WM44-EVO11

Wind speed and Direction display for outdoor. IP65.

INTRODUCTION

Wind speed and direction display .

For indoor/outdoor installation (IP65).

Graphic Liquid Crystal Display

Wide range of admissible wind sensors

Adjustable wind speed alarms

4-20 mA output

FEATURES

Display

Display in 128x64 pixels Graphic Liquid Crystal Display.

Display speed and wind direction readout with 3 digit resolution.

Programming speed options in km/h, mph or m/s.

Selection of wind speed display between km/h, MPH or m/s anytime pressing select button.

Alarms

The alarm activates when the wind reaches or is over the programmed speed value. An activation delay, configurable by keyboard, is included to avoid false activations.

The alarm deactivates when the wind falls the programmed speed value. A deactivation delay, configurable by keyboard, is also included.

The activation of ALARM 2 deactivates ALARM 1.

When ALARM 2 activates, the reading of the wind blinks to warn of the danger.

Alarm configuration: trigger values, polarity, intermittent or continuos operation, latching option (just ALARM 2).

Alarm output: Relays, Contacts "NO" and "NC" (ALARM 1), contact "NO" (ALARM2) Free voltage contacts.

Anemometer sensors

Supports a wide range of wind sensors.

Pulses anemometers, 4-20mA or RF anemo (just model IED Anemo 4403 RF) supported.

4-20mA wind vanes or WV RF (just model IED WV 4403 RF) supported.

Analogue output

Analogue output 4-20 mA.

Selection of parameter to transmit (wind or direction speed) by keyboard.

Default setting user

The setting can be kept as "Default setting user" and can be recovered when it is desired. P00-(4).

Register of minimum and maximum values

The WM44-EVO11 automatically records the minimum and maximum wind speed.

Press "ENTER" button to display the "Minimum" value and press again to see the "Maximum". After 3 seconds it displays the current screen.

To reset the "Minimum" and "Maximum" press "ESCAPE" for 2 seconds.

Note: both values are cleared by removing the power supply.

PROGRAMMING

To enter "programming mode", simultaneously press "ENTER" and "ESCAPE" for 2 seconds.

Functions of the keys in programming mode

Button	Function
UP	Increase program steps (P00, P01 ..), as well as options or values to be programmed.
DOWN	Decrease program steps and the options or values to be programmed.
ENTER	Enter the program step which validates options and values and exits program step.
ESC	Returns to program steps.

Programs 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) Pressing ”ENTER” for more than 10sec, exit program loading “preset user configuration” data.

P01: Wind sensor selection.(0) Only anemometer, (1) Only wind vane, (2) Anemometer + wind vane. <0>

P02: Anemometer input selection. Only for P01 = 0 and P01 = 2. (0) Pulse input, (1) Input 4-20mA, (2) RF Anemo 4403. <0>

P03: Input Selection wind vane. Only for P01 = 1 and P01 = 2. (0) Input 4-20mA, (1) RF WV4403. <0>

P04: (0) Programming in km / h, (1) Programming MPH, (2) Programming in m / s. <0>

P05: Only for P02 = 0. (0) Anemo4403 v3, (1-999) Reference speed displayed. <0>

P06: Only for P02 = 0 and P05≠ 0. Frequency in Hz necessary to visualize the value programmed in P05.<105>

P07: Only for P02 = 1. Selection of full scale (0) 120km / h, (1) 180km / h. <0

P08: Only for P03 = 0. Selection of full scale in degrees (0-359). <0>

P09: ALARM1. (0) Disabled, (1) Close contact OUT1 NO Rel, (2) Open contact NO OUT1 Rel. <1>

P10: ALARM1. Trigger value (1-999). <50>

P11: ALARM1. Mode. (0) Continuous mode, (1) Intermittent mode. <1>

P12: ALARM1. Only intermittently (P11 = 1). ON alarm time in tenths of seconds (1-99). <10>

P13: ALARM1. Only intermittently (P11 = 1). OFF alarm time in tenths of seconds (1-99). <50>

P14: ALARM1. Activation delay in seconds (0-999). <2>

P15: ALARM1. Deactivation delay in seconds (0-999). <5>

P16: ALARM2. (0) Disabled, (1) Close contact Rel OUT2, (2) Open OUT2 contact Rel. <1>

P17: ALARM 2. As P10 ALARM ALARM1. <70> (when this value is exceeded, displayed value blinks as a warning).

P18: ALARM2. As ALARM1 P11. <0>

P19: ALARM2. As ALARM1 P12. <5>

P20: ALARM2. As ALARM1 P13. <5>

P21: ALARM2. Activation delay in seconds (0-999). <2>

P22: ALARM2. Deactivation delay in seconds (0-999). <5>

P23: ALARM2. Latch configuraion. (0) Non-latching, (1) Latching <0> (Power off to release).

P24: Analog output configuration (0) Disabled, (1) proportional to wind speed, (2) proportional to wind direction. <0>

P25: Value of wind speed / direction corresponding to the maximum analog output (20mA) wind. <120>

P26: Only for P02 = 2 and P03 = 1. Timeout data reception Anemo4403 WV4403 RF and RF. Time (5-99) seconds. <12> NOTE: Timeout should not be less than 9sec in battery powered devices (RF Anemo4403 BAT and BAT WV4403 RF).

P27: Alarm status with timeout error. (0) No active alarm (1) ALARM1 active, (2) ALARM2 active. <2>

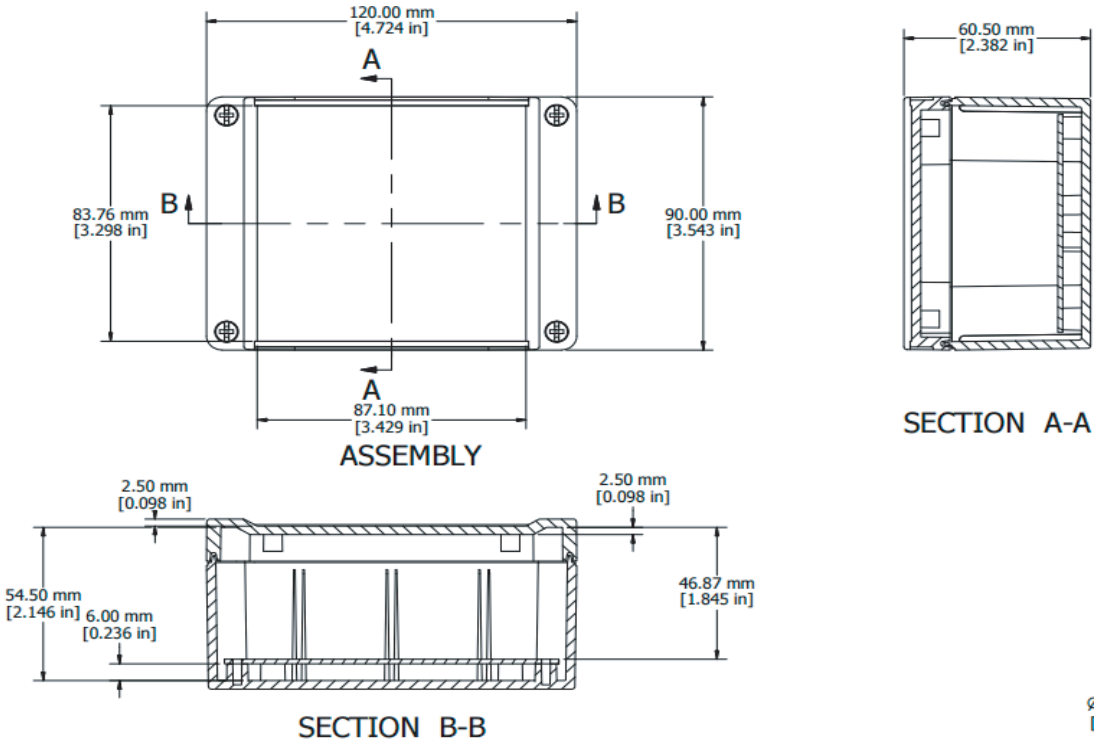
Note:

- in brackets “<>” values configured in factory by default

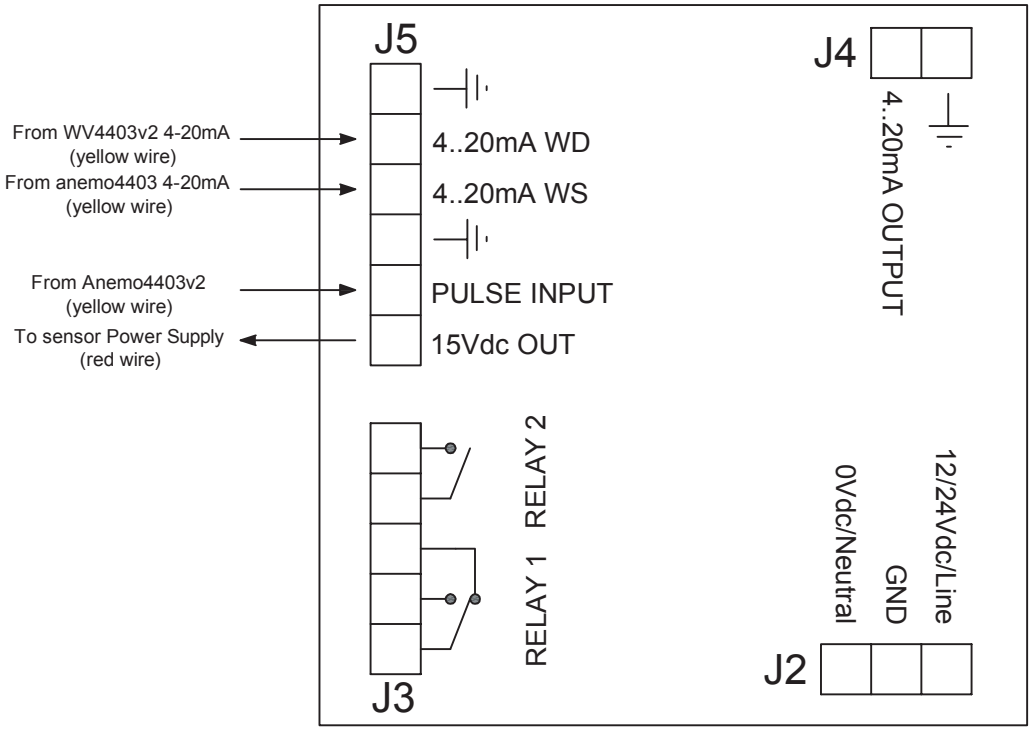
TECHNICAL CHARACTERISTICS

Power supply	**Voltage**	230 Vac, 50-60 Hz 12/24Vdc
	Power consumption	< 3,5VA
Display	**Technology**	Display in Graphic Liquid Crystal Display of
	Wind speed	3 digits. Selection of units between km/h, MPH and m/s
	Direction speed	3 digits. Indication of cardinal points
Inputs Outputs	**RF connectivity**	IEEE 802.15.4. ISM 2.4GHz
	Alarm relays	250Vac, 4A
Analog Output	**Output type**	4 - 20 mA
	Max. connectable impedance	500 ohm
	Error (1000 working steps)	Maximum 15 points
Physical features	**Material**	Polycarbonate
	Weigth	0,350 Kg
Environment	**Storage temperature**	-35 °C ... +70 °C
	Working temperature	-20 °C ... +70 °C
	IP protection	65
	Normative	Relative humidity not condensable IEC 68-2-3/IEC 68-2-27 Shock resistance according to IEC 68-2-27 Vibrations resistance according to IEC 68-2-6

Dimensions



CONNECTION DIAGRAM



J2: Power supply connector.

J3: Output relays connector. Configuration through P09 y P16.

J4: Analog output connector. Configuration through P24 y P25.

J5: Wind sensors connector. Configuration through P01, P02 y P03.*

ACCESSORIES

When using WM44-EVO11 with two wired wind sensors a junction box must be used to get only one wire into the sensor gland. IED electronics offers the accessory T-Box (IED electronics ref. 0106030405) to achieve this task.