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Temperature testing of VMS sign (3 appendices)

Test objects

One sample of a VMS sign of the type VarioSign 420 was subjected to temperature testing.

Summary of results

The tested VMS sign operated with full function in the entire tested temperature range.

Manufacturer specification of the test object

Your reference: Markus Karwin, 2013-09-04

Type: VarioSign 420

Nominal voltage: 12 - 24 VDC

Measurement date

2013-09-19

Measurement conditions

The measurements were made in a temperature-controlled chamber. The sign was connected to a 20.0 VDC source.

Instrument code: Temperature chamber (SP 501152)

Uncertainty of measurement

Temperature: ± 2 °C

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k = 2$, which for a normal distribution corresponds to a coverage probability of approximately 95 %. The standard uncertainty of measurement has been determined in accordance with EAL Publication EA-04/2.

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Measurement results

The sign was kept at each temperature for a period of one hour, after which a function test was performed. The function test consisted of switching between available patterns and a visual confirmation.

Temperature	Function test result	Note
-40 °C	PASS	Corresponds to minimum temperature of class T1 in EN 12966-1
+60 °C	PASS	Corresponds to maximum temperature of class T3 in EN 12966-1

Remark

The measured values reported are valid only for the unit under test.

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Mikael Lindgren
Performed by



REPORT

Date
2013-09-24

Reference
MTk3P06694-1

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Appendix 3