



Czech Metrology Institute

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Calibration laboratory No. 2202 accredited by the Czech Accreditation Institute according to ISO/IEC 17025:2017

Laboratory: Regional inspectorate, Okružní 31, 638 00 Brno
Department of temperature and humidity, tel. +420 545 555 314, fax. +420 545 555 183

CERTIFICATE OF CALIBRATION

6036-KL-V0100-20

Date of issue: March 26th, 2020

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Customer: ELEN, s.r.o.
Lubochnianska 16
080 06 Lubotice

Measuring instrument: Sensor of the humidity and temperature with transducer

Manufacturer: ELEN, s.r.o., Slovakia

Type: THS Sensor 52 12DC RS485

Serial number: 19/1423

Ident. number: 192.168.0.64 ID1

Description: resolution 0,1 % RH, 0,1 °C using the PC with SW SW ELEN Data Logger Software version 1.20.03

probe external s.n. 19/1423

connection by the convertor RS485-LAN s.n. 14/1296

The results of the calibration have been obtained following the procedures reported in this Certificate and are related only to the date, place and conditions of the calibration.

Date of calibration: March 19th, 2020

Calibrated by:

Director of the Regional inspectorate:

Ing. Jiří Bílek



Ing. Radovan Wiecek

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Metrological traceability: Measurements are traceable to (inter)national standards.

Calibration procedures: 636-MP-C119, 133-MP-C004

Place of calibration: CMI RI Brno, Okružní 31, 638 00 Brno

Ambient conditions: temperature: $(23 \pm 3) ^\circ\text{C}$

Calibration conditions: measuring instrument was calibrated according to the internal procedures on a standard equipment of CMI RI Brno. Humidity calibration was performed at $(23 \pm 2) ^\circ\text{C}$. During the calibration the instrument was supplied by the RS485.

Results of calibration:

RELATIVE HUMIDITY

Data of standard H_{et} % RH	Data of measuring instrument H_m % RH	Uncertainty U % RH
10,0	11,3	0,6
30,0	31,2	0,7
50,0	50,1	0,8
70,0	70,0	0,9
90,0	91,5	1,1

TEMPERATURE

Data of standard t_{90} $^\circ\text{C}$	Data of measuring instrument t_m $^\circ\text{C}$	Uncertainty U $^\circ\text{C}$
-40,0	-40,1	0,3
-20,0	-20,0	0,3
0,0	0,0	0,2
20,0	20,0	0,2
40,0	39,9	0,2
60,0	59,9	0,2
80,0	79,9	0,2

The standard uncertainty of measurement has been determined in accordance with EA-4/02 M:2013 document. The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k corresponding to a coverage probability of approximately 95 %, which for normal distribution corresponds to a coverage factor $k = 2$.

End of calibration certificate.

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