RoHS COMPLIANT

Overview

Our advanced Rogowski coil solution combines cutting-edge sensing technology with a built-in integrator, delivering accurate, proportional current measurements without the complexity of external components.

This all-in-one design reduces installation time and costs, enhances safety, and ensures reliable power quality analysis—making it the ideal choice for modern energy monitoring and control systems.

Benefits:

- All in one – Rogowski Coil with Integrator
- Reduced Installation Time and Cost
- Enhanced Safety, Simplified Inventory and Standardization
- Cost effective design
- Designed in Austria, Made in the Czech Republic

Features:

- Fully encapsulated
- Accuracy Class 0.5 (EN/IEC 61869-2)
- IP68 waterproof
- 1,2m output cable length
- Shielded cables
- -20°c to +80°C operating temperature
- Manufacturing according to ISO 9001

Applications

- Fault Detection, Isolation & Service Restoration
- Smart Grid Monitoring
- Protection and Safety Solutions
- Transformer Condition Monitoring
- Voltage Regulation & Power Quality Management
- Substation Applications
- Transformer Installations
- Overhead Line Infrastructure

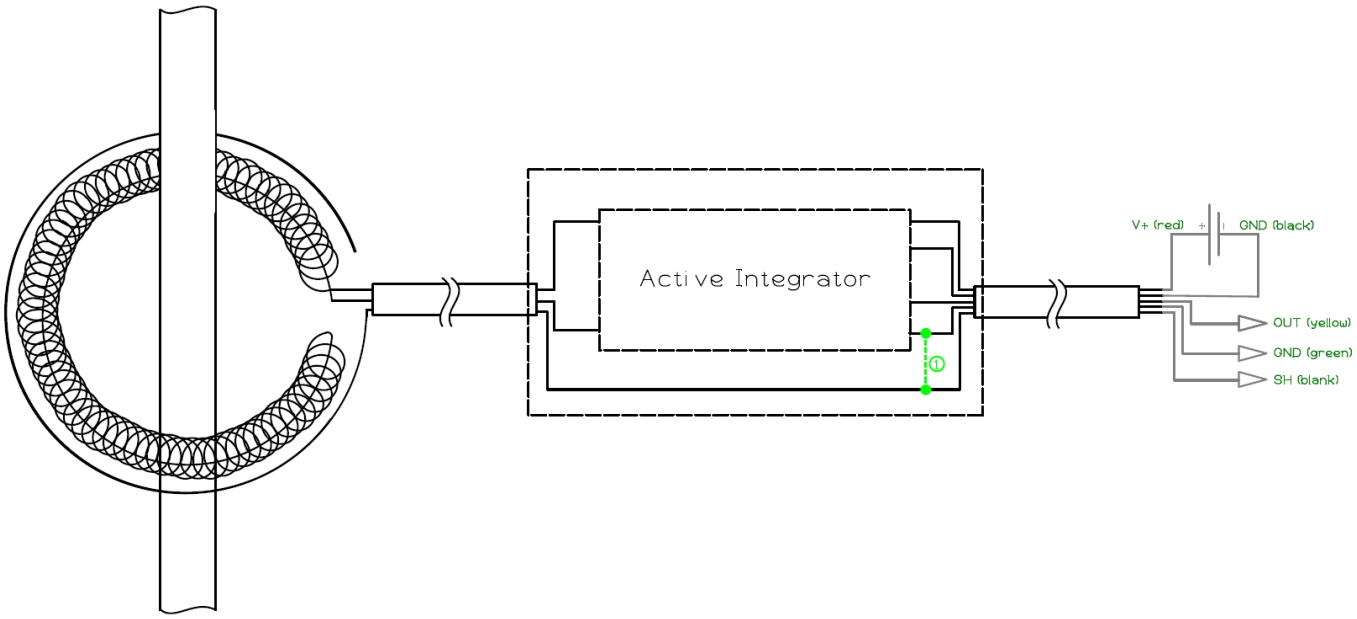
Specifications

Parameter	Symbol	Min	Typ.	Max.	Unit	Text Cond.
Accuracy Class			0,5			@ I nominal
Input Current			7,8	15	mA	680Ω output load
Input Voltage		4,5	5	5,5	V	5V Version
		10,8	12	13,2		12V Version
		21,6	24	26,4		24V Version
Nominal signal frequency		45		65	Hz	
Bandwidth		25		10000	Hz	<3dB
Phase accuracy				0,5	°	32-900Hz
Offset Error				1	mVDC	
Output Voltage			2250	2500	mVRMS	
Output Current				5	mA	
Operating Temperature		-20	20	80	°C	
Storage Temperature		-20	20	80	°C	
Humidity				95	%	Non-condensing
Atmospheric Pressure		70		106	kPa	
Cable length	Rogowski to-Amplifier		1		m	
	Amplifier-to-open end		1,2			
Cable diameter	Rogowski-to-Amplifier		3,96		mm	
	Amplifier-to-open end		3,9		mm	
Open end cross-section			0,14		mm^2	
Degree of protection by enclosure		IP68				

Ordering information				
Part number	**Sensitivity**	**Nominal Current**	**max. Current**	**Input Voltage**
	mV/kA	A (RMS)	A (RMS)	V
003980373 - N1hLR-2700mV/kA-5V	2700	750	900	5
003980374 - N1hLR-2700mV/kA-12V	2700	750	900	12
003980375 - N1hLR-2700mV/kA-24V	2700	750	900	24

Typical application circuit

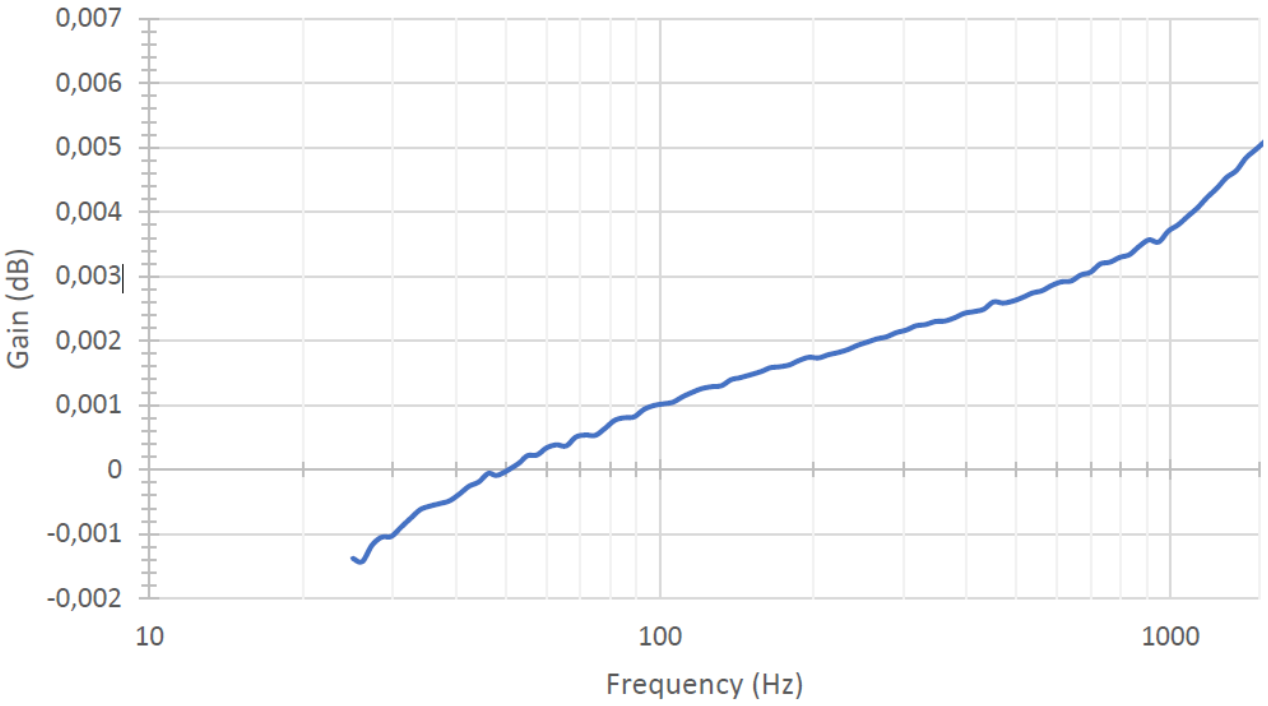
Rogo-Integrator



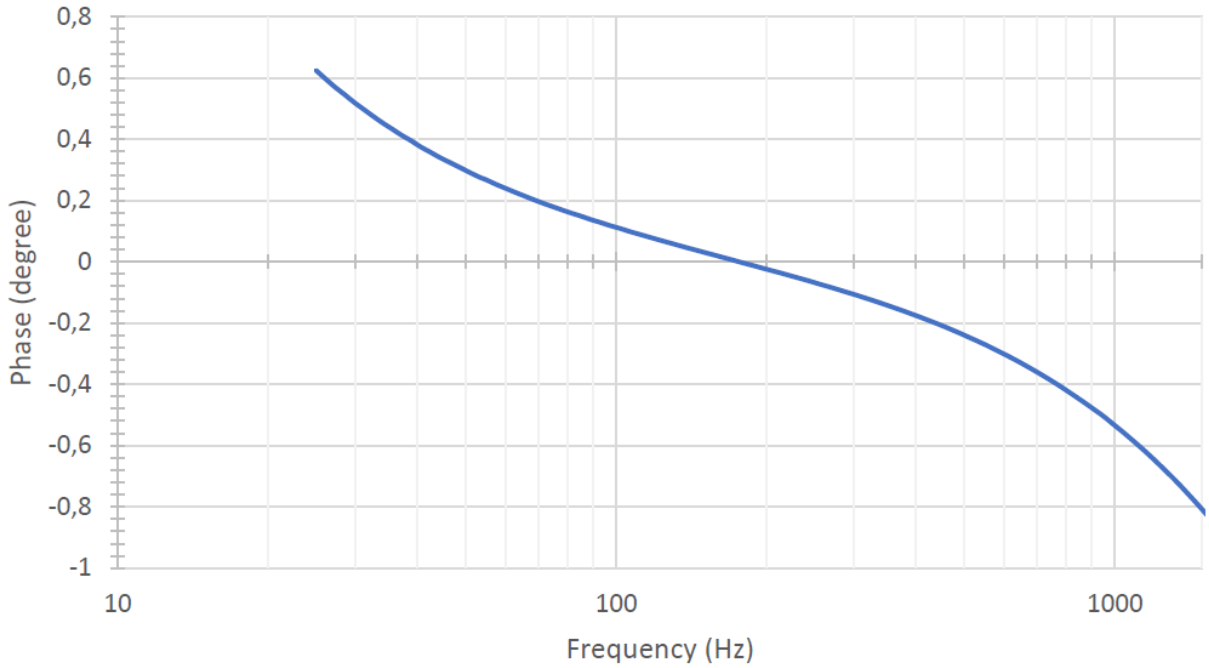
1...optional connection

Transfer-function

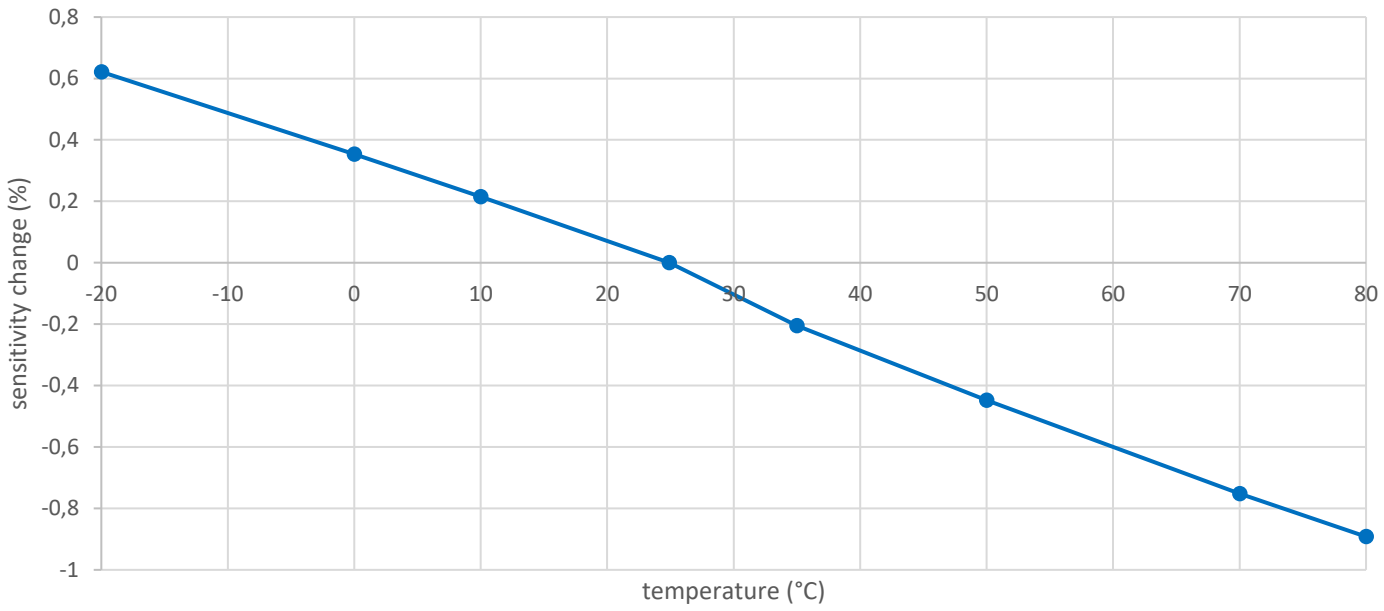
Magnitude



Phase

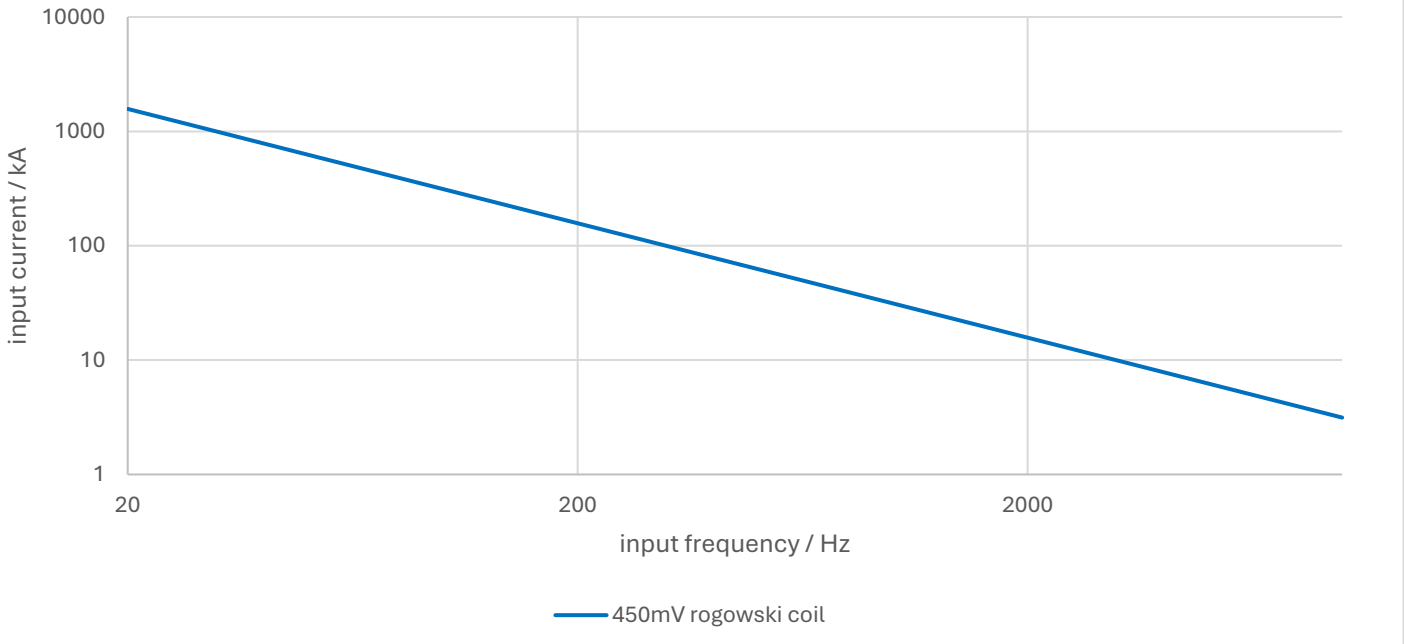


Sensitivity over temperature



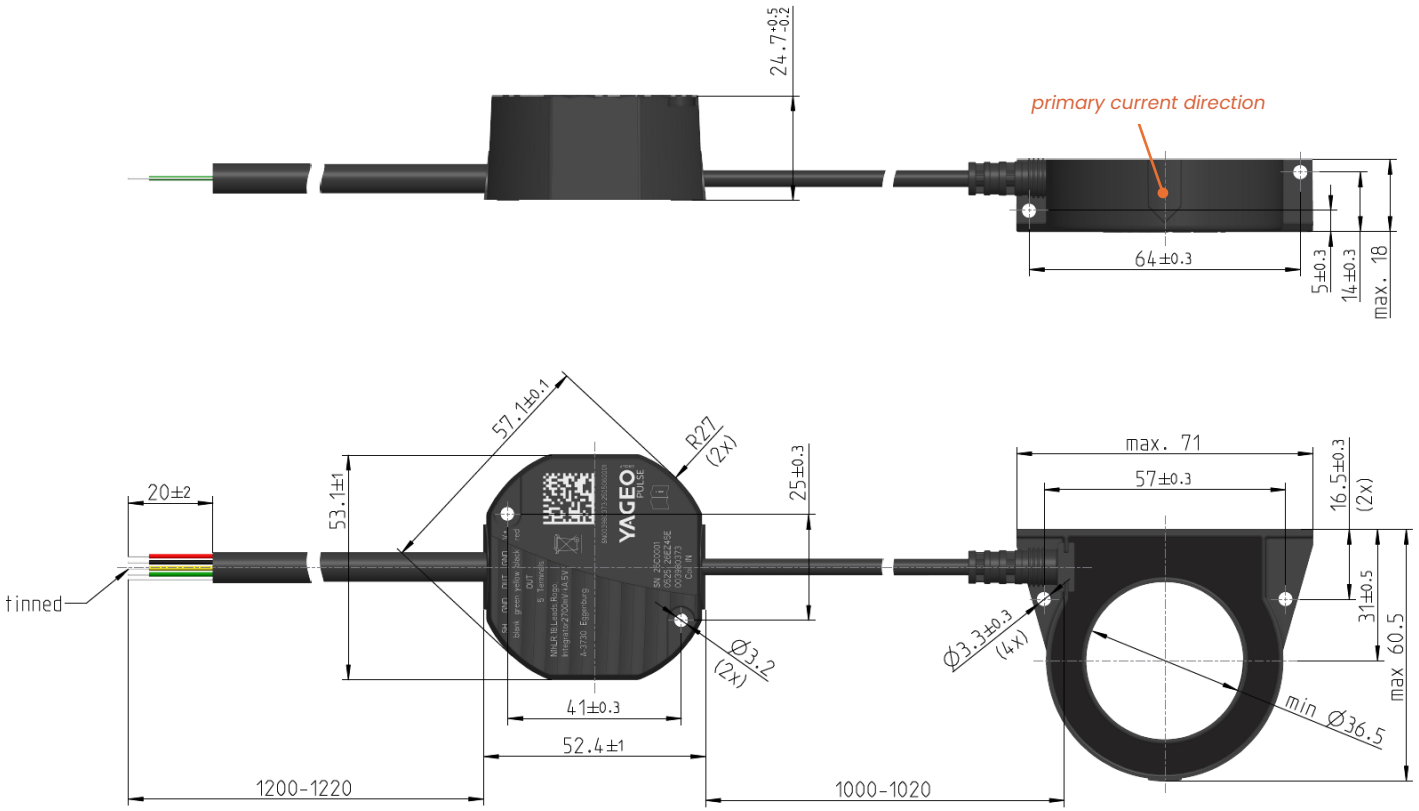
Absolute maximum input current versus input frequency

450mV Rogowski Coil



Mechanicals

Dimensions in mm

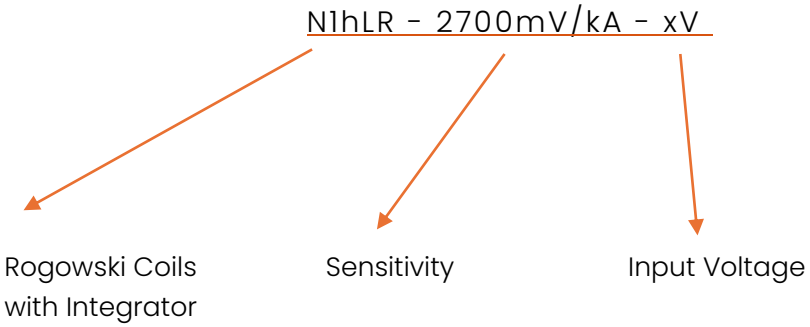


Marking plate symbol explanation	
RoHS conform	The electronic module has to be disposed appropriately according the local regulations for Waste Electrical and Electronic Equipment.
	Read instruction manual.

Installation	
	Maximum mounting screw torque M=30Ncm Recommended screws: Slotted pan head screw ISO 1580 max. M3 Alternative: Phillips pan head screw ISO 7045 max. M3 Alternative: fillister socket head screw low design ISO 7984 max. M3 Alternative: fillister socket head screw ISO 4762 max. M3

Legend

Codification



Customizable on request:

- output signal
- connectors
- certifications according to specific standards
- supply voltage
- temperature compensation
- accuracy
- cable length

Also in our production scope:

- Rogowski coils
- Flexible Rogowski coils
- Stand-alone integrator

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