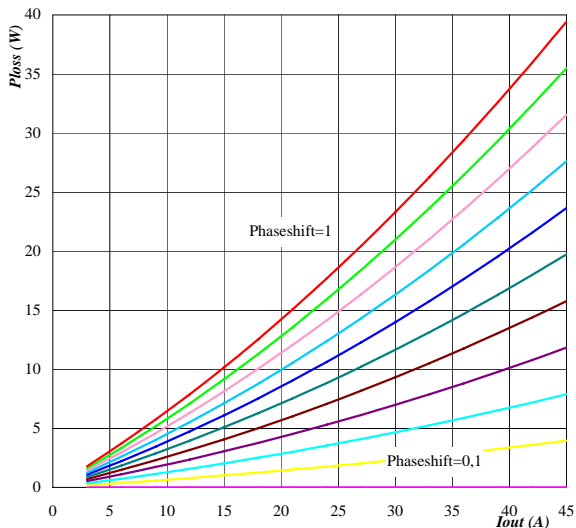


Output inverter application

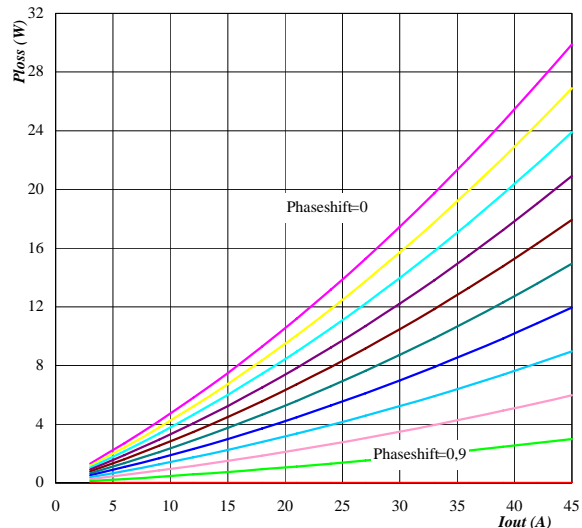
Phase shifted ZVS, $V_{geon}= 15\text{ V}$ $V_{geoff}=0\text{V}$ $R_{gon}= 4\text{ ohms}$ $R_{goff}= 1\text{ ohms}$

Figure 1. Typical static loss of shifted switch as a function of output current
IGBT $P_{loss}=f(I_{out})$



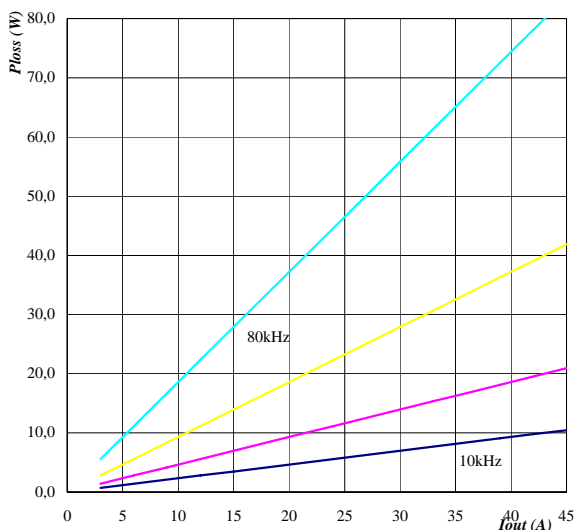
Conditions: $T_j=125^\circ\text{C}$
Phaseshift parameter Phaseshift from 0,10 to 1,00 in 0,10 steps

Figure 2. Typical static loss of shifted switch as a function of output current
FRED $P_{loss}=f(I_{out})$



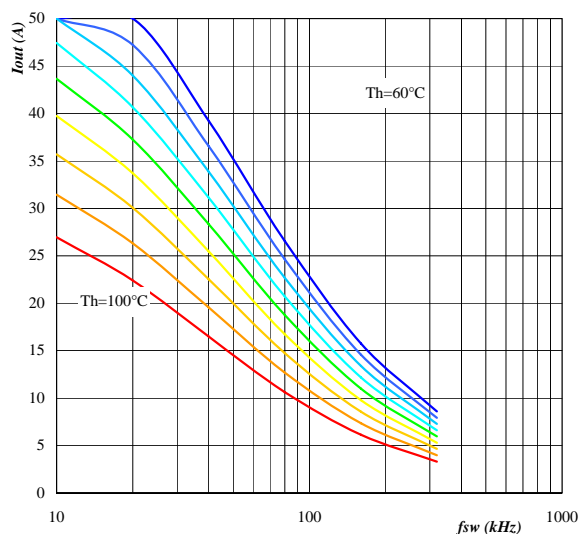
Conditions: $T_j=125^\circ\text{C}$
Phaseshift parameter Phaseshift from 0,00 to 0,90 in 0,10 steps

Figure 3. Typical switching loss as a function of output current
IGBT $P_{loss}=f(I_{out})$



Conditions: $T_j=125^\circ\text{C}$
 $I_{outpk}/I_{out}= 1,3$ DC link= 320 V
Phaseshift= 1
Switching freq. parameter f_{sw} from 10 kHz to 80 kHz in * 2 steps

Figure 4. Typical available output current as a function of switching frequency
Phase $I_{out}=f(f_{sw})$

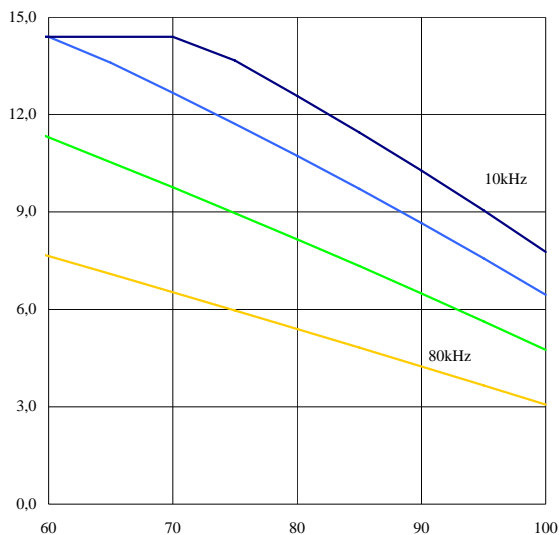


Conditions: $T_j=125^\circ\text{C}$
 $I_{outpk}/I_{out}= 1,3$ DC link= 320 V
Phaseshift= 1
Heatsink temp. parameter T_h from 60 °C to 100 °C in 5 °C steps

Output inverter application

Phase shifted ZVS, $V_{geon}= 15\text{ V}$ $V_{geoff}=0\text{V}$ $R_{gon}= 4\text{ ohms}$ $R_{goff}= 1\text{ ohms}$

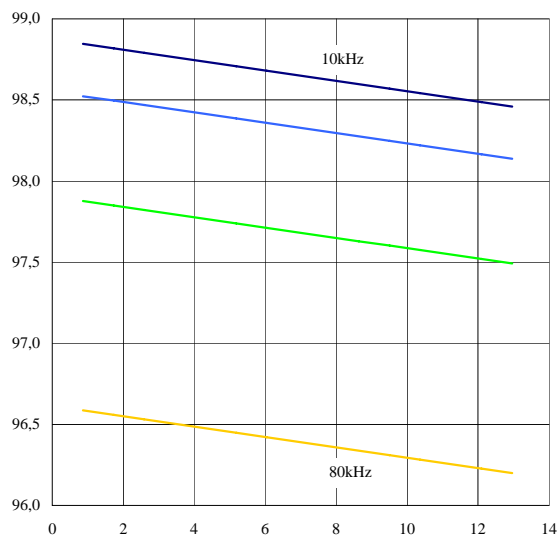
Figure 5. Typical available electric peak output power as a function of heatsink temperature
Inverter $P_{out}=f(T_h)$



Conditions: $T_j=125\text{C}$
 $I_{outpk}/I_{out}= 1,3$ DC link= 320 V
Phaseshift= 1

Switching freq. parameter fsw from in 10 kHz to 80 kHz * 2 steps

Figure 6. Typical efficiency as a function of output power
Inverter $efficiency=f(P_{out})$



Conditions: $T_j=125\text{C}$
 $I_{outpk}/I_{out}= 1,3$ DC link= 320 V
Phaseshift= 1

Switching freq. parameter fsw from in 10 kHz to 80 kHz * 2 steps