CALIBRATION

Date Of Issue 29th August 2014 Certificate Number 290814/S3



Certificate Issued By:



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Page 1 of 2 pages	
Approved Signatory	Signature
R. Collins	RGOO
G. Hills	
J. Hutchins	

Customer Name: SIGNATROL LIMITED

Address: UNIT E2

GREEN LANE BUSINESS PARK

TEWKESBURY

GLOUCESTERSHIRE

GL20 8SJ

Order Number: 44679

Ref Number: 421/41911

Date Received: 26th August 2014

Date Calibrated: 28/29th August 2014

Ambient Temperature: 22 °C ± 2 °C

Ambient Humidity: <60 % rh

Temperature Scale: International Temperature Scale of 1990

Instrument Type: EUROTRON MICROCAL 1 SIMULATOR

Instrument Serial Number: 0049272

Procedure: The instrument was stabilised at ambient temperature, then calibrated by measuring its

output on traceable reference equipment.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Results indicate performance of instrument at time of measurement, with no warranty as to specification, repeatability or long term stability.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

CERTIFICATE OF CALIBRATION

UKAS Accredited Calibration Laboratory No 0601

Certificate Number 290814/S3

Page 2 of 2 pages

Instrument Serial No 0049272

Results

Temperature °C Nominal mV Measured mV Temperature °C of Measurement -100 -4.633 -4.637 0 -100.1 ±0.25 °C 700.0 39.132 39.125 8 699.9 ±0.15 °C Type "K"Output Temperature °C Nominal mV Measured mV Equivalent Temperature °C Nominal mV Measured mV Temperature °C - 100.0 -3.554 -3.553 0 -100.0 ±0.25 °C Type "T"Output Temperature °C Temperature °C -100.0 ±0.15 °C Type "T"Output Temperature °C Nominal mV Measured mV Temperature °C -100.0 -3.379 -3.377 3 -99.9 ±0.25 °C Type "S"Output Temperature °C Nominal mV Measured mV Temperature °C 79.7 ±1 °C Type "R"Output Temperature °C 799.7 ±1 °C Type "E"Output Temperature °C 799.7	Type "J"Output			<u>Equivalent</u>	Uncertainty
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800.0 7.345 7.341 8 799.7 ± 1 °C 1400.0 14.373 14.370 5 1399.8 ± 1 °C Type "R"Output Temperature °C Nominal mV Measured mV Temperature °C 800.0 7.950 7.946 5 799.7 ± 1 °C 1400.0 16.040 16.034 3 1399.6 ± 1 °C Type "E"Output Equivalent Temperature °C -100.0 -'5.237 - 5.239 8 - 100.1 ± 0.25 °C 650.0 49.116 49.103 2 649.8 ± 0.15 °C PT100 Output Equivalent Temperature °C Nominal Ohms Measured Ohms Temperature °C 0.0 0.00 100.039 1 0.10 ± 0.025 °C	Type "S"Output			Equivalent	
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Temperature °C Nominal mV Measured mV Temperature °C 800.0 7.950 7.946 5 799.7 ± 1 °C 1400.0 16.040 16.034 3 1399.6 ± 1 °C Type "E"Output Temperature °C Equivalent Temperature °C Nominal mV Measured mV Temperature °C - 100.0 -'5.237 - 5.239 8 - 100.1 ± 0.25 °C 650.0 49.116 49.103 2 649.8 ± 0.15 °C PT100 Output Temperature °C Nominal Ohms Measured Ohms Temperature °C 0.0 0.00 100.039 1 0.10 ± 0.025 °C	1400.0	14.373	14.370 5	1399.8	± 1 °C
800.0 7.950 7.946 5 799.7 ± 1 °C 1400.0 16.040 16.034 3 1399.6 ± 1 °C Type "E"Output Temperature °C Nominal mV - 100.0 Nominal mV - 100.0 Nominal mV - 100.0 Temperature °C - 100.0 - 100.1 ± 0.25 °C - 100.0 650.0 49.116 49.103 2 649.8 ± 0.15 °C PT100 Output Temperature °C	Type "R"Output			Equivalent	
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Type "E"Output Equivalent Temperature °C Nominal mV Measured mV Temperature °C - 100.0 -'5.237 - 5.239 8 - 100.1 ± 0.25 °C 650.0 49.116 49.103 2 649.8 ± 0.15 °C PT100 Output Equivalent Temperature °C Nominal Ohms Measured Ohms Temperature °C 0.0 0.00 100.039 1 0.10 ± 0.025 °C	800.0	7.950	7.946 5	799.7	±1°C
Temperature °C Nominal mV Measured mV Temperature °C - 100.0 -'5.237 - 5.239 8 - 100.1 ± 0.25 °C 650.0 49.116 49.103 2 649.8 ± 0.15 °C PT100 Output Temperature °C Nominal Ohms Measured Ohms Temperature °C Temperature °C 0.00 0.00 100.039 1 0.10 ± 0.025 °C	1400.0	16.040	16.034 3	1399.6	±1°C
Temperature °C Nominal mV Measured mV Temperature °C - 100.0 -'5.237 - 5.239 8 - 100.1 ± 0.25 °C 650.0 49.116 49.103 2 649.8 ± 0.15 °C PT100 Output Temperature °C Nominal Ohms Measured Ohms Temperature °C Temperature °C 0.00 0.00 100.039 1 0.10 ± 0.025 °C	Type "E"Output			Equivalent	
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Temperature °C Nominal Ohms Measured Ohms Temperature °C 0.0 0.00 100.039 1 0.10 ± 0.025 °C	650.0	49.116	49.103 2	649.8	± 0.15 °C
Temperature °C Nominal Ohms Measured Ohms Temperature °C 0.0 0.00 100.039 1 0.10 ± 0.025 °C	PT100 Output			Equivalent	
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	A RECORD A	212	100.039 1		± 0.025 °C
		313.71	313.639	599.81	± 0.18 °C

End of Report