MIGA/C/FC ID = 23421308 BACnet FC

OBJECT LIST FOR 23421308 (ID = MIGAC-XX-XXX-XX-XX)

BACnet ** MSTP

Fan coil configuration (SW3.7=ON, SW2.4 =OFF)

BACnet MSTP/485 (rev.19) FW 18417722 BTL-certified
Baud rate: 9600, 19200, **38400 (default),** 76800 no parity, 8 data bits, 1 stop bit

N°	Object	Object Name	Value	Default	Access
1	Analog Input #0	T1_Sensor	0...40°C (32...104°F)	-	R/W
2	Analog Input #1	T2_Sensor	-20...100°C (-4...212°F)	-	R/W
3	Analog Input #2	T3_Sensor	-20...100°C (-4...212°F)	-	R/W
4	Analog Output #0	AO_Cool (cool/heat valve)	0...100%	-	R/W
5	Analog Output #1	AO_Heat	0...100%	-	R/W
6	Analog Output #2	AO_Fan	0...100%	-	R/W
7	Analog Value #0	SetPoint_SetPointCool	5...35°C (41...95°F)	23°C (73°F)	R/W
8	Analog Value #1	SetPointHeat	5...35°C (41...95°F)	23°C (73°F)	R/W
9	Analog Value #2	SetPointEffective	5...35°C (41...95°F)	-	R
10	Analog Value #3	ReturnAirSensorEffective	0...100°C (32...212°F)	-	R
11	Analog Value #4	Mode	0-Fan only, 1-Cool,2-Heat, 3-Auto, 6 -emergency mode from IRP.	1-Cool	R/W
12	Analog Value #5	ModeEffective	0-Fan only, 1-Cool, 2-Heat, 3-Auto, 4-Off, 5-None mode** (dead band in 2 pipe).	-	R
13	Analog Value #6	FanSpeed	0-Auto, 1-Low, 2-Medium, 3-High	0-Auto	R/W
14	Analog Value #7	FanEffective	0-Auto, 1-Low, 2-Medium, 3-High, 4-Off	-	R
15	Analog Value #8	ReturnAirSensorCalibration	-5...5°C (-9...9°F)	0°C (0°F)	R/W
16	Analog Value #9	SetPointLimitCool	5...35°C (41...95°F)	10°C (50°F)	R/W
17	Analog Value #10	SetPointLimitHeat	5...35°C (41...95°F)	30°C (86°F)	R/W
18	Analog Value #11	EconomySetPointInCool	5...35°C (41...95°F)	30°C (86°F)	R/W
19	Analog Value #12	EconomySetPointInHeat	5...35°C (41...95°F)	10°C (50°F)	R/W
20	Analog Value #13	OccupancyEffectiveHVAC	0 - Occupied; 2 - Unoccupied (Occ. Sensor Function=1); 3 - Unoccupied (Occ. Sensor Function=2); 4 - Unoccupied (Occ. Sensor Function=3).	-	R
21	Analog Value #14	OccupancySensorFunction	0-Not used, 1-On/Off, 2-Start/Stop, 3-Economy	0-Not used	R/W
22	Analog Value #15	OccupancySensorHVACDelayTime	0...900 min	20 min	R/W
23	Analog Value #16	TimeSwitchingToOccupiedMode	0...999 sec	2 sec	R/W
24	Analog Value #17	T2_Effective	-9.9...99°C (-9.9...210°F)	-	R
25	Analog Value #18	T3_Effective	-9.9...99°C (-9.9...210°F)	-	R
26	Analog Value #19	CoolFanOnDelay	0...120 sec	0 sec	R/W
27	Analog Value #20	CoolFanOffDelay	0...120 sec	0 sec	R/W
28	Analog Value #21	HeatFanOnDelay	0...120 sec	0 sec	R/W
29	Analog Value #22	HeatFanOffDelay	0...120 sec	30 sec	R/W

N°	Object	Object Name	Value	Default	Access
30	Analog Value #23	FreezeProtectionCutInSetpoint	0...10°C (32...50°F)	5°C (41°F)	R/W
31	Analog Value #24	FreezeProtectionCutOutSetpoint	2...12°C (36...54°F)	7°C (45°F)	R/W
32	Analog Value #25	FilterCounter	0...999 hour	-	R
33	Analog Value #26	FilterAlarmTimeDelay	0...999 hour	0 hour	R/W
34	Analog Value #27	CoolDifferentialBand	0.5...5°C (1...9°F)	1°C (2°F)	R/W
35	Analog Value #28	CoolDifferentialBandOffset	-5...5°C (-9...9°F)	0°C (0°F)	R/W
36	Analog Value #29	HeatDifferentialBand	0.5...20°C (1...36°F)	1°C (2°F)	R/W
37	Analog Value #30	HeatDifferentialBandOffset	-5...5°C (-9...9°F)	0°C (0°F)	R/W
38	Analog Value #31	ShiftBetweenCoolAndHeat	0...10°C (0...18°F)	2°C (4°F)	R/W
39	Analog Value #32	ShiftBetweenCoolStages	0...10°C (0...18°F)	2°C (4°F)	R/W
40	Analog Value #33	ShiftBetweenHeatStages	0...49°C (0...88°F)	2°C (4°F)	R/W
41	Analog Value #35	TimeDelayOnNextCoolStage	0...600 sec	5 sec	R/W
42	Analog Value #36	TimeDelayOnNextHeatStage	0...600 sec	5 sec	R/W
43	Analog Value #37	TimeDelayOffNextCoolStage	0...600 sec	1 sec	R/W
44	Analog Value #40	DeiceCoolCutInTemperature	-9.5...8°C (15...46°F)	0°C (32°F)	R/W
45	Analog Value #41	DeiceCoolCutOutTemperature	2...20°C (36...68°F)	8°C (46°F)	R/W
46	Analog Value #42	DeiceHeatTime	120...420 sec	300 sec	R/W
47	Analog Value #43	DeiceHeatBreakTime	600...1800 sec	1500 sec	R/W
48	Analog Value #44	DeiceHeatCutInTemperature	-9.5...8°C (15...46°F)	0°C (32°F)	R/W
49	Analog Value #45	DeiceHeatCutOutTemperature	2...20°C (35...68°F)	16°C (61°F)	R/W
50	Analog Value #46	FanSoftStartInHeatCutInTemperature	14...37°C (57...99°F)	36°C (97°F)	R/W
51	Analog Value #47	FanSoftStartInHeatCutOutTemperature	12...35°C (54...95°F)	32°C (90°F)	R/W
52	Analog Value #50	OutputsThresholdTimeHeat	0...100 sec	60 sec	R/W
53	Analog Value #51	Kp_PIDCool	0...100	100	R/W
54	Analog Value #52	Kp_PIDHeat	0...100	100	R/W
55	Analog Value #53	Ki_PIDCool	0...100	0	R/W
56	Analog Value #54	Ki_PIDHeat	0...100	0	R/W
57	Analog Value #55	Kd_PIDCool	0...100	1	R/W
58	Analog Value #56	Kd_PIDHeat	0...100	1	R/W
59	Analog Value #57	CoolValveProportionalBand	1...10°C (2...18°F)	2°C (4°F)	R/W
60	Analog Value #58	CoolProportionalLowLimit	0...100%	0%	R/W
61	Analog Value #59	CoolProportionalHighLimit	0...100%	100%	R/W
62	Analog Value #60	HeatValveProportionalBand	1...10°C (2...18°F)	2°C (4°F)	R/W
63	Analog Value #61	HeatProportionalLowLimit	0...100%	0%	R/W
64	Analog Value #62	HeatProportionalHighLimit	0...100%	100%	R/W
65	Analog Value #64	ProportionalOnPercent	0...30%	30%	R/W
66	Analog Value #65	ProportionalOffPercent	0...20%	10%	R/W
67	Analog Value #66	CoolVFSProportionalBand	1...10°C (2...18°F)	2°C (4°F)	R/W
68	Analog Value #67	HeatVFSProportionalBand	1...10°C (2...18°F)	2°C (4°F)	R/W
69	Analog Value #68	CoolVFSLowSpeedPercent	0...30%	20%	R/W
70	Analog Value #69	CoolVFSMediumSpeedPercent	30...60%	50%	R/W
71	Analog Value #70	CoolVFSHighSpeedPercent	60...100%	90%	R/W
72	Analog Value #71	HeatVFSLowSpeedPercent	0...30%	30%	R/W
73	Analog Value #72	HeatVFSMediumSpeedPercent	30...60%	50%	R/W
74	Analog Value #73	HeatVFSHighSpeedPercent	60...100%	80%	R/W
75	Analog Value #75	VFSMediumSpeedDiff	10...50%	35%	R/W
76	Analog Value #76	VFSHighSpeedDiff	10...50%	35%	R/W
77	Analog Value #77	CoolVFSLowLimit	0...100%	0%	R/W
78	Analog Value #78	CoolVFSHighLimit	0...100%	100%	R/W
79	Analog Value #79	HeatVFSLowLimit	0...100%	0%	R/W
80	Analog Value #80	HeatVFSHighLimit	0...100%	100%	R/W

N°	Object	Object Name	Value	Default	Access
81	Analog Value #113	ModbusBaudRate (not in use)	0…4	-	R/W
82	Analog Value #133	DipSwitchesState	0...65535	-	R
83	Analog Value #160	AlarmsFaults	0...65535 Bit0 - Alarm_FreezeProtection; Bit1 - Alarm_DeiceInCool; Bit2 - Alarm_DeiceInHeat; Bit3 - Alarm_OverHeatInCool; Bit4 - Alarm_OverHeatInHeat; Bit5 - AlarmT1; Bit6 – AlarmT2; Bit7 – AlarmT3; Bit8– Not in use; Bit9– Not in use; Bit10– AlarmByDI1_input; Bit11– FaultByDI2_input; Bit12– Not in use; Bit13– Alarm_FanOffBySoftStart; Bit14– Alarm_CoolValveInterlock; Bit15– Not in use.	-	R
84	Binary Input #0	DI_1	1-Close, 0-Open (if polarity=0)	-	R
85	Binary Input #1	DI2_OccupancySensor	If polarity=1: 1-Open (Occupied), 0-Close (Unoccupied).	-	R
86	Binary Input #2	DI_3	1-Close, 0-Open (if polarity=0)	-	R
87	Binary Input #3	DI_4	1-Close, 0-Open (if polarity=0)	-	R
88	Binary Output #0	Heat1	1-On, 0-Off	-	R/W
89	Binary Output #1	Heat2	1-On, 0-Off	-	R/W
90	Binary Output #3	Cool1 (cool/heat valve)	1-On, 0-Off	-	R/W
91	Binary Output #5	FanOnOffLow	1-On, 0-Off	-	R/W
92	Binary Output #6	FanOnOffMedium	1-On, 0-Off	-	R/W
93	Binary Output #7	FanOnOffHigh	1-On, 0-Off	-	R/W
94	Binary Output #10	FanIndication	1-On, 0-Off	-	R/W
95	Binary Output #12	PumpOut	1-On, 0-Off	-	R/W
96	Binary Value #0	OnOff	1-On, 0-Off	0-Off	R/W
97	Binary Value #1	AutoFanInCool	1-Enable, 0-Disable	0-Disable	R/W
98	Binary Value #2	C_F_Scale	1-Celsius, 0-Fahrenheit	1-Celsius	R/W
99	Binary Value #3	LockFan	1-Lock, 0-Unlock	0-Unlock	R/W
100	Binary Value #4	LockMode	1-Lock, 0-Unlock	0-Unlock	R/W
101	Binary Value #5	LockOnOff	1-Lock, 0-Unlock	0-Unlock	R/W
102	Binary Value #6	LockSetpoint	1-Lock, 0-Unlock	0-Unlock	R/W
103	Binary Value #7	One_TwoSetpoints	0-one setpoint, 1-two setpoints	0-one setpoint	R/W
104	Binary Value #10	AutoModeEnable	1-Enable, 0-Disable	1-Enable	R/W
105	Binary Value #11	FreezeProtectionEnable	1-Enable, 0-Disable	1-Enable	R/W
106	Binary Value #13	RestoreDefault	1-Restore, 0-Off	0-Off	R/W
107	Binary Value #16	UnoccupiedByNetwork	1-Unoccupied, 0-Off	0-Off	R/W
108	Binary Value #35	TemperatureOverrideEnable	1-Enable, 0-Disable	0-Disable	R/W
109	Binary Value #38	AutoFanInHeat	1-On, 0-Off	1-On	R/W
110	Binary Value #39	DI1_Polarity	1-Normally close, 0-Normally open	0-N.O	R/W
111	Binary Value #40	DI2_Polarity	1-Normally open, 0-Normally close	1-N.O	R/W
112	Binary Value #41	DI3_Polarity	1-Normally close, 0-Normally open	0-N.O	R/W

N°	Object	Object Name	Value	Default	Access
113	Binary Value #42	DI4_Polarity	1-Normally close, 0-Normally open	0-N.O	R/W
114	Binary Value #43	Reserve	0	0	R
115	Binary Value #47	DisableOccupancySensor	0- Enable Occ. sensor, 1- Disable Occ. sensor	0	R/W
116	Binary Value #48	SelectModeInFCByDI3Enable	1- Enable select Mode by DI3 input: DI3 Open = mode COOL, DI3 Close = mode HEAT. 0- Disable this function	0	R/W
117	Binary Value #54	DisablePolling	0- Enable Polling after power break; 1- Disable Polling after power break;	0	R/W

** None mode (dead band in 2-pipe): in 2-pipe configuration the T2 sensor is connected and measures temperature in range 20°C <T2<30°C. While None mode, the Cool and Heat outputs are off, Fan outputs works according to Auto fan state (see objects BV#1, BV#38)

MIGA/C/FC ID = 23421308 Modbus FC

OBJECT LIST FOR 23421308 (ID = MIGAC-XX-XXX-XX-XX)

MODBUS RTU Mode, Baud rate: 9600, 19200, 38400, 76800, 115200 no parity, 8 data bits, 1 stop bit

Fan coil configuration (SW3.7=ON, SW2.4 =OFF)

Supported Commands: 0x03 = Read Holding Registers (for all). 0x06 = Preset Single Register (For R/W registers only).

Command 0x2B will be used to identify the cassette controller as follows.
Request:
Function 0x2B (Encapsulated Interface Transport)
MEI Type 0x0E (Read Device Identification)
Read Dev ID code 0x03 (request to get the Extended Device Identification)
Object ID (0x80…0xFF) *The range [0x80 – 0xFF] is Product dependent.*
0x80: 0x01 (cassette ID=0x01)
0x81: 0x01 (version = 0x01)
0x82: 0x4C (release = 01 – for example, last release on)
…
0xFF

Function 0x2B (Encapsulated Interface Transport)
MEI Type 0x0E (Read Device Identification)
Read Dev ID code 0x01 (request to get the Basic Device Identification)

Note 1. The MODBUS Register No. X is addressed in the MODBUS Register Address (PDU) X-1.
All Registers are signed Integer 16 bit.

ObjectId	Object Name / Description	Type	M/O	Category
0x00	VendorName	ASCII String	**Mandatory**	**Basic**
0x01	ProductCode	ASCII String	**Mandatory**	**Basic**
0x03	MajorMinorRevision	ASCII String	**Mandatory**	**Basic**

VendorName = V 23421308.5563
ProductCode = MIGAC-XX-XXX-XX-XX
MajorMinorRevision = 23421308
Function 0x2B (Encapsulated Interface Transport)
MEI Type 0x0E (Read Device Identification)
Read Dev ID code 0x02 (request to get the Regular Device Identification)

If VFV column has marker ***:** - **if ViewFloatValue =** 0 – Modbus represents integer value for this register ,
If ViewFloatValue = 1 - float value with one decimal place for this register, multiplied by10 **(**for writable step of change is 0.5). Example: “256” is representation of “25.6”
With Shift = 0 (For technician stuff and commissioning)
Register number (Reg) = Address + 1

N°	Address Dec [Hex]	Object Name	Value	Default	Access	
1	0 [0x00]	T1_Sensor	0...40°C (32...104°F)	-	R/W	✸
2	1 [0x01]	T2_Sensor	-20…100°C (-4...212°F)	-	R/W	✸
3	2 [0x02]	T3_Sensor	-20...100°C (-4...212°F)	-	R/W	✸
4	3 [0x03]	AO_Cool (cool/heat valve)	0...100%	-	R/W	
5	4 [0x04]	AO_Heat	0...100%	-	R/W	
6	5 [0x05]	AO_Fan	0...100%	-	R/W	
7	6 [0x06]	SetPoint_SetPointCool	5...35°C (41...95°F)	23°C (73°F)	R/W	✸
8	7 [0x07]	SetPointHeat	5...35°C (41...95°F)	22°C (72°F)	R/W	✸
9	8 [0x08]	SetPointEffective	5...35°C (41...95°F)	-	R	✸
10	9 [0x09]	ReturnAirSensorEffective	0...100°C (32...212°F)	-	R	✸
11	10 [0x0A]	Mode	0-Fan only, 1-Cool, 2-Heat, 3-Auto, 6 -emergency mode from IRP.	1-Cool	R/W	
12	11 [0x0B]	ModeEffective	0-Fan only, 1-Cool, 2-Heat, 3-Auto, 4-Off, 5-None mode** (dead band in 2 pipe).	-	R	
13	12 [0x0C]	FanSpeed	0-Auto, 1-Low, 2-Medium, 3-High	0-Auto	R/W	
14	13 [0x0D]	FanEffective	0-Auto, 1-Low, 2-Medium, 3-High, 4-Off	-	R	
15	14 [0x0E]	ReturnAirSensorCalibration	-5...5°C (-9...9°F)	0°C (0°F)	R/W	✸
16	15 [0x0F]	SetPointLimitCool	5...35°C (41...95°F)	10°C (50°F)	R/W	✸
17	16 [0x10]	SetPointLimitHeat	5...35°C (41...95°F)	30°C (86°F)	R/W	✸
18	17 [0x11]	EconomySetPointInCool	5...35°C (41...95°F)	30°C (86°F)	R/W	✸
19	18 [0x12]	EconomySetPointInHeat	5...35°C (41...95°F)	10°C (50°F)	R/W	✸
20	19 [0x13]	OccupancyEffectiveHVAC	0 - Occupied; 2 -Unoccupied (Occ. Sensor Function=1); 3 -Unoccupied (Occ. Sensor Function=2); 4 - Unoccupied (Occ. Sensor Function=3).	-	R	
21	20 [0x14]	OccupancySensorFunction	0-Not used, 1-On/Off, 2-Start/Stop, 3-Economy	0-Not used	R/W	
22	21 [0x15]	OccupancySensorHVACDelayTime	0...900 min	20 min	R/W	
23	22 [0x16]	Reserve	0...1	0	R/W	
24	23 [0x17]	T2_Effective	-9.9...99°C (-9.9...210°F)	-	R	✸
25	24 [0x18]	T3_Effective	-9.9...99°C (-9.9...210°F)	-	R	✸
26	25 [0x19]	CoolFanOnDelay	0...120 sec	0 sec	R/W	
27	26 [0x1A]	CoolFanOffDelay	0...120 sec	0 sec	R/W	
28	27 [0x1B]	HeatFanOnDelay	0...120 sec	0 sec	R/W	
29	28 [0x1C]	HeatFanOffDelay	0...120 sec	30 sec	R/W	
30	29 [0x1D]	FanSoftStartInHeatCutInTemperature	14...37°C (57...99°F)	36°C (97°F)	R/W	
31	30 [0x1E]	FanSoftStartInHeatCutOutTemperature	12...35°C (54...95°F)	32°C (90°F)	R/W	
32	31 [0x1F]	DifferentialOnOffFanSpeeds	0.3...2°C (0.6...4°F)	0.7°C (1.4°F)	R/W	✸
33	32 [0x20]	CoolDifferentialBand	0.5...5°C (1...9°F)	1°C (2°F)	R/W	✸
34	33 [0x21]	CoolDifferentialBandOffset	-5...5°C (-9...9°F)	0°C (0°F)	R/W	✸
35	34 [0x22]	HeatDifferentialBand	0.5...20°C (1...36°F)	1°C (2°F)	R/W	✸
36	35 [0x23]	HeatDifferentialBandOffset	-5...5°C (-9...9°F)	0°C (0°F)	R/W	✸
37	36 [0x24]	ShiftBetweenCoolAndHeat	0...10°C (0...18°F)	2°C (4°F)	R/W	✸
38	37 [0x25]	ShiftBetweenHeatStages	0...49°C (0...88°F)	2°C (4°F)	R/W	✸

N°	Address Dec [Hex]	Object Name	Value	Default	Access	
39	38 [0x26]	TimeDelayOnNextHeatStage	0...600 sec	5 sec	R/W	
40	39 [0x27]	FreezeProtectionCutInSetpoint	0...10°C (32...50°F)	5°C (41°F)	R/W	✹
41	40 [0x28]	FreezeProtectionCutOutSetpoint	2...12°C (36...54°F)	7°C (45°F)	R/W	✹
42	41 [0x29]	Kp_PIDCool	0...100	100	R/W	
43	42 [0x2A]	Kp_PIDHeat	0...100	100	R/W	
44	43 [0x2B]	Ki_PIDCool	0...100	0	R/W	
45	44 [0x2C]	Ki_PIDHeat	0...100	0	R/W	
46	45 [0x2D]	Kd_PIDCool	0...100	1	R/W	
47	46 [0x2E]	Kd_PIDHeat	0...100	1	R/W	
48	47 [0x2F]	OutputsThresholdTimeCool	0...100 sec	60 sec	R/W	
49	48 [0x30]	OutputsThresholdTimeHeat	0...100 sec	60 sec	R/W	
50	49 [0x31]	CoolValveProportionalBand	1...10°C (2...18°F)	2°C (4°F)	R/W	✹
51	50 [0x32]	CoolProportionalLowLimit	0...100%	0%	R/W	
52	51 [0x33]	CoolProportionalHighLimit	0...100%	100%	R/W	
53	52 [0x34]	HeatValveProportionalBand	1...10°C (2...18°F)	2°C (4°F)	R/W	✹
54	53 [0x35]	HeatProportionalLowLimit	0...100%	0%	R/W	
55	54 [0x36]	HeatProportionalHighLimit	0...100%	100%	R/W	
56	55 [0x37]	ProportionalOnPercent	0...30%	30%	R/W	
57	56 [0x38]	ProportionalOffPercent	0...20%	10%	R/W	
58	57 [0x39]	CoolVFSProportionalBand	1...10°C (2...18°F)	2°C (4°F)	R/W	✹
59	58 [0x3A]	HeatVFSProportionalBand	1...10°C (2...18°F)	2°C (4°F)	R/W	✹
60	59 [0x3B]	CoolVFSLowSpeedPercent	0...30%	20%	R/W	
61	60 [0x3C]	CoolVFSMediumSpeedPercent	30...60%	50%	R/W	
62	61 [0x3D]	CoolVFSHighSpeedPercent	60...100%	90%	R/W	
63	62 [0x3E]	HeatVFSLowSpeedPercent	0...30%	30%	R/W	
64	63 [0x3F]	HeatVFSMediumSpeedPercent	30...60%	50%	R/W	
65	64 [0x40]	HeatVFSHighSpeedPercent	60...100%	80%	R/W	
66	65 [0x41]	VFSMediumSpeedDiff	10...50%	35%	R/W	
67	66 [0x42]	VFSHighSpeedDiff	10...50%	35%	R/W	
68	67 [0x43]	CoolVFSLowLimit	0...100%	0%	R/W	
69	68 [0x44]	CoolVFSHighLimit	0...100%	100%	R/W	
70	69 [0x45]	HeatVFSLowLimit	0...100%	0%	R/W	
71	70 [0x46]	HeatVFSHighLimit	0...100%	100%	R/W	
72	71 [0x47]	ModbusBaudRate	0-9600, 1-19200, 2-38400, 3-76800 4-115200	0-9600	R/W	
73	72 [0x48]	DipSwitchesState	0...65535	-	R	
74	73 [0x49]	Heat1	1-On, 0-Off	-	R	
75	74 [0x4A]	Heat2	1-On, 0-Off	-	R	
76	75 [0x4B]	FanIndication	1-On, 0-Off	-	R	
77	76 [0x4C]	Cool1(cool/heat valve)	1-On, 0-Off	-	R	
78	77 [0x4D]	FanOnOffLow	1-On, 0-Off	-	R	
79	78 [0x4E]	FanOnOffMedium	1-On, 0-Off	-	R	
80	79 [0x4F]	FanOnOffHigh	1-On, 0-Off	-	R	
81	80 [0x50]	PumpOut	1-On, 0-Off	-	R	
82	81 [0x51]	DI_1	1-Close, 0-Open (if polarity=0)	-	R	
83	82 [0x52]	DI2_OccupancySensor	If polarity=1: 1-Open (Occupied), 0-Close (Unoccupied).	-	R	
84	83 [0x53]	DI_3	1-Close, 0-Open (if polarity=0)	-	R	
85	84 [0x54]	DI_4	1-Close, 0-Open (if polarity=0)	-	R	

N°	Address Dec [Hex]	Object Name	Value	Default	Access	
86	85 [0x55]	OnOff	1-On, 0-Off	0-Off	R/W	
87	86 [0x56]	AutoFanInCool	1-Enable, 0-Disable	0-Disable	R/W	
88	87 [0x57]	AutoFanInHeat	1-Enable, 0-Disable	1-Enable	R/W	
89	88 [0x58]	C_F_Scale	1-Celsius, 0-Fahrenheit	1-Celsius	R/W	
90	89 [0x59]	LockFan	1-Lock, 0-Unlock	0-Unlock	R/W	
91	90 [0x5A]	LockMode	1-Lock, 0-Unlock	0-Unlock	R/W	
92	91 [0x5B]	LockOnOff	1-Lock, 0-Unlock	0-Unlock	R/W	
93	92 [0x5C]	LockSetpoint	1-Lock, 0-Unlock	0-Unlock	R/W	
94	93 [0x5D]	DI1_Polarity	1-Normally close, 0-Normally open	0-Normally open	R/W	
95	94 [0x5E]	DI2_Polarity	1-Normally open, 0-Normally close	1-Normally open	R/W	
96	95 [0x5F]	DI3_Polarity	1-Normally close, 0-Normally open	0-Normally open	R/W	
97	96 [0x60]	DI4_Polarity	1-Normally close, 0-Normally open	0-Normally open	R/W	
98	97 [0x61]	One_TwoSetpoints	0-one setpoint, 1-two setpoints	0-one setpoint	R/W	
99	98 [0x62]	AutoModeEnable	1-Enable, 0-Disable	1-Enable	R/W	
100	99 [0x63]	UnoccupiedByNetwork	1-Unoccupied, 0-Off	0-Off	R/W	
101	100 [0x64]	TemperatureOverrideEnable	1-Enable, 0-Disable	0-Disable	R/W	
102	101 [0x65]	ViewFloatValue	1-View, 0-Off	1-View	R	
103	102 [0x66]	RestoreDefault	1-Restore, 0-Off	0-Off	R/W	
104	103 [0x67]	DisableOccupancySensor	0- Enable Occ. sensor, 1- Disable Occ. sensor	0	R/W	
105	104 [0x68]	SelectModeInFCByDI3Enable	1- Enable select mode by DI3 input: DI3 open = COOL, DI3 Close = HEAT. 0- Disable this function	0	R/W	
106	105 [0x69]	FreezeProtectionEnable	1-Enable, 0-Disable	1-Enable	R/W	
107	106[0x6A]	AlarmsFaults	0…65535 Bit0 - Alarm_FreezeProtection; Bit1 - Alarm_DeiceInCool; Bit2 - Alarm_DeiceInHeat; Bit3 - Alarm_OverHeatInCool; Bit4 - Alarm_OverHeatInHeat; Bit5 - AlarmT1; Bit6 – AlarmT2; Bit7 – AlarmT3; Bit8– Not in use; Bit9– Not in use; Bit10– AlarmByDI1_input; Bit11– FaultByDI2_input; Bit12– Not in use; Bit13– Alarm_FanOffBySoftStart; Bit14– Alarm_CoolValveInterlock; Bit15– Not in use.	0	R	

** None mode (dead band in 2-pipe): in 2-pipe configuration the T2 sensor is connected and measures temperature in range 20°C <T2<30°C. While None mode, the Cool and Heat outputs are off, Fan outputs works according to Auto fan state (see registers 85,86).

As required by BACnet/BTL, the Present_Value property of all AO# / BO# objects must be writable. To ensure the safe operation of the thermostat, writing to the Present_Value of AO# / BO# objects over the network does not alter the actual physical outputs.
In other words, a network-overridden Present_Value is reflected in the BACnet object, but the thermostat's outputs remain under internal algorithmic control.
When a Relinquish Default command is issued, the Present_Value of all AO# / BO# objects reverts to showing the algorithmically computed value.

The Modbus registers that correspond to analog/digital outputs can also be overridden via the network, but they immediately revert to the algorithm-controlled values.

Revisions				
No	Date	File	Changes	By
1	15-Jan-2024	23421308.hex Build 5563	Original Object list Miga/C/FC based on Miga/C/MSC	S. Lukin
2	08-Dec-2025		Added a note about the writability of the Present Value of BACnet #AO and #B0 objects and of the corresponding Modbus registers.	B. Veikhman