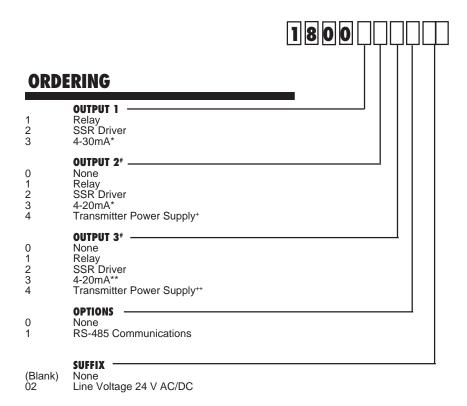
MIC 1800 MICROBASED 1/8 DIN OEM CONTROLLER



* For control output only.
** For retransmision only.

+ Cannot be used if output 3=4. + Cannot be used if output 2=4.

* NOTE: OUTPUT 2, when programmed as an ALARM, IS programmed as ALARM 2 ONLY. OUTPUT 3, when programmed as an ALARM, IS programmed as ALARM 1 ONLY.

WARRANTY

This instrument is backed by the Partlow comprehensive 2 year warranty. A complete warranty statement is published in the back of the product instruction manual. If you have further questions about warranties, please contact the Partlow factory.

ORDERING INFORMATION

For pricing and additional ordering information, refer to Form 3265, Electronic Price Book, Page 19.



DESCRIPTION

The new MIC 1800 controller is one of the most advanced 1/8 DIN microprocessor controllers available today. Its innovative design combines the ease of use common to all Partlow microbased controllers and recorders with built-in versatility and functionality. It is designed and priced for a wide variety of OEM applications as well as an excellent after-market replacement controller.

A choice of models and a wide selection of options means the MIC 1800 may be specified with only the options required for your specific application. This results in an unprecidented price/performance ratio.

The MIC 1800 is also easy to set up with its simplified operator interface. MIC 1800 programming is similar to the entire line of MIC prodiucts.

The MIC 1800 is manufactured using the latest surface mount and CMOS technology under ISO 9002 standards to provide reliable cost effective control.

CONTROLLERS

SPECIFICATIONS

Input

Thermocouple types J, K, T, R, S, B and L

RTD 100 ohm (.00385 ohm/ohm/C)

Volts 0 to 5VDC, 1 to 5VDC, 0 to 10VDC and

2 to 10 VDC

Millivolts 0 to 50mVDC and 10 to 50mVDC

0 to 20mADC and 4 to 20mADC Displays _LL_ or _HH_ for thermocouple Milliamps Sensor Fault Detection

or RTD inputs and sensor break, SnSr. Control outputs set to OFF (0% power); alarms operate as if the process variable has gone over-range (TC) and under-range

(RTD & V, mV, mA)

Outputs

Relay

115VAC: 2.0 A Resistive at 120/240 VAC

SSR Driver >4.3 VDC into 250 ohm minimum

Current Output 0-20mADC into 500 ohmmaximum

4-20mADC into 500 ohms maximum

0-10VDC 500 ohm minimum Volts DC Output

0-5VDC 500 ohm minimum

Display

Digital Display Four 7 segment LEDs, top .39" high,

bottom .28" high

Status Indicators Individual LED indictors for Output 1,

Output 2, Manual, Alarm and

Pre or Auto Tune

Alarm Adjustment

Process Alarm - Input Span **Deviation Alarm** - Input Span **Deviation Band Alarm** 0 to Input Span

Control Adjustments

On/Off Hysteresis 0.1% to 10.0% of Input Span 0% to 999.9% of Input Span Proportional Band

(0%=On/Off)

Manual Reset 0% to 100% of Output Power Auto Reset Off to 99 mins. 59 sec per repeat

0 sec to 99 mins. 59 sec Rate Cycle Time

.5, 1, 2, 4, 8, 16, 32, 64, 128, 256, and

512 seconds

-20% to +20% of PropBand 1 + Spread

PropBand 2

Performance

Line Voltage

 0.25% of span, - 1 LSD at 20 deg C Measurement Accuracy

Note: Reduced performance with Type "B" thermocouple between

100-600C (212-1112F)

Ambient Temperature Error 0.01% of span /deg C change in

ambient

Linearization Accuracy Better than - 0.2 deg C any point. any 0.1 deg C range (- 0.05 deg C (TC and RTD) typical). Better than - 0.5 deg C any

point, any 1 deg C range Better than - 0.7 deg C

Cold Junction Compensation 4 per second Scan Rate

Noise Rejection Common mode: >120dB at 50/60Hz giving negligible effect at up to 264V

50/60Hz

Series Mode: >500% of span (at 50/60

Hz) causes negligible effect 90 to 264VAC 50/60 Hz

Operating Temperature 0 to 55 C

Storage Temperature -20 to 80 C

Humidity 20 to 95% non condensing

Source Resistance 1000 ohm maximum (thermocouple) Lead Resistance 50 ohm per lead maximum balanced

(Pt100)

Dimensions 1/8 DIN front panel, 4.33" deep

Weight 16 ounces maximum

Front Panel Sealing IP65/NFMA4

Power Comsumption 4 Watts

Digital Communications

Address

Type RS-485 serial communication port: Character Format

ASCII

Bit Rate User configurable to 1200, 2400,

4800, 9600

User configurable 1 to 32