

LDE - LME

1/16 DIN Temperature Controllers



Features

- Four timer functions
- Thermocouple and RTD input
- PID and Smart AT autotuning
- NEMA 4X, IP65
- Programmable Soft Start
- Alarm masking
- Heat/Cool control

Specifications

Control Mode:

On/Off, PID with Smart AT Autotuning, Heat, Heat/Cool and Alarm

Supply Voltage:

100-240 Vac (+10%, -15%), 50/60 Hz or 24 Vac/Vdc ($\pm 10\%$)

Operating Ambient:

0-50°C, 20-85% RH non-condensing

Inputs:

T/C Types J, K, L, N & T (°C, °F); Pt 100
3W RTD (°C, °F)

Output Ratings:

Output 1: Relay, 3A/250V, SPDT, Resistive
(Heating) Logic SSR (unisolated)(Heating)

Logic Level 1: 14Vdc $\pm 20\%$ @ 20mA max
(700 Ω min.) 24Vdc max. $\pm 20\%$ @ 1mA

Logic Level 0: Less than 0.5Vdc

Output 2: Relay, 2A/250V, SPST, Resistive
(Cooling or Alarm)

Output 3: Relay, 2A/250V, SPST, Resistive
(Alarm)

Mounting:

panel mount

Mounting Dimensions:

48W x 48H x 100D mm

Cutout:

45W x 45H mm (-0, +0.6 mm), 60 mm min.
center-to-center vertical spacing, 75 mm min.
center-to-center horizontal

Weight:

160 gm

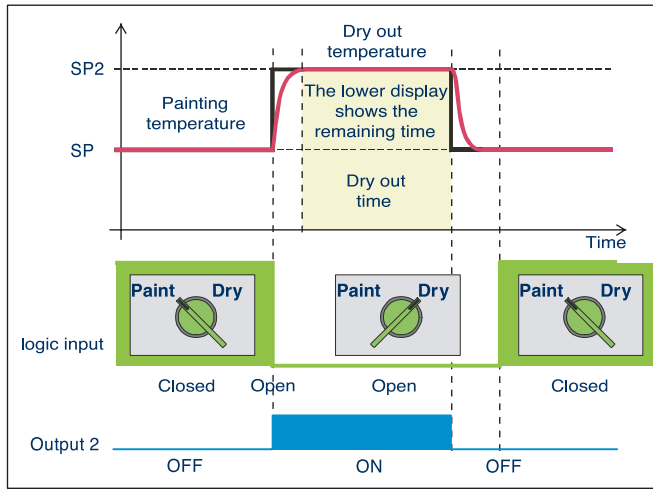
The LDE and LME controllers offer outstanding performance and a variety of features in a cost effective 1/16 DIN package. NEMA 4X faceplates allow these units to be used in applications in which washdowns and dust conditions exist. Thermocouple or RTD input and the choice of either a dual 3-digit display (LME) or single 4-digit display (LDE) provide complete coverage for plastics, packaging, food, environmental chambers and other cost sensitive applications.

These controllers provide solutions for heating, heating plus alarm and heating/cooling applications. Alarms can be process, deviation or band type, direct or reverse, with manual reset. Easy to understand, these controllers provide exceptional value to the industrial user.

The LDE and LME can be connected to a PC by means of the available CPI (Computer Port Interface). The CPI includes software which speeds up and simplifies instrument configuration by providing guided menus for complete instrument set-up. The software also allows you to save and copy complete instrument configurations.

The LDE and LME also include four different timer modes that provide control over the selection of the working and standby setpoints. The four modes include "Energy Saving," "Cooking," "Cooking & End of Cycle" and "Painting." These four modes, along with variations of each, provide users with a wide variety of timer choices.

Rear terminal connections and ordering codes



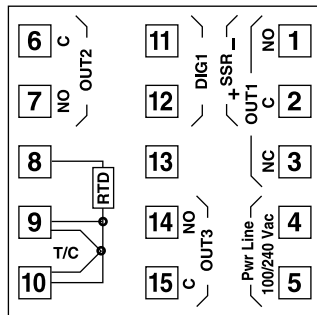
Timer Mode 4, the "Paint" Mode

The timer starts when SP2 is selected. If guaranteed soak is selected, the timer starts when SP2 is reached. OP2 can be used to control air recirculation during the drying period as well as indicating the dryer is operating. During the dry phase, the lower display shows the remaining time.

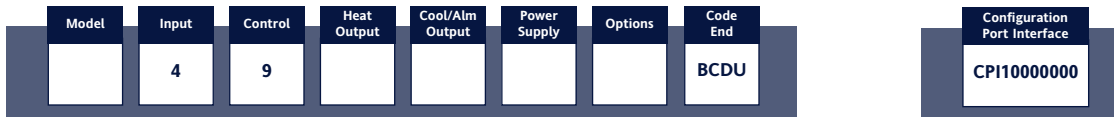
Variations

A "guaranteed soak" timer when the process is within defined temperature limits.

An "output power off" function instead of a "painting" temperature.



Standard Ranges				
TC type	°C		°F	
	LDE	LME	LDE	LME
L	0 / 900	0 / 900	0 / 1652	0 / 999
J	0 / 1000	0 / 999	0 / 1832	0 / 999
K	0 / 1370	0 / 999	0 / 2498	0 / 999
N	0 / 1400	0 / 999	0 / 2552	0 / 999
T	0 / 400	0 / 400	0 / 752	0 / 752
RTD type	°C		°F	
	LDE	LME	LDE	LME
PT 100	-200 / 800	-199 / 800	-328 / 1472	-199 / 999
3 wire	-199.9 / 400.0	-19.9 / 99.9	-	-



Model	Control Action	Cool/Alm Output	Options
LDE 4 digit temperature controller LME 3 digit temperature controller	9 SMART or PID	0 None 1 Relay	00 None 10 Output 3 (Alarm 2) 20 Logic Input
Input	Heat Output	Power Supply	
4 T/C Type J, K, L, N & T (°C, °F) and Pt100 3W RTD (°C, °F)	1 Relay 6 SSR	3 100-240 Vac 5 24 Vac/Vdc	

Example ordering code

LDE - 4 - 9 - 1 - 1 - 1 - 3 - 20 - BCDU

Model LDE 4 digit temperature controller, TC & RTD inputs, SMART or PID tuning, Relay heat output, Relay cool output, 100-240 Vac power, and Logic input.