Genius HF-C MK2 RF 80 kW

Radiographic/Fluoroscopic 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 (radiography)	40 ÷ 150 kV in 1 kV step
kV range (fluoroscopy)	40 ÷ 125 kV in 1 kV step
mA range (radiography)	10 ÷ 1000 mA according to R'10 scale
mA range (fluoroscopy)	0.5 ÷ 5 mA
Available power	80 kV 1000 mA 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)	100 kHz
Ripple	< 5%
Rise time	Max 1.5 ms up to 75% of kV value
Working stations	3 + direct exposure
Tubes	1
Tube rotor speed	Normal speed 3000 rpm(standard) High speed 9000 rpm (optional)

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Functionality

Working technique	- 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) - 0 point using transfer tables that allow the automatic kV and mA setting according to the last kV value used in fluoroscopy
Anatomical technique	432 programs (8 anatomic levels, 3 memory banks for each anatomic level, 6 programs for each memory bank, 3 patient sizes)
Tomography	Automatic selection of tomographic times with Villa remote control tables (4 angles, 2 speeds)
Pulsed fluoroscopy	- With 1Kx1K TV chains. The operator can adjust from generator console the frame rate from 1 to 30 fps. Fluoro current can be selected during system setup among 40/60/80/100 mA - With DRF digital acquisition systems, the frame rate can be adjusted by the operator from digital system console.
High speed selection	Automatic, depending on tube load
mA calibration	mA self-calibration during each exposure
Fluoro parameters adjustment	Automatic or manual kV/mA adjustment
Safeties	Maximum load, thermal load of anode, anode rotation, tube thermal switch, filament over-heating, maximum voltage protection
User interface	12" touch screen console with display of every operating parameter and message of anomalies
Technical service interface and setup	- From console - From an external PC with dedicated software, linked to the processor via USB 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 the automatic selection of exposure parameters with DRF and VDX digital systems only

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: - Date and time - Exposure parameters (kV, mA, mAs, cumulated time of sequence, number of exposures in the sequence) - Dose-Area Product (mGy cm^2) (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, anatomic program name, exposure technique, user's input string) on labels

Electrical characteristics

Power supply	Three-phase 400 Vac ± 10%
Frequency	50-60 Hz
Line impedance	≤ 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
Electrical cabinet	LS Starter Version: 500 x 350 x 890 mm (LxDxH) HS Starter Version: 500 x 350 x 1100 mm (LxDxH)	75 kg 85 kg
HT transformer	Integrated in the cabinet	
12" touch screen console	360 x 360 x 125 mm	5,2 kg

Environmental conditions

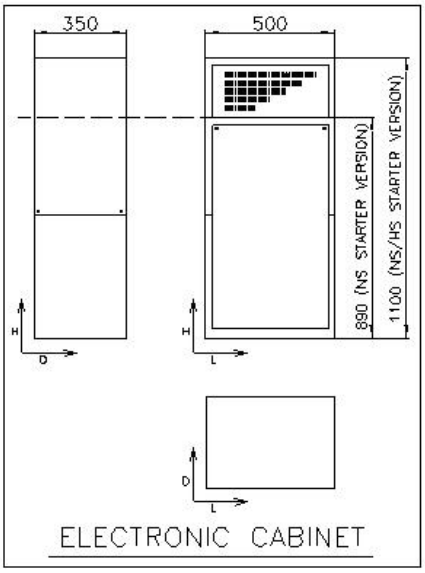
Operating conditions	Temperature:	from +10° to +40° Celsius
	Humidity:	from 30% to 75%
	Pressure:	from 700 hPa to 1060 hPa

Conditions for transport and storage	Temperature: Humidity: Pressure:	from -20° to +70° Celsius ≤ 95% non condensing > 630 hPa

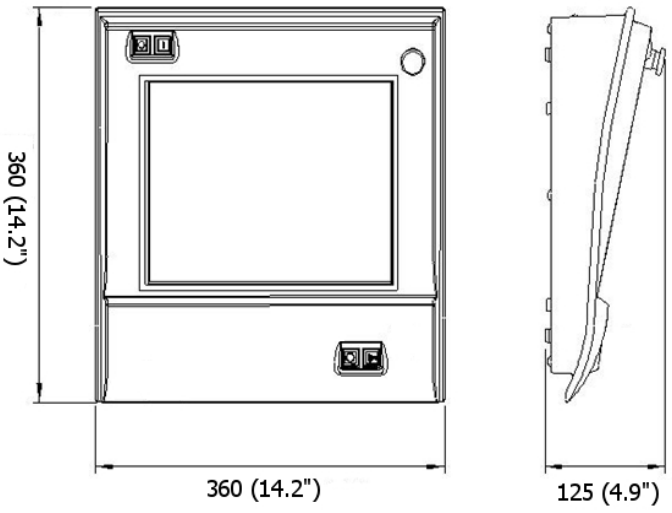
Standards and regulations

CE 0051	CE symbol grants the product compliance to the regulation (EU) 2017/745

Dimensions (in mm)



Electronic cabinet



12" 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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