

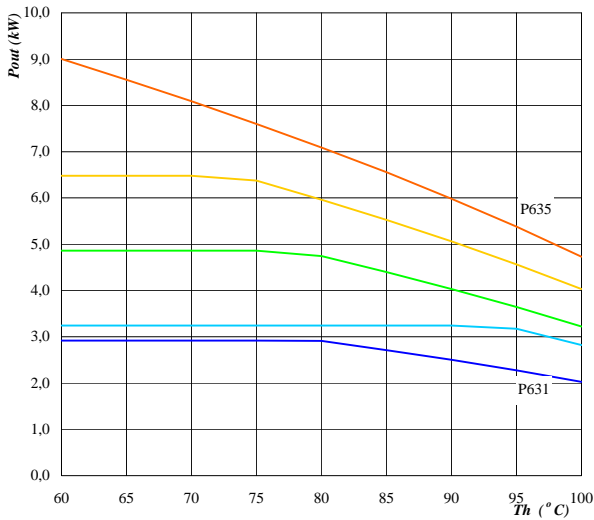
flow90PIM 1 selection guide

V23990-P63X-A-02-19

Output inverter selection guide

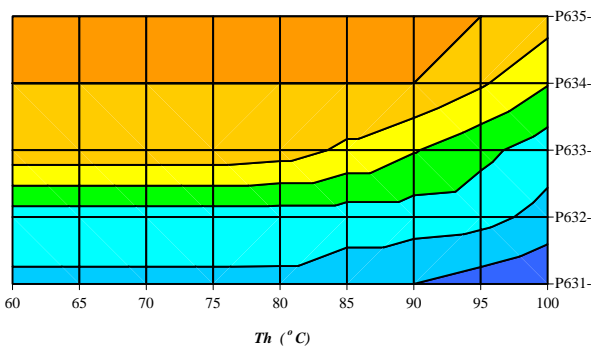
General conditions: 3 phase SPWM,  $V_{geon}= 15\text{ V}$   $V_{geoff}=0\text{V}$

**Figure 1. Typical available electric peak output power as a function of heatsink temperature**  
Inverter  $P_{out}=f(Th)$

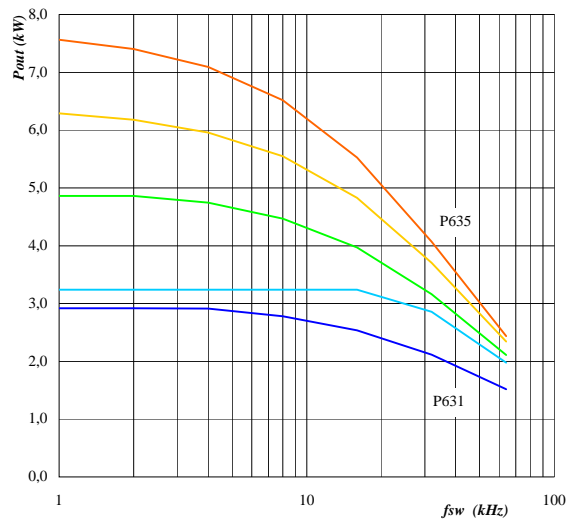


Conditions:  $T_j=125\text{C}$   
DC link= 300 V  
Modulation index  $M_i= 1$   
 $\cos\phi= 0,80$   
Switching frequency  $f_{sw}= 4\text{ kHz}$

Pout (kW)   
 ■ 1,5-2,0 ■ 2,0-2,5 ■ 2,5-3,0 ■ 3,0-3,5 ■ 3,5-4,0  
 ■ 4,0-4,5 ■ 4,5-5,0

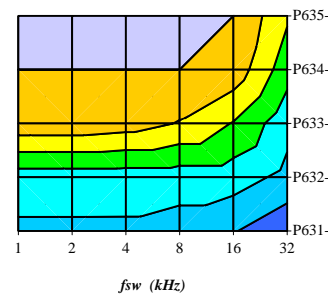


**Figure 2. Typical available electric peak output power as a function of switching frequency**  
Inverter  $P_{out}=f(f_{sw})$



Conditions:  $T_j=125\text{C}$   
DC link= 300 V  
Modulation index  $M_i= 1$   
 $\cos\phi= 0,80$   
 $Th= 80\text{ °C}$

Pout (kW)   
 ■ 1,5-2,0 ■ 2,0-2,5 ■ 2,5-3,0 ■ 3,0-3,5  
 ■ 3,5-4,0 ■ 4,0-4,5 ■ 4,5-5,0



Module type	P631-	P632-	P633-	P634-	P635-	$R_{gon}= 64\text{ ohms}$	$R_{goff}= 32\text{ ohms}$
						32	16
						16	8
						16	8
						8	4

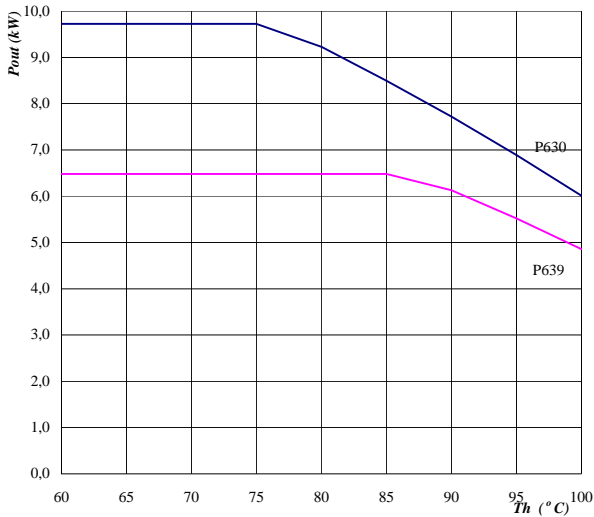
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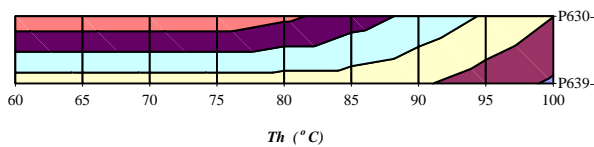
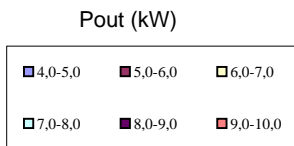
Output inverter selection guide

General conditions: 3 phase SPWM,  $V_{geon} = 15\text{ V}$   $V_{geoff} = -15$

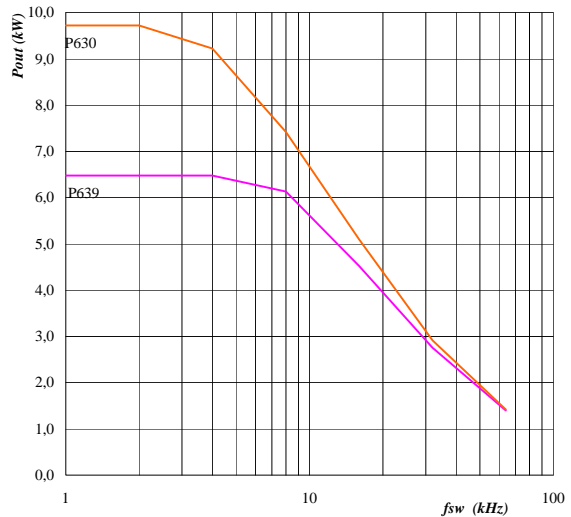
**Figure 3. Typical available electric peak output power as a function of heatsink temperature**  
 Inverter  $P_{out} = f(T_h)$



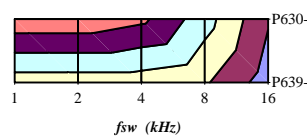
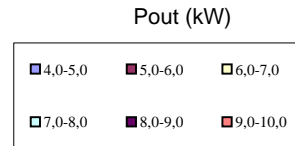
Conditions:  $T_j = 125\text{C}$   
 DC link = 600 V  
 Modulation index  $M_i = 1$   
 $\cos\phi_i = 0,80$   
 Switching frequency  $f_{sw} = 4\text{ kHz}$



**Figure 4. Typical available electric peak output power as a function of switching frequency**  
 Inverter  $P_{out} = f(f_{sw})$



Conditions:  $T_j = 125\text{C}$   
 DC link = 600 V  
 Modulation index  $M_i = 1$   
 $\cos\phi_i = 0,80$   
 $T_h = 80\text{ °C}$



Module type P639-  
 P630-

$R_{gon} = 64\text{ ohms}$   
 64

$R_{goff} = 64\text{ ohms}$   
 64

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General conditions: 3 phase SPWM,  $V_{geon} = 15\text{ V}$

Figure 5. Typical available overload factor as a function of motor power

$V_{geoff} = 0\text{V}$   
Inverter  $P_{peak}/P_{nom} = f(P_{nom})$

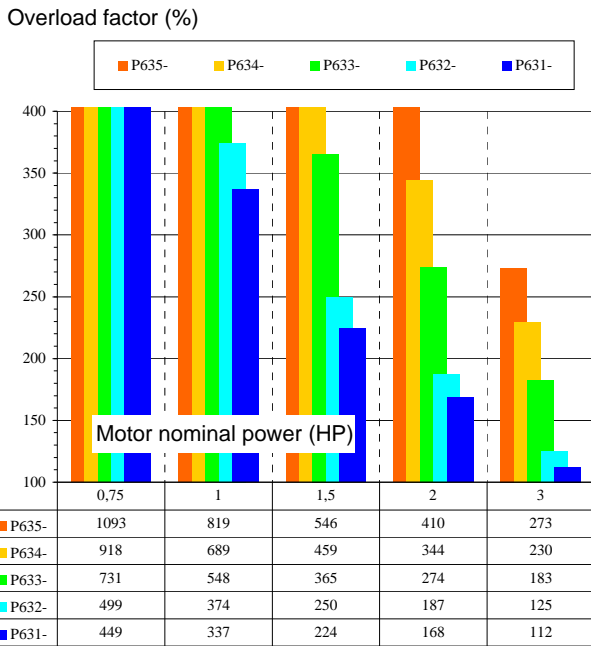
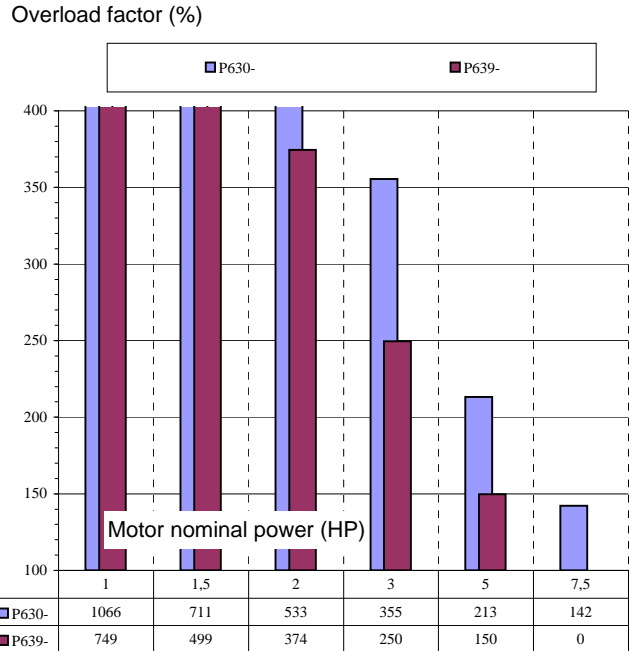


Figure 6. Typical available overload factor as a function of motor power

$V_{geoff} = -15\text{V}$   
Inverter  $P_{peak}/P_{nom} = f(P_{nom})$



Conditions:  $T_j = 125\text{C}$   
 DC link = 300 V  
 Modulation index  $M_i = 1$   
 $\cos\phi_i = 0,8$   
 Switching frequency  $f_{sw} = 4\text{ kHz}$   
 Heatsink temperature = 80 °C  
 Motor efficiency = 0,85

Conditions:  $T_j = 125\text{C}$   
 DC link = 600 V  
 Modulation index  $M_i = 1$   
 $\cos\phi_i = 0,8$   
 Switching frequency  $f_{sw} = 4\text{ kHz}$   
 Heatsink temperature = 80 °C  
 Motor efficiency = 0,85

Module type	P631-	$R_{gon} = 64\text{ ohms}$	P639-	$R_{goff} = 32\text{ ohms}$
	P632-	$32\text{ ohms}$	P630-	$16\text{ ohms}$
	P633-	$16\text{ ohms}$		$8\text{ ohms}$
	P634-	$16\text{ ohms}$		$8\text{ ohms}$
	P635-	$8\text{ ohms}$		$4\text{ ohms}$
	P639-	$64\text{ ohms}$		$64\text{ ohms}$
	P630-	$64\text{ ohms}$		$64\text{ ohms}$