

MA Series Temperature Controllers

Ordering Information

MODEL M A - - - -

Field No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Fields 1 through 3. CONTROLLER SIZE

- MAQ Quarter DIN (96 mm square)
- MAE Eighth DIN (48 mm W x 96 mm H)

Field 4. OUTPUT 1

- 1 - Relay Contact
- 2 - Non-Contact Voltage (for SSR)
- 3 - Current (4 to 20 mAdc)
- C - Current (2 to 12 mAdc)
- T - Triac Output

Field 5. OUTPUT 2

- 0 - None
- 1 - Relay Contact
- 2 - Non-Contact Voltage, (for SSR)
- 3 - Current (4 to 20 mAdc) (n/a for MAE)
- C - Current (2 to 12 mAdc) (n/a for MAE)
- 4 - Alarm 2 (shipped as Process Alarm)
- T - Triac Output

Fields 6 and 7. INPUT

Thermocouple

19* Type K (0 to 2400 °F)	<u>Current (4 to 20 mAdc)</u>	40 -199.9 to 999.9
02 Type K (0 to 1200 °C)		41 -1999 to 9999
03 Type J (0 to 1600 °F)		
04 Type J (0 to 800 °C)	<u>Voltage (0 to 5 Vdc)</u>	
07 Type R (0 to 3200 °F)		50 -199.9 to 999.9
08 Type R (0 to 1600 °C)		51 -1999 to 9999
09 Type S (0 to 3200 °F)		
10 Type S (0 to 1600 °C)	<u>Voltage (1 to 5 Vdc)</u>	
11 Type B (0 to 3200 °F)		60 -199.9 to 999.9
12 Type B (0 to 1800 °C)		61 -1999 to 9999
13 Type T (-199.9 to 750.0 °F)		
14 Type T (-199.9 to 400.0 °C)	<u>Voltage (0 to 10 Vdc)</u>	
15 PL II (0 to 2400 °F)		70 -199.9 to 999.9
16 PL II (0 to 1300 °C)		71 -1999 to 9999
17 Type C (0 to 4200 °F)		
18 Type C (0 to 2300 °C)		

RTD

- 32 - PLT 100 DIN (.00385Ω/Ω/°C)(-199.9 to 400 °C)
- 33 - PLT 100 DIN (.00385Ω/Ω/°C)(-199.9 to 999.0 °F)

Field 8. DIGITAL COMMUNICATIONS

- 0 - None
- 1 - RS-485 (MAQ)
- 2 - RS-485 (MAE, 120 Vac only)
- 3 - RS-485 (MAE, 240 Vac only)

Field 9. SPECIAL OPTIONS MAQ (1/4 DIN) only

- 0 - None
- 1 - Auto/Manual
- 2 - Auto/Manual & Remote Setpoint (4 to 20 mA)
- 3 - Auto/Manual & Process Variable Output (4 to 20 mA)
- 4 - Auto/Manual & Remote Setpoint & Process Variable Output (both 4 to 20 mA)
- 5 - Auto/Manual & Remote Setpoint (1 to 5 Vdc)
- 7 - Auto/Manual & Remote Setpoint (1 to 5Vdc) & Process Variable Output (4 to 20 mA)

Field 10. INSTA-SET MEMORY

- 0 - None
- 1 - Memory for 8 Sets of Setting Values

Field 11. HOUSINGS

- 0 - Panelmount (standard)
- 1 - Shipped without housing. Order housing separately.

Field 12. HEATER BURNOUT FUNCTION

Requires option 1, 2 or T in field 4. Not available on MAE with digital communications (Field 8, option 1).

- 0 - None
- 1 - Calibrated 5 Amps
- 2 - Calibrated 10 Amp
- 3 - Calibrated 20 Amps
- 4 - Calibrated 30 Amps
- 5 - Calibrated 40 Amps
- 6 - Calibrated 50 Amps

Field 13. ALARM 1

- 0 - No Temperature Alarm
- 1 - High Deviation Alarm
- 2 - Low Deviation Alarm
- 3 - Dev Band (de-energized in the band)
- 4 - Dev Range Band (energized in the band)
- 5 - Process Alarm
- 6 - High Dev with Stand-by function
- 7 - Low Dev with Stand-by function
- 8 - Dev Band (de-energized in the band) with Standby

Fields 14 and 15. SPECIALS

See price list

*19 replaces 01

MAQ6-6 Controllers

Ordering Information

MAQ6-6 Quarter DIN Controller with Electric Actuator Slidewire Feedback

MODEL M A Q 6 - 6 - 0 0 - -
 Field No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Fields 1 through 5. BASE

MAQ6-6 - Base Model

Fields 6 and 7. INPUT

Thermocouple

- 19 - Type K 0 to 2400°F
- 02 - Type K 0 to 1200°C
- 03 - Type J 0 to 1600°F
- 04 - Type J 0 to 800°C
- 07 - Type R 0 to 3200°F
- 08 - Type R 0 to 1600°C
- 09 - Type S 0 to 3200°F
- 10 - Type S 0 to 1600°C
- 11 - Type B 0 to 3200°F
- 12 - Type B 0 to 1800°C
- 13 - Type T -199.9 to 750.0°F
- 14 - Type T -199.9 to 400.0°C
- 15 - PLII 0 to 2400°F
- 16 - PLII 0 to 1300°C
- 17 - Type C 0 to 4200°F
- 18 - Type C 0 to 2300°C

RTD

- 32 - PLT 100 DIN (0.00385Ω/Ω/°C) (-199.9 to 400°C)
- 33 - PLT 100 DIN (0.00385Ω/Ω/°C) (-199.9 to 999.9°F)

Current (4 to 20 mA Dc)

- 40 - Scaled -199.9 to 999.9
- 41 - Scaled -1999 to 9999

Field 8. DIGITAL COMMUNICATIONS

- 0 - None
- 1 - RS-485

Field 9. OPTIONS

- 1 - Auto/manual (standard)
- 3 - Auto/manual and process variable output (4 to 20 mA Dc)
- 5 - Auto/manual and remote setpoint (1 to 5 Vdc)

Field 10. INSTA-SET™ MEMORY

- 0 - None
- 1 - For eight sets of setting values

Fields 11 and 12. RESERVED

Field 13. ALARM 1

- 0 - None
- 1 - High deviation alarm
- 2 - Low deviation alarm
- 3 - Deviation band (de-energized in band)
- 4 - Deviation range band (energized in band)
- 5 - Process alarm
- 6 - High deviation with standby function
- 7 - Low deviation with standby function
- 8 - Deviation band with standby function

Fields 14 and 15. SPECIALS

- 00 - None
- XX - See Price List

Specifications

Supply Voltage:	115/230 Vac ±10%, 50/60 HZ
Power Consumption:	approx. 5W
Ambient Temperature:	0 to 50 °C (32 to 112 °F)
Relative Humidity:	Up to 85% (non-condensing)
Weight:	approx. 18 oz.
Accuracy:	Within ±0.3% of scaling range full scale + 1 digit
	Thermocouple: 300 °C (550 °F) span or more
	RTD: 100.0 °C (200.0 °F) span or more