

# 3-CHANNEL ROGOWSKI COIL INTEGRATOR

MODEL FCA3000

## DESCRIPTION

The FCA3000 is a multi-channel current converter designed to operate with MFC150 series of Rogowski coils. Three independent input channels allow for measurement of a single three-phase system or multiple single-phase systems. Three dc output signals indicate the true RMS value of the individual input channels. A fourth output signal represents the sum of the three inputs - system current for three-phase systems.

Application flexibility is provided by jumper-selectable output response time values and frequency equalization to allow Rogowski coils to be used over a wide range of frequencies.



## FEATURES

- Three independent input/output channels
- Fourth output for sum of three input channels
- True RMS measurements
- Jumper-selectable output response time
- Compact and convenient DIN-Rail enclosure
- Powered by any standard power mains from 80 to 260Vac

**5 YEAR WARRANTY**

## APPLICATIONS

- True RMS current measurement
- High-current measurement
- PLC interface
- SCADA systems



## MODEL SELECTION

FCA3000 - [ ] - [ ]

FULL-SCALE INPUT		OUTPUT	
0300	300A	D	0-10Vdc
3K	3kA	N	0-20mAdc
K010	10kA	E	4-20mAdc
K020	20kA		

### ORDERING INFORMATION

Example 3000A F.S. Input, 0-10Vdc output,

**FCA3000-3K-D**

**NOTE:** All models designed for use with separately-supplied 100mV/1kA, MFC150 series Rogowski coils.

## SPECIFICATIONS

**INPUTS (3)** From MFC150 series Rogowski coils  
Standard..... 100mV/1kA@50Hz

**OUTPUTS (4)**

Scaling

Option D..... 0-F.S. Input = 0-10Vdc Output

Option E..... 0-F.S. Input = 4-20mAdc Output

Option N..... 0-F.S. Input = 0-20mAdc Output

Loading

Option D..... >100kΩ

Option E..... <300Ω

Option N..... <300Ω

Response Time (default value) ..... 150ms  
(jumper-selectable from 50 to approx. 150ms)

**INSTRUMENT POWER** .....80-260Vac, 45-65Hz, 3VA

**ACCURACY**  
Accuracy (typical).....±1%Rdg. ±0.3%F.S

**MECHANICAL**

Enclosure Material ..... Noryl UL94-V0

Size (approximate) ..... 3.7in. x 6.2in. x 2.3in.

Weight (approximate) ..... 9oz.

DIN-Rail Format ..... EN50022

Protection Degree ..... Front panel..... IP51  
Terminals ..... IP20

Refer to User's Manual for installation instructions.

**ENVIRONMENTAL**

Operating Temperature Range..... -10 to 50°C

Storage Temperature Range ..... -25 to 60°C

Operating Humidity ..... 0-75% non-condensing

**STANDARDS COMPLIANCE**

Safety ..... 73/23/EEC and 93/68/EEC directives, EN61010.1 safety standard

EMC  
89/366/EEC directive with following modifications:  
93/31/EEC, 93/68/EEC, EN50081-2, EN50082-2, EN61326/A1



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