

## **Switch-ladder: reliable and efficient multilevel inverter**

### **ABSTRACT**

A DC-AC-AC multilevel inverter based on a multi-winding transformer is presented. The most important advantage of this inverter is that only four switches conduct during each cycle, which means that it exhibits lower on-state power dissipation. High reliability when switches fail in open-circuit behaviour is another advantage of this inverter structure. Finally, practical results are presented.