**Supplementary Table 3 –** Measurement protocol.

**Measurement protocol**

Manufacturer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Tests for rhythm recognition**

|  |  |  |
| --- | --- | --- |
| **Input signal (1 mV)** | **Shock delivered** | **Test result** |
| Normal sinus | 🞎 | 🞎 Passed 🞎 Failed |
| Pair of premature ventricular complexes | 🞎 | 🞎 Passed 🞎 Failed |
| Coarse atrial fibrillation | 🞎 | 🞎 Passed 🞎 Failed |
| Fine atrial fibrillation | 🞎 | 🞎 Passed 🞎 Failed |
| Atrial flutter | 🞎 | 🞎 Passed 🞎 Failed |
| Atrial tachycardia | 🞎 | 🞎 Passed 🞎 Failed |
| Supraventricular tachycardia | 🞎 | 🞎 Passed 🞎 Failed |
| Asystole | 🞎 | 🞎 Passed 🞎 Failed |
| First-degree block | 🞎 | 🞎 Passed 🞎 Failed |
| Second-degree block (type I) | 🞎 | 🞎 Passed 🞎 Failed |
| Second-degree block (type II) | 🞎 | 🞎 Passed 🞎 Failed |
| Third degree block | 🞎 | 🞎 Passed 🞎 Failed |
| Coarse ventricular fibrillation | 🞎 | 🞎 Passed 🞎 Failed |
| Fine ventricular fibrillation | 🞎 | 🞎 Passed 🞎 Failed |
| Polymorphic ventricular tachycardia (type I, II, III, IV, V) | 🞎 | 🞎 Passed 🞎 Failed  No. failed \_\_\_\_\_\_\_\_\_ |
| Monomorphic ventricular tachycardia (120-300 bpm, with 5 bpm steps) | 🞎 | Minimum shocked frequency: \_\_\_\_ bpm |
| **Minimum shocked amplitude**  **(0.05 mV steps in the range 0.05-0.45 mV, 0.5 mV steps in the range 0.5-5.0 mV)** | | |
| Coarse ventricular fibrillation | \_\_\_\_\_\_ mV | |
| Fine ventricular fibrillation | \_\_\_\_\_\_ mV | |

1. **Tests for accuracy of delivered energy**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Accuracy1,2** | **Load (Ω)** | | | | | | |
| **Energy level (J)** | 25 | 50 | 75 | 100 | 125 | 150 | 175 |
| Level 1 | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % |
| … | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % |
| Level n | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % | \_\_\_\_ % |

|  |  |
| --- | --- |
| **Accuracy1 before the automatic disarming3** | **Load (Ω)** |
| **Energy level (J)** | 50 |
| 50 | \_\_\_\_ % |
| 150 | \_\_\_\_ % |

1Obtained by comparing measured delivered energy to the corresponding rated value, i.e. the value specified by the manufacturer for the specific energy-load combination (in case rated values are not provided, consider the selected energy level as the reference value).

2Press the “shock” as soon as indicated by the device.

3Press the “shock” button within two seconds before the automatic disarming.

1. **Tests for charging time**

|  |  |
| --- | --- |
| **Start Time1** | \_\_\_\_\_\_ s |

|  |  |
| --- | --- |
| **Input signal (1 mV)** | **Analysis Time2** |
| Coarse ventricular fibrillation | \_\_\_\_\_\_ s |
| Fine ventricular fibrillation | \_\_\_\_\_\_ s |
| Polymorphic ventricular tachycardia (type I) | \_\_\_\_\_\_ s |
| Polymorphic ventricular tachycardia (type II) | \_\_\_\_\_\_ s |
| **Average of shockable rhythms** | \_\_\_\_\_\_ s |
| First-degree block | \_\_\_\_\_\_ s |
| Second-degree block (type I) | \_\_\_\_\_\_ s |
| Third-degree block | \_\_\_\_\_\_ s |
| Asystole | \_\_\_\_\_\_ s |
| **Average of non-shockable rhythms** | \_\_\_\_\_\_ s |

|  |  |
| --- | --- |
| **Energy level (J)** | **Charge Time3** |
| Level 1 |  |
| … |  |
| Level n |  |

1Time interval from power-on (with electrodes connected both to the defibrillator and to the load) to notification of the start of rhythm analysis (ST).

2Time interval from notification of the start of rhythm analysis to indication of rhythm recognition or equivalent message (AT).

3Time interval from the indication of rhythm identification to the “ready for discharge” condition (CT).