RIK 1AR

Protective Relay Rogowski Integrator Datasheet



Rogowski Coil and Power supply sold separately

The Accuenergy Relay Class Rogowski Integrator Kit is engineered to be an installer-friendly, plug-and-play solution for use with any protection relay or power meter with a 1A nominal input. Ideal for installations where spacial constraints or conductor size prohibit the use of rigid-body current transformers, flexible Rogowski coils streamline the installation process for exceptionally rapid deployment.

Features

- 0-1A rated output works with any protection relay or meter with a 1A nominal current transformer input
- Protection Class: 5P20 (IEC 61869-2)
- Pairs with a flexible Rogowski current sensor, designed to easily fit into crowded electrical panels and weighs 95% less than traditional relay class CTs *(sold separately)*
- Current sensing range from 0.25A to 100kA for compatibility across any system
- Five field-configurable CT ratios: 50A, 200A, 500A, 2000A, and 5000A
- Compatible with both 50Hz and 60Hz systems

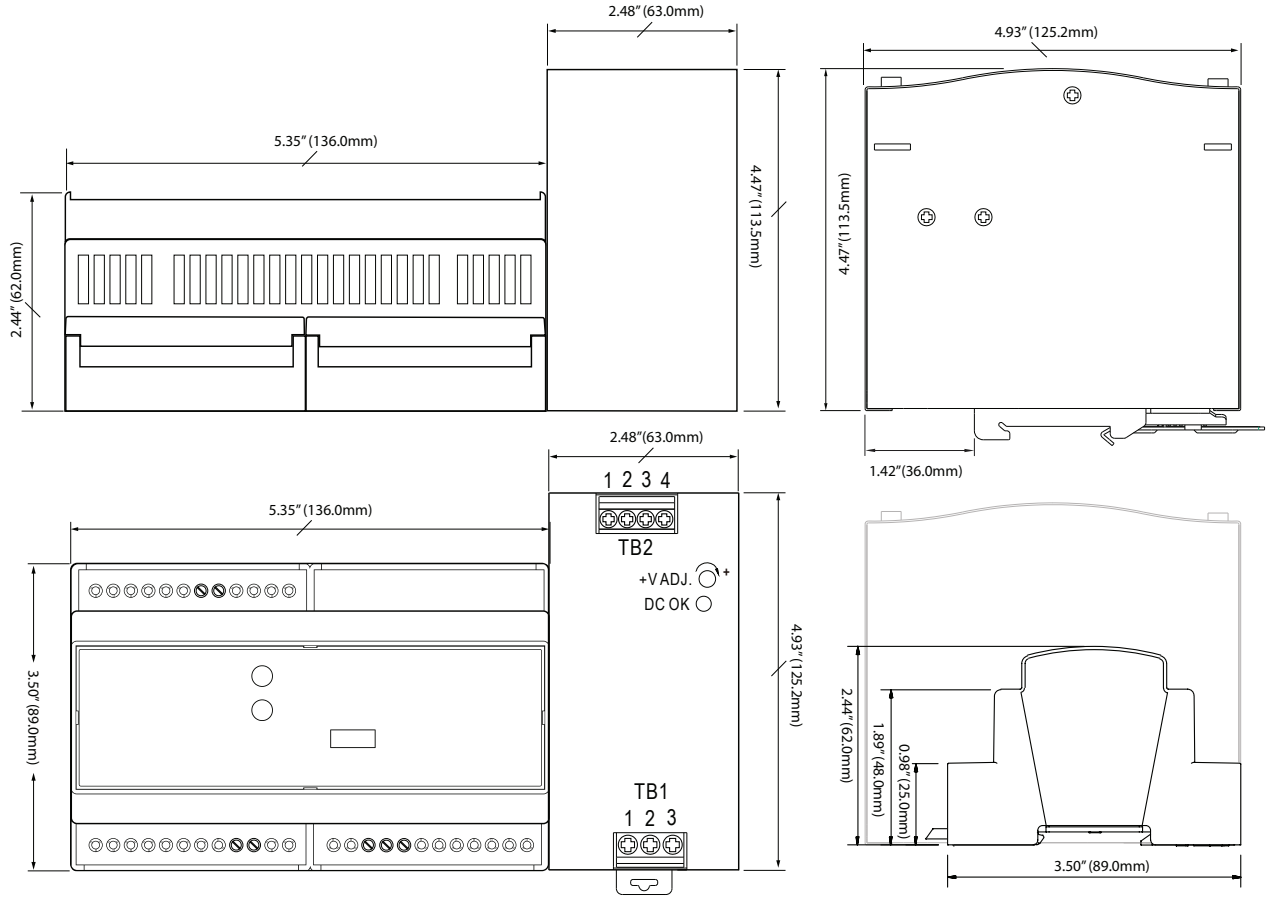
Specifications

RATED CURRENT	
Measuring Range	0.25A - 100000A
Rated Primary Current	50A, 200A, 500A, 2000A, 5000A User Selectable
Integrator Output	0-1A
Integrator Accuracy	1% at 1A, 5% at 20A
Phase Maximum Error	1 degree
Class	5P20 (IEC 61869-2)
Continuous Thermal Current	150% (1.5A)
Short-Time Thermal Current	20A
Short-Time Thermal Current Max Duration	4 seconds
Settling Time to Full Scale	<100µs
MECHANICAL/ENVIRONMENTAL	
Integrator Kit Size	199.0mm x 125.2mm x 113.5mm 7.83" x 4.93" x 4.47"
Input/Output Wire Connection	14 - 30 AWG
Operating Temperature	-20°C ~ 55°C -4°F ~ 131°F
Operating Humidity	Non-condensing, 0 to 95% RH
Integrator Enclosure Material	ABS, UL 94V-0
Mounting	DIN TS-35/7.5 or 15 (DIN 43880) or Panel
Weight	0.8 lbs / 362.9g
ELECTRICAL	
Measurement Channels	1
Frequency Range	50/60Hz
Power Supply	100-240Vac
Burden	0.25Ω
SAFETY/COMPLIANCE	
Overload Protection	Thermal
Certifications	CE, UL Listed (E359521), RoHS
ROGOWSKI COIL OPTIONS:	*Rogowski coil sold separately*
Window Size	RCT16-1000 - 106.0mm (4.17") RCT24-1000 - 178.0mm (7.01") RCT36-1000 - 271.0mm (10.67") RCT47-1000 - 369.0mm (14.53")
Length of Coil	RCT16-1000 - 400.0mm (15.75") RCT24-1000 - 600.0mm (23.62") RCT36-1000 - 900.0mm (35.43") RCT47-1000 - 1200.0mm (47.24")
Coil Material	Orange thermoplastic rubber UL 94V-0 rated flame retardant
Lead Wires	1000V UL Style 20940, 26AWG
Wire Polarity	White=Positive, Brown=Negative, Bare=Shield
Phase Orientation	Arrow Points Towards Load

Integrator's Current Range Settings

PRIMARY INPUT (A_{RMS})	MEASURING RANGE (A)	OUTPUT	RELAY CLASS OUTPUT	CT RATIO
50	0.25 to 1000	1A @ 50A	20A @ 1kA	50:1
200	1 to 4000	1A @ 200A	20A @ 4kA	200:1
500	2.5 to 10000	1A @ 500A	20A @ 10kA	500:1
2000	10 to 40000	1A @ 2000A	20A @ 40kA	2000:1
5000	25 to 100000	1A @ 5000A	20A @ 100kA	5000:1

Dimensions



Ordering Information

	Model	-	*Integrator Output*
	RIK		1AR
Ordering Example	**RIK-1AR**		

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Power Supply Unit			
	Model	-	*Supply*
	PSU-240		**24:** 24 VDC
Ordering Example	**PSU-240-24**		

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Specs Subject To Change Without Notice.