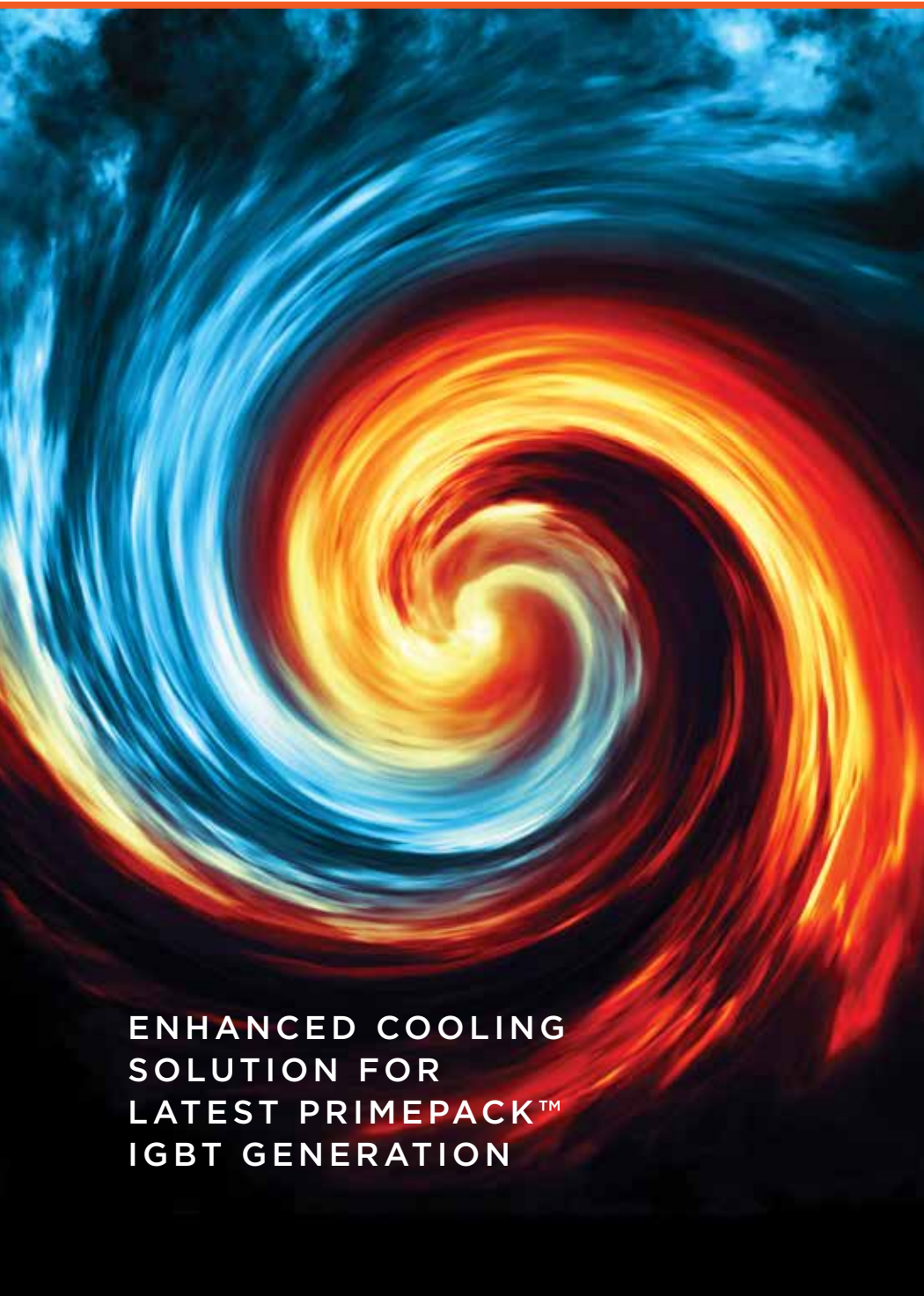




Eldre | Ferraz Shawmut | R-Theta

IsoMAXX  
VACUUM BRAZED  
COLD PLATES



ENHANCED COOLING  
SOLUTION FOR  
LATEST PRIMEPACK™  
IGBT GENERATION



# IsoMAXX: ENHANCED COOLING SOLUTION FOR LATEST PRIMEPACK™ IGBT GENERATION

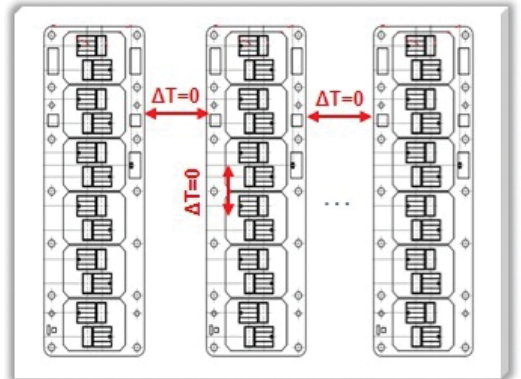
As today's market needs for more efficient electrical power conversion designs grow, so do the technological advancements from power electronic module manufacturers. The new generation of PrimePACK™ IGBT modules now boast an increased power dissipation compared to previous generations. Inverter manufacturers are also looking to minimize foot print in their design by condensing their power conversion designs and running IGBTs at higher switching frequencies. This increased level of optimization in power conversion designs, raises a new set of challenges for effective cooling of power modules. The fact of the matter remains that traditional heat sink designs cannot meet these stringent cooling requirements.



## Introducing Mersen's patent pending IsoMAXX Vacuum Brazed Cold Plates

Engineers at Mersen have designed the revolutionary IsoMAXX vacuum brazed cold plate to provide an efficient cooling pattern below the newest PrimePACK™ IGBT modules.

Module No. 1    Module No. 2 ...    Module No. n



### Customer Benefits are many:

- **Unsurpassed thermal performance:** compared to traditional cold plates
- **Optimized pressure drop:** compared to existing cold plates designs
- **Unparalleled Thermal homogeneity:** chip-to-chip (all chips at the same T°) and module-to-module on a multi-module cooling plate
- **Compact design:** As there will be no minimum clearance distance between modules, designers can mount modules closer to each to reduce overall inverter footprint
- **Modular solution:** covers all PrimePACK™ types, regardless of the number of modules on the cold plate
- **Cost competitive**

