

## 1.1.1

**SHFR800-TF400 – GENERATOR 80KW, 125 KVP, 800MA, 630MAS, LOW/HIGH SPEED, 1 TUBE, THREE PHASE 400VAC**

1.1.1 This High Frequency X-ray Generator is designed for conventional or digital radiography and pulsed or continuous fluoroscopy (optional) and is controlled by multiple microprocessors providing an increased **image / exposure consistency, efficient operation and extended Tube life.**

There are "service tools" available that facilitate configuration, calibration and remote diagnosis. Being able to remotely update the generator software, collect data from error logs, equipment counters, perform or restore backups of calibration and / or configuration data, download data from new X-ray tubes, consult the software versions and / or the license installed on the computer. Even with the presence of an operator in the room, by activating the handswitch, the generator could be calibrated remotely and simultaneously while the curves of kV, mA, filament current versus mA, or other internal generator signals are analyzed.



All the mentioned service tools along with its advanced self-diagnosis system with indication of error codes, simplify the troubleshooting of the equipment, allowing easy maintenance and even advance the necessary spare parts in an installation before visiting it.

Its low ripple factor and high accuracy of the radiographic parameters (KVp, mA, exposure time), reduce soft radiation and improve the X-ray beam homogeneity allowing an improvement in the image quality and a reduction of the patient dose. There are also optional or configurable functionalities that reduce the kV peak times and the kV drop times, allowing to **reduce even more the patient and the soft radiation doses.**

Generator with advanced features in an **Ultra-Compact Size:**

- Remote service, update and diagnosis possibility.
- High frequency Constant potential.
- Tube protection circuitry prolongs Tube life and increases system
- Equipped with closed loop control of X-ray Tube current, kVp and filaments, which minimizes potential errors and the need for readjustments.
- Automatic line compensation due to closed loop operation of X-ray Tube current and kVp.
- Heat Unit storage for the X-ray Tube, even after turning On / Off the equipment.
- Independent memory for storing Radiographic or Fluoroscopic operating parameters. This permits rapid switching from one technique to another. Remote service, update and diagnosis possibility.
- Space charge compensation.
- Power cabinet and electronic control.

## TECHNICAL SPECIFICATIONS:

GENERATOR TYPE	THREE PHASE, HIGH FREQUENCY, Low/ High Speed. 1 TUBE
INPUT LINE OPERATION	400Vac
FREQUENCY	50/60kHz
MAXIMUM POWER kW	80kW, According to IEC definition (0,1s, 100Kv) 1.1.2; T1
MINIMUM POWER kW	0.4 kW (40kVp 10 mA)
kVp RANGE	From 40kVp to 125KVp (150kVp Optional). In steps of 1KVp 1.1.3
kVp ACCURACY	± (3% + 1kVp)
mAs RANGE	From 0.1mAs to 630*mAs in 39 steps, Renard10 Scale 1.1.4
mAs ACCURACY	±(10% + 0.2mAs)
mA RANGE	From 10 mA to 800mA in 20 steps, Renard10 Scale 10,12.5,16,20,25,32,40,50,63,80,100,125,160,200,250,320,400,500,630,800
mA ACCURACY	± (4% + 1 mA)
EXPOSURE TIME RANGE	1.0msec, Interval of 1.0msec to 10,000msec (0.001 to 10 seconds)
ACCURAY EXPOSURE TIME	± (2% + 0.1 ms)
POWER OUTPUT (@ 0,1s)	800mA @ 100kVp
RIPPLE FACTOR	1 %
MARGING OF ERROR - kVp & mA/ time	Lower than 5% in all parameters
AUTOMATIC COMPENSATION LINE	± 10%Vac
mAs in AEC	500mAs
WEIGHT & DIMENSIONS	L445mm x W360mm x H564.5mm 65 Kg
NOTES (*)	Under requirement, mA and exposure time stations could be configured to three different logarithmic scales by the Field Service Engineer: <ul style="list-style-type: none"> <li>· R'10: 63mA, 630 mA and 63 ms, 630ms, 6.3 s.</li> <li>· R'10<sub>(64)</sub>: 64mA, 640 mA and 64 ms, 640ms, 6.4 s.</li> <li>· R'10<sub>(65)</sub>: 65mA, 650 mA and 65 ms, 650ms, 6.5 s.</li> </ul>