Company: Karel Hrnčíř – BIOMAG
Chomutice 81
507 53 Chomutice, CZ
IČ: 18848125, DIČ: CZ570223085

Headquarters:
Průmyslová 1270
506 01 Jičín, CZ
IČP: 1002612233

Datasheet

Medical Device: Pulsed Magnetic Therapy Device

Model: BIOMAG® Lumina 3D-e

BIOMAG® Lumina 3D-e EASY without battery
BIOMAG® Lumina 3D-e EASY with battery
BIOMAG® Lumina 3D-e CLINIC without battery
BIOMAG® Lumina 3D-e CLINIC with battery

Description	Values	
Software version	Display on the screen www.biomag-medical.com/info/	
Power supply voltage	~100 to 240 V, 50/60 Hz	
Device input power	60 VA	
Voltage of integrated power source	24 V DC	
Device insulation class	II.	
Applied part type	BF type	
Power cord	H05VVH2-F 2 x 0.75 mm / H03VVH2-F 2 x 0.75 mm	
Environment	Normal	
Protection grade	IP 30 *	
MIMI – maxim intensity of magnetic induction	Max. 35 mT	
Output regulation (intensity)	EASY Without regulation	CLINIC 12 levels 1, 5, 10, 20, 30, 40, 50, 60, 70, 80, 90,100%
Number of outputs for applicators	4	
Number of EASY programs	6 programs	
Basic number of programs in MY PROGRAMS for the EASY mode (possibility of copying the program without changing the name / with changing the name)	** 1 most frequently used + 8 possibilities	
Number of CLINIC programs	6 programs	
Basic number of programs in MY PROGRAMS for the CLINIC mode (possibility of copying the program without changing the name / with changing the name)	*** 1 most frequently used + 200 possibilities	
Frequencies of programs	EASY 4–81 Hz	CLINIC 4–81 Hz
Pulse shape	Rectangle (modified according to frequency)	
Pulse leading edge width (dependent on the selected program and applicator induction)	0.4-2.5 ms	
Pulse width	1.1-11.1 ms ****	
Pulse descending edge depending on the applicator induction	0.5-3.5 ms	
Number of time ranges	9	
Application times	5, 10, 15, 20, 25, 30, 45, 60, 90 min	
End of application	Acoustic indication + Display	
Warning messages	Acoustic indication + Display	
EMC – electromagnetic compatibility	CSN EN 60601-1-2 ed. 3:2016	
Ambient temperature around the device	+5°C to +35°C	
Device dimensions	240 x 162 x 75mm	
Display	3.5' TFT	
Device weight	0.845 kg	
Type of accumulator (if included in the system)	Lithium battery LIP745690P/2S	
Accumulator weight	165 g	
Operation time when powered from accumulator (with 4 outputs occupied)	approx. 160 min	
Accumulator recharging time	7 hours	

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Programs and their parameters

Order	Name	Frequency / sequence time			Wobbling	Intensity	Pulse shape	Application time
Program No. 1	**PAIN-RELIEVING EFFECT** promoting pain relief	5–12 Hz 2 min 30 s	15 Hz 15 s	25 Hz 15 s	Gradually increasing	EASY: without regulation CLINIC: 1–100%	Rectangle	EASY: 20 min CLINIC: 20 min (5–90 min)
Program No. 2	**HEALING EFFECT** promoting healing accompanied by regeneration, anti-inflammatory and anti-rheumatic effects	50–81 Hz 2 min 30 s		12 Hz 30 s	gradually increasing / after pulse	EASY: without regulation CLINIC: 1–100%	Rectangle	EASY: 20 min CLINIC: 20 min (5–90 min)
Program No. 3	**ANTI-SWELLING EFFECT** promoting the reduction of swellings	12–15 Hz 2 min 30 s		50–75 Hz 30 s	Gradually increasing	EASY: without regulation CLINIC: 1–100%	Rectangle	EASY: 20 min CLINIC: 20 min (5–90 min)
Program No. 4	**MYORELAXING EFFECT** promoting the reduction of spasms and swellings	10–12 Hz 3 min			Gradually increasing	EASY: without regulation CLINIC: 1–100%	Rectangle	EASY: 20 min CLINIC: 20 min (5–90 min)
Program No. 5	**VASODILATING EFFECT** promoting vasodilation and blood circulation	12 Hz 1 min		50–80 Hz 2 min	after pulse / gradually increasing	EASY: without regulation CLINIC: 1–100%	Rectangle	EASY: 20 min CLINIC: 20 min (5–90 min)
Program No. 6	**DETOXIFYING EFFECT** promoting metabolism and detoxification	4–12 Hz 2 min		50–81 Hz 1 min	Gradually increasing	EASY: without regulation CLINIC: 1–100%	Rectangle	EASY: 20 min CLINIC: 20 min (5–90 min)

Sequence = the group of frequencies that repeat periodically over the application time.