

Rivacor 3 DR-T

MR conditional dual-chamber ICD



Ordering Information

Model	Connectors	Volume/weight	Dimensions	Order number
Rivacor 3 DR-T	DF4 (LLHH) (1x), IS-1 (1x)	32 cm ³ /77 g	60 mm x 66.5 mm x 10 mm	429573

Product Highlights

BIOshape

BIOTRONIK Home Monitoring®

Heart Failure Monitor

ProMRI¹⁾

1) For combination of MR conditional devices, please see the "ProMRI MR conditional device systems" manual

ShockReduct

SMART

MorphMatch

Automatic threshold monitoring (RA, RV)

Rivacor 3 DR-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... (5) ... 100 ... (10) ... 160 bpm
AT/AF	100 ... (10) ... 250 bpm
VT1	OFF; 100; 102; 103 ... (2) ... 115; 118 ... (2) ... 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VT2	OFF; 120; 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VF	OFF; 150 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 ... (9) ... 240; 250 bpm
Ventricular arrhythmia detection and redetection	
VT detection criteria	Interval; SMART detection; Onset; Stability; MorphMatch (if SMART: OFF); Sustained VT
Detection counter VT1	10 ... (2) ... 100
Detection counter VT2	10 ... (2) ... 80
Redetection counter VT1	10 ... (2) ... 50
Redetection counter VT2	10 ... (2) ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... (4) ... 32 % If SMART = ON: 4 ... (4) ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... (4) ... ± 48 ms and ± 8 ... (4) ... ± 48 % If SMART = ON: ± 8 ... (4) ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... (1) ... 3; 5; 10 ... (10) ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... (1) ... 10
ATP type	Burst; Ramp
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
ATP optimization	OFF; ON
Minimum ATP interval	200 ms (fixed)
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF ; Burst; Ramp
Stability criterion	12 % (fixed)
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
Cardioversions/defibrillation therapy	
Number of shocks	For VT zones: OFF; 1; 2; 6 or 8 For VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... (2) ... 20 ... (5) ... 40 J
Energy of 2nd shock	OFF; 4 ... (2) ... 20 ... (5) ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV, RA)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Pacing parameters	
Mode	DDDR; DDIR; VVIR; AAIR; D00; DDD; DDI; VI; AAI; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV]	0.5 ... (0.25) ... 4.0 ... (0.5) ... 6.0; 7.5 V
Pulse width [A, RV]	0.4; 0.5 ... (0.25) ... 1.5 ms
Capture control [A, RV]	OFF; ATM
Basic rate	30 ... (5) ... 100 ... (10) ... 160 bpm
Rate hysteresis	OFF; -5 ... (-5) ... -25 ... (-20) ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... (5) ... 100 bpm

Pacing parameters	
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... (5) ... 350 ms
Sense compensation	OFF; -5 ... (-5) ... -120 ms
AV hysteresis mode	OFF; Positive; Negative; IRSplus
AV hysteresis mode (IRSplus)	400 ms (fixed)
AV scan/repetitive (Positive)	OFF; ON
Upper rate	90 ... (10) ... 170 bpm
Atrial upper rate	OFF; 175; 200; 240 bpm
Mode switching (Mode)	VDI, VDIR; DDI, DDIR
Intervention rate	OFF; 120 ... (10) ... 200 bpm
Change of basic rate during MS	OFF; +5 ... (5) ... +30 bpm
Post mode switching rate	OFF; +5 ... (5) ... +50 bpm
Post mode switching duration	1 ... (1) ... 30 min
Onset criterion/Resolution criterion	3 ... (1) ... 8 out of 8
PVARP	AUTO; 175 ... (25) ... 600 ms
PMT detection/termination	OFF; ON
Sensing (RV)	Std.; TWS; VFS
Sensing (A)	Std.; OFF
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording (if Home Monitoring: OFF)	OFF; 30 ... (30) ... 120; 180 days
IEGM Holter	3 × 56 min (Far-field, A and RV)
Length of prehistory	Fixed: 30 s; 5 s (when onset fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V
Longevity	12.52 years ¹ ¹ RA, RV: 2.5 V/0.4 ms, 60 bpm, 500 Ω; RV: 15 %, RA: 50 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), Retrograde conduction, Rapid ventricular pacing

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

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Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics

Please refer to the technical manual of the device for further technical information.