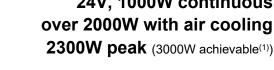


041.024.2K3.01 **Resonant Tank Test Report**

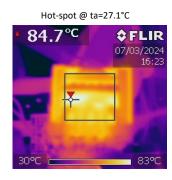


24V, 1000W continuous

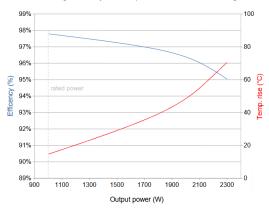


98%							
97%							80
96%							00
95%							60
94%							
93%							40
92%				rated p	NOW OF		
91%				rated p	JOWEI !		20
90%							
89%	200	400	600	800	1000	1200	0

	@410Vdc in	
Input voltage	410,0	Vdc
Input current	2,497	Adc
Input power	1021,3	W
Output voltage	24,03	Vdc
Ouput current	41,645	Adc
Ouput power	1000,3	W
Switching frequency	43,4	KHz
Converter Efficency	97,95%	%
Temperatures		
Ambient	27,1	°C
Pri Trise	57,6	°C
Sec Trise	50,2	°C
Core Trise	49,6	°C



LLC stage efficency and Temp. rise with 7 m/sec air co
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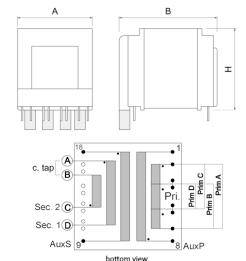
Transformer SRLPQ4040001, powered on Pri.A

Resonant capacitor 390nF

Rated input voltage 410Vdc (min 380 - max 440Vdc) Primary and secondary Aux ratings 15,5Vdc_min., 30mA

TEST CONDITIONS

- Our standard LLC transformers are designed to be used with any controller. The performances reported here refer to the use of FAN7621, one of the simplest controllers on the market.(1)
- Half-bridge mosfet type STWA48N60M6.
- Synchronous rectification with 2x2 mosfet type IPP019N06NS.



Dimensions (mm) A=42,0 max B=55,0 max H=43,2 max

BENEFITS OF TRANSFORMER DESIGN BY ITACOIL® PROPRIETARY SOFTWARE

- smaller and lighter transformer
- resonant inductor integrated into the transformer
- lower temperature and power saving
- lower costs
- very high efficiency
- immediate success of your project

(1) As an example, using LLC controllers with programmable dead time, FCP067N65S3 or similar half-bridge mosfets and increasing Vin_min to 385V, the same resonant tank supports 3000Wpk. With our design service, we can assist you predicting the performance with any controller.