PID CONTROLLER

MODEL : MACZER MZ-903 PID

FEATURES

- High accuracy
- Programmable range
- Simple 4 key user control
- Universal input (RTDs, T/C, mA / V)
- User friendly installation and operation
- Digital calibration and auto zero technology
- Application of advanced artificial intelligence control algorithm with auto tuning function, no overshoot.
- Operation & Calibration through keyboard on front panel
- Application of advanced artificial intelligence control algorithm with auto tuning function, no overshoot.
- Provided with auto/manual bumpless switch and soft-start function.
- New generation of X3 and X5 current output modules with accuracy 0.2%F.S., improving the precision of control and retransmission.
- Fast communication with sampling rate 12.5 times/ second and minimum control period 0.24 second, able to control quickly change object
- Application of advanced modular structure, conveniently providing plentiful output options, can satisfy various application requirements, and make quick delivery and easy maintenance.
- Friendly and customized operating interface leads to easy learning and simple manipulation. Any parameter can be promoted to immediate operator access in Field Parameter Table or password protected in Full Parameter Table. With worldwide power supply of 100-240VAC or 24VDC and various dimensions for user to choose. 50Hz or 60Hz power frequency, and unit of ℃ or ℉ are selectable by parameter.
- High quality and performance hardware design, using high performance tantalum capacitor or ceramic capacitor.
- Compared to competing models, it consumes less electricity, experiences less temperature shifting, provides higher stability and reliability, and can work in a wider range of temperature.
- ISO9001 and CE certified, achieving world class level of quality, anti-interference ability and safety. The power and all I/O terminals passed 4KV/5KHz EFT test, and the instrument can work stably under interference.

Maczer India

INPUT TABLE:

INPUTS	TYPE	RANGE
Universal	Programmable	**As per input selected**
Thermocouple	J	0 to 1200 Deg. C
	K	-100 to 1300 Deg. C
	R	0 to 1700 Deg. C
	S	0 to 1700 Deg. C
	T	-200 to 390 Deg. C
	E	0 to 1000 Deg. C
	N	0 to 1800 Deg. C
RTD	PT100	-200 to 800.0 Deg.C
	Cu50	-50 to 150 Deg.C
Linear (V / mA)	0 – 5 V / 1-5 / 0-1 V/ 0-100mV/ 0-20 mV	-9990 to +30000 Defined by users
	4 – 20/ 0 – 20/ 0 - 10 mA	

SPECIFICATIONS:

Model	**: MZ-903 temperature controller based on MZ-908 with auto/manual control with bump less switch function added.**
Dimensions	**: A: 96*96*100mm,** **: ----------** **: ----------**
Control Mode	**: On – Off control mode (dead band adjustable)** **: AI artificial intelligent MPT with auto-tuning, adopting fuzzy logic PID algorithm**
Measurement Accuracy	**: 0.1% FS +/- 0.1 Deg C**
Resolution	**: 0.1 Deg. C (automatically change to 1 Deg.C when temperature higher than 999.9 Deg. C) / 1 Deg. C selectable**
Temperature Drift	**: ≤ 0.01% FS/℃ (typical value is 50 ppm/℃)**
Response Time	**: ≤0.3s** **(When digital filter parameter dL=0)**
Power Supply	**: Power supply: 100~240VAC,-15%,+10%; 50/60Hz;** **: 24VDC/AC,-15%,+10%** **: Power consumption: ≤5W**
Output - I **Output - II** **Output - III**	**: Linear current output: 4~20 mA** **: Linear current Re-transmission output: 4~20 mA** **: Alarm 02 Nos.**

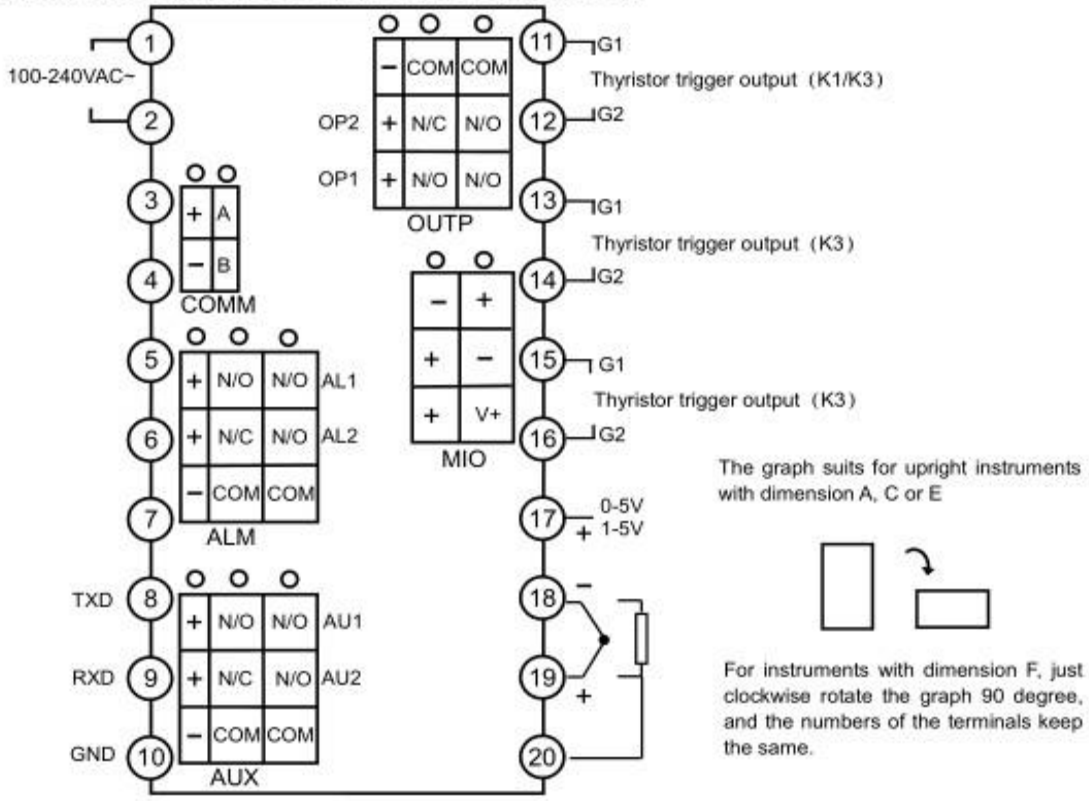
ENVIRONMENT

Operating Temperature	**: 10~60°C**
Operating Humidity	**: ≤90%RH**
Storage Temperature	**: -10 to +70 Deg. C**

OPTIONAL FUNCTIONS

1~4 alarms, RS485 communication

Wiring graph for instruments except D and D2 dimension.



Note 1: For linear voltage input, if the range is below 1V, connect to terminals 19 and 18. 0～5V or 1～5V signal can be inputted from terminals 17 and 18.

Note 2: 4～20mA linear current signal can be transformed to 1～5V voltage signal by connecting a 250 ohm resistor, and then be inputted from terminals 17 and 18. If I4 module is installed in MIO socket, 4～20mA signal can be inputted from terminals 14+ and 15-, and 2-wire transmitter can be inputted from terminals 16+ and 14-.

Note 3: The compensation wires for different kinds of thermocouple are different, and should be directly connect to the terminals. When the internal auto compensation mode is used, connecting the common wire between the compensation wire and the terminals will cause measurement error.