

Report No. 24PTP\_01PM04240054

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# **Preventive Maintenance Action Report**

EQUIPMENT : INFUSION PUMPS, SYRINGE

ID CODE : PTP00755

MANUFACTURER : TERUMO

MODEL : TE-331

SERIAL No. : 1208000519

LOCATION : I.C.U

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

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

Tel: 02-271-7000 Fax: -

PM. DATE : 16 APRIL 2024

ISSUE DATE : 3 MAY 2024

Chakkaphan

CHAKKAPHAN KHAMPHUMI

Approved by :

PHUWASIN YIWKIM

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

1. REFERENCE STANDARD INSTRUMENT:

MASTERMANUFACTURERMODELSERIAL NO.CERTIFICATE NO.DUE DATEElectrical SafetyFlukeESA615349403423MD7747 Jun 2024

Analyzer

Performed by:

#### 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   | /    |      |      |         |
| 3   | Casters/Brakes                                    |      |      | /    |         |
| 4   | AC Plug   | /    |      |      |         |
| 5   | Line Cord   | /    |      |      |         |
| 6   | Strain Reliefs                                    | /    |      |      |         |
| 7   | Fittings/Connectors                               | /    |      |      |         |
| 8   | Controls/Switches                                 | /    |      |      |         |
| 9   | Battery   | /    |      |      |         |
| 10  | Indicators/Displays                               | /    |      |      |         |
| 11  | Self-Test   | /    |      |      |         |
| 12  | Time/Date Settings                                |      |      | /    |         |
| 13  | Cybersecurity                                     |      |      | /    |         |
| 14  | Alarms  | /    |      |      |         |
| 15  | Syringe Detection                                 | /    |      |      |         |
| 16  | Empty Syringe                                     | /    |      |      |         |
| 17  | Occlusion   | /    |      |      |         |
| 18  | Infusion Complete                                 | /    |      |      |         |
| 19  | Nurse Call (verify only if this function is used) |      |      | /    |         |
| 20  | Labeling  | /    |      |      |         |
| 21  | Accessories                                       | /    |      |      |         |

#### 2. Quantitative Tests

| No. | List                                   | Pass | Fail | None | Comment |
|-----|--|------|------|------|---------|
| 1   | Grounding Resistance $\leq 0.5 \Omega$ | /    |      |      | 0.315 Ω |
| 2   | Chassis Leakage Current ≤500 μA        | /    |      |      | 67.9 μΑ |
| 3   | Flow Accuracy ±5%                      | /    |      |      |         |
| 4   | Occlusion Pressure Alarm <1000 mmHg    | /    |      |      |         |

#### 3. Preventive Maintenance

| No. | List                               | Pass | Fail | None | Comment |
|-----|------------------------------------|------|------|------|---------|
| 1   | Clean the exterior and accessories | /    |      |      |         |
| 2   | Lubricate                          |      |      | /    |         |



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#### 3. Preventive Maintenance (Continues)

| N | List    | Pass | Fail | None | Comment |
|---|---------|------|------|------|---------|
| 3 | Adjust  |      |      | /    |         |
| 4 | Replace |      |      | /    |         |

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

FI-BME-NHS-CP-011/7 Rev.03 Page 3/3 Issued Date 20/07/2023