



RF-RS485

Manual

SUMMARY

1 CONNECTIONS	4
2 LEDS.....	4
3 SPECIFICATIONS	5
4 MODBUS REGISTERS	6

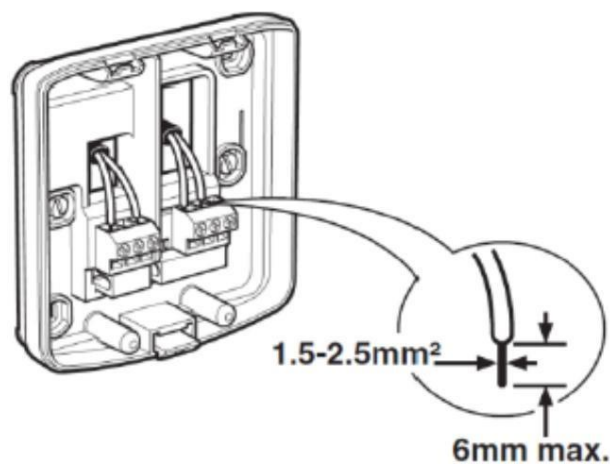


The use of this product is not authorized for persons, including minors, with reduced intellectual capacities, with limited physical capacities or with a lack of experience and the necessary knowledge, unless they are under the supervision or have received by from a person responsible for your safety the necessary instructions in order to use the Central.



In any case, children should be checked to ensure that they do not play with the product.

1-CONNECTIONS



P= Power: 5-24 VAC/VDC

Tolerance: 5 VDC -0%, 24 VAC +20%

G= Earth

A= Signal A RS485

B= Signal B RS485

2-LED'S

The device has a button and 2 LEDs.

The button is used to reset the device to factory defaults, if pressed for 10 seconds, as well as to initiate and accept communications with another RF device.

The LEDs indicate if the device is on (Green LED) and if it has an error (Red LED).



3-SPECIFICATIONS

Dimensions	92mm x 90mm x 31mm (Height x Width x Depth)
Weight	90 grams
Power	Power 5-24VAC/VDC Tolerance 5 VDC -0%, 24 VAC +20%
Environment	Operating temperature: 0-45°C Storage temperature: -20 to 55°C Operating humidity: 10-90% (non-condensing) Storage humidity: 10-95% (no condensation)
Compliant with regulations	EMC directive: 2014/30/EU LVD directive: 2014/35/EU RED directive: 2014/53/EU ROHS directive: 2011/65/EC WEEE directive: 2012/19/EU

4-MODBUS REGISTERS

Node Information Values

All registers in the range 40000 to 40999 are supported, as described in the remote access document in the node information chapter.

The following table shows the device specific values.

REGISTRATION	READING / WRITING	FUNCTION / NAME	UNIT	DATA	CACHE
40101	READING	RF COMMUNICATION STATUS 0 = NO ERROR 1 = ERROR (no communication for at least 30 minutes)	-	UINT16	YES
40102	READING	BATTERY STATUS FFFFh (no battery)	-	UINT16	YES
40103	READING	FAILURE STATUS 0 = Fan ok 1 = Fan fault	-	UINT8	YES
41000	READING	FAN SPEED IN PROGRESS 0 = OFF 1 = Speed 1, low 2 = Speed 2, medium 3 = Speed 3, high 11 = Temporary speed override 1, timer 12 = Speed 2 temporary override, timer 13 = Speed 3 temporary override, timer 21= Absolute minimum speed, away 23 = Absolute maximum speed, boost 24 = Automatic mode	-	UINT8	YES

REGISTRATION	READING / WRITING	FUNCTION / NAME	UNIT	DATA	CACHE
41003	READING	ERROR CODE 0 no fault 1 Nonspecific failure 2 emergency stop 3 Fan 1 power failure 4 Sensor error X22 5 Sensor error X23 6 Sensor error X21 7 Sensor error X20 8 Fan 2 error 254 Binding mode active 255 Device identification active	-	UINT8	YES
41004	READING	TIME REMAINING TEMPORARY OVERRIDE Note: This value is only valid when the actual fan speed is equal to 11, 12 or 13.	min	UINT 16	YES
41005-41006	READING	INSIDE TEMPERATURE The value is equal to NAN when no known outside temperature is available. A value lower than -273 °C indicates that there is a problem with the sensor.	°C	FLOAT	YES
41007-41008	READING	OUTSIDE TEMPERATURE The value is equal to NAN when no known outside temperature is available. A value below -273°C indicates that there is a problem with the sensor.	°C	FLOAT	YES
41009-41010	READING	AIR OUTLET TEMPERATURE The value is equal to NAN when no known outside temperature is available. A value below -273°C indicates that there is a problem with the sensor.	°C	FLOAT	YES
41011-41012	READING	SUPPLY TEMPERATURE The value is equal to NAN when no known outside temperature is available. A value below -273°C indicates that there is a problem with the sensor.	°C	FLOAT	YES

REGISTRATION	READING / WRITING	FUNCTION / NAME	UNIT	DATA	CACHE
41013	READING	PREHEATER 0% = Preheater off 100% = Preheater Maximum EFh = Not available	%	UINT8	YES
41014	READING	DIRTY FILTER 0 = Filter Ok 1 = dirty filter	-	UINT8	YES
41015	READING	DEFROST 0 = Defrost inactive 1 = Defrost active	-	UINT8	YES
41016	READING	BYPASS OPTION 0% = Closed 100% = Open Note: Values greater than 120% indicate a mistake.	%	UINT8	YES
41017	READING	INDOOR HUMIDITY EFh = Not available F0h = Sensor shorted F1h = Sensor open F2h = Error not available F3h = Out of Range High F4h = Out of Range Low F5h = Unreliable F6h-FEh = Error Reserved FFh = Unspecified error	%	UINT8	YES
41018	READING	outdoor humidity EFh = not available F0h = sensor shorted F1h = sensor open F2h = error not available F3h = out of range high F4h = out of range low F5h = unreliable F6h = reserved error FEh = reserved error FFh = unspecified error Note: Value = EFh Not available on VMD 02RPS78 and VMD-0RPS66	%	UINT8	YES

REGISTRATION	READING / WRITING	FUNCTION / NAME	UNIT	DATA	CACHE
41019-41020	READING	INPUT FLOW LEVEL Special values: 7FFFh: Not available 8000h-85FFh: Sensor error Note: Value = 7FFFh Not available in VMD-02RPS78 and VMD-0RPS66	m3/h	FLOAT	Yes
41021-41022	READING	OUTLET FLOW LEVEL Special values: 7FFFh: Not available 8000h-85FFh: Sensor error NOTE: Value = 7FFFh Not available in VMD 02RPS78	m3/h	FLOAT	YES
41023	READING	AIR QUALITY 0% = Poor 100% = Excellent EFh = Not available Note: Value = EFh Not available on VMD 02RPS78 and VMD-0RPS66	%	UINT8	YES
41024	READING	BASIS OF AIR QUALITY bit 0: based on VOC bit 1: based on CO2 bit 2: Rh-based Note: Value = 0 Not available on VMD-02RPS78 and VMD-0RPS66	-	UINT8	YES
41025	READING	CO2 LEVEL Special values: 7FFFh: Not available 8000h-FFFFh: sensor error	PPM	UINT16	YES
41026	READING	AFTER HEATER 0% = Post heater off 100% = Heater Maximum EFh = Not available	%	UINT8	YES

REGISTRATION	READING / WRITING	FUNCTION / NAME	UNIT	DATA	CACHE
41027	READING	FAN SPEED BITS bit 0: PreHeaterAvailable bit 1: PostHeaterAvailable bit 2: Reserved bit 3: night capacity bit 4: Speed10 Capable bit 5: Speed9Capable bit 6: Speed8Capable bit 7: Speed7Capable bit 8: Speed6Capable bit 9: Speed5Capable bit 10: Speed4Capable bit 11: Self capable bit 12: Boost Capability bit 13: suitable for timer bit 15: Suitable for OFF	-	UINT16	YES
41040	READING	AIR FILTER TIME REMAINING Time left to clean or renew the air filter. Note: Reading this log triggers a query of the air filter duration and percentage of time	Days	UINT16 airNote: the reading of this Registration	YES
41041	READING	FILTER TIMER DURATION OF AIR Time interval in which the air filter must be cleaned or renewed.	Days	UINT16	YES
41042	READING	AIR FILTER TIME PERCENTAGE Percentage of time before the air filter needs to be cleaned or renewed	%	UINT8	YES
41500	READING AND WRITING	SYSTEM FAN SPEED REQUESTED 0 = OFF 1 = Absolute minimum speed, absent 2 = Speed 1, low 3 = Speed 2, rated 4 = Speed 3, high 5 = Automatic mode 7 = Absolute maximum speed, boost Note: the value returned by the read is the internal value of BRDG and not the value of the fan	-	UINT8	YES

REGISTRATION	READING / WRITING	FUNCTION / NAME	UNIT	DATA	CACHE
41501	WRITING	VERRIDE SPEED 1 TIME When this value is entered, the fan automatically goes into override mode temporary speed 1. Note: the maximum number of hours allowed is 18	min	UINT16	NO
41502	WRITING	VERRIDE SPEED 2 TIME When this value is entered, the fan automatically goes into override mode temporary speed 2. Note: the maximum number of hours allowed is 18	min	UINT16	NO
41503	WRITING	VERRIDE SPEED 3 TIME When this value is entered, the fan automatically goes into override mode temporary speed 3. Note: the maximum number of hours allowed is 18	min	UINT16	NO
42000	WRITING	RESET AIR FILTER TIMER AIR Value 0 restarts the filter timer	-	UINT8	NO
42001	READING AND WRITING	STANDBY SPEED SUPPLY Minimum :0% Maximum: 40% Note: Label setting 61	%	UINT8	YES
42002	READING AND WRITING	ESCAOE OF THE STANDBY SPEED Minimum :0% Maximum: 40% Note: Label setting 62	%	UINT8	YES
42003	READING AND WRITING	LOW SPEED SUPPLY Minimum :0% Maximum: 80% Note: Label setting 63	%	UINT8	YES
42004	READING AND WRITING	low speed exhaust Minimum :0% Maximum: 80% Note: Label setting 64	%	UINT8	YES

REGISTRATION	READING / WRITING	FUNCTION / NAME	UNIT	DATA	CACHE
42005	READING AND WRITING	MEDIUM SPEED SUPPLY Minimum :0% Maximum: 100%. Note: Tag Setting 65	%	UINT8	YES
42006	READING AND WRITING	MEDIUM SPEED EXHAUST Minimum: 10%. Maximum: 100%. Note: Label setting 66	%	UINT8	YES
42007	READING AND WRITING	HIGH SPEED SUPPLY Minimum :0% Maximum: 100%. Note: Label setting 67	%	UINT8	YES
42008	READING AND WRITING	HIGH SPEED EXHAUST Minimum: 10%. Maximum: 100%. Note: Tag setting 68	%	UINT8	YES
42009- 42010	READING AND WRITING	PREHEATER SET VALUE PROTECTION AGAINST FROST Minimum: -20°C Maximum: 50°C Note: Label setting 39	°C		YES
42011- 42012	READING AND WRITING	PREHEATER SET VALUE Minimum: -20°C Maximum: 50°C Note: Label setting 46	°C		YES
42013- 42014	READING AND WRITING	HEATING SETPOINT FREE VENTILATION Minimum: 0°C Maximum: 30°C Note: Label setting 117	°C		YES
42015- 42016	READING AND WRITING	COOLING COMPENSATION BY FREE VENTILATION Minimum 1K Maximum: 10K Note: Label setting 132	°K		YES

Environmentally efficient ventilation and air treatment systems



Cyber Zone, SL
Factory and Central Offices:
Post Office Box n. 9 C/ Can
Macia n. 2 08520 Les
Franqueses del Vallès Barcelona-
Spain

Tel. 902 02 72 14
Int. 00 34 938 616 261
Fax. 902 02 72 16 Ext.
00 34 937 814 108
siber@siberzone.es
www.siberzone.es

The total or partial reproduction of the content of this publication is prohibited without the express consent of the owner.

Siber Zone, SL reserves the right to make any technical changes to the equipment and elements without prior notice.

VERSION 1