

Report No. 24PTP_01PM04240369

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Preventive Maintenance Action Report

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP01093

MANUFACTURER : PHILIPS

MODEL : SURESIGNS VM4

SERIAL No. : US90328518

LOCATION : Gastrointestinal & Liver Center

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

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

Tel: 02-271-7000 Fax: -

PM. DATE : 26 APRIL 2024 ISSUE DATE : 3 MAY 2024

Performed by:

Approved by :

KANITTHA SRIPRAPAD

PHUWASIN YIWKIM

CONDITION OF THIS RESULT OF TEST

1. REFERENCE STANDARD INSTRUMENT:

MASTERMANUFACTURERMODELSERIAL NO.CERTIFICATE NO.DUE DATEElectrical SafetyFlukeESA615349403423MD7747 Jun 2024

Analyzer

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



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1. Qualitative Tests

No.	List	Pass	Fail	None	Comment
1	Chassis/Housing	/			
2	Mount/Fasteners	/			
3	Casters/Brakes	/			
4	AC Plug	/			
5	Line Cord	/			
6	Strain Reliefs	/			
7	Fan	/			
8	Controls/Switches	/			
9	Battery/Charger	/			
10	Self-Test	/			
11	Time/Date Settings	/			
12	Cybersecurity			/	
13	Recorder / Printer			/	
14	Labeling	/			
15	Manuals	/			
16	Cables	/			
17	Tubes/Hoses/Bulbs	/			
18	Fittings/Connectors	/			
19	Indicators/Displays	/			
20	User Calibration	/			
21	Alarms	/			
22	Pressure Modes (IBP)			/	
23	Accessories	/			

2. Quantitative Tests

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No.	List	Pass	Fail	None	Comment	
1	Grounding Resistance $\leq 0.5 \Omega$	/			0.283 Ω	
2	Chassis Leakage Current ≤500 µA	/			84.6 μΑ	
3	Lead -to-Ground Leakage Current ≤100 μA			/		
	grounded; ≤500 μA ungrounded					
4	Rate Calibration (ECG) ±2% or mfr	/				
5	Rate Alarm (ECG)	/				
6	Paper Speed ±2%		·	/		



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2. Quantitative Tests (Continues)

No.	List	Pass	Fail	None	Comment
7	Air Leakage (NIBP) ≤15 mm Hg/min	/			
8	Static Pressure Accuracy (NIBP) ±3 mm Hg	/			
	*Oscillometric Pressure Accuracy (NIBP) ±8 mm				
	Hg				
9	Maximum Pressure (NIBP) ≤330 mm Hg	/			
10	Pressure Accuracy (IBP) ±2% *or mfr spec			/	
11	Alarm Accuracy (IBP) ±2%			/	
12	Temperature Accuracy, Predictive Mode			/	
	(thermistor thermometers) (Temp) ±0.3°C (0.5°F)				
13	Temperature Accuracy, Steady-State Mode			/	
	(thermistor thermometers) (Temp) ±0.3°C (0.5°F)				
14	Temperature Alarms (Temp) ±0.6°C (1.0°F)			/	
15	Carbon Dioxide Concentration Accuracy			/	
	(Capnometers) ±0.4 vol% (±3 mm Hg) or ±10%				

3. Preventive Maintenance

No.	List	Pass	Fail	None	Comment
1	Clean the exterior and accessories	/			
2	Lubricate			/	
3	Adjust			/	
4	Replace			/	

4. Remark ไม่มีสาย EKG

Electrical Safety Test: Master used Electrical Safety Analyzer (Metron / QA-90) according to IEC.60601.1