

TABLE OF CONTENTS

PRECAUTIONS

- 1 General Precautions
- 2 Safety Precautions
- 3 Application Precautions
- 4 Noise Prevention

SECTION 1

Introduction

- 1-1 Features
- 1-2 Front of the Meter
- 1-3 Rear of the Meter
- 1-4 Modes
- 1-5 Communications Function

SECTION 2

Setup

- 2-1 Mounting
- 2-2 Input Block

 - 2-2-1 Terminal Arrangement
 - 2-2-2 Wiring Precautions
 - 2-2-3 Wiring

- 2-3 Output Board

 - 2-3-1 Terminal Arrangement
 - 2-3-2 Relay Output Board
 - 2-3-3 Transistor and Combination Output Board
 - 2-3-4 Linear Output Board
 - 2-3-5 BCD Output Board

SECTION 3

Operating Modes

- 3-1 Passing Speed: f1
- 3-2 Cycle: f2
- 3-3 Time Difference: f3
- 3-4 Elapsed Time: f4
- 3-5 Length Measurement: f5
- 3-6 Interval: f6

SECTION 4

Parameter Setting

- 4-1 Overview

 - 4-1-1 Heading Symbols
 - 4-1-2 Setting Procedures

- 4-2 Setting Mode

 - 4-2-1 Selecting Setting Mode
 - 4-2-2 Menu Overview
 - 4-2-3 Setting Value Menu (sUset)

 - Bank No. of Set Value
 - HH Set Value
 - H Set Value
 - L Set Value
 - LL Set Value

 - 4-2-4 Prescaling Menu (pscl)

TABLE OF CONTENTS

- Bank No. of Prescale
- Prescaling Value X (Mantissa) of Input A
- Prescaling Value Y (Exponent) of Input A
- Decimal Point Position
- 4-2-5 Setup Menu (setup)
- Operating Mode
- Sensor Type
- Time Unit
- Communications Unit Number
- Baud Rate
- Word Length
- Stop Bits
- Parity Bits
- 4-2-6 Option Menu (opt)
- Comparative Output Pattern
- Upper Limit (H) of Linear Output Range
- Lower Limit (L) of Linear Output Range
- Remote/Local Programming
- 4-3 Protect Mode
- 4-3-1 Selecting Protect Mode
- 4-3-2 Menu Overview
- 4-3-3 Protect Menu (prot)
- All Key Protect
- Setting Value Change Prohibit
- Reset Prohibit
- Security

SECTION 5

Operations in RUN Mode

- 5-1 Displaying and Changing Setting Values
- 5-1-1 Displaying Setting Values
- 5-1-2 Changing Setting Values
- 5-2 Displaying and Resetting of Maximum and Minimum Values
- 5-2-1 Displaying Maximum and Minimum Values
- 5-2-2 Resetting Maximum and Minimum Values
- 5-3 External Input Signals
- 5-3-1 Bank Selection
- 5-3-2 Max./Min. Value RESET
- 5-3-3 RESET
- 5-3-4 HOLD

SECTION 6

Useful Functions

- 6-1 Teaching Function
- 6-1-1 Set Value
- 6-1-2 Linear Output Range
- 6-2 Output Test
- 6-3 Maintenance Mode
- 6-3-1 Maintenance Mode
- 6-3-2 Initialization

SECTION 7

BCD Output

- 7-1 Connectors

TABLE OF CONTENTS

7-2 Timing Charts

SECTION 8

Troubleshooting

8-1 Items to Be Checked First

8-2 Display

8-2-1 Flashing

8-2-2 Error Message

Appendices

A Specifications

B List of Settings

C Available Models

D Available Parameters

E Setting Examples

Revision History