





















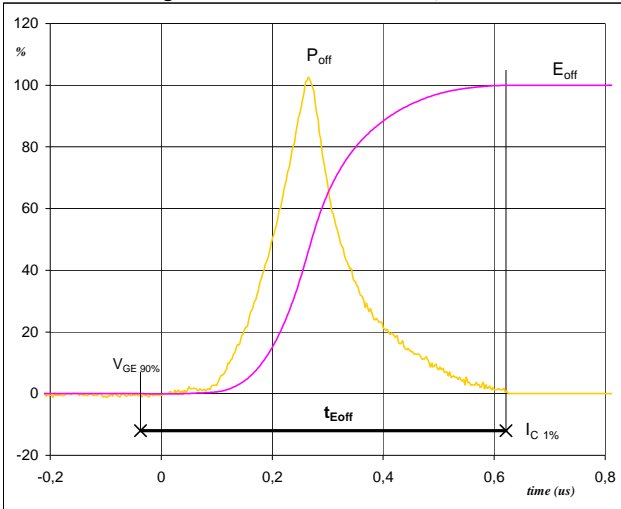






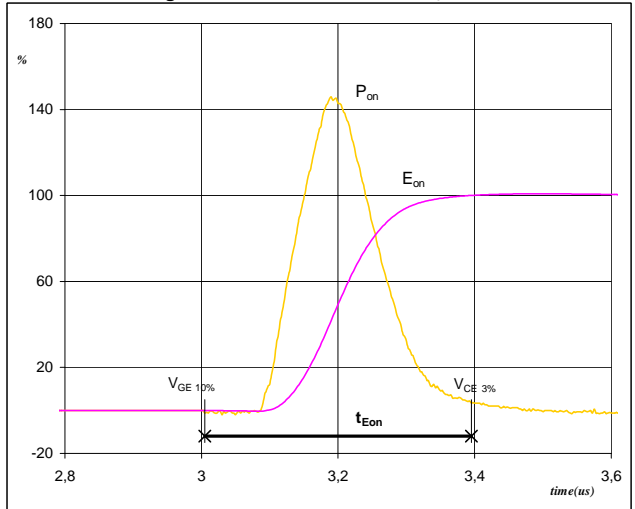
## Switching Definitions Output Inverter

**Figure 5** Output inverter IGBT

**Turn-off Switching Waveforms & definition of  $t_{Eoff}$** 


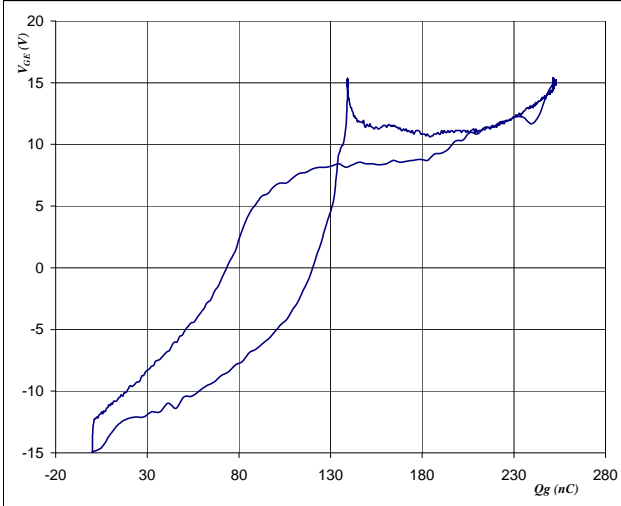
$P_{off}(100\%) = 20,99$  kW  
 $E_{off}(100\%) = 3,38$  mJ  
 $t_{Eoff} = 0,66$   $\mu$ s

**Figure 6** Output inverter IGBT

**Turn-on Switching Waveforms & definition of  $t_{Eon}$** 


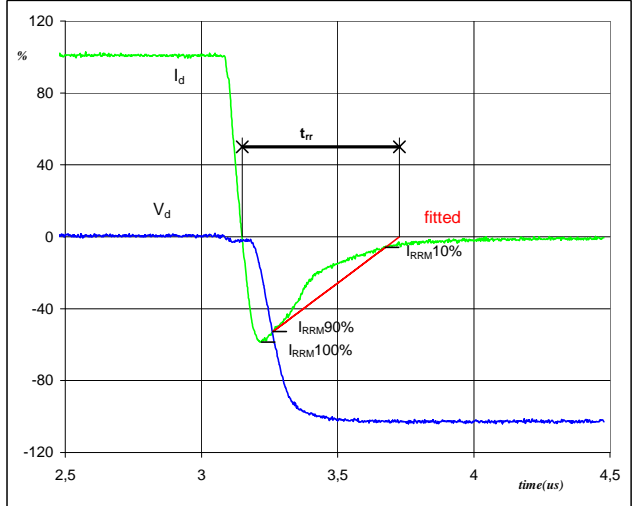
$P_{on}(100\%) = 20,99$  kW  
 $E_{on}(100\%) = 4,08$  mJ  
 $t_{Eon} = 0,39$   $\mu$ s

**Figure 7** Output inverter IGBT

**Gate voltage vs Gate charge (measured)**


$V_{GEoff} = -15$  V  
 $V_{GEon} = 15$  V  
 $V_C(100\%) = 600$  V  
 $I_C(100\%) = 35$  A  
 $Q_g = 252,70$  nC

**Figure 8** Output inverter FWD

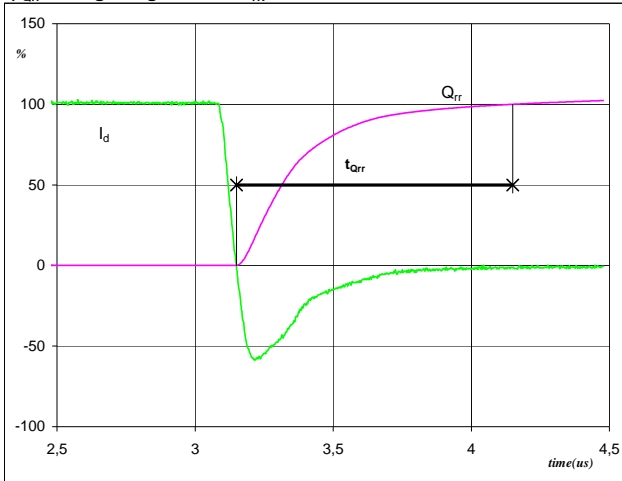
**Turn-off Switching Waveforms & definition of  $t_{rr}$** 


$V_d(100\%) = 600$  V  
 $I_d(100\%) = 35$  A  
 $I_{RRM}(100\%) = -21$  A  
 $t_{rr} = 0,57$   $\mu$ s

## Switching Definitions Output Inverter

**Figure 9** Output inverter FWD

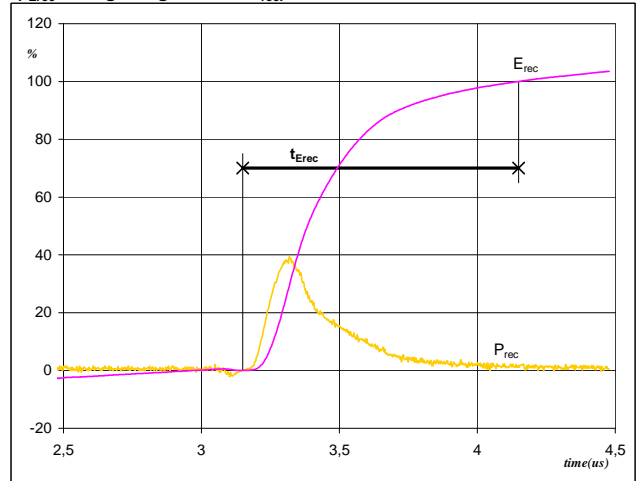
Turn-on Switching Waveforms & definition of  $t_{Qrr}$   
 ( $t_{Qrr}$  = integrating time for  $Q_{rr}$ )



$I_d$ (100%) =	35	A
$Q_{rr}$ (100%) =	5,50	$\mu\text{C}$
$t_{Qrr}$ =	1,00	$\mu\text{s}$

**Figure 10** Output inverter FWD

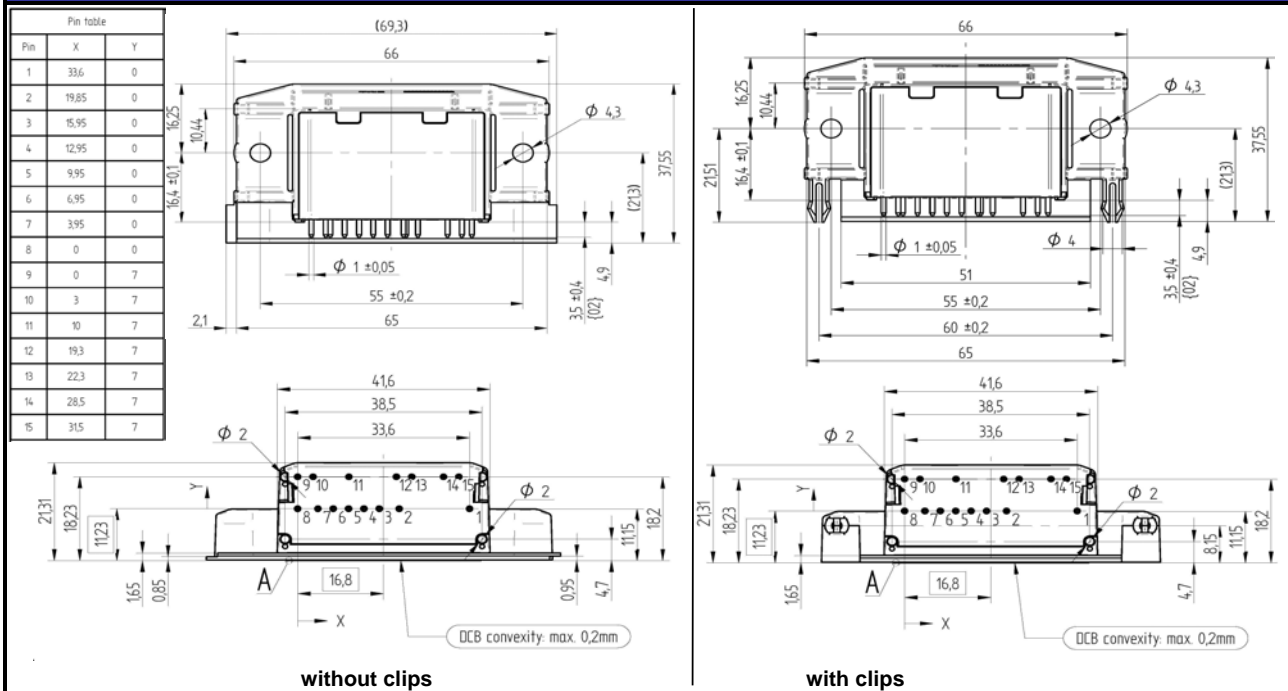
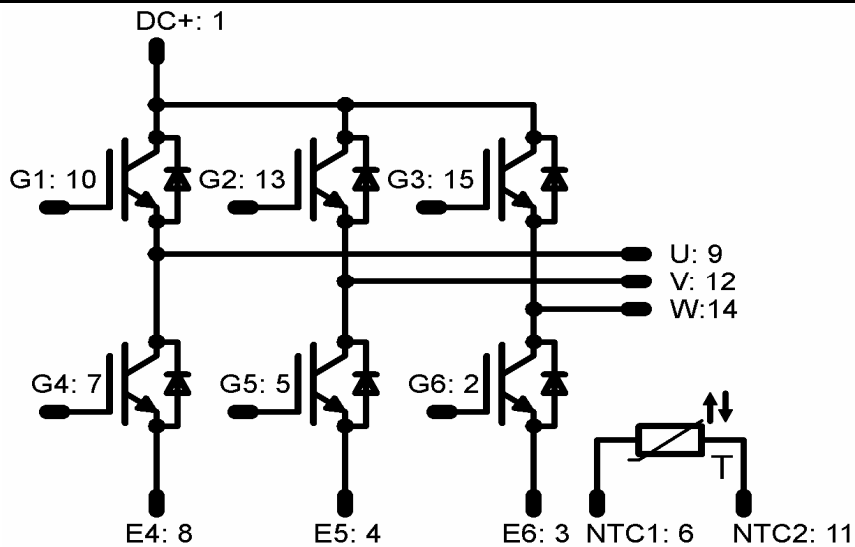
Turn-on Switching Waveforms & definition of  $t_{Erec}$   
 ( $t_{Erec}$  = integrating time for  $E_{rec}$ )



$P_{rec}$ (100%) =	20,99	kW
$E_{rec}$ (100%) =	2,27	mJ
$t_{Erec}$ =	1,00	$\mu\text{s}$

**Ordering Code and Marking - Outline - Pinout**
**Ordering Code & Marking**

Version	Ordering Code	in DataMatrix as	in packaging barcode as
without thermal paste ,housing without clips	10-RZ126PA035SC-M620F41	M620F41	M620F41
without thermal paste ,housing with clips	10-R0126PA035SC-M620F40	M620F40	M620F40

**Outline**

**Pinout**


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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.