

Certificate No. 2

24PTP\_0104240279

Page 1 of 3

### **Certificate of Calibration**

EQUIPMENT : ELECTROSURGICAL UNITS

ID CODE : PTP00647

MANUFACTURER : COVIDIEN

MODEL : FORCE FX

SERIAL No. : S4L16218AX

LOCATION : Operating Room

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

670/1 Phaholyothin Road, Samsen Nai, Phaya Thai, Bangkok 10400

Tel: 02-271-7000 Fax: -

CALIBRATED DATE : 24 APRIL 2024

ISSUE DATE : 1 MAY 2024

Kanittha.

Performed by : Approved by : KANITTHA SRIPRAPAD

21100 4

PHUWASIN YIWKIM

This certificate may not be reproduced except in full unless permission for reproduction has been obtained in writing from the calibration.

### **CONDITION OF THIS RESULT OF TEST**

#### 1. REFERENCE STANDARD INSTRUMENT:

MASTERMANUFACTURERMODELSERIAL NO.CERTIFICATE NO.DUE DATEElectrosurgeryFluke BiomedicalQA-ES III572872623MD85221 Jun 2024Analyzer

### 2. THIS CERTIFICATION IS TRACEABLE TO:

- Technology Promotion Association (Thai-Japan)

## 3. THIS RESULT OF TEST WAS FOUND ACCURATE AS SHOW ON DATE AND PLACE OF TEST ONLY



Certificate No. 24PTP\_0104240279

Page 2 of 3

# **Calibration Report**

EQUIPMENT : ELECTROSURGICAL UNITS

ID CODE : PTP00647

MANUFACTURER : COVIDIEN

MODEL : FORCE FX

SERIAL No. : S4L16218AX

DATE OF CALIBRATION : 24 APRIL 2024

ENVIRONMENT : TEMPERATURE 23 °C

RELATIVE HUMIDITY 50 %

### **PROCEDURE USED:**

This instrument was calibration by comparison with standard

### **MEASURMENT RESULT:**

/	Without Adjustment		Before Adjustment		After Adjustment
---	--------------------	--	-------------------	--	------------------

Energy Monopolar/Cut					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(Watt)	(Watt)	(Watt)	(%)	(Watt)	
20	17.80	-2.20	-11.00	± 1.1547	
50	45.80	-4.20	-8.40	± 2.8868	
100	91.00	-9.00	-9.00	± 5.7737	
200	181.00	-19.00	-9.50	± 11.5473	
300	272.00	-28.00	-9.33	± 17.3210	

Energy Monopolar/Coag					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(Watt)	(Watt)	(Watt)	(%)	(Watt)	
20	18.70	-1.30	-6.50	± 1.1547	
50	48.70	-1.30	-2.60	± 2.8868	
80	76.20	-3.80	-4.75	± 4.6189	
100	96.30	-3.70	-3.70	± 5.7737	
120	115.00	-5.00	-4.17	± 6.9284	

Energy Bipolar						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(Watt)	(Watt)	(Watt)	(%)	(Watt)		
10	9.20	-0.80	-8.00	± 0.5774		
30	27.80	-2.20	-7.33	± 1.7321		
50	45.80	-4.20	-8.40	± 2.8868		



Certificate No. 24PTP\_0104240279

Page 3 of 3

# **Calibration Report**

EQUIPMENT : ELECTROSURGICAL UNITS

ID CODE : PTP00647

SERIAL No. : S4L16218AX

Energy Bipolar (Continues)						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(Watt)	(Watt)	(Watt)	(%)	(Watt)		
60	55.20	-4.80	-8.00	± 3.4642		
70	64.90	-5.10	-7.29	± 4.0416		

### **UUC\***: Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%

FI-BME-NHS-CP-024/1 Rev.03 Page 3/3 Issued Date 20/07/2023