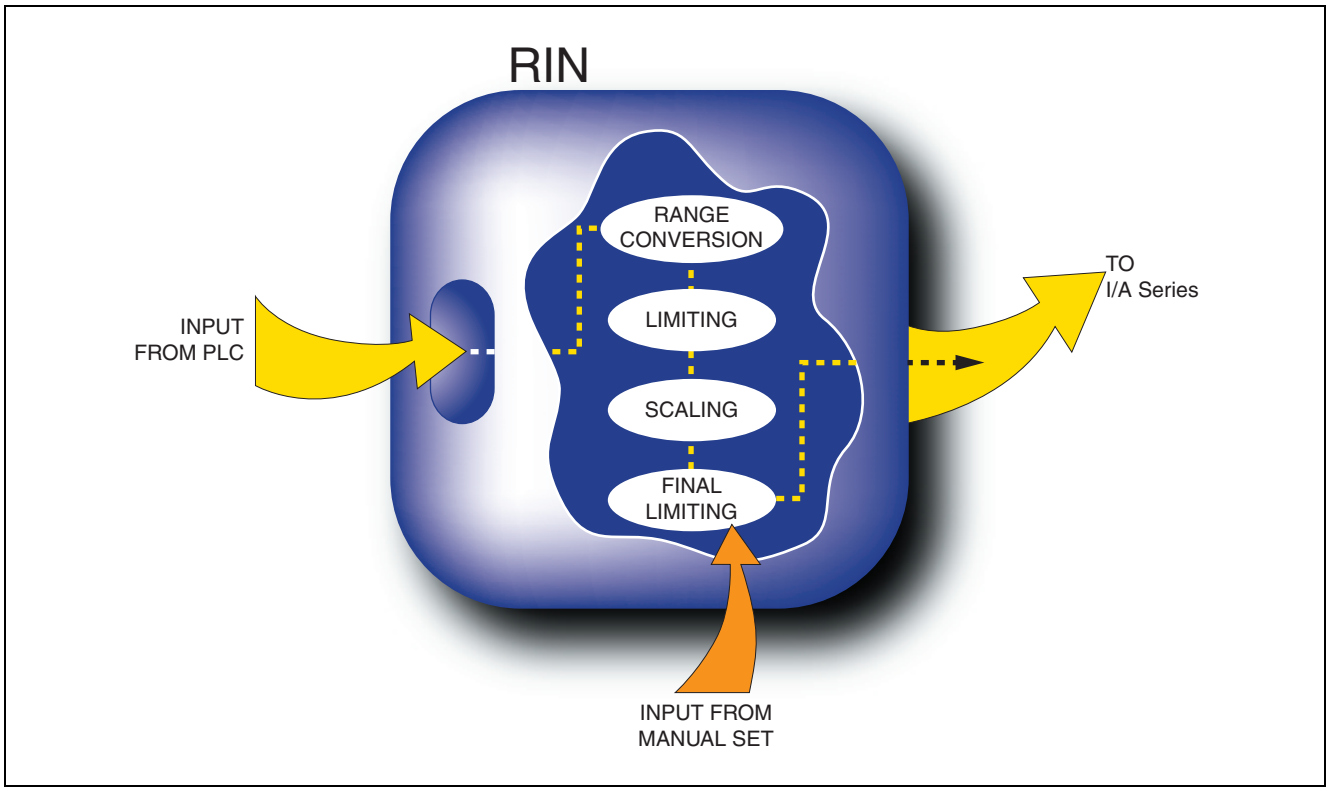
FOXBORO®

PSS 21S-3Q3 B4

I/A Series® Software
Real Input (RIN) Block



The Real Input (RIN) block provides the control strategy with the capability to read a single analog value from an address in an Allen-Bradley™ Programmable Logic Controller (PLC™).

OVERVIEW

The Real Input (RIN) block is used in applications where the PLC provides the analog data value to the I/A Series system for use in a Display Manager, FoxView™ display, or connection to a Foxboro control strategy. The real data value may originate either in the PLC ladder logic, or in a panel display which is typically mounted in the process area.

The raw value from the PLC is first scaled into the I/A Series raw count range specified by the configured Signal Conditioning Index (SCI). It is then limited to prevent excursions beyond the upper or lower limits of that range.

The limited I/A Series raw count value is converted into engineering units by a proportionality calculation. After a final limiting calculation, the result, in engineering units, is made available.

RIN always reads its input from the PLC address, whether the block is in Auto or Manual mode. However, in Manual mode, you can set the value of the output.

RIN does not provide any alarm detection or reporting capability.

Features

- Manual/Auto control of the block output signal; can be initiated by a host process or another block
- Support for operator sets in Manual
- Specification of PLC source point as device-specific string
- Input value scaled into I/A Series raw count range before further processing
- Input in I/A Series raw count converted to engineering units.

Principal Parameters

Input

- 1 real input
- Manual/Auto control mode switching
- Signal Conditioning Index

Output

- 1 real output, derived from PLC in Auto mode, or set by operator in Manual mode.

SUPPORT

RIN is a PLC block which allows the following I/A Series equipment to interface Allen-Bradley PLCs:

- AW70 processors with control software (see 70 Series Application Workstation Model AW70 [PSS 21H-4U1 B3])
- AW51 Integrators (see 50 Series Application Workstation Model AW51 [PSS 21H-4R1 B3])
- Micro-I/A™ Station (see Field Automation Subsystem Micro-I/A™ Allen-Bradley PLC5/E Remote I/O Interface [PSS 21H-6C6 B4])
- Allen-Bradley Station (see Allen-Bradley Station [PSS 21H-1F1 B3]).

PLC blocks are supported on I/A Series software version 6.2 or later. Value points for PLC blocks are listed in Micro-I/A FoxBlock™ Integrated Control Software (PSS 21H-6C1 B4).

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MB 021 Printed in U.S.A. 0201

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