Logicbus
¡ Tu Sitio de Automatización !

4 DIGITAL PID CONTROLLER LB-TB Series

FEATURE

- Measuring T/C, Pt100Ω, Process signal mA, Vdc
- Accuracy: ±0.25% of full scale
- 4 Digital display: -1999~9999
- Automatic / manual output in standard
- Heating / Cooling control output available in option
- Analog re-transmission function option
- Outside dimensions is 1/4, 1/8, 1/16 DIN
- High stability & low cost
- CE Approval

SPECIFICATIONS

Measuring Range		Resolution	Input Impedance
Thermo-couple	K	0.0~400.0°C/ 0~1200°C	≥1M ohm
	J	0.0~400.0°C / 0~1200°C	≥1M ohm
	E	0~1000°C	≥1M ohm
	T	-199.9~400.0°C / 0.0~350.0°C	≥1M ohm
	R	0~1796°C	≥1M ohm
	S	0~1796°C	≥1M ohm
	B	0~1820°C	≥1M ohm
	N	0~1300°C	≥1M ohm
	W	0~2320°C	≥1M ohm
	PLII	0~1390°C	≥1M ohm
	U	-199.9~400.0°C / 0.0~400.0°C	≥1M ohm
	L	0~800°C	≥1M ohm
Pt100Ω		-199.9~600.0°C / 0~600°C	≥1M ohm
Current		0~20 mA	2.4 ohm
		4~20 mA	2.4 ohm
Voltage		0~50 mV	≥1M ohm
		0~10 V	≥20K ohm
		1~5 V	≥10K ohm

- Measuring accuracy: ±0.25% F.S. ±1 digit
- Scaling: -1999~9999; 14 bit resolution
- Sampling time: About 2 cycles/sec.

Display functions

- LED: Dual display for PV & SV
  8 square LED for status of output, alarm…
  10 segments bar display for output percentage
- Decimal point: Settable any digit by front key (linear input)
- Unit: °C and °F changeable
- Compensation: For PV and SV
- Over-range indication: " UUU1 " display

Operating

- Operation key: Five key for Function setting / Auto-Manual output
  Up key / Down key / Shift key
- Skip function: Skip the functions showing what the customer don't use.

Control mode

- ON/OFF control: when P sets to be 0(P=0),
  Hysteresis (Hy): 0~1000 counts
- PID control: Auto tuning
  Proportional Band (P): 0.0~200.0% of span
  Cooling side Proportional Band (P1):
  0.0~200.0% of span
  Reset time (Integral): 0~900 sec.
  Rate time (Deviation): 0~1000 sec.
  Cycle time: 0~150 sec.
  H/C dual control output
  Direct/Reverse programmable
- Control output: Relay SPDT x 1, 5A/240Vac
  SSR, 24V, 20mA
  4~20 mA, Load: 600Ω
  0~10 V, Load: 1MΩ

Alarm

- Relay contact: Standard: Alarm 1: SPDT 5A/240V
  Option: Alarm 2: SPDT 3A/240V
- Alarm functions: Wait, Hysteresis, Alarm time, Alarm delay, Alarm hold,
- Alarm mode: 13 action modes programmable
  Deviation High, Low or High & Low alarm,
  Absolute value High, Low or High & Low alarm,
  Absolute value high & low range
  A/D error, Heater break

Analogue output (option)

- Accuracy: ± 0.25% of RO
- Output capability: Max. load resistance : 600 ohms
- Isolation: Isolation between input and output
- Calibration: By front key

Power

- Excitation Supply: DC 24V, 30mA
- Power Supply: AC 85~265V, 50/60 Hz
  Option: DC 24V
- Power consumption: 4.5VA
- Back up memory: By EEPROM

Enviromental

- Operating temperature: 0~55 °C
- Operating relative humidity: 20~90%RH(Non-condense)
- Temperature coefficient: ≤100 PPM/°C (0~50°C)
  ≤50 PPM/°C (23 ± 3°C)
- Storage temperature: -10~70 °C
- Enclosure: IP 42

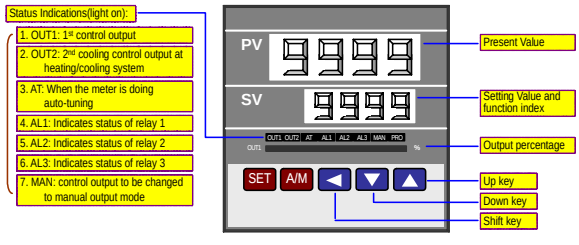
Electrical safety

- Dielectric Strength: AC 2.0KV for 1 min
  Between Input / Output / Power / Case
- Insulation: ≥20M ohm
- LVD: EN61010-1
- EMC: EN 55022; EN50204
  EN61000-3-2; EN61000-4-2

Mechanical

- Case material: Black ABS fire-protection
- Mounting: Panel flush mounting
- Connection: Screw terminal
- Weight: About 325g

FRONT PANEL



LB-TB SERIES

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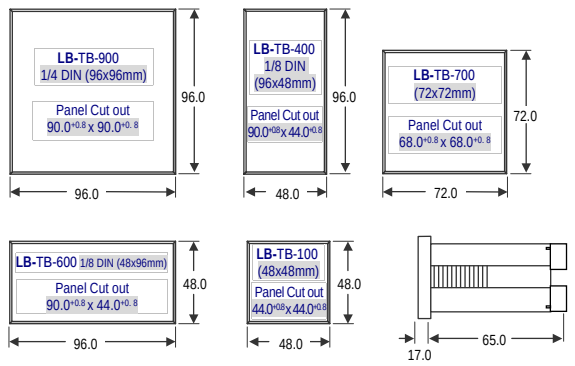
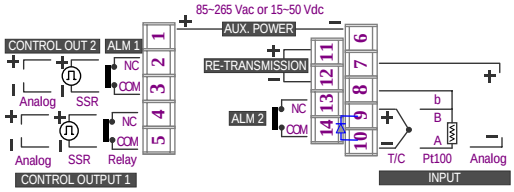
MX 01 (33) 3854-5975 y 3823-4349 USA 001 (619)-884-94-93 (San Diego, CA. Office)

DIMENSIONS



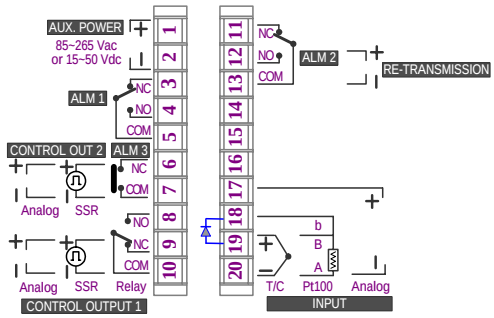
LB-TB-100 (48x48mm):



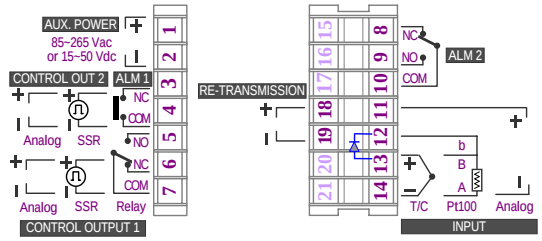
CONNECTION DIAGRAM

LB-TB-900 (96x96mm):

LB-TB-400 (48x96mm) and LB-TB-600 (96x48mm):



LB-TB-700 (72x72mm):



ORDER INFORMATION

LB-TB- [Dimension] — [Control Output 1] — [Control Output 2] — [Alarm Output] — [Analogue Output] — [0] — [0] — [Aux. Power]

CODE	DIMENSION
900	96x96mm
700	72x72mm
600	96x48mm(V)
400	48x96mm(H)
100	48x48mm

CODE	CONTOL O/P 1
0	None
1	Relay
2	Volt (for SSR)
3	4 ~ 20 mA

CODE	CONTOL O/P 2
0	None
1	Relay
2	Volt (for SSR)
3	4 ~ 20 mA

CODE	ALARM O/P
0	None
1	1 Relay
2	2 Relay
3	3 Relay

CODE	ANALOG O/P
0	None
1	4 ~ 20 mA
2	0 ~ 20 mA

CODE	AUX. POWER
A	AC 86~264V
D	DC 10~50V

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