VMD-02RPS66 VMD-02RPS78
Modbus Registers Overview

Revision History

Rev.	Date	Author	Description
1	March 24, 2020	Henk Aarts	Initial document created from ModBus Registers Overview VMD-02RPS54 v4
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Node Info Values

All registers in the range 40000 up to 40999 as descripted inside the remote access document chapter Node Info are supported.

The following table shows the device specific values.

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
40002 **40003**	R-	***Product Type + Sub ID + Manufacturer ID*** VMD-02RPS66 0x0001C88E VMD-02RPS78 0x0001C892	-	UINT32	Yes
40005	R-	***OEM number*** 6Ah	-	UINT8	Yes
40011- **40020**	R-	***String to identify the product*** VMD-02RPS78 VMD-02RPS66	-	STRING	Yes
40101	R-	***RF Communication status*** 0 = No Error 1 = Error (no communication for at least 30 minutes)	-	UINT16	Yes
40102	R-	***Battery Status*** FFFFh (no battery)	-	UINT16	Yes
40103	R-	***Fault status*** 0 = Fan ok 1 = Fan failure	-	UINT8	Yes

Supported binding

- Outgoing binding (from BRDG to product)

Device Specific Holding Registers

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached

41000	R-	***Actual Ventilation speed*** 0 = OFF 1 = Speed 1, low 2 = Speed 2, medium 3 = Speed 3, high 11 = Speed 1 temporary override, timer 12 = Speed 2 temporary override, timer 13 = Speed 3 temporary override, timer 21 = Absolute minimum speed, away 23 = Absolute maximum speed, boost 24 = Auto mode	UINT8	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41001	R-	***Actual Exhaust Fan speed*** 0 = Off 200 = Highest speed. FFh = Not available	%	UINT8	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41002	R-	***Actual Inlet Fan speed*** 0 = Off 200 = Highest speed. FFh = Not available	%	UINT8	Yes
41003	R-	***Error Code*** 0 No fault 1 Nonspecific fault 2 Emergency stop 3 Fan 1 supply error 4 X22 sensor error 5 X23 sensor error 6 X21 sensor error 7 X20 sensor error 8 Fan 2 error 254 Binding mode active 255 Device identification active	-	UINT8	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41004	R-	***Remaining Time Temporary override*** Note: this value is only valid when the actual Ventilation speed equals 11, 12, or 13	Min	UINT16	Yes
41005-41006	R-	***Indoor Temperature*** Value equals NAN when there is no known outdoor temperature available A value below -273°C indicates there is problem with the sensor	°C	FLOAT	Yes
41007-41008	R-	***Outdoor Temperature*** Value equals NAN when there is no known outdoor temperature available A value below -273°C indicates there is problem with the sensor	°C	FLOAT	Yes
41009-41010	R-	***Exhaust Temperature*** Value equals NAN when there is no known outdoor temperature available A value below -273°C indicates there is problem with the sensor	°C	FLOAT	Yes
41011-41012	R-	***Supply Temperature*** Value equals NAN when there is no known outdoor temperature available A value below -273°C indicates there is problem with the sensor	°C	FLOAT	Yes
41013	R-	***Preheater*** 0% = Preheater off 100% = Pre heater maximum EFh = Not available	%	UINT8	Yes
41014	R-	***Filter Dirty*** 0 = Filter OK 1 = Filter dirty	-	UINT8	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41015	R-	***Defrost*** 0 = Defrost inactive 1 = Defrost active	-	UINT8	Yes
41016	R-	***Bypass position*** *0% = closed* *100% = Open* *Note: Values above 120% indicates an error*	%	UINT8	Yes
41017	R-	***Indoor Humidity*** EFh = not available F0h = shorted sensor F1h = open sensor F2h = not available error F3h = out of range high F4h = out of range low F5h = not reliable F6h-FEh = reserved error FFh = non-specified error	%	UINT8	No

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41018	R-	***Outdoor Humidiy*** EFh = not available F0h = shorted sensor F1h = open sensor F2h = not available error F3h = out of range high F4h = out of range low F5h = not reliable F6h-FEh = reserved error FFh = non-specified error Note: Value = EFh Not available in VMD-02RPS78 and VMD-0RPS66	%	UINT8	Yes
41019 **41020**	R-	***Inlet Flow Level*** Special values: 7FFFh: Not Available 8000h-85FFh: sensor error Note: Value = 7FFFh Not available in VMD-02RPS78 and VMD-0RPS66	m^3/h	Float	Yes
41021 **41022**	R-	***Exhaust Flow Level*** Special values: 7FFFh: Not Available 8000h-85FFh: sensor error Note: Value = 7FFFh Not available in VMD-02RPS78	m^3/h	Float	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41023	R-	***Air Quality*** 0% = Poor 100% = Excellent EFh = Not available Note: Value = EFh Not available in VMD-02RPS78 and VMD-0RPS66	%	UINT8	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41024	R-	***Air Quality Basis*** bit 0: VOC based bit 1: CO2 based bit 2: Rh based Note: Value = 0 Not available in VMD-02RPS78 and VMD-0RPS66	-	UINT8	Yes
41025	R-	***CO2 level*** Special values: 7FFFh: Not Available 8000h-FFFFh: sensor error	ppm	UINT16	Yes
41026	R-	***Post Heater*** 0% = Post heater off 100% = Post heater maximum EFh = Not available	%	UINT8	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41027	R-	***Ventilation Speed Capable bits*** bit 0: PreHeaterAvailable bit 1: PostHeaterAvailable bit 2: Reserved bit 3: Night capable bit 4: Speed10Capable bit 5: Speed9Capable bit 6: Speed8Capable bit 7: Speed7Capable bit 8: Speed6Capable bit 9: Speed5Capable bit 10: Speed4Capable bit 11: Auto capable bit 12: Boost capable bit 13: Timer capable bit 15: OFF capable	-	UINT16	Yes
41040	R-	***Air Filter Time Remaining*** Time left before the air filter should be cleaned or renewed Note: reading this register triggers a query of Air filter duration and time percent	Days	UINT16	Yes
41041	R-	***Air Filter Timer Duration*** Time interval on which the air filter should be cleaned or renewed	Days	UINT16	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41042	R-	***Air Filter Time Percent*** Percent of time before the air filter should be cleaned or renewed	%	UINT8	Yes

RF Node Registers (control)

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
41500	RW	***Requested system ventilation speed*** 0 = OFF 1 = Absolute minimum speed, away 2 = Speed 1, low 3 = Speed 2, nominal 4 = Speed 3, high 5 = Auto mode 7 = Absolute maximum speed, boost Note: the value returned by reading is the BRDG internal value and not the value from the fan.	-	UINT8	Yes
41501	-W	***Override Time speed 1*** When this value is written the fan automatically switches over to Speed 1 Temporary override mode. Note: maximum allowed amount of hours is 18	Min	UINT16	No
41502	-W	***Override Time speed 2*** When this value is written the fan automatically switches over to Speed 2 Temporary override mode. Note: maximum allowed amount of hours is 18	Min	UINT16	No
41503	-W	***Override Time speed 3*** When this value is written the fan automatically switches over to Speed 3 Temporary override mode Note: maximum allowed amount of hours is 18	Min	UINT16	No

RF Node Registers (settings)

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
42000	-W	***Reset Air Filter Timer*** Value 0 resets filter timer	-	UINT8	No
42001	RW	***Standby speed supply*** Min :0 % Max: 40 % Note: Setting Tag 61	%	UINT8	Yes
42002	RW	***Standby speed exhaust*** Min :0 % Max: 40 % Note: Setting Tag 62	%	UINT8	Yes
42003	RW	***Low speed supply*** Min :0 % Max: 80 % Note: Setting Tag 63	%	UINT8	Yes
42004	RW	***Low speed exhaust*** Min :0 % Max: 80 % Note: Setting Tag 64	%	UINT8	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
42005	RW	***Medium speed supply*** Min :0 % Max: 100 % Note: Setting Tag 65	%	UINT8	Yes
42006	RW	***Medium speed exhaust*** Min :10 % Max: 100 % Note: Setting Tag 66	%	UINT8	Yes
42007	RW	***High speed supply*** Min :0 % Max: 100 % Note: Setting Tag 67	%	UINT8	Yes
42008	RW	***High speed exhaust*** Min :10% Max: 100 % Note: Setting Tag 68	%	UINT8	Yes
42009 **42010**	RW	***Frost protection pre-heater setpoint*** Min :-20 °C Max: 50 °C Note: Setting Tag 39	°C	FLOAT	Yes

Reg No.	Read Write	Function / Name value	Unit	Data Type	Cached
42011 **42012**	RW	***Pre-heater setpoint*** Min :-20 °C Max: 50 °C Note: Setting Tag 46	°C	FLOAT	Yes
42013 **42014**	RW	***Free ventilation heating setpoint*** Min : 0 °C Max: 30 °C Note: Setting Tag 117	°C	FLOAT	Yes
42015 **42016**	RW	***Free ventilation cooling offset*** Min 1 K Max: 10 K Note: Setting Tag 132	K	FLOAT	Yes