

**Application ()**    **Input ()**    **Device ()**    **Thermal ()**    **Simulation ()**

**Summary ()**    **User Guide ()**

	<b>Variant 1</b>
<b>Circuit</b>	Inverter (3ph)
<b>Input voltage</b>	680 V
<b>Output voltage</b>	400 V
<b>Actual output power</b>	2.300 kW
<b>AC frequency</b>	50.0 Hz
<b>Power factor</b>	1.00
<b>Switching frequency</b>	6.0 kHz
<b>Deadtime</b>	200.00 ns
<b>Inductance</b>	15.00 mH
<b>MOSFET</b>	C2M0160120D
<b>DC-link MOSFET (T-Type)</b>	—
<b>External Schottky Diode</b>	
<b>Side MOSFET (T-Type)</b>	
<b>Clamping Diode (NPC)</b>	—
<b>Module</b>	
<b>Side Module (T-Type)</b>	
<b>Turn-on gate resistance</b>	10.00
<b>Turn-off gate resistance</b>	2.500
<b>Combined Primary MOSFET conduction losses</b>	5.73 W
<b>Combined Primary MOSFET switching losses</b>	1.30 W
<b>Combined Primary MOSFET total losses</b>	7.03 W
<b>Combined Side MOSFET conduction losses (T-type)</b>	—
<b>Combined Side MOSFET switching losses (T-type)</b>	—
<b>Combined Side MOSFET total losses (T-type)</b>	—

	<b>Variant 1</b>
<b>Combined diode conduction losses</b>	—
<b>Combined diode switching losses</b>	—
<b>Combined diode total losses</b>	—
<b>Total converter losses</b>	7.03 W
<b>Efficiency</b>	99.70 %
<b>Primary MOSFET peak junction temperature</b>	43.6 °C
<b>Side MOSFET peak junction temperature (T-type)</b>	—
<b>Diode peak junction temperature</b>	—
<b>Heatsink temperature</b>	40.0 °C
<b>Ambient temperature</b>	—
<b>Rth case-heatsink</b>	1.000 °C/W
<b>Rth heatsink-ambient</b>	—
<b>Additional heat source</b>	—

Simulation powered by PLECS (<http://www.plexim.com/plecs/>) using WebSIM (<http://www.transim.com/>)<sup>®</sup> patented technology

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