MYCRO 382
Logic & Sequence Controller

USER'S MANUAL

MOORE PRODUCTS CO. Spring House, PA 19477
The MYCRO 382 Logic and Sequence Controller is a versatile, general purpose instrument useful in a variety of industrial control applications. Activities such as logic, sequencing, setpoint programming, and PID can be easily selected and implemented using the modular, interconnecting Function Blocks available from the Model 382. The user merely selects the desired blocks and connects them in the order required by the type of control necessary. The clear, understandable displays and simple, uncomplicated controls allow the MYCRO 382 to be used in a minimum of time and operator training.

This manual presents the general instructions, descriptions, and recommendations for using the MYCRO Model 382. The following sections are included:

- Section 1 — Controller Concepts
- Section 2 — Function Blocks
- Section 3 — Factory Configured Options
- Section 4 — MYCRO 382 Service and Installation Instruction (SD382)
- Section 5 — MYCRO 382 Logic and Sequence Controller Configuration Documentation (AD832-30)
  Function Block Identification (AD382-50)
SECTION 1 — CONTROLLER CONCEPTS

Displays and Controls .................. 1
Configuration Controls .................. 2
Configuration Procedure ................. 3
Operating Controls ...................... 4

SECTION 2 — FUNCTION BLOCKS
(Numerical Listing by FB Number)

FB01 ................................ Analog Input #1
FB02 ................................ Analog Input #2
FB03 ................................ Analog Output #1
FB04 ................................ Digital Output #1
FB05 ................................ Digital Output #2
FB06 ................................ Digital Input
FB07 ................................ Programmer
FB08 ................................ Repeat Cycle Timer #1
FB09 ................................ Hi/Lo Limit
FB10 ................................ Batch Totalizer #1
FB11 ................................ Sequencer
FB12 ................................ Alarms
FB13 ................................ PID Control

PID Control
PD Control
ID Control
PID (Adaptive Gain) Control

FB14 ................................ Auto/Manual Transfer
FB15 ................................ Operator’s Display
FB17 ................................ Setpoint Track & Hold
FB18 ................................ General Purpose Track & Hold
FB20-FB31 ..................... Quad Logic #1 through #12

FB32 ........................ Deviation Amplifier #1
FB33 ........................ Dual Transfer Switch #1
FB34 ........................ Quad Comparator
FB35 ........................ Quad Delay Timer #1
FB36 ........................ Quad Delay Timer #2
FB37 ........................ Quad Divide by n Counter #1
FB38 ........................ Quad Divide by n Counter #2
FB39 ........................ Quad One-Shot Timer #1
FB40 ........................ Quad One-Shot Timer #2
FB41 ........................ Quad Flip/Flop #1
FB42 ........................ Quad Flip/Flop #2
FB43 ........................ Quad Flip/Flop #3
FB44 ........................ Repeat Cycle Timer #2
FB45 ........................ Batch Totalizer #2
FB46 ........................ Multiplier/Divider #1
FB47 ........................ Multiplier/Divider #2
FB48 ........................ Adder/Subtractor #1
FB49 ........................ Adder/Subtractor #2
FB50 ........................ Deviation Amplifier #2
FB51 ........................ Square Root Extractor
FB52 ........................ Dual Transfer Switch #2
FB50 ........................ Analog Output #2
FB51-FB76 ................ Configurable Discrete I/O #1 through #16
FB77 ........................ Recipe Storage and Real Time Clock
FB98 ........................ Local Instrument Link Interface

FB99 ............................. #3 Analog Input Options

Voltage
Computer Pulse
Millivolt or Thermocouple
RTD
Frequency

Function Block Master Foldout

(continued on next page)
## SECTION 2 — FUNCTION BLOCKS (CONT'D)

(Alphabetic Listing, By Function)

### Arithmetic
- Adder/Transfer #1: FB48
- Adder/Transfer #2: FB49
- Deviation Amplifier #1: FB32
- Deviation Amplifier #2: FB50
- Multiplier/Divider #1: FB46
- Multiplier/Divider #2: FB47
- Square Root Extractor: FB51

### Control
- Alarms: FB12
- Auto/Manual Transfer: FB14
- Dual Transfer Switch #1: FB33
- Dual Transfer Switch #2: FB52
- General Purpose Track & Hold: FB18
- Hi/Lo Limit: FB90
- PID Controller: FB13
- Programmer: FB07
- Quad Comparator: FB34
- Setpoint Track & Hold: FB17
- Sequencer: FB11

### Counter/Timers
- Batch Totalizer #1: FB10
- Batch Totalizer #2: FB45
- Quad Delay Timer #1: FB35
- Quad Delay Timer #2: FB36
- Quad Divide by n Counter #1: FB37
- Quad Divide by n Counter #2: FB38
- Quad One-Shot Timer #1: FB39
- Quad One-Shot Timer #2: FB40
- Repeat Cycle Timer #1: FB08
- Repeat Cycle Timer #2: FB44

### Inputs/Outputs
- Analog Input #1: FB01
- Analog Input #2: FB02
- Analog Output #1: FB03
- Analog Output #2: FB00
- Configurable Discrete
  - I/O #1 through #16: FB61-FB76
- Digital Input: FB06
- Digital Output #1: FB04

## SECTION 3

### FACTORY CONFIGURED OPTIONS
- FC0 Description: .1
- FC001 — Single Loop PID Control: .2
- FC010 — Default Data: .3
- FC011 — Single Loop PID Control with Console:
  - Local Operation: .8

## SECTION 4

### MYCRO 382 SERVICE AND INSTALLATION
- Installation Details
- SD382 Service and Installation Instructions

## SECTION 5

### CONFIGURATION DOCUMENTATION
- AD382-30 MYCRO 382 Configuration Documentation
- Sequencer Function Block Configuration Worksheet
- Function Block Output Identification
- AD382-50 MYCRO 382 Function Block Identification