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Integrity · Reliability · Sustainable Development



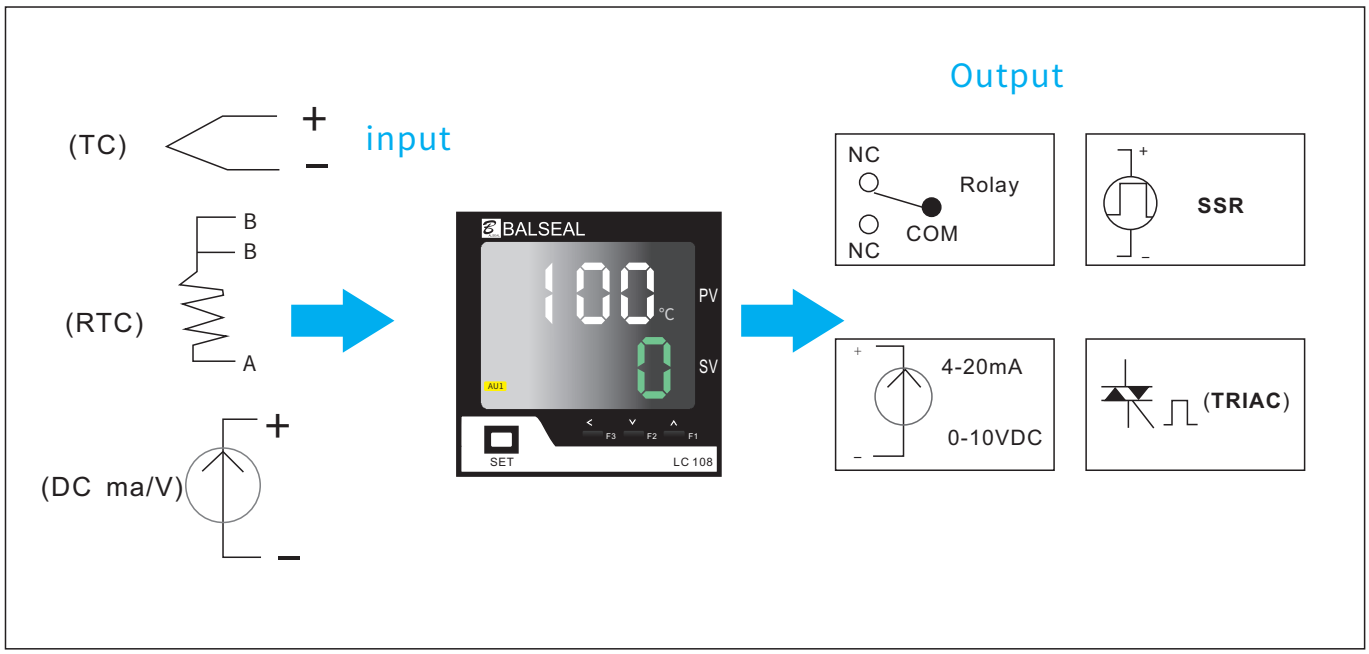
BLC MICPO PROCESSOR

LC series

PID CONTROLLER

Product Selection Manual

Usually input



MICOR PROCESSOR CONTROLLER

New Generation Digital Temperature Controller Advanced design, easy operation



Adopts a new type of LCD display withwhite PV display mode,greatly improving the visibility of displayed data.

The new-generation temperature controller adopts a compact design, requiring less installation space inside the control cabinet.It can be easily and quickly snapped into place even in limited space.



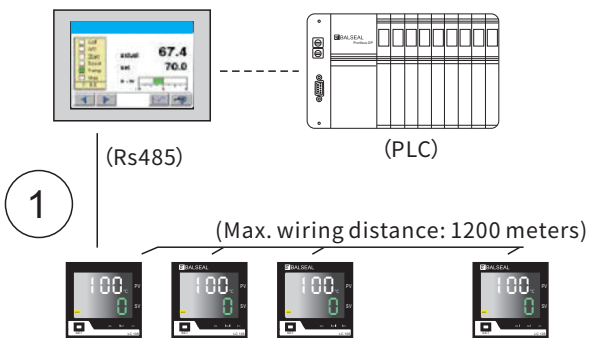
MICOR PROCESSOR CONTROLLER

- auto/manual
- Transmissiopn
- Remove SV value
- Doubie PID Heating/cooling
- Programmer control 32 segment
- Soft start function
- Digit input function
- 3 wires motor value PID control

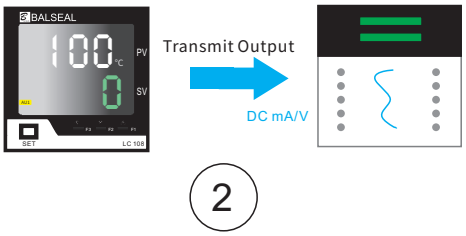
- Input Type
  - Thermocouple:K、E、J、T、B、S、Wu3_re25、n、r
  - RTD:PT100
  - Analog:DC 0-5V、1-5V、0-10V、2-10V、DC 4-20mA、0-20mA
  - Measurement Accuracy:(Max±0.2%FUS. OR±1) <±1 digit
  - Measured Value Calibration:-200-9999℃
  - Display Unit:℃

Percentage Display
Fuzzy Control
Channel Switch
Auto-Tuning
Valve Control
Ramp & Soak
Transmit Output
Remote Control
Digital Communication
Programmable Control

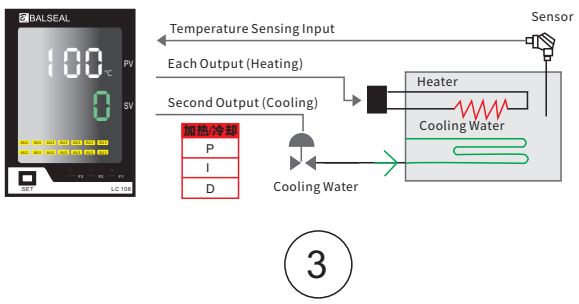
Comunication RS-485



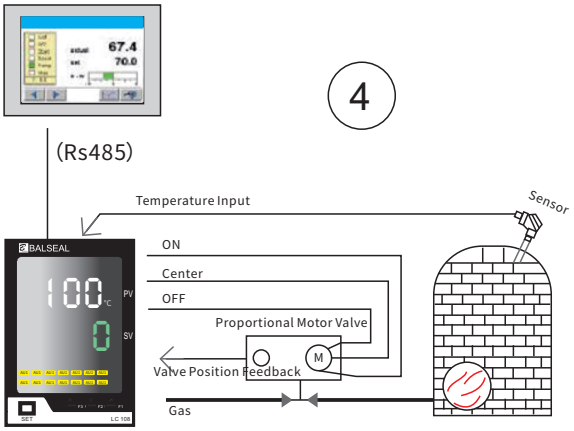
Transmission



Double PID Heating/Cooling



3wires motor valve PID control



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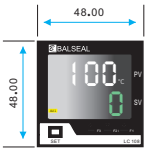
Selection guide

BLC \ N1 \ 1 \ R \ M \ A \ *

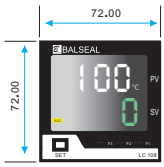
Series Code	Panel Size	Output Mode	Output Control	Communication	Power Supply	Special Functions
BLC:LCD Type BLD:LED Type	N1:48×48 N4:48×96 N7:72×72 N9:96×96	1:Alarm 1 2:Alarm 2	R:Relay S:SSR P:4–20mA I: 0-10VDC	*:No Comm. M:RS-485	A: 100/220VAC D:24VDC	Z: Valve Forward / Reverse W:Heat / Cool Dual Channel

Basic parameters

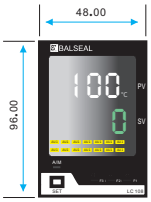
Overall Dimension



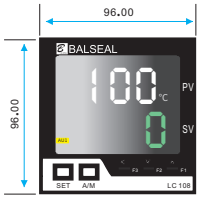
BLC/N1



BLC/N7



BLC/N4



BLC/N9

Main Parameters

Input Signal (℃)

Input Type	Thermocouple (℃)													
Product Name	K					J			T			*S	R	E
Temperature Range	0-400℃	0-800℃	-15-+1300℃	-15-+400℃	0.0-800℃	0-400℃	15-1000℃	-15-+300℃	0-400℃	-15-+300℃	0-400℃	0-1600℃	0-+1769℃	0-800℃
Set Signal	A4	A8	B3	D4	D8	A4	A0	D3	A4	D3	D4	B6	B7	A8

Input Signal

Input Type	Thermocouple (℃)		W-Re Thermocouple (℃)	Platinum RTD (℃)			
Product Name	*B	N	Wu3/Re25	Pt100			
Temperature Range	0-1800℃	0-1300℃	0-+2200℃	0-400℃	-200-+800℃	-199.9-+800℃	Note: Accuracy is undefined for S/R type input from -15 to 100℃, and for B type input from -15 to 200℃.
Set Signal	B8	B3	B0	A4	A8	D8	

Input Signal (°F)

Input Type	Thermocouple (°F)											W-Re Thermocouple (°F)
Product Name	K		J		T			*S	R	E	*B	N	Wu3/Re25
Temperature Range	0-999.9°F	0-2502°F	0-550°F	-15-+1958°F	0-300°F	0-+600°F	0-782°F	0-3000°F	0-3216°F	0-1562°F	0-3276°F	0-2372	0-3276°F
Set Signal	F0	H6	F5	G0	F3	F6	F7	H0	H2	G5	H2	G3	H2

Input Signal (°F)

Input Type	Platinum RTD (°F)		
Product Name	Pt100		
Temperature Range	-199.9-900°F	-326-+1472°F	Note: Accuracy is not guaranteed for S/R type input from 0 to 212°F, and for B type input from 0 to 392°F.
Set Signal	F0	G4	

Output Control

Relay	250VAC 3A 1a (Resistive Load)
Mechanical	⩾10,000,000 Min
Electrical	⩾100,000 250VAC 3A 1a (Resistive Load) Min
SSR	12VDC ±2V 20mA Max.
Auxiliary Output	AL1,AL2Relay Output:250VAC 1A 1a
Integral Time	0-3600s
Derivative Time	0-3600s
Proportional Band	0-800
Proportional Cycle	(Heating Side) 0-100s

Usually input

Other Parameters

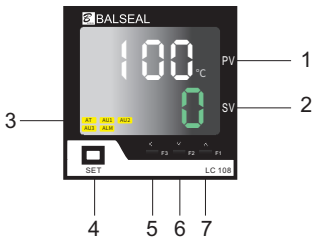
Output Control

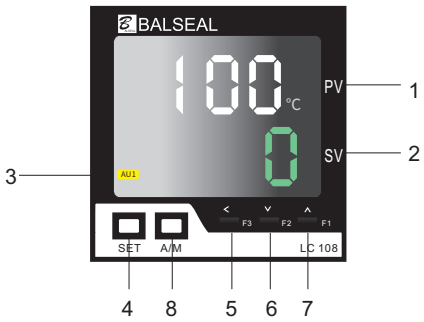
Proportional Cycle	Proportional Band (Cooling Band): 0~1000%

Communication & Others

Communication Method	RS-485 Asynchronous Serial Communication in Single Host Mode
Communication Protocol	Modbus-RTU protocol, supports read function 03, write function 06 and 10.
Baud Rate	2400, 4800, 9600, 19200 bps selectable (Default: 9600)
Ingress Protection Rating	Front Panel: IP66, Rear Housing: IP20, Terminals: Ip00
Operating Environment	Temperature: -10℃ ~ 55℃ (no condensation, no icing); Humidity: 25% ~ 85%
Storage Environment	-25℃ ~ 65℃ (no condensation, no icing)
Certifications	CE,RoHS

Usually input





Panel Description

1. PV Display Window: Shows the current measured value
2. SV Display Window: Shows the current set value
3. Control / Auxiliary Indicator LED
   - AT Indicator: Flashes during auto-tuning
   - OUT1 Indicator: Indicates OUT1 output status
   - OUT2 Indicator: Indicates OUT2 output status
   - OUT3 Indicator: Indicates OUT3 output status
   - ALM Indicator: Indicates alarm status
4. SET Main Function Key
5. F3 (<) Shift Key, Monitor Switch & RUN/STOP Key
6. F2 (∨) Down Adjustment Key
7. F1 (∧) Up Adjustment Key
8. A/M Auto-Manual Switch Key (Auto-switch function available on specified models)

Applications

1. The BLC series temperature controllers are targeted at system integrators and machine builders. They provide temperature control solutions for HVAC, industrial equipment, packaging, textile and other industries.

- **Application Examples:**
  - Extruder Production Line
  - Plastic & Rubber Injection Molding Equipment
  - Thermoforming
  - Synthetic Fiber and Polymer Production Line
  - Food and Beverage Processing Production Line
  - Molding Press
  - UV and Laser Equipment
  - Refrigeration Chamber
  - Paint Spraying
  - Horticulture and Livestock Farms

Peripheral matching goods (sold separately)

Solid State Relay

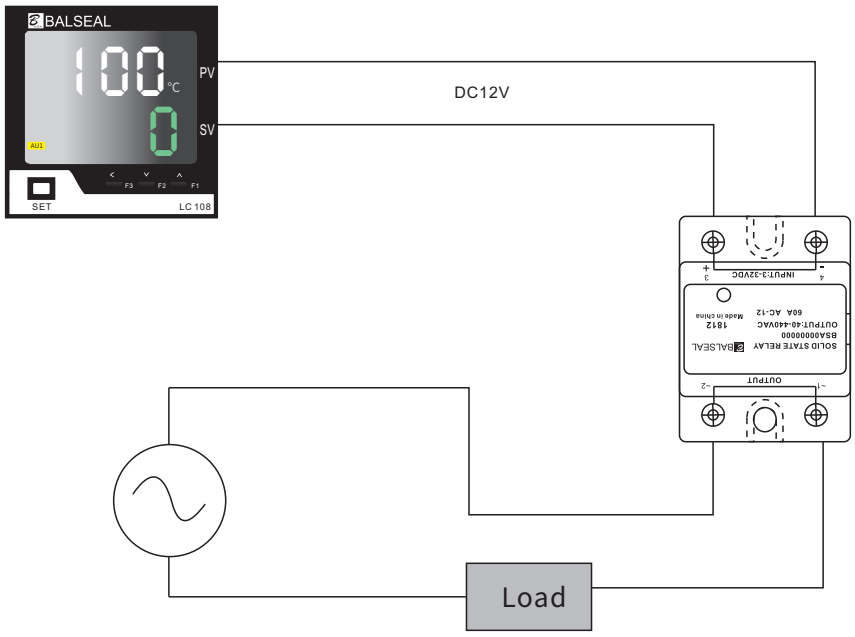
- Multiple inputs, compatible with various temperature controllers
- 5-80A, same mounting pitch
- Compliant with CE and RoHS standards

Applicable Output Loads	Standard Type	Compact Type	Compact Integrated Type	Applicable Output Loads	Standard Voltage Regulating Type	Compact Integrated Voltage Regulating Type
5A(AC24-440)	—	BSN1D032A250/D1	—	5A(AC24-440)	—	—
10A(AC24-440)	BSA1044D032	—	BSAP1044D032	10A(AC0-220)	BSA10220AV200	BSAP10220AV200
20A(AC24-440)	BSA2044D032	—	BSAP2044D032	20A(AC0-220)	BSA20220AV200	BSAP20220AV200
30A(AC24-440)	BSA3044D032	—	BSAP3044D032	30A(AC0-220)	BSA30220AV200	BSAP30220AV200
40A(AC24-440)	BSA4044D032	—	BSAP4044D032	40A(AC0-220)	BSA40220AV200	BSAP40220AV200
80A(AC24-440)	BSA8044D032	—	BSAP8044D032	80A(AC0-220)	BSA20220AV200	BSAP80220AV200

Voltage regulating typeInput: 200k–220kΩLoad: 10–80A optionalOutput: 0–220VAC / 0–380VAC

For details, please contact your local agent or sales support.

Wiring Example





NOTES

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