

Explore our Technologies

Silicon Carbide Inverter (SiC)

for Best-In-Class Performance



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Lighter, more efficient, and more compact.

Highly compact silicon carbide MOSFET inverter.

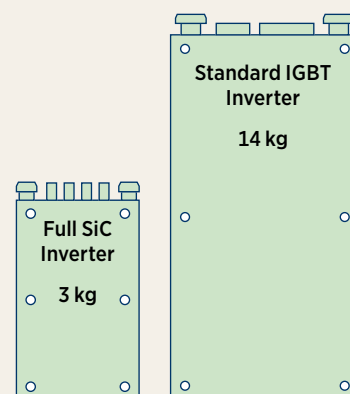
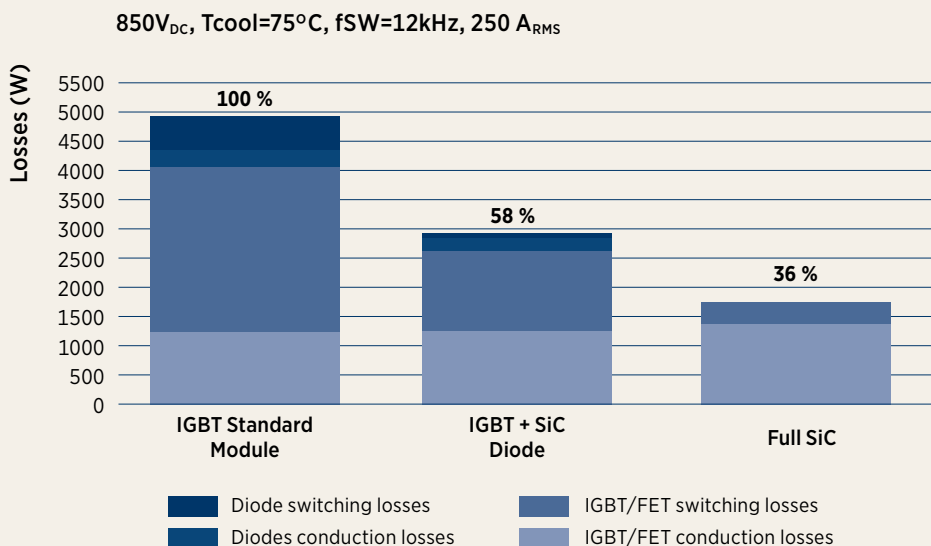
With the design study of the 320 kVA FullSiC inverter, BorgWarner has once again pushed the envelope between performance and weight limits. With a total weight of only 3 kg and a volume of 2.8 l, the FullSiC is more than 4 times lighter and smaller than a comparable standard IGBT inverter.



FullSiC* Key Features

- 320 kVA SiC MOSFET technology
- DC supply voltage up to 950 V_{DC}
- Phase current 300 A_{RMS} (cont.); 350 A_{RMS} (peak 10 s)
- Very compact: 260 x 160 x 80 mm
- Only 3 kg!
- Liquid cooled, inlet temperature < 65°C

Loss comparison SiC vs IGBT



* design study. Not available as represented, 100% customized according to customer requirements.