## **TECHNICAL FEATURES**

#### **Electrical features**

Power supply	230/48/24 Vac, 50-60 Hz 24/12 Vdc (see references)
Power consumption	< 3.5 VA @ 230/48/24 Vac < 3.5 W @ 24/12 Vdc
Inputs	
Type of input signal	Square, triangular or sinusoidal 1-750 Hz / 5-35 Vdc o 4-24 Vac
Input impedance	-For connection with Anemo4403 or Namur: 1000 ohm -Direct: 10 k ohm
Sensors admitted	Anemo4403 V3 sensor -3 wire sensor -Namur -Direct signal (see "type of input signal)
Outputs	
Power output for sensors	10 Vdc or 20Vdc +/- 10% 0,5 W

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Analogue output (optional) (only for panel version)	4-20 mA o 0-10 Vdc
Max. connectable impedance	500 Ohm (4-20mA analogue output)
Analogue output resolution	1000 dots
Analogue output accuracy	1,5%
Relay Alarms	4 A, 250 Vac (Dry contacts)

#### **General features**

Dimensions	See drawings
Weight	350 g (WMM44-P V3) 450 g (WMM44-DRM V3)
Storage temperature	-35 °C +70 °C
Working temperature	-20 °C +70 °C
IP protection	IP50 (WM44-P V3) IP20 (WM44-DRM V3)
EMC	EN 61000-6-2:2001 EN 55022:2001, Class B

#### Measurements

Accuracy (100Hz=100km/h)	+/- 1km/h
Maximum measurable speed	999 km/h, 999MPH, 99.9 m/s



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## REFERENCES AND ACCESSORIES

#### References

Assembling on a 96x48mm panel	
0106030501	WM44-P V3 230Vac
0106030502	WM44-P V3 48Vac
0106030503	WM44-P V3 24Vac
0106030504	WM44-P V3 24Vdc NOT INSULATED

#### Assembling on DIN 46 277 and DIN EN 50 022

0106030701	WM44-DRM V3 230Vac
0106030702	WM44-DRM V3 48Vac

#### Other devices of WM44 V3 range

0106030601	WM44-SS V3 24Vac
0106030411	WM44-EV011 V3 IP65 24Vdc
0106030412	WM44-EV011 V3 IP65 230Vac

#### Compatible anemometers

0103010801	ANEMO4403 V3 PULSES OUTPUT M8 LATERAL
0103010802	ANEMO4403 V3 PULSES OUTPUT M8 UNDERSIDE
0103010804	ANEM04403 V3 PULSES OUTPUT 2,5m CABLE
0103010806	ANEM04403 V3 PULSES OUTPUT 20m CABLE
0103011301	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE NO FEMALE CONNECTOR
0103011302	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE
0103011303	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE 12m CABLE
0103011304	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE 25m CABLE

\*For other references, please contact us.



#### All dimensions and sizes are approximate. Specifications and prices are subject to change without notice.





# WM44-P V3 / WM44-DRM V3

Anemometer display with alarms.

WM44 V3 have a 3-digit wind speed reading in km/h, MPH or m/s. Choosing one of the 3 options is possible at any time by pressing "SELECT". They admit 2 and 3 wire sensors and have a 10-20 Vdc power output.



Version Rail DIN 46 277 and DIN EN 50 022



Wind speed display with 2 alarms Pre-configured to work with Anemo4403 V3 pulses output sensor Adjustable pre-alarm and alarm 4-20mA or 0-10V analogue output upon request

## FFATURES

#### Alarms

The alarm is triggered when the wind speed 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 programmed 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: Trigger values, polarity, intermittent or continuous alarm, alarm latching (only ALARM2) Alarms outputs: Relays. Contacts "NO" and "NC" (ALARM1), contact "NO" (ALARM2). Dry contact relay contacts.

#### User Default Setting

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

#### Register of minimum and maximum wind values

WM44 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 the 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.

#### Ingramming

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" press simultaneously "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 aplying "preset user configuration,
	(4) Exit program saving data as "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]

#### P02 Reference speed value. (1-999) [100]

P03 Hz corresponding to the reference speed value PO2. (1-999) [121]

#### P04 Speed-Hz ratio offset (0-999) [3]

P05 ALARM1. (0) Disabled, (1) OUT1 Relay closes NO contact , (2) OUT1 Relay opens NO contact. [1]

#### P06 ALARM1. Trigger value (1-999). [50]

P07 ALARM1. Mode. (0) Continuous mode, (1) Intermittent mode. [1]

P08 ALARM1. Only for intermittent mode (P07 = 1). Alarm ON time in tenths of seconds (1-99). [10]

- P09 ALARM1. Only for intermittent mode (P07 = 1). Alarm OFF time in tenths of seconds (1-99). [50]
- P10 ALARM2 operation, (0) Disabled, (1) OUT2 Relay closes contact, (2) OUT2 Relay opens contact. [1]
- ALARM 2. Same as PO6 ALARM ALARM1. [70] (when this P11 value is exceeded, the displayed value blinks as a warning).
- P12 ALARM2. Same as ALARM1 P07. [0]
- P13 ALARM2. Same as ALARM1 P08. [5]
- P14 ALARM2. Same as ALARM1 P09. [5]
- P15 ALARM2. Configuration latching. (0) Non-latching (1) Latching [0] (Power off to release).
- **P16** Analogue output (only for those devices that have it). (0) Disabled, (1-999) Wind speed value corresponding to the highest value of the 10V or 20mA analogue output.
- P17 ALARM1. Activation delay in seconds (0-999). [2]
- P18 ALARM1. Deactivation delay in seconds (0-999). [5]
- P19 ALARM2. Activation delay in seconds (0-999). [2]
- P20 ALARM2. Deactivation delay in seconds (0-999). [5]

#### Notes:

- In bold and between brackets **[x],** the factory settings -Preconfigured factory values in compliance with ITC MIE-AEM-2:

- · Wind speed sensor model: Anemo 4403.
- · ALARM1 is triggered at 50km/h, ALARM1 activation closes the relay contact, ALARM1 is intermittent (ton=1sec, t=5 sec).
- · ALARM2 is triggered at 70km/h. ALARM2 close contacts NO. ALARM2 is continuous
- -Users may program WM44P to comply with local safety regulations.

## WM44-P V3 CONNECTION







ANALOGUE OUTPUT

WITH AN OPEN-COLLECTOR NPN SENSOR, A RESISTOR MUST BE PLACED BETWEEN TERMINALS 10 AND 12 OR 13, RESISTOR VALUE: 1-5 K

ONLY WITH WMH-P WITH ANALOGUE CARD, MOD AN-200

"Namur" type sensors are connected the same way as the Anemo4403 wind speed sensor.

Direct signal input between terminals 9 and 13.

WARNING: Do not connect two different type of inputs simultaneously.

## NM44-P V3 DIMENSIONS





## WM44-DRM V3 CONNECTION



Connection label.



"Namur" type sensors are connected the same way as the Anemo4403 wind speed sensor.

Elirect signal input between terminals 9 and 13. WARNING: Do not connect two different type of inputs simultaneously.

## NM44-DRM V3 DIMENSIONS

