EcoStruxure™

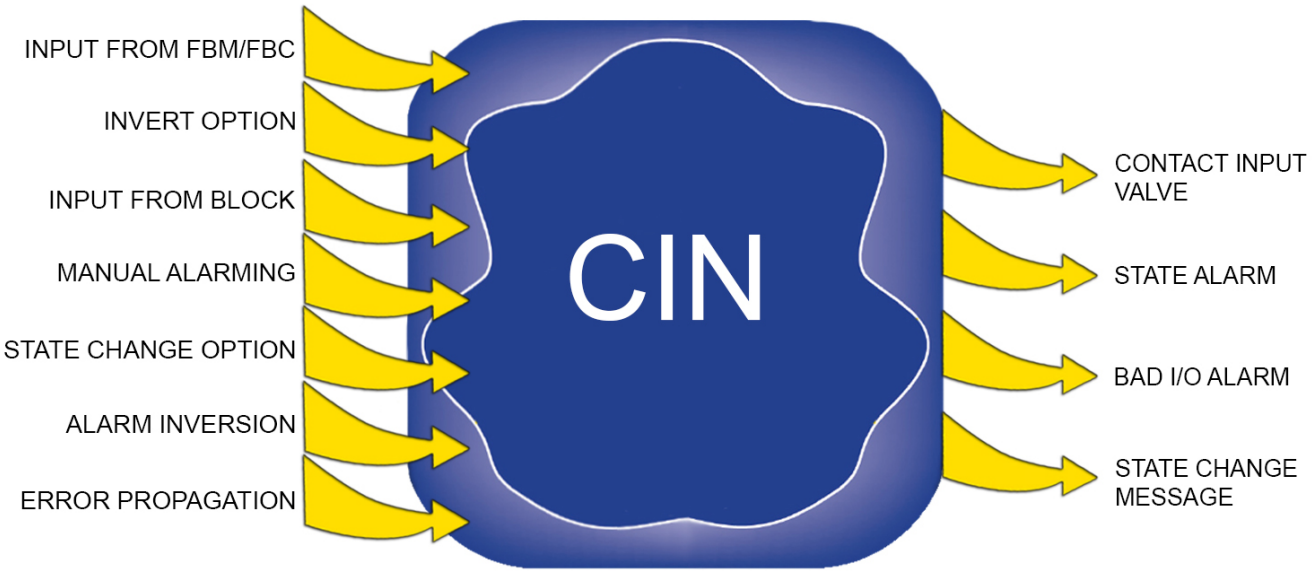
# Foxboro™ DCS

## Contact Input (CIN) Block

## PSS 41S-3CIN

**Product Specification**

**April 2019**

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# Legal Information

# Overview

*The CIN block provides input capability for a single digital input point from any EcoStruxure™ Foxboro™ DCS Fieldbus Module (FBM) or Fieldbus Card (FBC) containing such points. Readback values from digital output points may also be read by the CIN block. The state of the point is made available to the control scheme as parameter Contact Input (CIN). It may represent any process contact or discrete logic input.*

The CIN block supports two basic modes of operation:

- With the Fieldbus Module Option configured true, block input is taken from the FBM or FBC and point number specified by the user.
- When this option is false, the CIN block input is taken from any other source in the control scheme that is specified during configuration.

The block provides alarming upon detection of a fault in the operational status of the FBM or input channel, and for any state changes (transitions).

## Standard Features

- Manual/Auto transfer, which can be initiated by an operator, a host process, or another block.
- Inhibiting of alarm messages of specified types.
- Identification of the highest priority among current alarms, indicating alarm type and priority level.
- Loop identifier allows the user to identify the loop or process unit that contains the block.
- Workstation lock allows write access to the block parameters only by the Display Manager that has locked the block.
- Owner identifier allows the user to allocate control blocks to applications.
- Automatic last good value functionality whereby the output is not updated whenever the FBM or FBC, the input point, or the input from another block has bad status.

## Options

- Invert Option causes the inversion of the block's input, regardless of the source.
- State Alarm Option causes the generation of a State Alarm indication and message on any transition of the output.
- Alarm Inversion Option reverses the meaning of "into alarm" and "return to normal" for State Alarm Messages.
- Bad Alarm Option causes the generation of a Bad I/O indication and message when the FBM or FBC, or the input point, has bad status.
- State Change Option causes the generation of state change messages on only false-to-true or only true-to-false transitions of the output, or on both.

## Messages and Alarms

- State Alarm Messages carry a user-specified “into alarm” or “return-to-normal” identifying string, and a user-specified Alarm Name as a point descriptor.
- “Into alarm” consists of a false-to-true transition of the output, and “return-to-normal” is the opposite. The Alarm Inversion Option reverses these definitions.
- Bad Alarm Messages carry the user-specified Bad Alarm Text string.
- State Change Messages contain one of two user-specified strings to indicate the direction of transition.

## Extended Features

- Propagate Error Option causes abnormal conditions of an input taken from another block to result in an error status of the output.
- Manual Alarming Option permits alarming to be active during Manual mode.

## Additional Features

- Delayed alarming. A configurable timer delays alarm detection or return-to-normal messages for a specific alarm to reduce the number of alarm messages generated when a block parameter crosses back and forth over an alarm limit.
- Quality Status output parameter provides a single source for the block's value record status, block status, and alarm status.

**WARNING**: This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.p65warnings.ca.gov/.

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