Object List

VAV01-MOD-ECO

VAV released on controller PIC18F46K22.

MODBUS RTU Mode, Address Slave 1-247, Maximum Time Out for reply = 200 ms,
Baud rate= 9600, 19200, 38400. Default = 9600. No parity, 8 bits, 1 stop.
VAV supports only one type of data - Holding registers, signed Integer 16 bit word.

Supported command: 0x03 = Read Holding Registers
0x06 = Write Single Register
0x10 = Write Multiple Registers
0x2B = Read Device Identification (Basic = 0x01, Regular = 0x02)

Function 0x2B (Encapsulated Interface Transport)

MEI Type 0x0E (Read Device Identification)

Read Dev ID code 0x01 (request to get the Basic Device Identification)

ObjectId	Object Name / Description	Type	M/O	Category
0x00	VendorName	ASCII String	**Mandatory**	**Basic**
0x01	ProductCode	ASCII String	**Mandatory**	**Basic**
0x02	MajorMinorRevision	ASCII String	**Mandatory**	**Basic**

VendorName = " Meitav-Tec Ltd "
ProductCode = " 22197201.4804 "
MajorMinorRevision = "" 22197201"

Function 0x2B (Encapsulated Interface Transport)

MEI Type 0x0E (Read Device Identification)

Read Dev ID code 0x02 (request to get the Regular Device Identification)

ObjectId	Object Name / Description	Type	M/O	Category
0x03	VendorUrl	ASCII String	Optional	**Regular**
0x04	ProductName	ASCII String	Optional	**Regular**
0x05	ModelName	ASCII String	Optional	**Regular**
0x06	UserApplicationName	ASCII String	Optional	**Regular**

VendorUrl = "www.meitavtec.com"
ProductName = "VAV01-MOD-ECO"
ModelName = "22197201.4804"
UserApplicationName = "VAV01-MOD-ECO"

N°	Address	Value	Description	Default	Remarks
1	0x0000***	7...32°C	T_AmbientTemperature		Read only***
2	0x0001	0...100%	DamperIndication		Read only
3	0x0002	0...65535	Reserve	0	Not in use
4	0x0003	0...65535	Reserve	0	Not in use
5	0x0004	0...65535	Reserve	0	Not in use
6	0x0005	3 - Auto	Mode	3 - Auto	Read only
7	0x0006	10...30°C	SetPoint	22°C	Read/Write
8	0x0007	10...30°C	SetPointEffective	22°C	Read only
9	0x0008	10...30°C	SetPointLimitCool	10°C	Read/Write
10	0x0009	10...30°C	SetPointLimitHeat	30°C	Read/Write
11	0x000A	-6...6°C	T_AmbientCalibration	0°C	Read/Write
12	0x000B	0	Reserve	0	Not in use
13	0x000C	0...50	CoolDeadZone	5	Multiple by 0.1°C Read/Write
14	0x000D	2...10°C	DamperProportional Band	2°C	Read/Write
15	0x000E	0...100%	DamperLow_limit	0%	Read/Write
16	0x000F	0...100%	DamperHighLimit	100%	Read/Write
17	0x0010	0...50	HeatDeadZone	5	Multiple by 0.1 °C Read/Write
18	0x0011	2...10°C	Reserve	2°C	Not in use
19	0x0012	0...100%	Reserve	0%	Not in use
20	0x0013	0...100%	Reserve	100%	Not in use
21	0x0014	10...600 sec	TimeOpenClose	80 sec	Read/Write
22	0x0015	0...60 sec	ElHeater_Cycle	10 sec	Read/Write
23	0x0016	0...50%	ElHeater_MinOnLimit	5%	Read/Write
24	0x0017	0...20%	ElHeater_MinOffLimit	5%	Read/Write
25	0x0018	0...100%	ElHeater_Value	0%	Read only
26	0x0019	1...10°C	ElHeater_ProportionalBand	2°C	Read/Write
27	0x001A	0	Reserve	0	Not in use
28	0x001B	0	Reserve	0	Not in use
29	0x001C	0…100%	MinDamperMovingTime	4%	Read/Write
30	0x001D	0...100%	DamperPositionInHeat	0%	Read/Write
31	0x001E	0...100 sec	DamperOutThresholdTime	60 sec	Read/Write
32	0x001F	0...255	MacAddDipSw	1	Read only

N°	Object	Value	Description	Default	Remarks
33	0x0020	1-Short, 0-Open	JP2_ShortTimetOccSensor	0	Read only
34	0x0021	1-Short, 0-Open	JP3	0	Read only
35	0x0022	1-Short, 0-Open	JP4	0	Not in use
36	0x0023	1-Short, 0-Open	JP5	0	Read only
37	0x0024	0	Reserve	0	Not in use
38	0x0025***	1-On, 0-Off	Out_G1_LightOff	0	Read only***
39	0x0026***	1-On, 0-Off	Out_ElHeater	0	Read only***
40	0x0027***	1-On, 0-Off	Out_DamperOpen	0	Read only***
41	0x0028***	1-On, 0-Off	Out_DamperClose	0	Read only***
42	0x0029	1-On, 0-Off	OnOff	0	Read/Write
43	0x002A	1-On, 0-Off	LockRoom_Module_All	0	Read/Write
44	0x002B	1-On, 0-Off	LockRoom_Module_SetPoint	0	Read/Write
45	0x002C	1-On, 0-Off	LockRoom_Module_OnOff	0	Read/Write
46	0x002D	1-On, 0-Off	EnableOverrideInputOutput	0	Read/Write
47	0x002E	1-On, 0-Off	RestoreDefaults	0	Read/Write
48	0x002F	1-On, 0-Off	Reserve	0	Not in use
49	0x0030	1-On, 0-Off	Reserve	0	Not in use
50	0x0031	1-On, 0-Off	Reserve	0	Not in use
51	0x0032	1-On, 0-Off	Reserve	0	Not in use
52	0x0033	1-Occupied, 0-Unoccupied	OccupansySensorState (state of input)	0	Read only
53	0x0034	1-Normally Close, 0-Normally Open	OccupancySensorPolarity	0	Read/Write
54	0x0035	1-Disable Occ, 0-Enable Occ	DisableOccupancySensor	0	Read/Write
55	0x0036	0…3600 sec	TimeSwitchingToUnOccupied	1200 sec	Read/Write
56	0x0037	1-Unoccupied, 0-Occupied	UnOccupancy (logic state after time delay)	0	Read only
57	0x0038	0…3 0 – On/Off, 1 - Start/Stop, 2 - Light Only, 3 – Economy (change set points)	UnOccupancyModeSelect	0	Read/Write
58	0x0039	0…100% Position of Damper in unoccupied state	ECODamperPosition	30%	Read/Write
59	0x003A	0 – integer values, 1 – float values.	ViewFloatValue	1	Read/Write
60	0x003B	0 – Off (light state may be On or Off), 1 – On (light turned off)	BV_LightOff	0	Read/Write
61	0x003C	0 – 9600; 1 - 19200; 2 - 38400	Baud Rate	0 (9600)	Read/Write

***-writable only if the value of register 46 (“EnableOverrideInputOutput”) is equal to 1.
Attention! Writing to the registers 38…41*** must be used only for the commissioning purpose. At the end of commissioning the technician must make Restore Default procedure – write “1” to register 47

("RestoreDefault").
Register 1*** has range -32655…32655 during override.

While register 59 ("ViewFloatValue") is "1", all the registers of units °C are presented in format Integer (Real value * 10, Meitav-tec OEM "floating point" format).

Read value examples:

Register 1 "T1_RoomTemperature = 221" represents real value = 22.1°C.
Register 7 "SetPoint = 150" represents real value = 15.0°C.
Register 13 "DeadZoneForCool = 10" represents value = 1 * 0.5 °C = 0.5°C

Write value examples:

To write 20°C to "SetPoint", send value 200 to Register 7.
To write 1.5 °C to "CoolDeadZone", send value = 3 * 10 = 30 to Register 13.

The "range" value for the "Reserve" registers is formal and could be ignored.