

## 2. TECHNICAL DATA

### 2.1 TECHNICAL DATA LIST

**Table 3 TECHNICAL DATA**

| Items   |   | Rated value   |   |
|---|---|---|---|
| Nominal X-ray tube Voltage                            | IEC 60613:2010                                | Fluoroscopy   | 125 kV  |
|   |   | Radiography   | 150 kV  |
| X-ray tube assembly                                   | Max. heat content                             |   | 1100kJ {1600kHU}  |
|   | Nominal continuous input power IEC 60613:2010 |   | 470W{660HU/s} : with fan<br>235W{330HU/s} : without fan |
| X-ray tube  | Max. anode heat content                       |   | 280kJ { 400kHU}   |
|   | Max. anode heat dissipation rate              |   | 1600W {2200HU/s}  |
|   | Max. continuous heat dissipation rate         |   | 300W { 420HU/s}   |
|   | Continuous anode input power IEC 60613:2010   |   | 100W<br>(Repetition of radiographic exposure)           |
| Nominal focal spot value IEC 60336                    |   | 0.6   | 1.2   |
| Measuring method of focal spot size                   |   | Slit camera   | Slit camera   |
| X-ray tube max. Fluoroscopic load(10min.)             | Anode stationary                              | 355W {500HU/s}  | 425W{600HU/s}   |
|   | Anode rotating                                | 425W {600HU/s}  | 425W{600HU/s}   |
| Nominal anode input power (0.1sec)                    | 50Hz (164DK)                                  | 12.7kW  | 34.3kW  |
|   | 60Hz (164DK)                                  | 13.8kW  | 37.3kW  |
|   | 180Hz (364DK)                                 | 24kW  | 65kW  |
| Nominal radiographic anode input power IEC 60613:2010 | 50Hz (164DK)                                  | 12.7kW  | 34.3kW  |
|   | 60Hz (164DK)                                  | 13.8kW  | 37.3kW  |
|   | 180Hz (364DK)                                 | 24kW  | 65kW  |
| Max. filament voltage                                 |   | 7.6 V   | 12.1 V  |
| Max. filament current *1                              |   | 5.6 A   | 5.6 A   |
| Anode target  | material                                      | Rhenium-tungsten faced molybdenum   |   |
|   | angle/diameter                                | 16°/100mm   |   |
| Anode rotation *2                                     |   | Direction of anode rotation is counter-clockwise as viewed from the cathode side, and R.P.M as follows.<br>2700 min. <sup>-1</sup> {R.P.M.} at 50 Hz<br>3200 min. <sup>-1</sup> {R.P.M.} at 60 Hz<br>9700 min. <sup>-1</sup> {R.P.M.} at 180 Hz |   |
| Minimum total filtration IEC 60601-2-28:2017          |   | 1.7 mm Al/75 kV (Including added filter*3)  |   |
| Permanent filtration *4                               | IEC 60601-2-28:2017                           | 1.0 mm Al/75 kV IEC 60522:1999 (without added filter)   |   |
|   | JIS Z 4751-2-28:2008 (IEC 60601-2-28:1993)    | Min. 1.5 mm Al at 70kV *5 (Including added filter)  |   |
| Leakage radiation *6                                  | IEC 60601-1-3:2008+A1:2013                    | Leakage radiation in hour from the X-ray tube assembly and collimator is less than 0.87mGy at a distance of 1 meter from the focal spot. However, leakage radiation in an hour from the collimator is less than 0.30mGy.                        |   |
| X-ray radiation field                                 |   | 350mm × 350mm (at distance of 650mm from focal spot)  |   |
| IEC classification IEC 60601-1:2005+A1:2012           |   | CLASS I   |   |
| Mode of operation                                     |   | Continuous operation with intermittent loading  |   |
| Mass *7   |   | 21 kg   |   |
| High voltage connector                                |   | IEC 60526 type  |   |