

CF Rated Power Supply for Cardiac Support Device

INDUSTRY

Medical
Cardiac Therapy

SOLUTION

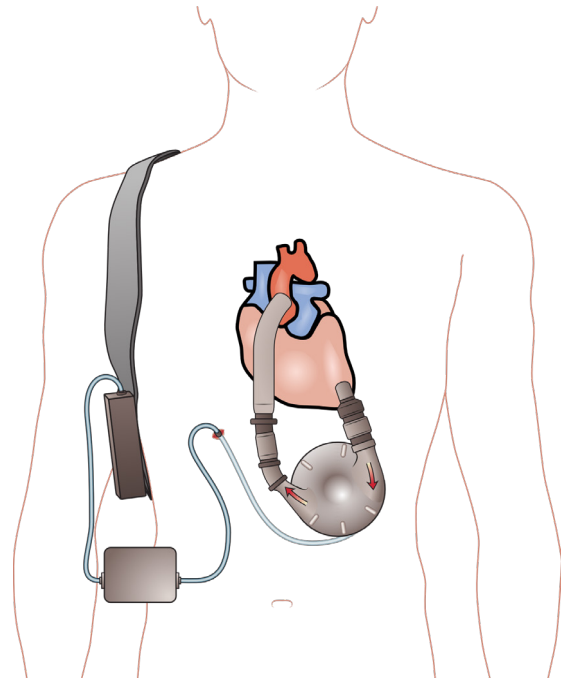
Customized MB65
Series Model

EQUIPMENT

Ventricular Assist
Device

CHALLENGE

The challenge presented to Advanced Energy was to provide a more reliable power supply for next generation LVAD device (Left Ventricular Assist Device). The end-customers previous source would not work consistently on the proposed new generation device, with the main issues they were experiencing related to meeting peak power requirements. The previous power supply used by this customer also had ESD susceptibility issues, resulting in the inadvertent temporary shut down of the LVAD control unit if ESD present in normal home environments was present.

**SOLUTION**

- Started with MB65 series model, as this meets 15kV+ ESD level
- The AE team customized the MB65 15V model, to provide peak currents as required by the customer device.
- The customization also included re-layout of PCB and other modifications to allow CF Rating while maintaining class B emissions compliance.
- This also included input and cabling to allow easy integration into the customer enclosure.

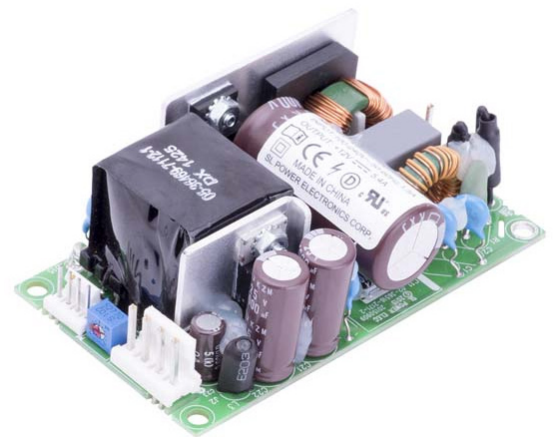
RESULT

The research and customization by the Advanced Energy team resulted in the required, reliable power supply. The custom solution resulted in:

- Enhanced ESD Compliance
- The correct CF Rating to allow use with Cardiac Therapy device
- Value-Add (cabling) reducing integration time in production
- Consistent, reliable operation with end device
- System level EMI and EMC compliance

CONCLUSION

The exceptional applications support uncovered sporadic operational issues and found the correct solution for the customer. The unrivalled support during customer validation phase, including on-site system testing at the AE Customer Experience Center (CEC) demonstrated technical knowledge and application understanding of the AE team. This greatly accelerated the electrical verification testing of the system, and significantly reduced system design and compliance time for the customer. Advanced Energy's proven reputation for quality and reliability gave the customer the reassurance of the proposed solution.



For international contact information, visit advancedenergy.com.

sales.support@aei.com
+1.970.221.0108

PRECISION | POWER | PERFORMANCE | TRUST

Specifications are subject to change without notice. Not responsible for errors or omissions.
©2023 Advanced Energy Industries, Inc. All rights reserved. Advanced Energy®, AE®, Ascent® and PowerInsight by Advanced Energy™ are U.S. trademarks of Advanced Energy Industries, Inc.