

TECHNICAL FEATURES

Electrical features	
Power supply	230 Vac, 50-60 Hz 24 Vdc
Power consumption	< 3.5 VA @ 230 Vac < 3.5 W @ 24 Vdc
Communication	
Type of communication	IEEE 802.15.4. ISM 2.4 GHz
Transmission power	10 mW (10dBm)
Reception sensibility	-100 dBm
Range	Indoor/Urban: 60 m maximum, 30 m typically Outdoor/Line-of-sight: 750 m maximum, 200 m typically
Measurement	
Maximum speed	200 km/h, 124 mph o 55.5 m/s
Accuracy	+/-2 %
Analogue output	
Type	Intensity, 4-20mA
Max. connectable impedance	500 Ω
Analogue output accuracy	1.5 %
Relay alarm	4 A, 250 Vac (Dry contacts)
General features	
Dimensions	See drawings
Weight	350 g
Storage temperature	-35°C +70°C
Working temperature	-20°C +70°C
IP Protection	IP50
EMC	EN 61000-6-2:2001 EN 55022:2001, Class B

REFERENCES

References (wind sensor and emitter included)	
0103012001	SET ANEMO4403 V3 + RF MODULE V3 FB + WM44-P V3 RF 24Vdc
0103012002	SET ANEMO4403 V3 + RF MODULE V3 FB + WM44-P V3 RF 230Vac
0103012005	SET ANEMO4403 V3 + RF MODULE V3 F/SLB + WM44-P V3 RF 24Vdc
0103012006	SET ANEMO4403 V3 + RF MODULE V3 F/SLB + WM44-P V3 RF 230Vac
0103012009¹	SET ANEMO4403 V3 + RF MODULE V3 FB + WM44-P V3 RF RP-SMA 24Vdc
0103012010¹	SET ANEMO4403 V3 + RF MODULE V3 FB + WM44-P V3 RF RP-SMA 230Vac
0103012013¹	SET ANEMO4403 V3 + RF MODULE V3 F/SLB + WM44-P V3 RF RP-SMA 24Vdc
0103012014¹	SET ANEMO4403 V3 + RF MODULE V3 F/SLB + WM44-P V3 RF RP-SMA 230Vac

Displays	
0106030801	WM44-P V3 RF 24Vdc
0106030802	WM44-P V3 RF 230Vac
0106030805¹	WM44-P V3 RF RP-SMA 24Vdc
0106030806¹	WM44-P V3 RF RP-SMA 230Vac
0106030413	WM44-EV011 V3 RF IP65 24Vdc
0106030414	WM44-EV011 V3 RF IP65 230Vac
0106030415¹	WM44-EV011 V3 RF RP-SMAIP65 24Vdc
0106030416¹	WM44-EV011 V3 RF RP-SMA IP65 230Vac

¹References with external antenna connector (antenna included in reference)



WM44-P V3 RF

Anemometer display with alarms.

WM44-P V3 RF has a 3-digit wind speed reading in km/h, mph or m/s. It is configured to work with ANEMO4403 V3 RF + RF MODULE V3. More than one display can work with a Radio-Frequency set. Several devices can communicate each other in the same area with no risk of interaction or interference.

- Wind speed display with 2 alarms
- Only for use with ANEMO4403 V3 RF + RF MODULE V3
- Adjustable pre-alarm and alarm
- RF Communication, according to 802.15.4 standard, 2.4 GHz (worldwide free)
- 4-20mA analogue output



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FEATURES

Alarms

The alarm is triggered when the wind speed value reaches or exceeds the programmed value. It includes a configurable delay to prevent the alarm from being triggered by gusts of winds.

The alarm is deactivated when the wind speed drops below the set value. It also has a configurable delay to prevent the alarm from being deactivated by temporary periods of low-intensity wind.

The activation of ALARM2 deactivates ALARM1. When ALARM2 is activated, the reading will blink to warn about the danger.

Alarms configuration: Activation values, polarity, intermittent or continuous alarm, alarm latching (only ALARM2)

Alarms outputs: Relays. Contacts "NO" and "NC" (ALARM1), contact "NO" (ALARM2). Dry relay contacts.

Wind speed sensors & Communication

For exclusive use with the Anemo 4403 RF / BAT wireless sensor. Twin units share the same DL and MY parameters but exchanged. DL and MY parameters are written in the unit label. The sensor and the WM44-P V3 RF communicate each other through RF 802.15.4 2.4 GHz, that is a worldwide free frequency band.

Default user setting

The setting can be saved as "Default user setting" and can be retrieved when necessary P00 – (3). If no configuration has been saved, the factory configuration can be reset with this process.

Minimum and Maximum wind values recording

WM44-P RF automatically records the minimum and the maximum wind speed value.

To access the programming buttons, insert a flat-headed screwdriver into the groove marked as "Open to program" and lever the front cover out.

Press "ENTER" to see the minimum value and press it again to see the maximum one. After 3 seconds it will automatically display the current wind speed again.

To delete both the maximum and minimum values, press "ESCAPE" for 2 seconds.

Note: Both values are deleted when the power is cut off.

PROGRAMMING

To access the programming buttons, insert a flat-headed screwdriver into the groove marked as "Open to program" and lever the front cover out.

To enter the "Programming Mode" simultaneously press "ENTER" and "ESCAPE" for 2 seconds.

FUNCTIONS OF THE KEYS IN PROGRAMMING MODE

Button	Function
UP	Increases the program steps (P00, P01...), as well as the options or values to be programmed.
DOWN	Decreases the program steps and the options or values to be programmed.
ENTER	Enters the program step which validates options and values and exits the program step.
ESC	Returns to the program steps. Select the digit to be modified within the range.

PROGRAM STEPS

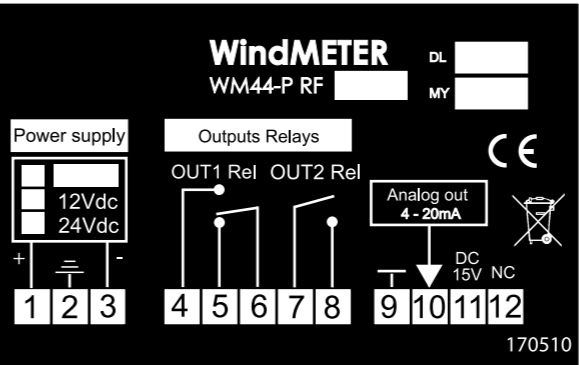
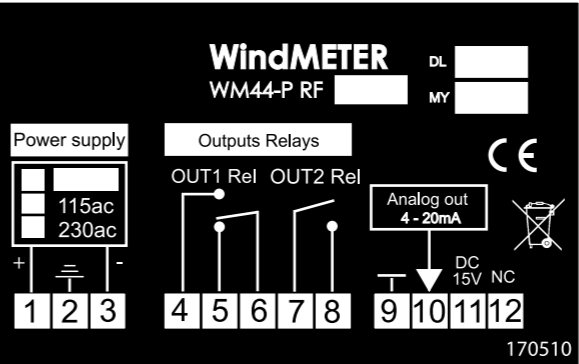
P00	(1) Exit program mode without saving data, (2) Exit program mode saving data, (3) Exit program mode saving data as "preset user configuration", (4) Exit program recovering "preset user configuration" data by pressing "ENTER" for more than 10sec.
P01	(0) Programming in km/h, (1) Programming in mph, (2) Programming in m/s. [0]
P04	ALARM1 (0) Disable, (1) OUT1 Relay closes NO contact, (2) OUT1 Relay opens NO contact. [1]
P05	ALARM1 activation threshold. (1-999). [100]
P06	ALARM1 mode. (0) Continuous mode, (1) Intermittent mode. [1]
P07	ALARM1 time ON in intermittent mode (P06=1). Tenths of a second (1-99). [10]
P08	ALARM1 time OFF in intermittent mode (P06=1). Tenths of a second (1-99). [50]
P09	ALARM2 operation (0) Disable, (1) OUT2 Relay closes contact (2) OUT2 Relay opens contact. [1]
P10	ALARM 2. Same as P05 but for ALARM2. [70] <i>(When this value is exceeded, the displayed value blinks as a warning).</i>
P11	ALARM2. Same as P06 but for ALARM2. [0]
P12	ALARM2. Same as P07 but for ALARM2. [5]
P13	ALARM2. Same as P08 but for ALARM2. [5]
P14	ALARM2 Latch configuration. (0) Non-latching, (1) Latching. [0] <i>(To release a latched alarm, WM44-P RF has to be powered off).</i>
P15	Analogue output configuration. (0) Analog output disabled, (1-999) Introduced value will match maximum analogue output (20 mA). [120]
P16	Timeout data reception. (5-99) Maximum time in seconds without receiving data from Anemo4403 RF. [12] <i>NOTE: timeout should not be less than 9s in battery powered anemometers (Anemo4403 RF BAT)</i>
P17	Alarm status with Timeout error. (0) Alarms deactivation, (1) ALARM1 activation, (2) ALARM2 activation. [2]

P02 and P03 do not exist.

Notas:

- In bold and between brackets "**[x]**", the factory settings.
- Preconfigured factory values in compliance with ITC MIE-AME-2 :
 - Wind speed sensor model: Anemo 4403 RF or Anemo 4403 RF BAT.
 - ALARM1 is triggered at 50km/h, ALARM1 activation closes the relay contact, ALARM1 is intermittent (ton=1sec, toff=5 sec).
 - ALARM2 is triggered at 70km/h. ALARM2 close contacts NO. ALARM2 is continuous.
- Users may program WM44-P RF to comply with local safety regulations.

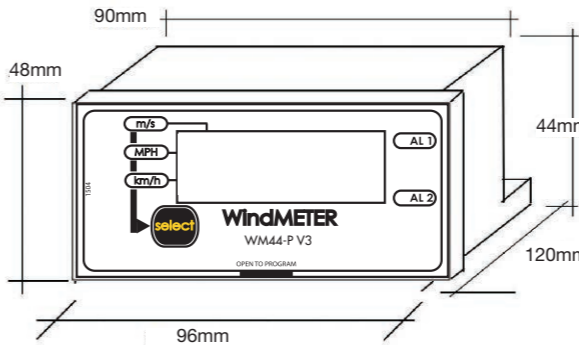
CONNECTION



WM44-P V3 Connections Label

Notes: in DC powered units:
- Terminal 1: +Vdc (12Vdc or 24Vdc)
- Terminal 3: 0V

DIMENSIONS



EXTERNAL ANTENNA RP-SMA

The units with an external connector have been designed for those situations where the display has been installed in a place with a poor RF communication signal. If the display must be installed in a metal box or similar, it will be necessary to use a unit with external antenna. The antenna connector is at the back of the display where all the connectors are.



The units with an external antenna connector (see references) have the antenna included with a 3-meter cable and magnet fixation.



DUAL SETS

The Radio-Frequency sets can communicate with several displays at the same time with no risk of signal loss.

Each and every one of the sets are provided with a display. If the set must communicate with several displays, the purchase request must include the set reference plus the reference/s of the display/s to be added.

The Radio-Frequency sets allow to add any type of RF display