

FCS 3121 - Flexible Current Sensor SymmProFlex®

Precision flexible AC current sensor for current, power, energy and electricity quality applications

⇒ Highlights

P Patent Protection

- Accuracy up to 0.2 % includes wire position influence
- Composite core for low TC
- · Broad frequency range
- · Accuracy specification includes wire position influence
- Symmetric flexible shielding pp for excellent suppression of strange electric fields
- Symmetric sensor coil pp for excellent suppression of strange magnetic fields
- Flexible sensor cable with Ø 6 mm diameter
- · Safety wear indicator outer layer

⇒ Description

Precision Flexible AC Current Sensor SymmProFlex® FCS 3121 is based on Rogowski coil principle designed to measure alternating current.



⇒ Available Models

Model	Class	Sensor Cable
FCS 3121C	0.2	Ø 6 mm
FCS 3121D	0.5	Ø 6 mm
FCS 3121P	1.0	Ø 6 mm

⇒ Technical Specification

General Parameters		
Working Frequency (3dB)	> 100 kHz	
Mutual inductance / Gain	95.5 nH / 30 μV/A @50Hz	
Accuracy of mutual inductance *	0.2%, 0.5%, 1%	
External magnetic field influence **	< 0.1%	
Temperature Coefficient	< 15 ppm / K	
Output Voltage Maximum	15 V peak	
Peak dl/dt	150 A/μs	
Operating / Test Voltage	600 V / 3 kV	
Safety	EN 61010-2-032 Cat II/300V	
Sensor diameter	Ø 6 mm	
Sensor length	0.5m (customized length optional)	
Sensor resistance	2 x 620 Ω / 0.5 m	
Load Resistance	≥1 MΩ	
Signal cable	Ø 4mm shielded wire pair, length 1 m	
Operating Temperature	-20 +60 °C	
Storage Temperature	-20 +60 °C	

- * Accuracy specified as maximum allowed deviation:
 - from the nominal value (FCS 3121P)
 - from the calibration value (FCS 3121D, FCS 3121C)
- ** The sensor located at radius distance from the external current conductor

The information in this document is subject to change without notice

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