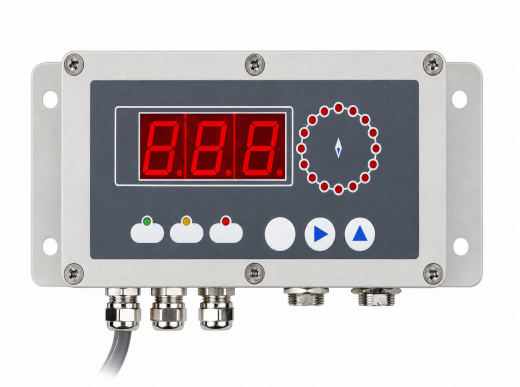
WIND MONITORING / DATA SHEET

SS105-05
Digital Wind Speed and Direction Control Alarm

Digital wind speed and direction display with relay alarm and communication outputs.

Overview

- SS105-05 is a digital controller for instantaneous and average wind speed plus wind direction measurement.
- The display, direction indicator, control buttons and over-limit alarm functions support on-site monitoring.
- Separate wind speed and direction inputs or an integrated sensor input are supported by the source wiring diagrams.
- The controller is intended for large mechanical equipment, factories, power plants, ports, mines and wind turbines.



Wind speed **0-50 m/s**	**Wind direction** **0-360°**	**Resolution** **0.1 m/s / ±5°**	**Communication** **RS485**
Alarm **Early warning + alarm**	**Relay** **220 VAC / 10 A**	**Analog output** **Iout1 / Iout2**	**Casing** **ABS**

Key Advantages

- Simultaneous wind speed and wind direction display.
- Instantaneous and average wind speed monitoring.
- Panel buttons for on-site parameter setting.
- Early warning and alarm relay outputs with buzzer prompt.
- Anti-RF and anti-EMI protection circuits.

Application Scenarios

- Large mechanical equipment and engineering machinery.
- Factories, power plants, ports and mines.
- Wind turbines and industrial wind monitoring.
- Weather station and environmental monitoring.
- Industrial automation for wind speed and direction control.

Measurement Principle

The controller receives wind speed and wind direction signals, displays the measured values and supports instantaneous and average wind speed monitoring. User-set limits drive early-warning and alarm relay outputs, with buzzer prompting. Iout1 and Iout2 provide the source-listed analog outputs for wind speed and wind direction.

Technical Specifications

Item	Specification
Power supply voltage (optional)	AC 220 V / 110 V / 48 V; DC 12-30 VDC
External sensor power supply	24 VDC; external DC supply according to the power-supply voltage
Measurement display range	Wind speed: 0-50 m/s; wind direction: 0-360°
Display resolution	Wind speed: 0.1 m/s; wind direction: ±5°

Item	Specification
Display error	Wind speed: 3% FS; wind direction: ±22.5°
Signal input (optional)	Wind speed: 0-5/10 VDC, 4-20 mA or pulse; wind direction: 0-5/10 VDC or 4-20 mA
Wind speed alarm output	Early warning and alarm; relay contact capacity 220 VAC / 10 A; buzzer prompt
Analog signal output	Iout1 wind speed and Iout2 wind direction; 4-20 mA; load <500 Ω
Communication method	RS485 digital communication output
Operating temperature	-20 to +50 °C
Shell material	ABS

Signal options, alarm modes and wiring details are reproduced from the supplied source datasheet. Confirm the selected sensor input and output configuration before ordering.

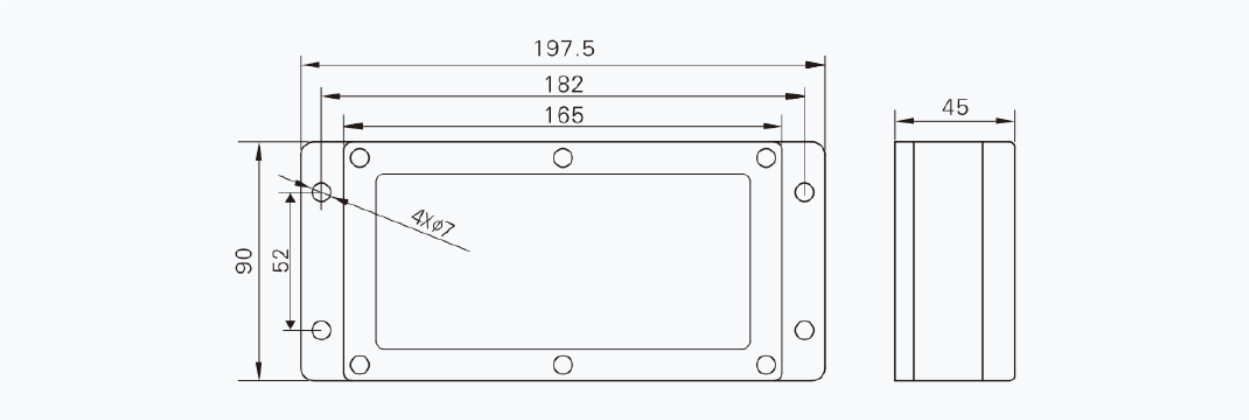
Output and Communication

Interface	Source-listed configuration
Signal input	Wind speed: 0-5/10 VDC, 4-20 mA or pulse; wind direction: 0-5/10 VDC or 4-20 mA
Analog output	Iout1 wind speed and Iout2 wind direction; 4-20 mA; load <500 ohms
Alarm output	Early warning and alarm; relay contact capacity 220 VAC / 10 A; buzzer prompt
Digital communication	RS485 digital communication output

The source drawings show power input, alarm control, analog output / RS485 and separate or integrated sensor connections. Final terminal wiring should follow the confirmed configuration.

Mechanical Dimensions

Dimensions



Source drawing dimensions: overall width 197.5 mm, overall height 90 mm and depth 45 mm; mounting-hole callout 4 x 7 mm.

Electrical Connection

Connection group	Source-listed terminals and function
Power input	AC-L / AC-N / DC+ / DC-
Signal output	485A / 485B / GND; Iout1 wind speed; Iout2 wind direction

Connection group	Source-listed terminals and function
Alarm control	Pre-alarm and alarm relay terminals: NO / NC / COM
Wind speed and direction sensor	Vcc / signal input / GND / shield
Integrated sensor input	Port A and Port B support separate speed and direction signal inputs

Signal Output Pin Assignment

Connection	Pin	Line color	Definition
Signal output	1	Red	485A
Signal output	2	Green	Iout1 (wind speed)
Signal output	3	Black	GND
Signal output	4	White	Iout2 (wind direction)
Signal output	5	Yellow	485B

Product Selection

Selection	Configuration
Base model	SS105-05 - Digital Wind Speed and Direction Control Alarm
Power and sensor supply	AC 220 V / 110 V / 48 V; DC 12-30 VDC; external sensor supply 24 VDC
Signal input	Wind speed: 0-5/10 VDC, 4-20 mA or pulse; wind direction: 0-5/10 VDC or 4-20 mA
Relay alarm	Early warning and alarm; 220 VAC / 10 A; buzzer prompt
Communication and output	RS485 optional; 4-20 mA output optional

Specify SS105-05 together with the selected power supply, sensor input, relay alarm and communication / output configuration.

CONTACT / SUPPORT

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