TEST REPORT

Instrument	ULTRASONIC WIND SENSOR WMT703
Order code	WMT703C1A0D009B1A2
Serial number	V2521572
Manufacturer	Vaisala Oyj, Finland
Calibration date	20th June 2023
Test procedure	DOC221130-D

The above instrument was calibrated by comparing the readings of the instrument to working standards of the manufacturer.

The wind measurement was one-point calibrated at zero-wind condition. Additional functional test for wind speed and wind direction at flow of 7 m/s was performed.

The analog output signals were calibrated for voltage and current modes with a three-point method. The output signal was measured. In current mode a calibrated 50 Ohm was used as load. At the time of shipment, the instrument described above met its operating specifications.

Order code 3C1A0D009B1A2

	Property	**Feature**
3	Measurement range	75 m/s WMT703
C	Temperature range	-55...+70 C
1	Heating	Non-heated version
A	Digital communication interface	RS-485 isolated
0	Digital communication profile	WMT70 - poll mode (default) 9600b, 8, N, 1 Polled
D	Digital communication units	km/h
0	Analog output signals for wind speed channel	Disabled
0	Analog output signals for wind direction channel	Disabled

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Test Results

Test	Lower limit	Upper limit	Value	Unit
Input current	30	63	36.97	mA
Input voltage	23.8	24.2	23.99	V
Zerowind	0	0.2	0.02	m/s
Heating N resistance	N/A	N/A	N/A	Ω
Heating E resistance	N/A	N/A	N/A	Ω
Heating S resistance	N/A	N/A	N/A	Ω
Heating Body resistance	N/A	N/A	N/A	Ω
Functional wind speed	6	8	7.09	m/s
Functional wind direction	148	152	150.20	°

Calibration results

Measurement	Reference	Observed	Error	Unit
A1 current 90%	18.00	17.97	-0.03	mA
A1 current 10%	2.00	1.97	-0.03	mA
A1 voltage 90%	9.00	9.00	0.00	V
A1 voltage 10%	1.00	1.00	0.00	V
A1 freq 1005.00 Hz	1005.00	1004.53	-0.47	Hz
A2 current 90%	18.00	17.98	-0.02	mA
A2 current 10%	2.00	1.98	-0.02	mA
A2 voltage 90%	9.00	9.00	0.00	V
A2 voltage 10%	1.00	1.00	0.00	V
A2 potentiometer 90%	90.00	90.29	0.29	%
A2 potentiometer 10%	10.00	10.24	0.24	%
One-point wind calibration	0.00	0.02	0.02	m/s

Ambient conditions / Humidity 27.39 ± 5%RH, Temperature 26.52 ± 1 °C, Pressure 1012.54 ± 1 hPa.

Technician

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