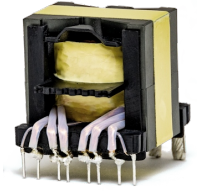
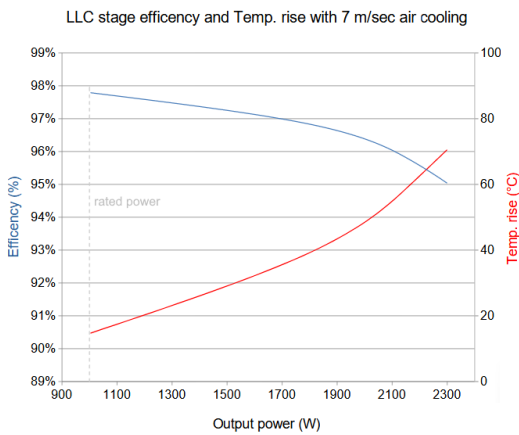
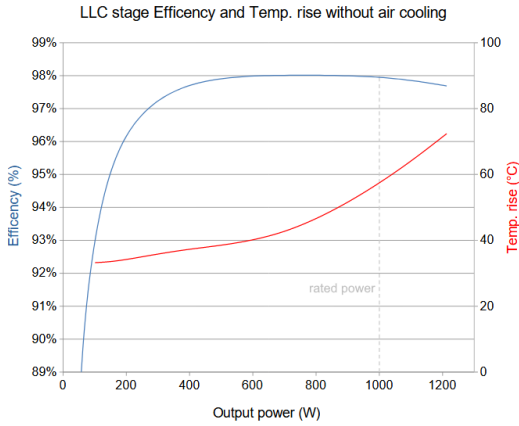




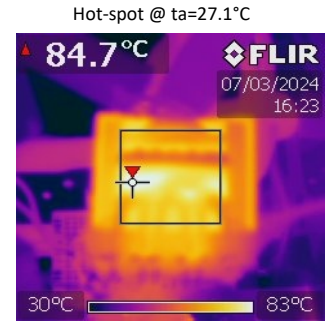
041.024.2K3.01 Resonant Tank Test Report



**24V, 1000W continuous
over 2000W with air cooling
2300W peak** (3000W achievable⁽¹⁾)



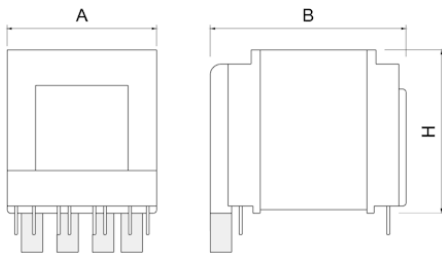
	@410Vdc in	
Input voltage	410,0	Vdc
Input current	2,497	Adc
Input power	1021,3	W
Output voltage	24,03	Vdc
Output current	41,645	Adc
Output power	1000,3	W
Switching frequency	43,4	KHz
Converter Efficiency	97,95%	%
Temperatures		
Ambient	27,1	°C
Pri Trise	57,6	°C
Sec Trise	50,2	°C
Core Trise	49,6	°C



Transformer SRLPQ4040001, powered on Pri.A
Resonant capacitor 390nF
Rated input voltage 410Vdc (min 380 - max 450Vdc)
Primary and secondary Aux ratings 15,5Vdc_min., 30mA

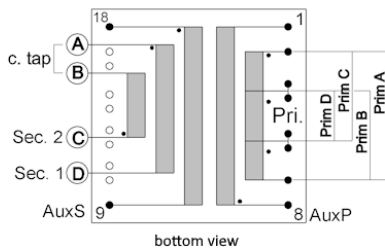
TEST CONDITIONS

- 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.