Anemometer Display with programmable relay output

WM44-SS V3 Small Control Unit

The control unit WM44-SS, is a tool of high accuracy with 2 programmable alarm thresholds. Particularly suitable for the use in combination with the sensor or ANEMO4403 SAG105WR, it is nevertheless compatible with a wide range of sensors for rotary motion.

It has 2 thresholds programmable relays (ALARM 1 and ALARM 2). The device can be easily installed on instrument panels, cabinet doors and various types of industrial enclosures.

- Automatic deactivation of the relay under the threshold level
- Signalling by flashing display of intervention AL2
- Selecting the mode for the alarm (intermittent, continuous, considered)
- Possibility of inversion of the output relay contacts

PANEL VIEW
- 2-digit display (height 20 mm)
- 2 LED indicators status alarms (AL1 and AL2)
- Indicator of units (Km / h or Mph)

Each output relay, can be normally energized or de-energized at tripping.
In the latching mode, the alarm 2 relay energizes when the wind speed set point is exceeded and remains energized until the equipment is switched off

ANEMOMETRIC SENSOR

Compatible with most common wind sensors:
- Sensor power supply: 20V or 10Vdc
- Type : 3 or 2 wires (see the wiring diagram)
- RECOMMENDED working with our Anemo 4403 sensor device

USER PREDEFINED INSTALLING CONFIGURATION
Apart from user programmed parameters, you can save another alternative configuration, and you can recover it as many times you want, going back to P01 program step.

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PROGRAMMING

To access the configuration buttons, lever up the frontal cover in the lower crack indicated by "open to program".

To enter the configuration mode, press Enter and Escape buttons simultaneously for more than 2 seconds.

Function buttons in program mode:

Button	Function
↑ UP	Increase program steps (P00,P01..), options or thresholds to program
↓ DOWN	Decrease program steps, options or thresholds to program
↵ ENTER	Enter into the program step where it is located, validate options and thresholds and escapes to step program.
← ESC	Return to program steps. In range, it selects the digit to modify

Programmation parameters:

P00: (1) Exit profram mode without saving data, (2) Exit program mode saving data, (3) Exit program mode aplyng "preset user configuration", (4) Exit program saving data as "preset user configuration"data by pressing "ENTER" for more than 10 sec.

P01:   (0) Programming in Km/H, (1) Programming in MPH **<0>**

P02:   Reference speed value (1-99) **<50>**

P03:   Hz corresponding to the reference speed value P02 (1-99) **<59>**

P04:   Speed –Hz ratio offset (0-99) **<3>**

P05:   ALARM1. (0) Disabled, (1) OUT1 Relay Closes NO contact, (2) OUT1 Relay Opens NO contact **<1>**

P06:   ALARM1. Trigger value (1-99). **<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>**

P11:   ALARM2. Same as P06 ALARM ALARM1 **<70>** (When this 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)

NOTES:

-The value between brackets <X> are those configured in factory by default.

- Preconfigured factory values in compliance with ITC MIE- AEM – 2:

. Wind speed sensor model: Anemo 4403 V3 Pulses Output

. ALARM1 is triggered at 50Km/h, ALARM1 activation closes the relay contact, ALARM1 is intermittent (ton=1sec. t=5sec).

. ALARM2 is triggered at 70Km/h. ALARM2 close contacts NO. ALARM2 is continuous.

. Users may program WM44-SS to comply with local safety regulations.

Technical Features

- Available input voltage Vac 24
- Power consumption <3VA
- Input signal sine, square, triangle, periodic waveforms signals from 1 to 750mHz – from 5 to 35 Vcc or from 4 to 24Vca
- Input impedance for Anemo4403 o Namur: 1000Ω
- Input types: 2 wire sensor (like Anemo4403) – 3 wire sensor (pnp,npn..) – Namur – Direct output signal
- Output sensor power suplly 10 or 20Vcc (±10%)
- Operating temperature from -20° to 70°C
- Reading resolution (100hz=100km/h) ±1
- Maximum speed 99km/h – 61 MPH
- Realy contacts 4A 250Vca
- Non condesable relative humidity according to IEC 68-2-3 and IEC 68-2-27 – Impacts according to IEC 68-2-27
- Vibrations according to IEC 68-2-6
- IP50 Range Protection

Electrical Features
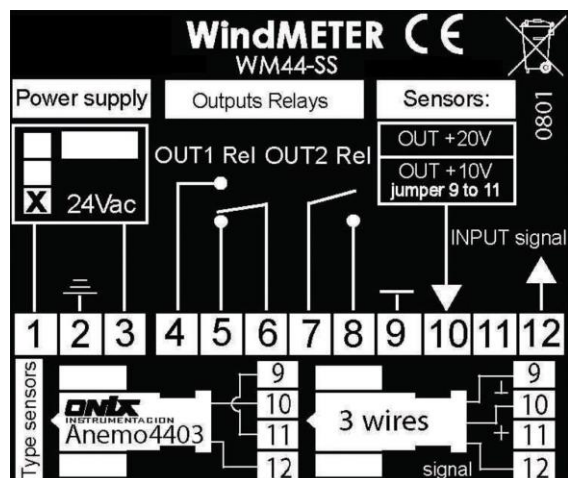
Wiring diagram
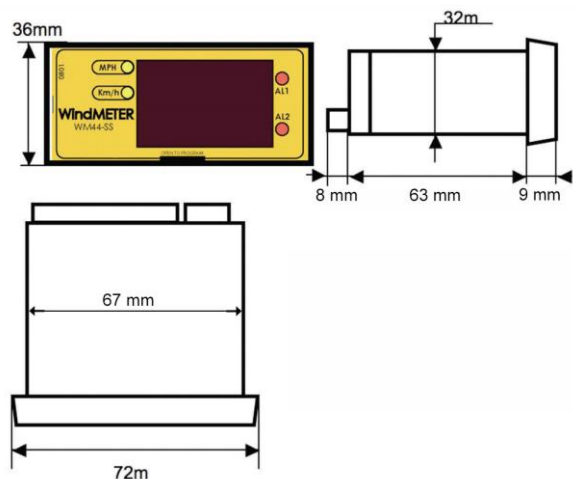
Dimensions

Optional Items

Protective screen

IP65 with protective glass cover.

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Plastic box

IP65

External enclosure stainless steel.

As a container for optional external enclosure is available in stainless steel with transparent porthole that allows to see the internal display.

Pre-assembled Equipment

On request, are available **pre-assembled equipments** for crane consists of:

- Anemometer SAG105WR with output pulse or ANEMO4403
- Schneider Electric alarm beacon
- Magnet for a rapid fix of the component
- Lenght of cable need to be requested

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