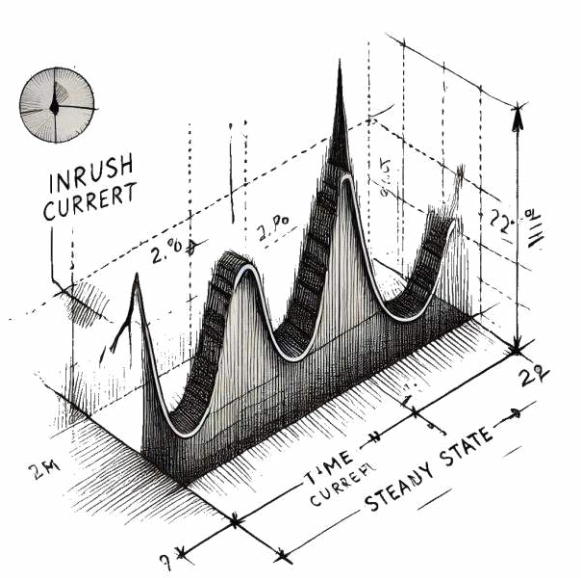
Use case – High Inrush

RIPEENERGY
The Power Conversion Company



Project Challenges

The end user faces the challenge of delivering a solution capable of providing both civilian and military 5G networks within 9 minutes of deployment to support disaster recovery efforts following a real-life storm event. High hydraulic loads and harsh environmental conditions required a very high inrush current of up to 2 seconds. Compliance with MIL-STD-461 and MIL-STD-810 was critical, necessitating the use of a certified device with end-of-production testing to ensure reliability and transportability.

Solution

The Combo provides a three-phase power grid that ensures energy supply for nominal operation and handles the needed inrush current for 2.5 seconds under worst-case scenarios, ensuring reliability in challenging environments.

Additional Challenges

After the initial prototypes, an uncommunicated challenge emerged: the end customer requested enhanced water protection, a requirement for which the Combo was not originally designed.

Our Approach

We developed an additional IP protection kit for our customer, enabling the Combo to meet the required IP protection standards. This solution was thoroughly tested and certified. Our customer can now retrofit existing Combos to the enhanced IP protection level and place new orders with the required protection already integrated.