analog-input	R
Current Value	REAL	0	R
Description	CharacterString	Compressor 1 current	0
Unit	BACnetEngineering Units Amperes		R
On a ration Instruction	The CURRENT VALUE attribute of the selected object reflects the		
Operation Instruction	COMPRESSOR 1 ELECTRIC C		

#### **Outdoor Unit Table 6. Compressor 2**

Attribute Identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 4	R
Object Name	CharacterString	AC_ICom2Current	R
Object Type	BACnetObjectType	Analog-input	R
Current Value	REAL	0	R
Description	CharacterString Compressor 2 current		0
Unit	BACnetEngineering Units Amperes		R
Operation Instruction	The CURRENT VALUE attribute of the selected object reflects the		
Operation Instruction	COMPRESSOR 2 ELECTRIC CURRENT (Read only).		

#### **Outdoor Unit Table 7. Compressor 3**

Attribute Identifier	Data type	Attribute value	Read/Write	
Object Identifier	BACnetObjectIdentifier	Analog-input 5	R	
Object Name	CharacterString	AC_ICom3Current	R	
Object Type	BACnetObjectType	Analog-input	R	
Description	CharacterString	Compressor 3 current	0	
Unit	BACnetEngineering Units Amperes		R	
On a ration I hadrustian	The CURRENT VALUE attribute of the selected object reflects the			
Operation Instruction	COMPRESSOR 3 ELECTRIC CURRENT (Read only).			

#### **Outdoor Unit Table 8. Error Code**

Attribute Identifier	Data type	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 3	R
Object Name	CharacterString	AC_IMalfunction	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	Malfunction Status	0
		E0	
		E1	
		E2	
		E3	
		E4	
		E5	
Status Text		E6	
	DACTON ADDAVINI	E7	
	BACnet ARRAY[N]	E8	0
	CharacterString	E9	
		EA	
		EB	
		EC	
		ED	
		EE	
		EF	
		No	

#### **Outdoor Unit Table 9. Protection Code**

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 4	R
Object Name	CharacterString	AC_IProtect	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	Protect Status	0
		P0	
		P1	
		P2	
		P3	
		P4	
		P5	
Status Text		P6	
	BACnet ARRAY[N]	P7	
	CharacterString	P8	0
	CharacterString	P9	
		PA	
		РВ	
		PC	
		PD	
		PE	
		PF	
		No	

#### **Appendix A. BACnet Protocol Observed**

**Supportive Object Type** 

Object Type	Supported	Dynamic Established or Not	<b>Dynamic Deleted or Not</b>
Analog Input Object Type	X	X	X
Analog Output Object Type	X	X	X
Analog Value Object Type	X	X	X
Binary Input Object Type	X	X	X
Binary Output Object Type	Х	X	X
Binary Value Object Type	Х	X	X
Device Object Type	Х	X	X
Multi-Status Input Object Type	Х	X	X
Multi-Status Output Object Type	X	X	X

**Application Services of Supplied BACnet** 

Application oct vices of capplica BACHET		
Application Services	Request Start	Request Preformed
Read Property		X
Read Property Multiple		Х
Write Property		X
Write Property Multiple		Х
Who-Has	X	Х
Who-Is		
I-Am		Х

#### **Option of Data Link Layer**

<u>-</u>	
ISO 8802-3,10BASE5	
ISO 8802-3,10BASE2	
ISO 8802-3,10BASET	

#### **Supportive Character Set**

ANSI X3.4
IBMTM/Microsoft TM ISO
10646(UCS2)T

#### **Special Function**

	Yes	No	
Subsection request support	Х		window size:1476
Subsection respond support	Х		window size:1476

Legend

Abbreviation	Meaning	
R	Read	
W	Write	
R/W	Read/Write	
I	Input	
0	Output	
BI	Binary Input	
ВО	Binary Output	
Al	Analog Input	
AO	Analog Output	
MI	Multistate Input	
MO	Multistate Output	

#### **Appendix B. Indoor Unit Detailed Points**

#### **Indoor Unit Table 1. Mode**

Attribute Identifier	Data type	Attribute value	Meaning	Read/Write
Object Identifier	BACnetObjectIdentifier	MultiState-output 1		R
Object Name	CharacterString	AC_OModeSetting		R
Object Type	BACnetObjectType	MultiState-output		R
Description	CharacterString	Operation mode setting		0
Current Value	REAL	0		W
Status Flags	BACnetStatusFlags	FFFF		R
Event Status	BACnet EventStatus	Normal		R
Take Off Service	BOOLEAN	F		R
Status Number	Unsigned	6		R
Options	Integer	1 2 3 4	Heat Cool Dry Fan	0
Priority Array	BACnetPriorityArra	NULL		R
Release Default	Unsigned	0		R
Publicly Type	Unsigned	1701		0
Feedback Value	Unsigned	6		
Event Enable	BACnetEventTransitionBits	TTT		0
Affirm Transform	BACnetEventTransitionBits	TTT		0
Notify Type	BACnetNotifyType	Alarm		0

#### **Indoor Unit Table 2. Mode Status**

Attribute identifier	Data type	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 3	R
Object Name	CharacterString	AC_QueryMode	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	QueryMode	0
Status Text	BACnet ARRAY[N]	("Lloct" "Cool" "Dm." "Fon only" Ston")	0
	CharacterString	["Heat","Cool","Dry", "Fan only", Stop"]	0

#### **Indoor Unit Table 3. Fan Speed**

Attribute Identifier	Data type	Attribute value	Meaning	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-output 2		R
Object Name	CharacterString	AC_OFanSpeed		R
Object Type	BACnetObjectType	MultiState-output		R
Description	CharacterString	Fan Speed Setting		0
Current Value	Unsigned	0		W
Status Flags	BACnetStatusFlags	FFFF		R
Event Status	BACnet EventStatus	Normal		R
Take Off Service	BOOLEAN	F		R
Status Number	Unsigned	6		R
Options	Integer	1 2 3	High Medium Low	0
Priority Array	BACnetPriorityArra	NULL		R
Release Default	Unsigned	0		
Time Delay	Unsigned	1		0
Publicly Type	Unsigned	1701		0
Feedback Value	Unsigned	6		
Event Enable	BACnetEventTransitionBits	TTT		0
Affirm Transform	BACnetEventTransitionBits	TTT		0
Notify Type	BACnetNotifyType	event		0

#### **Indoor Unit Table 4. Fan Speed Status**

Attribute identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 4	R
Object Name	CharacterString	AC_QueryFanSpeed	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	QueryFanSpeed	0
Status Text	BACnet ARRAY[N]	("High" "Middle" "Low" "Step")	0
	CharacterString	{"High","Middle","Low", "Stop"}	

#### **Indoor Unit Table 5. Setpoint**

Attribute Identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-output 1	R
Object Name	CharacterString	AC_OTempSetting	R
Object Type	BACnetObjectType	Analog-output	R
Description	CharacterString	Setpoint	0
Status Flags	BACnetStatusFlags	FFFF	R
Current value	REAL	Temperature Value	W
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Unit	BACnetEngineering Units	Degree-Fahrenheit	R
Minimum	REAL	62°F (17°C)	0
Maximum	REAL	86°F (30°C)	0
Distinguishability	REAL	1	0
Priority Array Value	BACnetPriorityArra	NULL	R
Default Release	REAL	0	R
Distinguishability	REAL	1	0
Cov Increment	REAL	1	0
Low Valve Value	REAL	62°F (17°C)	0
High Valve Value	REAL	86°F (30°C)	0
Width Valve Value	REAL	1	0
Enable Valve Value	BACnetLimitEnable	TT	0
Event Enable	BACnetEventTransitionBits	TTT	0
Notify Type	BACnetNotifyType	Alarm	0
Publicly Type	Unsigned	1701	0
Time Delay	Unsigned	1	0
Affirm Transform	BACnetEventTransitionBits	TTT	0

**NOTE** - All values are degrees Fahrenheit (°F). You must send degrees Fahrenheit (°F) values and you will receive degrees Fahrenheit (°F). Range: 61°F - 90°F (16°C - 32°C)..

#### **Indoor Unit Table 6. Setpoint Status**

Attribute identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 4	R
Object Name	CharacterString	AC_QueryTempSetting	R
Object Type	BACnetObjectType	Analog-input	R
Current Value	REAL	0	R
Description	CharacterString	QueryTempsetting	0
Unit	BACnetEngineering Units	Degree-Fahrenheit	R

NOTE - The sent value is degrees Fahrenheit (°F).

#### **Indoor Unit Table 7. Room Temperature**

Attribute Identifier	Data Mode	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 1	R
Object Name	CharacterString	AC_ITempIndoor	R
Object Type	BACnetObjectType	Analog-input	R
Current Value	REAL	0	R
Description	CharacterString	Indoor Temperature	0
Unit	BACnetEngineering Units	Degree-Fahrenheit	R
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Reliablity	BACnetReliability	NO-FAULT-DETECTED	R
Take Off Service	BOOLEAN	F	R
Unit	BACnetEngineering Units	Degree-Fahrenheit	R
Minimum	REAL	0°F (-18°C)	0
Maximum	REAL	200°F (93°C)	0
Distinguishability	REAL	1	0
Time Delay	Unsigned	1	0
Publicly Type	Unsigned	1701	0
Low Valve Value	REAL	0°F (-18°C)	0
High Valve Value	REAL	200°F (93°C)	0
Width Valve Value	REAL	1	0
Enable Valve Value	BACnetLimitEnable	FT	0
Event Enable	BACnetEventTransitionBits	TTT	0
Notify Type	BACnetNotifyType	event	0

**NOTE** - The received value is degrees Fahrenheit (°F).

#### Indoor Unit Table 8. Swing

Attribute Identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Binary-output 1	R
Object Name	CharacterString	AC_OSwing	R
Object Type	BACnetObjectType	Binary-output	R
Current Value	BACnetBinaryPV	inactive	W
Description	CharacterString	Swing Setting	0
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Polarity	BACnetPolarity	Normal	R
Inactive Text	CharacterString	Turn off	0
Active Text	CharacterString	Turn on	0
Time Delay	Unsigned	1	0
Status Change Time	BACnetDateTime		0
Status Change Times	Unsigned		0
Change Time To 0	BACnetDateTime		0
Publicly Type	Unsigned	1701	0
Feedback Value	BACnetBinaryPV	inactive	0
Event Enable	BACnetEventTransitionBits	TTT	R
Affirm Transform	BACnetEventTransitionBits	TTT	0
Priority Array	BACnetPriorityArra	NULL	R
Default Release	BACnetBinaryPV	inactive	R
Notify Type	BACnetNotifyType	Alarm	0

NOTE - Inactive means swing OFF, active means swing ON.

#### **Indoor Unit Table 9. Error Code**

Attribute Identifier	Data Mode	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 1	R
Object Name	CharacterString	AC_IMalfunction	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	Malfunction Status	0
Current Value	Unsigned	0	R
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Status Number	Unsigned	11	R
		E0	
		E1	
		E2	
		E3	
	BACnet ARRAY[N]	E4	
		E5	
		E6	
		E7	
Status Text		E8	0
	CharacterString	E9	
		EA	
		EB	
		EC	
		ED	
		EE	
		EF	
		No	
Time Delay	Unsigned	1	0
Publicity Type	Unsigned	1701	0
Event Enable	BACnetEventTransitionBits	TTT	0
Affirm Transform	BACnetEventTransitionBits	TTT	0
Notify Type	BACnetNotifyType	Alarm	0

#### **Indoor Unit Table 10. Protection Code**

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 2	R
Object Name	CharacterString	AC_IProtect	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	Protect Status	0
Current Value	Unsigned	0	R
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Status Number	Unsigned	11	R
		P0	
	BACnet ARRAY[N]	P1	
		P2	
		P3	
		P4	
Status Text		P5	0
	CharacterString	P6	
		P7	
		P8	
		PF	
		No	
Time Delay	Unsigned	1	0
Publicly Type	Unsigned	1701	0
Event Enable	BACnetEventTransitionBits	TTT	0
Affirm Transform	BACnetEventTransitionBits	TTT	0
Notify Type	BACnetNotifyType	Alarm	0

**Indoor Unit Table 11. Remote Control Lock** 

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	Binary-output 4	R/W
Object Name	CharacterString	Remote_Control_lock	R
Object Type	BACnetObjectType	Binary-output	R
Current Value	BACnetBinaryPV	inactive	W
Description	CharacterString	Lock/Unlock remote control	0
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Polarity	BACnetPolarity	Normal	R
Inactive text	CharacterString	unlock remote control	0
Active text	CharacterString	lock remote control	0
Time Delay	Unsigned	1	0
Status Change Time	BACnetDateTime		0
Status Change Times	Unsigned		0
Change Time To 0	BACnetDateTime		0
Publicly Type	Unsigned	1701	0
Feedback Value	BACnetBinaryPV	inactive	0
Event Enable	BACnetEventTransitionBits	TTT	R
Affirm Transform	BACnetEventTransitionBits	TTT	0
Priority Array	BACnetPriorityArra	NULL	R
Default Release	BACnetBinaryPV	inactive	R
Notify Type	BACnetNotifyType	Alarm	0

**NOTE -** Refer to the Lennox VRF Mobile App for error code descriptions.

NOTE - Lock All Functions of Wireless Remote Controller V0STAT52P-1.

**NOTE** - Inactive means unlock remote control, active means lock remote control.

Indoor Unit Table 12. Turn Indoor Unit ON/OFF

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	Binary-output 3	R/W
Object Name	CharacterString	AC_TurnOnOff	R
Object Type	BACnetObjectType	Binary-output	R
Current Value	BACnetBinaryPV	inactive	W
Description	CharacterString	Turn On/Off the AC	0
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Polarity	BACnetPolarity	Normal	R
Inactive text	CharacterString	Turn off	0
Active text	CharacterString	Turn on	0
Time Delay	Unsigned	1	0
Status Change Time	BACnetDateTime		0
Status Change Times	Unsigned		0
Change Time To 0	BACnetDateTime		0
Publicly Type	Unsigned	1701	0
Feedback Value	BACnetBinaryPV	inactive	0
Event Enable	BACnetEventTransitionBits	TTT	R
Affirm Transform	BACnetEventTransitionBits	TTT	0
Priority Array	BACnetPriorityArra	NULL	R
Default Release	BACnetBinaryPV	inactive	R
Notify Type	BACnetNotifyType	Alarm	0

**NOTE -** Refer to the Lennox VRF Mobile App for error code descriptions.

NOTE - Inactive means indoor unit turned off, active means indoor unit turned on.

Indoor Unit Table 13. Turn All Indoor Units ON/OFF

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	Binary-output 5	R/W
Object Name	CharacterString	ALL_AC_OnOff	R
Object Type	BACnetObjectType	Binary-output	R
Current Value	BACnetBinaryPV	inactive	W
Description	CharacterString	turn on/turn off ac all the bus	0
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Polarity	BACnetPolarity	Normal	R
Inactive text	CharacterString		0
Active text	CharacterString	turn off ac all the bus	0
Time Delay	Unsigned	1	0
Status Change Time	BACnetDateTime		0
Status Change Times	Unsigned		0
Change Time To 0	BACnetDateTime		0
Publicly Type	Unsigned	1701	0
Feedback Value	BACnetBinaryPV	inactive	0
Event Enable	BACnetEventTransitionBits	TTT	R
Affirm Transform	BACnetEventTransitionBits	TTT	0
Priority Array	BACnetPriorityArra	NULL	R
Default Release	BACnetBinaryPV	inactive	R
Notify Type	BACnetNotifyType	Alarm	0

**NOTE -** Refer to the Lennox VRF Mobile App for error code descriptions.

**NOTE** - Active means turn off all indoor units.

#### **Appendix C. Outdoor Unit Detailed Points**

**NOTE -** Outdoor unit control & monitoring points are not available for Mini-Split systems. -1P Mini-VRF systems require the Mini-VRF Control Interface V0CTRL00P-1.

#### **Outdoor Unit Table 1. Operation Mode**

Attribute Identifier	Data Mode	Attribute value	Meaning	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 1		R
Object Name	CharacterString	AC_IOperationMode		R
Object Type	BACnetObjectType	MultiState-input		R
Description	CharacterString	Operation mode		0
Current Value	REAL	0		R
Status Flags	BACnetStatusFlags	FFFF		R
Event Status	BACnet EventStatus	Normal		R
Take Off Service	BOOLEAN	F		R
Status Number	Unsigned	3		R
	PACnot APPAV [NI]	1	Heat	
Status Text	BACnet ARRAY [N]	2	Cool	0
	CharacterString	3	Stop	
Time Delay	Unsigned	1		0
Publicly Type	Unsigned	1701		0
Event Enable	BACnetEventTransitionBits	TTT		0
Affirm Transform	BACnetEventTransitionBits	TTT		0
Notify Type	BACnetNotifyType	Alarm		0

#### Outdoor Unit Table 2. Condenser Fan Speed

Attribute Identifier	Data Mode	Attribute value	Meaning	Read/Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 2		R
Object Name	CharacterString	AC_IFanSpeed		R
Object Type	BACnetObjectType	MultiState-input		R
Description	CharacterString	Fan Speed		0
Current Value	Unsigned	0		R
Status Flags	BACnetStatusFlags	FFFF		R
Event Status	BACnet EventStatus	Normal		R
Take Off Service	serviceBOOLEAN	F		R
Status Number	Unsigned	4		R
Options	Integer	1	High	0
		2	Medium	
		3	Low	
Time Delay	Unsigned	1		0
Publicly Type	Unsigned	1701		0
Event Enable	BACnetEventTransitionBits	TTT		0
Affirm Transform	BACnetEventTransitionBits	TTT		0
Notify Type	BACnetNotifyType	event		0

#### **Outdoor Unit Table 3. Ambient Temperature**

Attribute Identifier	Data type	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	Analog-input 1	R
Object Name	CharacterString	AC_ITempOutoor	R
Object Type	BACnetObjectType	Analog-input	R
Current Value	REAL	0	R
Description	CharacterString	Outdoor Temperature	0
Status Flags	BACnetStatusFlags	FFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Unit	BACnetEngineering Units	Degree-Fahrenheit	R
Minimum	REAL	0°F (-18°C)	0
Maximum	REAL	200°F (93°C)	0
Time Delay	Unsigned	1	0
Publicly Type	Unsigned	1701	0
Low Valve Value	REAL	0°F (-18°C)	0
High Valve Value	REAL	200°F (93°C)	0
Width Valve Value	REAL	1	0
Enable Valve Value	BACnetLimitEnable	FT	0
Event Enable	BACnetEventTransitionBits	TTT	0
Notify Type	BACnetNotifyType	event	0

**NOTE** - The received value is degrees Fahrenheit (°F).

#### **Outdoor Unit Table 4. Indoor Quantity**

Attribute Identifier	Data Mode	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 2	R
Object Name	CharacterString	AC_ITotalACs	R
Object Type	BACnetObjectType	Analog-input	R
Current Value	REAL	0	R
Description	CharacterString	Indoor unit qty	0
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Unit	BACnetEngineering Units		R
Minimum	REAL	0	0
Maximum	REAL	250	0
Time Delay	Unsigned	1	0
Publicly Type	Unsigned	1701	0
Low Valve Value	REAL	0	0
High Valve Value	REAL	250	0
Width Valve Value	REAL	1	0
Enable Valve Value	BACnetLimitEnable	FT	0
Event Enable	BACnetEventTransitionBits	TTT	0
Notify Type	BACnetNotifyType	Alarm	0
Operation Instruction	The CURRENT VALUE attribute of the selected object reflects the current INDOOR UNIT QUANTITY (it's read only).		

#### Outdoor Unit Table 5. Error Code Compressor 1

Attribute Identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 3	R
Object Name	CharacterString	AC_ICom1Current	R
Object Type	BACnetObjectType	Analog-input	R
Current Value	REAL	0	R
Description	CharacterString	Compressor 1 current	0
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Unit	BACnetEngineering Units	Amperes	R
Minimum	REAL	0	0
Maximum	REAL	200	0
Time Delay	Unsigned	1	0
Publicly Type	Unsigned	1701	0
Low Valve Value	REAL	0	0
High Valve Value	REAL	200	0
Width Valve Value	REAL	1	0
Enable Valve Value	BACnetLimitEnable	FT	0
Notify Type	BACnetNotifyType	Alarm	0
Operation Instruction	The CURRENT VALUE attribute of the selected object reflects the		
Operation Instruction	COMPRESSOR 1 ELECTRIC CURRENT (Read only).		

#### **Outdoor Unit Table 6. Error Code Compressor 2**

Attribute Identifier	Data type	Attribute value	Read/Write	
Object Identifier	BACnetObjectIdentifier	Analog-input 4	R	
Object Name	CharacterString	AC_ICom2Current	R	
Object Type	BACnetObjectType	Analog-input	R	
Current Value	REAL	0	R	
Description	CharacterString	Compressor 2 current	0	
Status Flags	BACnetStatusFlags	FFFF	R	
Event Status	BACnet EventStatus	Normal	R	
Take Off Service	BOOLEAN	F	R	
Unit	BACnetEngineering Units	Amperes	R	
Minimum	REAL	0	0	
Maximum	REAL	200	0	
Time Delay	Unsigned	1	0	
Publicly Type	Unsigned	1701	0	
Low Valve Value	REAL	0	0	
High Valve Value	REAL	200	0	
Width Valve Value	REAL	1	0	
Enable Valve Value	BACnetLimitEnable	FT	0	
Event Enable	BACnetEventTransitionBits	TTT	0	
Notify Type	BACnetNotifyType	Alarm	0	
Operation Instruction	The CURRENT VALUE attribu	The CURRENT VALUE attribute of the selected object reflects the		
Operation Instruction	COMPRESSOR 2 ELECTRIC CURRENT (Read only).			

#### **Outdoor Unit Table 7. Error Code Compressor 3**

Attribute Identifier	Data type	Attribute value	Read/Write
Object Identifier	BACnetObjectIdentifier	Analog-input 5	R
Object Name	CharacterString	AC_ICom3Current	R
Object Type	BACnetObjectType	Analog-input	R
Description	CharacterString	Compressor 3 current	0
Current Value	REAL	0	R
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Unit	BACnetEngineering Units	Amperes	R
Minimum	REAL	0	0
Maximum	REAL	200	0
Time Delay	Unsigned	1	0
Publicly Type	Unsigned	1701	0
Low Valve Value	REAL	0	0
High Valve Value	REAL	200	0
Width Valve Value	REAL	1	0
Enable Valve Value	BACnetLimitEnable	FT	0
Event Enable	BACnetEventTransitionBits	TTT	0
Notify Type	BACnetNotifyType	Alarm	0
Operation Instruction	The CURRENT VALUE attribute of the selected object reflects the		
Operation Instruction	COMPRESSOR 3 ELECTRIC CURRENT (Read only).		

#### **Outdoor Unit Table 8. Error Code**

Attribute Identifier	Data type	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 3	R
Object Name	CharacterString	AC_IMalfunction	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	Malfunction Status	0
Current Value	Unsigned	0	R
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Status Number	Unsigned	17	R
		E0	
		E1	
		E2	
		E3	
	BACnet ARRAY[N] CharacterString	E4	
		E5	
		E6	
		E7	
Status Text		E8	0
		E9	
		EA	
		EB	
		EC	
		ED	
		EE	
		EF	
		No	
Time Delay	Unsigned	1	0
Publicly Type	Unsigned	1701	0
Event Enable	BACnetEventTransitionBits	TTT	0
Affirm Transform	BACnetEventTransitionBits	TTT	0
Notify Type	BACnetNotifyType	Alarm	0

**NOTE -** Refer to the Lennox VRF Mobile App for error code descriptions.

#### **Outdoor Unit Table 9. Protection Code**

Attribute Identifier	Data Mode	Attribute value	Read/ Write
Object Identifier	BACnetObjectIdentifier	MultiState-input 4	R
Object Name	CharacterString	AC_IProtect	R
Object Type	BACnetObjectType	MultiState-input	R
Description	CharacterString	Protect Status	0
Current value	Unsigned	0	R
Status Flags	BACnetStatusFlags	FFFF	R
Event Status	BACnet EventStatus	Normal	R
Take Off Service	BOOLEAN	F	R
Status Number	Unsigned	17	R
		P0	
		P1	
		P2	
		P3	
	BACnet ARRAY[N] CharacterString	P4	
		P5	
		P6	
		P7	
Status Text		P8	0
		P9	
		PA	
		РВ	
		PC	
		PD	
		PE	
		PF	
		No	
Time Delay	Unsigned	1	0
Publicly Type	Unsigned	1701	0
Event Enable	BACnetEventTransitionBits	TTT	0
Affirm transform	BACnetEventTransitionBits	TTT	0
Notify Type	BACnetNotifyType	Alarm	0