

ACCUENERGY ROGOWSKI INTEGRATOR KIT (RIK)

- R I K S E R I E S +

R O G O W S K I I N T E G R A T O R

The Accuenergy Rogowski Integrator Kit (RIK) provides users with an easy-to-install, plug-n-play solution to be used with any power meters or equipment with a 5A current transformer input. Meaning the RIK will allow for the installation of rogowski coil CTs in a variety of applications/configurations where spacial constraints may limit the use of other CT solutions.

The RIK kit is designed around a three channel 5A output integrator and includes with it three Accuenergy Rogowski coil current sensors, and one power supply. All of these parts are further configurable for the needs of many applications.



KEY FEATURES

- Flexible rope-like current sensor, designed to easily fit into panels or busbars where space may be limited.
- 0-5A rated output that works with any power meter or equipment with 5A nominal current transformer input.
- Current sensing range from 2.5A to 50,000A to fit all systems.
- Seven field-configurable CT ratios: 500A, 1kA, 2.5kA, 5kA, 10kA, 25kA, 50kA.
- Individual CT ratios can be configured for each channel. Works in any single phase application with different current ratings.
- Works in both 50Hz and 60Hz systems.

HOW THE RIK WORKS

The Accuenergy Rogowski Integrator Kit features a three channel 5A output integrator that allows for use with most power meters/equipment that feature a 5A input. The RIK offers seven selectable ranges including: 500A, 1kA, 2.5kA, 5kA, 10kA, 25kA and 50kA, with a sensing range of 0.5% to 120% of rated current input.

The RIK can be used in both 50Hz and 60Hz systems with a rated frequency range of 45Hz to 65 Hz. The Integrator itself is DIN rail or surface mountable and features a 24Vdc power supply.

INDUSTRY RANGING COMPATIBILITY

The Rogowski Integrator Kit enhances the capabilities of existing metering systems, designed for full integration with a variety of standard metering solutions. The RIK is capable of integration with any power meter or system with a 5A current transformer input.

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ROGOWSKI INTEGRATOR

BENEFITS OF ROGOWSKI COIL CURRENT TRANSFORMERS

Rogowski Coils are high-specification current transformers that are ideal for use when space is limited. The flexible form factor of a Rogowski Coil means they easily fit into tight panels and come in a range of sizes to suit most installations.

Like standard split core transformers, Rogowski coils can be easily integrated into existing panels without having to

cut any lines. However, the major benefit of a Rogowski coil current transformer is its flexible form factor, allowing for installation where spacial constraints may exist.

Accuenergy Rogowski coil current transformers are available with input ranges from 5A to 50,000A AC in an array of sizes from 16" to 47".

KEY SPECIFICATIONS

Specification	Measurement
Current Measurement Range	2.5A - 60000A
Output Current	0 - 6A _{RMS} (0 - 5A _{RMS} Nominal)
Sensing Range	500A, 1000A, 2500A, 5000A, 10000A, 25000A and 50000A (user selectable)
Maximum Burden	1.8VA per channel
Maximum Output Impedance	50mΩ
Measurement Channels	3 (three-phase or single-phase)
Frequency	45Hz to 65Hz
Accuracy	±1% Full Scale Error
Channel Cross Talk	< -60dB
Maximum Operating Temperature	55°C (131°F)

POWER REQUIREMENTS

Supply Voltage	24V _{DC} ± 1%
Supply Current	0.9A _{DC} @ 24V _{DC}

ACCESSORIES

AC/DC Power Supply 24Vdc	85-264Vac
Mounting Rail	DIN TS-35/7.5 or 15

CURRENT RANGE SETTINGS

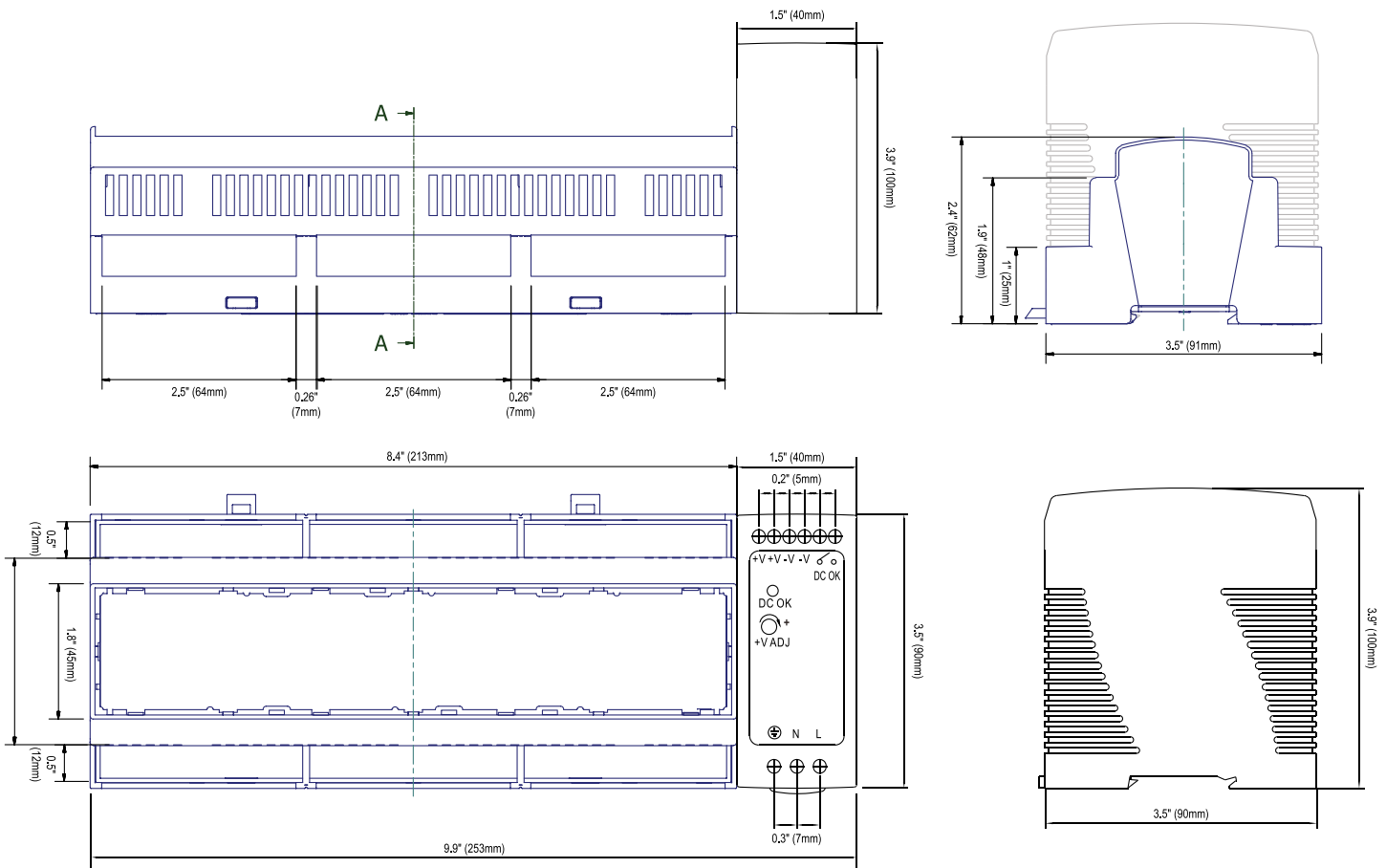
Primary Input (A _{RMS})	Sensing Range (A)	Output	CT Ratio
500	2.5 to 600	5A @ 500A	500:5
1000	5 to 1200	5A @ 1000A	1000:5
2500	12.5 to 3000	5A @ 2500A	2500:5
5000	25 to 6000	5A @ 5000A	5000:5
10000	50 to 12000	5A @ 10000A	10000:5
25000	125 to 30000	5A @ 25000A	25000:5
50000	250 to 60000	5A @ 50000A	50000:5

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RIK MEASUREMENT SPECIFICATIONS



ORDERING INFORMATION

Model	Description
RIK16-5A	Includes three 16 inch rogowski current transformers and power supply.
RIK24-5A	Includes three 24 inch rogowski current transformers and power supply.
RIK36-5A	Includes three 36 inch rogowski current transformers and power supply.
RIK47-5A	Includes three 47 inch rogowski current transformers and power supply.

DIMENSIONS / MOUNTING

Integrator Width	3.58" (91mm)
Integrator Length	8.4" (213mm)
Integrator Height	2.4" (62mm)
Kit Width	3.58" (91mm)
Kit Length	9.96" (253mm)
Kit Height	3.93" (100mm)
Mounting	DIN TS-35/7.5 (DIN 43880) or Panel
Input Wire Connection	14 - 30 AWG
Output Wire Connection	14 - 30 AWG

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