SFL series - PFC inductors - transition mode 50-100W



- Inductors for active PFC Transition-Critical-Boundary Mode
- Suited for PFC converters based on the chips shown in the introduction page
- Excellent power/dimensions ratio
- Low power loss for high PFC efficiency and negligible inductance drop for best THD
- Suitable for Wide range and European range mains voltage
- Auxiliary winding for bias and zero current detect
- Also suitable for buck and boost converters
- Custom versions on request



Code		Inductance ¹	DCR Typ @20°C Main winding	DCR Typ @20°C Aux winding	Main/Aux Turns ratio	Maiı Dielectri	1/Aux c Strength
SFLE2001		610 μΗ	690 mΩ	425 mΩ	10:1	1.0	ЭКV
Dimensions	mm	Layout (bot	tom view)		Drawing		.stp file Download
A max	22.2			۵	в		
B max	21.9	8	1			1	
H max	16.6	• <u> </u>	+ ref.				
X typ	5.0					н	STP
Y typ	15.0						
L min	2.5	5	4		D	L	
D typ (Ø)	0.7	pin 1 missing for reference		<u> </u>	Y		

PFC inductor selection table for Transition Mode - Critical Mode - Boundary Mode pre-regulators

mains voltage range (50-60Hz)	Max Output Power ²	Output Voltage Range
85264Vac	50W	395450Vdc
180264Vac	100W	395450Vdc

The PCB layouts are referred to the standard products. The same are strongly suggested for customized products too.

- Our experience and proprietary software allow an optimal inductor design, considering skin effect, proximity effect, and actual core loss in spite of the complex current wave shape. This allows the best efficiency, size and so on.

- For customized products, fill in the "PFC inductor request form", we will support you for the best inductor definition, considering every detail including skin effect, proximity effect and size. - Windings temperature should not exceed 100°C continuous, 115°C for brief times.

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 May 2023

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¹ Tolerances ±10% - Measured @10KHz-100mV

² Referred to 40°C max ambient temperature. Dependently to working conditions, actual max power could be higher than rated. Working with actual output power very lower than rated in combination with some input/output voltages, the power factor correction could result unsatisfactory. Contact our technical service for more info. Output power is related to each inductor (doubled on two phase interleaved configuration).

^b The user should perform any compliance verification to technical and safety standard requirement according to the application field.



SFL series - PFC inductors - transition mode 95-170W

- Inductors for active PFC Transition-Critical-Boundary Mode
- Suited for PFC converters based on the chips shown in the introduction page
- Excellent power/dimensions ratio
- Low power loss for high PFC efficiency and negligible inductance drop for best THD
- Suitable for Wide range and European range mains voltage
- Auxiliary winding for bias and zero current detect
- Also suitable for buck and boost converters
- Custom versions on request



Code Inductance ¹		DCR Typ @20°C	DCR Typ @20°C	Main/Aux	Main/Aux
		Main winding	Aux winding	Turns ratio	Dielectric Strength
SFLPQ201601	330 μH	335 mΩ	295 mΩ	10:1	1.0KV



PFC inductor selection table for Transition Mode - Critical Mode - Boundary Mode pre-regulators

mains voltage range (50-60Hz)	Max Output Power ²	Output Voltage Range	
85264Vac	95W	395450Vdc	
180264Vac	170W	395450Vdc	

The PCB layouts are referred to the standard products. The same are strongly suggested for customized products too.

-Our experience and proprietary software allow anoptimal inductor design, considering skin effect, proximity effect, and actual core loss in spite of the complex current wave shape. This allows the best efficiency, size and so on.

-For customized products, fill in the "PFC inductor request form", we will support you for the best inductor definition, considering every detail included skin effect, proximity effect and size.

-Windings temperature should not exceed 100°C continuous, 115°C for brief times.

¹ Tolerances ±10% - Measured @10KHz-100mV

² Referred to 40°C max ambient temperature. Dependently to working conditions, actual max power could be higher than rated. Working with actual output power very lower than rated in combination with some input/output voltages, the power factor correction could result unsatisfactory. Contact our technical service for more info. Output power is related to each inductor (doubled on two phase interleaved configuration).

^{nb} The user should perform any compliance verification to technical and safety standard requirement according to the application field.

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SFL series - PFC inductors - transition mode 200-400W



- Inductors for active PFC Transition-Critical-Boundary Mode
- Suited for PFC converters based on the chips shown in the introduction page
- Excellent power/dimensions ratio
- Low power loss for high PFC efficiency and negligible inductance drop for best THD •
- Suitable for Wide range and European range mains voltage
- Auxiliary winding for bias and zero current detect •
- Also suitable for buck and boost converters ٠
- Custom versions on request



Code	Code Inductance ¹ DCR Typ @20°C		DCR Typ @20°C	Main/Aux	Main/Aux
	Main winding		Aux winding	Turns ratio	Dielectric Strength
SFLPQ262001	175 μH	105 mΩ	250 mΩ	8,5:1	1.0KV



PFC inductor selection table for Transition Mode - Critical Mode - Boundary Mode pre-regulators

mains voltage range (50-60Hz)	Max Output Power ²	Output Voltage Range	
85264Vac	200W	395450Vdc	
180264Vac	400W	395450Vdc	

The PCB layouts are referred to the standard products. The same are strongly suggested for customized products too.

- Our experience and proprietary software allow anoptimal inductor design, considering skin effect, proximity effect, and actual core loss in spite of the complex current wave shape. This allows the best efficiency, size and so on.

- For customized products, fill in the "PFC inductor request form", we will support you for the best inductor definition, considering every detail included skin effect, proximity effect and size

- Windings temperature should not exceed 100°C continuous, 115°C for brief times.

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