



Genius HF-C MK2 RAD 80 kW

Radiographic 80 kW high frequency generator

Product Data

Radiological features

Power	80 kW
Exposure time range	0,001 ÷ 6 s according to R'10 scale (36 steps)
kV range	40 ÷ 150 kV in 1 kV step
mA range	10 ÷ 800 mA according to R'10 scale (31 steps) 10 ÷ 1000 mA according to R'10 scale (32 steps) in option
Available power	80 kV 800 mA standard, 1000 mA in option 100 kV 800 mA 126 kV 630 mA 150 kV 500 mA 150 kV 400 mA
mAs range	0.4 ÷ 600 mAs according to R'10 scale
kV accuracy	Less than ± 5%
mA accuracy	Less than ± 10%
mAs accuracy	Less than ±15%
ms accuracy	±1%
High voltage frequency (max)	64 kHz 100 kHz in burst mode (intermittent) for low load applications
Ripple	< 5%
Rise time	Max 1.5 ms up to 75% of kV value
Working stations	3 + direct exposure
Tubes	1
Tube rotor supply	Normal speed (standard) High speed (optional)



Functionality

Working technique	<ul style="list-style-type: none"> - 3 points (kV, mA, s) - 2 points (kV, mAs) - AEC technique (option), with possibility to select 1 point technique (kV) or 2 point technique (kV, mA)
Anatomical technique	432 programs (8 anatomic levels, 3 memory banks for each anatomic level, 6 programs for each memory bank, 3 patient sizes)
High speed selection	Automatic, depending on tube load
mA calibration	mA self-calibration during each exposure
Safeties	Maximum load, thermal load of anode, anode rotation, tube thermal switch, filament over-heating, maximum voltage protection
User interface	<ul style="list-style-type: none"> - Standard 7" touch screen console for every operating parameter and message of anomalies - Optional 10.4" touch screen console
Technical service interface and setup	<ul style="list-style-type: none"> - From console - From an external PC with dedicated software, linked to the processor via serial connection
Console language choice	Italian, English, French, Spanish, German, Greek, Cyrillic
Focus selection	Manual or automatic selection of 2 focus
Anode heat calculator	Real time calculation and display of anode load (absolute anode thermal load in kJ and in percentage of maximum load)
Serial communication line	RS 232 serial port for communication with digital acquisition system for automatic selection of exposure parameters

AEC (option)

Number of receptors	Up to 2
Measuring chamber	3 fields, semiconductor chamber or ionization chamber
Screen-film combination	3 choices
Film darkening adjustment	7 steps



Integrated DAP meter (option)

Type	Ionization chamber
Number of ionization chambers	1
Parameters display	The following parameters are visualized on the generator display: <ul style="list-style-type: none"> - Date and time - Exposure parameters (kV, mA, mAs, cumulated time of sequence, number of exposures in the sequence) - Dose-Area Product (mGy cm²) (actual exposure) - Total dose from last print out
Printer	Option. It allows to print the displayed parameters (Dose-Area Product, kV, mA, sec, number of runs, date and time, anatomical program name, exposure technique, user's input string) on labels

Electrical characteristics

Power supply	Three-phase 400 Vac \pm 10%
Frequency	50-60 Hz
Line impedance	\leq 0,13 Ohm
Line voltage compensation	Automatic
Console/cabinet connection	With 20 m cable
Peak current	208 A
Power rating	108 kW active, 144 kVA apparent

Mechanical characteristics

	DIMENSIONS	WEIGHT
Standard 7" touch screen console	320 x 208 x 59 mm	2 kg
Electrical cabinet	LS Starter Version: 500 x 350 x 890 mm (LxDxH)	75 kg
	HS Starter Version: 500 x 350 x 1100 mm (LxDxH)	85 kg
HT transformer	Integrated in the cabinet	
Optional 10,4" touch screen console	295 x 245 x 95 mm	5,5 kg

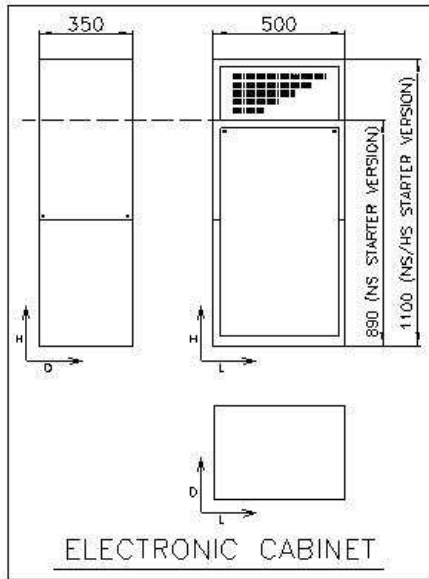
Environmental conditions

Operating conditions	Temperature:	from +10° to +40° Celsius
	Humidity:	from 30% to 75%
	Pressure:	from 700 hPa to 1060 hPa
Conditions for transport and storage	Temperature:	from -20° to +70° Celsius
	Humidity:	\leq 95% non condensing
	Pressure:	> 630 hPa

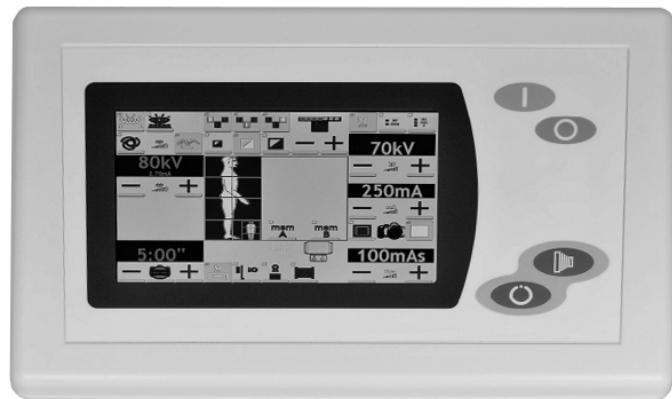
Standards and regulations

 0051	CE symbol grants the product compliance to the European Directive for Medical Devices 93/42/EEC and its revised versions as a class IIB device
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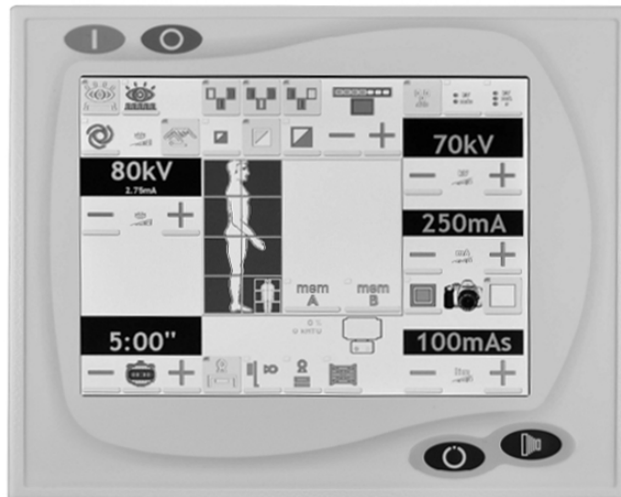
Dimensions (in mm)



Electronic cabinet



Standard 7" touch screen console



Optional 10.4" touch screen console

Note: Products are continuously under review in the light of technical advancement. The actual specification may therefore be subject to improvement or modification without notice.

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Company with Quality System certified by



ISO 9001:2015



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