



YOKOGAWA

European Standards Laboratory
Yokogawa Europe Solutions B.V.
Amersfoort, The Netherlands



CALIBRATION-CERTIFICATE

Certificate number 58176M10041
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Example

Applicant

Instrument	Current Sensor	
	Manufacturer	PM Special Measuring Systems
	Type	Macc 2 plus
	Serial number	MAC-17-131-0492
	Inventory number	CCE_11_234
	ID numbers used standards	CSE959 CSE960 CSE1014 CSE974 CSE1026
	Procedure	Call_MaccPlus Version: 1 of 26-062016

Calibration method	The Current Sensor was calibrated using a Sampling Transformer Ratio Bridge The used burden resistor was 0.8 Ohm	
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Environmental conditions	Temperature	(23.1 ± 1) °C
	Relative Humidity	(50 ± 4) %rh

Date of Calibration	27 February 2018
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Result	<p>The results of the calibration are shown on the next pages.</p> <p>The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor 2 such that the coverage probability corresponds to approximately 95%.</p> <p>The standard uncertainty of measurement has been determined in accordance with the EA4/02:2013.</p> <p>The long term stability of the calibrated object is not included in the reported expanded uncertainty measurement.</p> <p>This certificate of calibration is issued in compliance with ISO/IEC 17025:2005</p>
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Traceability	The measurements have been executed using standards for which the traceability to (inter)national standards has been demonstrated towards the RvA.
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Date	27 February 2018
Name	E.J. Kroon
Function	Manager European Standards Laboratory

Yokogawa Europe Solutions B.V.
European Standards Laboratory
P.O. Box 163, 3800 AD Amersfoort (NL)
Phone +31 (0)88 46410000
website <http://tmi.yokogawa.com>

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Example

Ratio Calibration Iin/Iout at 53 Hz

Range	Applied	Measured	±Uncertainty	Unit	Deviation %
at 50 A input	1000.00	1000.02	0.06	Iprim/Isec	0.002
at 100 A input	1000.00	1000.02	0.06	Iprim/Isec	0.002
at 150 A input	1000.00	1000.03	0.06	Iprim/Isec	0.003
at 200 A input	1000.00	1000.03	0.06	Iprim/Isec	0.003
at 250 A input	1000.00	1000.03	0.06	Iprim/Isec	0.003
at 300 A input	1000.00	1000.03	0.06	Iprim/Isec	0.003
at 350 A input	1000.00	1000.03	0.06	Iprim/Isec	0.003
at 400 A input	1000.00	1000.03	0.06	Iprim/Isec	0.003
at 450 A input	1000.00	1000.03	0.06	Iprim/Isec	0.003
at 500 A input	1000.00	1000.03	0.06	Iprim/Isec	0.003
at 550 A input	1000.00	1000.04	0.06	Iprim/Isec	0.004
at 600 A input	1000.00	1000.05	0.06	Iprim/Isec	0.004

Phase Displacement at 53 Hz

Range	Applied	Measured	±Uncertainty	Unit	Deviation %
at 50 A input	0.000	0.002	0.007	°	-
at 100 A input	0.000	0.002	0.007	°	-
at 150 A input	0.000	0.001	0.007	°	-
at 200 A input	0.000	0.001	0.007	°	-
at 250 A input	0.000	0.001	0.007	°	-
at 300 A input	0.000	0.001	0.007	°	-
at 350 A input	0.000	0.001	0.007	°	-
at 400 A input	0.000	0.001	0.007	°	-
at 450 A input	0.000	0.001	0.007	°	-
at 500 A input	0.000	0.001	0.007	°	-
at 550 A input	0.000	0.001	0.007	°	-
at 600 A input	0.000	0.001	0.007	°	-

Comments :