

AAIR **SAFE** inside
NATURAL RHYTHM

BTO **inside**
BRADY TACHY OVERLAP

ELA **ovatio** DR
MODEL 6550

TECHNICAL SPECIFICATIONS



Real size, 29 cc, 10.9 mm thin, 34 J

SENSING / DETECTION

THERAPY ZONES	VALUES
Slow VT detection zone	Slow VT ON-Slow VT OFF
VT detection zone	VT ON-VT OFF
Fast VT / VF detection zone	Fast VT + VF ON-VF ON
Slow VT cycle length (lower limit) (min-1)	From 100 to 200 by steps of 5 ; 190
VT cycle length (lower limit) (min-1)	130-135-140-145-150-155-160-165 - 170-175-180-185- 190 -195-200-210-220-230-240
VF cycle length (lower limit) (min-1)	150-155-160-165-170-175-180-185- 190 -195-200-210-220-230-240
Fast VT cycle length (upper limit) (min-1)	150-155-160-165-170-175-180-185- 190 -195-200-210-220-230-240-255
Slow VT persistence (cycles)	4-6-8-10-12-16-20-30-50-100-200
VT persistence (cycles)	4-6-8-10-12-16-20-30-50-100-200
VF persistence (cycles)	From 4 to 20 by steps of 1 ; 6

SORTING CRITERIA

Slow VT and VT sorting criteria	Rate Only-Stability-Stability+Stability/Acc-Stability+/Acc-Parad-Parad+
Fast VT sorting criteria	Rate+Stability-Rate Only
Majority (XY) : Y (cycles)	8 -12-16
Majority (XY) : X (%)	65-70- 75 -80-90-95-100
Window of RR stability for Slow VT and VT (ms)	30-45- 60 -80-95-110-125
Window of RR stability for fast VT (ms)	30 -45-65
Prematurity acceleration (%)	6-13-19- 25 -31-38-44-50
Long cycle persistence extension (cycles)	From 0 to 16 by steps of 1 ; 10
Long cycle gap (ms)	15-30-45-65-80-95-110-125-140-155- 170 -190-205
Atrial monitoring	Yes-No

THERAPIES

COMMON PARAMETERS	VALUES
Enable ATP therapy	Yes- No
Enable shock therapy	Yes- No
Polarity	Normal -Inverted
Polarity alternation (34J)	Yes- No
Atrial coil (SVC) present	Yes-No
Active case	Yes-No
Shock vector	Case to RV-SVC to RV- Case + SVC to RV
SVC Exclusion (shock < 15J)	Yes- No

THERAPIES

programmable independently per zone (slow VT, VT, fast VT/VF, VF):

ATP PROGRAM PER ZONE	VALUES
2 ATP programs	OFF -Burst-Burst+Scan-Ramp-Ramp+Scan
Number of sequences	1-2-3-4-5-6-7-8-9-10-11-12-13-14-15
Cycles in first sequence	1-2-3-4-5-6-7-8-9-10-11-12-13-14-15
Cycles added per sequence	0-1-2-3-4-5-6-7-8-9-10-11-12-13-14-15
Coupling interval (%)	50-55-60-70-75-80-90-95
Ramp decrement (per cycle) (ms)	0-4-8-12-16-20-30-40-50-60
Scan decrement (per sequence) (ms)	0-4-8-12-16-20-30-40-50-60
Time limit (min)	0.5-1-1.5-2-2.5-3-3.5-4
Minimum cycle length (ms)	95-110-125-140-155-170-190-205-220-235-250-265-280-295-310

SHOCK PROGRAM PER ZONE

2 shocks with programmable energy (J)	OFF -0.5-0.8-1.2-1.6-2.1-2.7-3.4-4.5-6-7-8-9-10-12-14-16-18-20-22-24-26-28-30-32-34
Number of Shock Max (34 J)	OFF -1-2-3-4

Note: In fast VT/VF zone: only one ATP program programmable, shock program still programmable

NON PROGRAMMABLE PARAMETERS

ATRIAL REFRACTORY PERIODS	VALUES
Post atrial sensing	47 ms
Post atrial pacing	109 ms
VENTRICULAR REFRACTORY PERIODS	
Post ventricular sensing	95 ms
Post ventricular pacing	220 ms
Post atrial pacing (blanking)	16 ms
OTHER	
Window of PR association	63 ms
Waveform	Constant tilt (50% - 50%)
Stored energy for the shock MAX	34 J
Pacing amplitude during ATP therapies	7 V
Committed period	94 ms

ANTIBRADYCARDIA PACING

PACING/SENSING	VALUES
Mode	VV-VVIR-DDD-DDDR-DDD/DDIR-DDI-DDIR AAIsafeR-AAIsafeRR
Basic rate (min-1)	From 30 to 90 by steps of 5 ; 60
Maximum rate (min-1)	From 100 to 145 by steps of 5 ; 120
Hysteresis (%)	0 -5-10-20-35
Rest AV delay (ms)	30-45-65-80-95-110-125-140- 155 -170-190-205-220-235-250
Exercise AV delay (ms)	30-45-65- 80 -95-110-125-140-155-170-190-205-220-235-250
AV delay extension (ms)	0-15-30-45- 65 -80-95-110-125
Atrial sensitivity (mV)	From 0.2 to 4 by steps of 0.2 ; 0.4
Atrial amplitude (V)	1-1.5-2-2.5-3- 3.5 -4-4.5-7
Atrial pulse width (ms)	0.12-0.25- 0.35 -0.5-0.6-0.75-0.85-1
Ventricular sensitivity (mV)	From 0.4 to 4 by steps of 0.2 ; 0.4
Ventricular amplitude (V)	1-1.5-2-2.5-3- 3.5 -4-4.5-7
Ventricular pulse width (ms)	0.12-0.25- 0.35 -0.5-0.6-0.75-0.85-1

POST-SHOCK MODE

Mode	OFF-VV-DDI-DDD
Plateau duration	10s- 20s -30s-1min-2min-3min-4min-5min
Basic rate (min-1)	From 50 to 90 by steps of 5 ; 60
A amplitude (V)	1-1.5-2-2.5-3- 3.5 -4-4.5-7
A pulse width (ms)	0.12-0.25- 0.35 -0.5-0.6-0.75-0.85-1
Ventricular amplitude (V)	1-1.5-2-2.5-3- 3.5 -4-4.5-7
Ventricular pulse width (ms)	0.12-0.25- 0.35 -0.5-0.6-0.75-0.85-1

SPECIAL FEATURES

Smoothing	No -Very slow-Slow-Medium-Fast
Fallback Mode Switching	Yes -No
Fallback Basic Rate (min-1)	40-45-50-55- 60 -65-70-75-80-85-90
Anti-PMT protection	Termin- Reprog
Physical activity	Very low-Low- Medium -High-Very high

AAIsafeR PARAMETERS

Pause max (s)	2 -3-4
Long PR : max (ms)	From 200 to 500 by steps of 50 ; 450
Long PR : min (ms)	From 200 to 500 by steps of 50 ; 250
AVB I Commutation	Rest+Exercise -Exercise

V ARRHYTHMIA PREVENTION ALGORITHMS

Synchronous atrial pacing on ES	Yes- No
Post extrasystolic pause suppression	Yes- No
Acceleration on extrasystole	Yes- No
Max acceleration rate (min-1)	From 60 to 145 by steps of 5 ; 100

REFRACTORY PERIODS

Atrial refractory period post ventricular sensing (ms)	45 -65-80-95-110-125-140-155
Atrial refractory period post ventricular pacing (ms)	80 -95-110-125-140-155

SENSITIVITY MARGINS

Atrial post pacing/sensing margin (mV)	From 0 to 1 by steps of 0.2 ; 0.4
Ventricular post pacing margin (mV)	From 0 to 2 by steps of 0.2 ; 0.8

RESPONSE TO NOISE

V pacing on noise	Yes- No
Automatic sensitivity on noise	Yes- No

AIDA+ Diagnostics (Automatic Interpretation for Diagnosis Assistance)

- Automatic analysis of stored data: help messages supported by graphical data.
- Reprogramming proposals for device functioning optimisation.
- Day by day evolution over 6 months: of atrial and ventricular arrhythmias, of A and V rate and pacing %.
- Ventricular arrhythmias analysis
 - Delivered therapy statistics, pacing and detection statistics
 - EGM, markers and device analysis: up to 15 episodes
 - Arrhythmia history

Automated follow-up assistant

Automatic sequencing of the steps of a standard follow-up

Physical characteristics:

- Size: 58.8 x 67.9 x 10.9 mm - 86g - 29cc
- Connectors: 2*IS-1 bipolar, 2*DF-1
- Longevity: 6.5 years (pacing in DDD mode, 15%, 500 Ω, 2.5 V, 0.35 ms, 60 min-1, 1 maximum power shock per quarter)

Value in bold: 'as shipped' value.

Information given in this document may be modified without prior notice.