### CARDIAC RESYNCHRONISATION THERAPY (CRT) DEVICES

# Allure Quadra™ RF

Cardiac Resynchronisation Therapy Pacemaker



# **Product Highlights**

- The Allure Quadra<sup>™</sup> CRT-P and quadripolar LV pacing lead features four pacing electrodes and 14 pacing vectors to provide more options and greater control to address complications at and post implant to improve CRT response.
- Angled header and physiologic teardrop shape provide better lead wrap.
- CorVue™ Congestion Monitoring feature monitors the intrathoracic impedance and provides the option for both patient and physician alerts.
- The DirectTrend™ Report provides a summary of three month daily, one year weekly or one year daily diagnostic trends.
- Better patient unitilization from Day 1 when paired with the Merlin@home™ transmitter at point of care.

- AT/AF alerts can be programmed to notify patients and their clinics when a programmed AT/AF threshold or continuous episode duration has been exceeded or when a high ventricular rate accompanies the AT/AF episode.
- Exclusive AF Suppression™ algorithm is clinically proven to suppress episodes of paroxysmal and persistent AF.
- AT/AF burden trend provides a graphical representation of the percentage of time in AT/AF and the number of AT/ AF episodes in the previous 52 weeks.
- Up to 14 minutes of stored electrograms help identify key intrinsic and pacemaker-related events and simplify the diagnosis of complex ECG rhythms associated with heart failure.
- Industry-leading longevity offers over seven and a half years of service life supported by a six-year warranty.\*

## **Ordering Information**

Contents: Cardiac Pulse Generator

MODEL NUMBER	DIMENSIONS (H × W × T, MM)	WEIGHT (G)	VOLUME (CC)	CONNECTOR
PM3242	56 × 59 × 6	27	15	IS4-LLLL, IS-1

Indications: Implantation of Allure and Allure RF devices is indicated for: maintaining synchrony of the left and right ventricles, implantation of Assurity™, Endurity™ and Allure™ family of devices is indicated in one or more of the following permanent conditions: syncope, presyncope, fatigue, disorientation, or any combination of those symptoms. Rate-Modulated Pacing is indicated for patients with chronotropic incompetence, and for those who would benefit from increased stimulation rates concurrent with physical activity. Dual-Chamber Pacing is indicated for those patients exhibiting: sick sinus syndrome, chronic, symptomatic second- and third-degree AV block, recurrent Adams-Stokes syndrome, symptomatic bilateral bundle branch block when tachyarrhythmia and other causes have been ruled out. Atrial Pacing is indicated for patients with sinus node dysfunction and normal AV and intraventricular conduction systems. Ventricular Pacing is indicated for patients with significant bradycardia and normal sinus rhythm with only rare episodes of A-V block or sinus arrest, chronic atrial fibrillation, severe physical disability. AF Suppression algorithm is indicated for more of the above pacing indications.

Contraindications: Implanted Cardioverter-Defibrillator (ICD). Devices are contraindicated in patients with an implanted cardioverter-defibrillator. Rate-Adaptive Pacing may be inappropriate for patients who experience angina or other symptoms of myocardial dysfunction at higher sensor-driven rates. An appropriate Maximum Sensor Rate should be selected based on assessment of the highest stimulation rate tolerated by the patient. AF Suppression stimulation is not recommended in patients who cannot tolerate high atrial-rate stimulation. Dual-Chamber Pacing, though not contraindicated for patients with chronic atrial flutter, chronic atrial fibrillation, or silent atria, may provide no benefit beyond that of single-chamber pacing in such patients. Single-Chamber Ventricular Demand Pacing is relatively contraindicated in patients who have demonstrated pacemaker syndrome, have retrograde VA conduction, or suffer a drop in arterial blood pressure with the onset of ventricular pacing. Single-

**Chamber Atrial Pacing** is relatively contraindicated in patients who have demonstrated compromise of AV conduction. **Atrial Fibrillation**. Anthem devices are contraindicated in patients having chronic atrial fibrillation or intermittent atrial fibrillation that does not terminate. For specific contraindications associated with individual modes, refer to the programmer's on-screen help.

Potential Adverse Events: The following are potential complications associated with the use of any pacing system: air embolism, body rejection phenomena, cardiac tamponade or perforation, hematoma, bleeding hematoma, seroma, formation of fibrotic tissue, local tissue reaction, inability to interrogate or program due to programmer or device malfunction, infection/erosion, interruption of desired pulse generator function due to electrical interference, either electromyogenic or electromagnetic, lead malfunction due to conductor fracture or insulation degradation, loss of capture or sensing due to lead dislodgement or reaction at the electrode/tissue interface, loss of desired pacing and/or sensing due to lead displacement, body reaction at electrode interface, or lead malfunction (fracture or damage to insulation), loss of normal device function due to battery failure or component malfunction, pacemaker migration or pocket erosion, pectoral muscle or diaphragmatic stimulation, phrenic nerve stimulation, pneumothorax/hemothorax, endocarditis, excessive bleeding, induced atrial or ventricular arrhythmias, myocardial irritability, pericardial effusion, pericardial rub, pulmonary edema, rise in threshold and exit block, valve damage, cardiac/coronary sinus dissection, cardiac/coronary sinus perforation, coronary sinus or cardiac vein thrombosis.

Refer to the User's Manual for detailed indications, contraindications, warnings, precautions and potential adverse events.

 $<sup>^*\</sup>mathrm{Longevity}$  calculated based on the following settings: 2.5 V, 500 Ohm, 60 BPM, 100% DDD-BiV Pacing, 0.4 ms, Cap Confirm Off, and Stored EGM On.

## Allure Quadra™ RF

## CARDIAC RESYNCHRONISATION THERAPY (CRT) DEVICES

Cardiac Resynchronisation Therapy Pacemaker

#### PHYSICAL SPECIFICATIONS

Model	PM3242	
Telemetry	RF	
Dimensions (mm)	56 × 59 × 6	
Weight (g)	27	
Volume (cc)1	15	
Connector	IS4-LLLL, IS-1	
PARAMETER	SETTINGS	
Resynchronisation Thera	nnv	

QuickOpt™ Timing Cycle Optimisation RV and LV Pulse Width (ms) RV and LV Pulse Amplitude (V)

RV Pulse Configuration VectSelect Quartet

Ventricular Sense Configuration

First Chamber Paced Interventricular Pace Delay (ms) Output/Sensing

LV Pulse Configuration

Negative AV Hysteresis Search (ms)

Negative AV Hysteresis search (n Shortest AV/PV Delay (ms) Atrial ACap™ Confirm Feature Primary Pulse Confirmation Backup Pulse Confirmation Backup Pulse Amplitude (V) Searchable Intervals (hrs) Atrial Pulse Configuration

Atrial Sense Configuration Atrial Sensitivity3,4 (Fixed) (mV)

Atrial Pulse Amplitude (V) Atrial Pulse Width (ms) RVCap™ Confirm Feature

Searchable Interval (hrs)
LVCap™ Confirm Feature Searchable Interval (hrs) SenseAbility™ Sensing Algorithm Technology A Max Sensitivity (mV)

V Max Sensitivity (mV) Threshold Start

Decay Delay (ms)

 $(Ventricular Post-Pace)\ Auto;\ 0;\ 30;\ 60;\ 95;\ 125;\ 160;\ 190;\ 220$  Ventricular Sensitivity (fixed) (mV) 0,5–12,5 in steps of  $0,5^{3,4}$ 

Rate/Timing Mode

DDT Trigger

DDT Timing<sup>5</sup> Base Rate (min-1) Hysteresis Rate (min-1) Search Interval (min) Cycle Count

Intervention Rate (min-1) Intervention Duration (min-1)

Recovery Time Rest Rate (min<sup>-1</sup>) Maximum Tracking Rate (min-1) Sensed AV Delay (ms) Paced AV Delay (ms)

Ventricular Pace/Sense Refractory<sup>7</sup> (Fixed) (ms) Atrial Pace Refractory Atrial Sense Refractory PVARP (ms) Atrial Protection Interval (ms)5

Far-Field Protection Interval (ms)5 16 Rate-Modulated Rate Responsive AV/PV Delay Rate Responsive PVARP/VREF

Shortest PVARP/VREF (ms) Sensor Max Sensor Rate (min-1)

Threshold

Off; Low; Medium; High 125-475 in steps of 25 On; Off; Passive

Sensed/Paced AV Delay; Interventricular Paced Delay

0,05; 0,1-1,5 in steps of 0,1

0,25-4,0 in steps of 0,25; 4,5-7,5 in steps of 0,5

Unipolar; Bipolar Unipolar; Bipolar; Distal Tip 1 - Mid 2; Distal Tip 1 - Proximal 4; Distal Tip

1, Post Try 1 - RV Ring; Mid 2 - Proximal 4; Mid 2 - RV Ring; Mid 3 - Mid 2; Mid 3 - Proximal 4; Mid 3 - RV Ring; Proximal 4 - Mid 2; Proximal 4 - RV Ring; Distal Tip 1 - Can; Mid 2 - Can; Mid 3 - Can; Proximal 4 - Can BV Unipolar Tip; BV Bipolar; RV Unipolar Tip; RV Bipolar; Distal Tip 1 - Mid 2; Distal Tip 1 - Can; and Distal Tip 1 - RV Tip

Simultaneous2; RV; LV 10-80 in steps of 5

Off; -10 to -120 in steps of 10 25–50 in steps of 5; 60–120 in steps of 10 On; Off; Monitor

Bipolar Bipolar 8:24

Unipolar (tip-case); Bipolar (tip-ring) Unipolar Tip (tip-case); Bipolar (tip-ring); Unipolar Ring (ring-case)

0,1-0,5 in steps of 0,1; 0,75-2,0 in steps of 0,25; 2,5-5,0 in steps of 0,5 0,25–4,0 in steps of 0,25; 4,5–7,5 in steps of 0,5

0,05; 0,1–1,5 in steps of 0,1 On; Off; Monitor 8: 24 On; Off; Monitor

> Off; On (Automatic sensitivity control adjustment for atrial and ventricular events) 0,2–1,0 in steps of 0,1

0,2–2,0 in steps of 0,1 (Atrial and Ventricular Post-Sense) 50; 62,5; 75; 100% (Atrial

Varian and vein tudar 10szesties/30/25,7/3,105/0/Artial Post-Pace) 0,2-3,0 in steps of 0,1 mV (Ventricular Post-Pace) Auto; 0,2-3,0 in steps of 0,1 mV (Atrial and Ventricular Post-Sense) 0; 30; 60; 95; 125; 160; 190; 220 (Atrial Post-Pace) 0; 30; 60; 95; 125; 160; 190; 220

A00(R); AAI(R); AAT(R); VOO(R); VVI(R); VVT(R); DOO(R); DVI(R); DDI(R); DDT(R); DDD(R); VDD(R);

Pacing Off R wave DDI

30-130 in steps of 5; 140-170 in steps of 10

Off; 30–150 in steps of 56 Off; 1; 5; 10; 15; 30

Off; Same Base Rate; 80-120 in steps of 10 (Intrinsic +0; Intrinsic +10; Intrinsic +20; Intrinsic +30)

1-10Fast; Medium; Slow; Very Slov Off; 30-150 in steps of 5

90–130 in steps of 5; 140–180 in steps of 10 25; 30–200 in steps of 10; 225–325 in steps of 25 25; 30–200 in steps of 10; 225–300 in steps of 25; 350

125; 160-400 in steps of 30; 440; 4708 190–400 in steps of 30; 440; 470<sup>8</sup> 93; 125; 157; 190–400 in steps of 30; 440; 470<sup>8</sup>

125-500 in steps of 25

Off; Low; Medium; High

80–150 in steps of 5; 160–180 in steps of 10 Auto (-0,5); Auto (+0,0); Auto (+0,5); Auto (+1,0); Auto (+1,5); Auto +(2,0); 1–7 in steps of 0,5 Auto (-1); Auto (+0); Auto (+1); Auto (+2); Auto (+3); 1-16 Reaction Time Very Fast; Fast; Medium; Slow Recovery Time Fast: Medium: Slow: Very Slow

AF Management

AF Suppression™ Algorithm Lower Rate Overdrive (min-1)5 Upper Rate Overdrive (min-1)5 No. of Overdrive Pacing Cycles

Rate Recovery (ms) Auto Mode Switch

Off; On 15-40 in steps of 5

off; DDD(R) to DDI(R); DDD(R) to DDT(R); DDD(R) to VVI(R); DDD(R) to VVT(R); VDD(R) to VVI(R); VDD(R)

AMS Base Rate (min-1) 40-170 in steps of 5

Stored Electrograms Options

Priority Options Channel Triggers Advanced Hysteresis AMS Entry/AMS Exit/

AMS Entry and Exit AT/AF Detection Magnet Response High Atrial Rate Rate (min-1)

No. of Consecutive Cycles High Ventricular Rate Rate (min<sup>-1</sup>) No. of Consecutive Cycles PMT Termination Consecutive PVCs

No. of Consecutive PVCs Noise Reversion Other

Magnet Response

VIP Search Interval VIP Search Cycles

of the Atrial Tachycardia Detection Rate (min<sup>-1</sup>) Post Vent. Atrial Blanking

(PVAB) (ms) Ventricular Safety Standby PVC Response PMT Options PMT Detection Rate (min<sup>-1</sup>)

Lead Type NIPS Options Stimulation Chamber Coupling Interval9 (ms)

S1 Count S110; S2; S3 and S4 Cycle (ms) Right Ventricular Support Rate (min<sup>-1</sup>) Sinus Node Recovery Delay (s) Diagnostic Trends

CorVue Congestion Monitoring CorVue Congestion Monitoring

Trigger Patient Notifiers

Programmable Notifiers (On; Off)

Device Reset Entry into Backup VVI Mode

Audible Duration (sec)
Number of Audible Alerts
per Notification
Number of Notifications Time Between Notifications (hours)

10:22

Off; Low; High 1:2:3

Off; Low; High Off; Low; High

Off; Low; High Off; Low; High Off; Low; High 125-300 in steps of 25 2; 3; 4; 5; 10; 15; 20 Off; Low; High 125–300 in steps of 25 2; 3; 4; 5; 10; 15; 20 Off: Low: High Off; Low; High 2; 3; 4; 5 Off; Low; High

Off; Battery Test

Ventricular Intrinsic Preference, VIP™ (ms) Off; 50–150 in steps of 25; 160–200 in steps of 10

30 sec.; 1; 3; 5; 10; 30 min.

110-200 in steps of 10; 225-300 in steps of 25

60-200 in steps of 10; 225; 250 Off; On Off; Atrial Pace8 Off; Passive; Atrial Pace<sup>8</sup> 90–180 in steps of 5 Uncoded; Unipolar; Bipolar

> Atrial; Right Ventricular 200-800 in steps of 10 2-25 in steps of 1

Off; 100-800 in steps of 10 (Fixed or Adaptive) Off; 30-95 in steps of 5

1-5 in steps of 1 AT/AF Activity; Exercise; Lead Impedance; P and R Wave; A and V threshold; CorVue™ Congestion Monitoring

Off: On 8-18 days

Device at ERI; Atrial Lead Impedance Out of Range Ventricular Lead Impedance Out of Range; LV Lead Impedance Out of Range; AT/AF Burden; AT/AF Episode Duration; High V Rate During AT/AF, High V Rate, Percent BiV/RV Pacing Alert CorVue Congestion Monitoring Alert

On 2; 4; 6; 8; 10; 12; 14; 16

1-16

 $^\pm$  0,5 cc LV first with 10 ms interventricular delay. Sensitivity is with respect to a 20 ms haversine test signal. Values 0,1–0,4 not available in a Unipolar Sense Configuration. This parameter is not programmable. The highest available setting for hysteresis rate is 5 min-1 below the programmed base  $^{-12}$ 

In dual-chamber modes, the maximum ventricular refractory period is 325 ms.

8. Programming options dependent on pacing mode.
9. During atrial NIPS in dual-chamber modes, the shortest coupling interval will be limited by the programmed AV/PV delay.
10. SI burst cycle is applied at the preprogrammed SI cycle length.

Customer Support: 46-8-474-4756

### Abbott

Slope

The Corporate Village Da Vincilaan 11 Box F1 1935 Zaventem, Belgium Tel: +32 2 774 68 11 SJM.com

Brief Summary: Prior to using these devices, please review the Instructions for Use for a complete listing of indications, contraindications, warnings, precautions, potential adverse events and directions for use.

™ Indicates a trademark of the Abbott group of companies.

‡ Indicates a third party trademark, which is property of its respective owner.

© 2018 Abbott. All Rights Reserved

St. Jude Medical is now Abbott. 28820-SJM-ALLU-0914-0001(1) | Information contained herein intended for audiences from outside the United States only.

