## of Life Technologies Europe B.V. European Calibration Services (ECS)

This annex is valid from: 10-04-2024 to 01-07-2027

Replaces annex dated: 27-12-2023

#### Location(s) where activities are performed under accreditation

	Head Office	
Kwartsweg 2 2665 NN Bleiswijk The Netherlands		

Location	Abbreviation/ location code
Kwartsweg 2 2665 NN Bleiswijk The Netherlands	BL

HCS code	Measured quantity, Range	Frequency	CMC <sup>1</sup>	Remarks	Location
LF 0 0	DC/LF Quantities				
LF 1 1	DC Voltage			generating	BL
	3.300 V		0.002 V		
	33.00 V		0.02 V		
	330.0 V		0.1 V		
	1 kV		1 V		
	DC Millivolt			generating	BL
	33.0 mV		0.1 mV		
	330.0 mV		0.2 mV		

This annex has been approved by the Board of the Dutch Accreditation Council, on its behalf,

J.A.W.M. de Haas

<sup>&</sup>lt;sup>1</sup> Calibration and Measurement Capability (CMC): Demonstrated measurement uncertainty, with coverage probability of 95%, in a given measurement point or measurement range. Measurement uncertainty, *U*, is calculated according to EA-4/02 "*Evaluation* of the Uncertainty of Measurement in Calibration".

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HCS code	Measured quantity, Range	Frequency	CMC <sup>1</sup>	Remarks	Location
LF 2 1	DC MilliAmp			generating	BL
	33.00 mA		0.03 mA		
	330.0 mA		0.7 mA		
	DC MicroAmp			generating	BL
	330.0 µA		0.3 µA		
	3300 µA		3 μΑ		
	DC Amp			generating	BL
	3.000 A		0.005 A		
	10.00 A		0.02 A		
LF 3 1	AC Voltage			generating	BL
2. 0 .	330.0 mV	60 Hz	0.7 mV		
	600.0 mV	13 kHz	1.6 mV		
	3.300 V	60 Hz	0.007 V		
	3.300 V	20 kHz	0.015 V		
	33.00 V	60 Hz	0.04 V		
	33.00 V	20 kHz	0.10 V		
	330.0 V	60 Hz	0.5V		
	330.0 V	2.5 kHz	0.7 V		
	500 V	60 Hz	1 V		
	1 kV	1 kHz	2V		
LF 4 1	AC MilliAmp			generating	BL
	33.00 mA	60 Hz	0.12 mA		
	330.0 mA	60 Hz	1.6 mA		

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LF 4 1	AC MicroAmp			generating	BL
	330.0 µA	60 Hz	1.1 µA		
	3300 µA	60 Hz	11 µA		
LF 4 1	AC Amp			generating	BL
	3.000 A	60 Hz	0.008 A		
LF 6 1	Resistance			generating	BL
	330.0 Ω		0.5 Ω		
	3.300 kΩ		0.003 kΩ		
	33.00 kΩ		0.03 kΩ		
	330.0 kΩ		0.3 kΩ		
	3.300 MΩ		0.005 MΩ		
	30.00 MΩ		0.07 ΜΩ		
TF 0 0	Time and Frequency				
TF 2 1	Frequency			generating	BL
	60.00 Hz		0.01 Hz	U <sub>nom</sub> = 110 V	
	50.00 Hz		0.01 Hz	U <sub>nom</sub> = 230 V	

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HCS code	Measured quantity, Instrument, Measure	Range	CMC <sup>2</sup>	Remarks	Location
TE 0 0	Temperature				
TE 4 1	Thermometers	4.00 °C – 96.00 °C	0.09 °C	In water bath with multi-well dry block inserts	BL
		30.00 °C – 115.00 °C	0.10 °C	In silicon oil bath with multi-well dry block inserts	

#### Remarks:

Environmental conditions  $T = (23 \pm 3) \degree C$ ,  $RH = (50 \pm 25) \%$  rh for Electrical  $T = (23 \pm 2) \degree C$ ,  $RH = (50 \pm 25) \%$  rh for Thermometers (for water bath)  $T = (23 \pm 5) \degree C$ ,  $RH = (50 \pm 25) \%$  rh for Thermometers (for silicon bath)

Calibrations are performed inside the laboratory, unless specified otherwise.

<sup>&</sup>lt;sup>2</sup> Calibration and Measurement Capability (CMC): Demonstrated measurement uncertainty, with coverage probability of 95%, in a given measurement point or measurement range. Measurement uncertainty, *U*, is calculated according to EA-4/02 "*Evaluation* of the Uncertainty of Measurement in Calibration".