

BR1-28 INSTRUCTIONS FOR USE

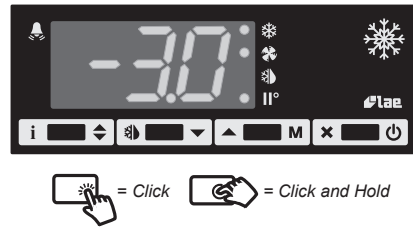
Thank you for having chosen an LAE electronic product. Before installing the instrument, please read this instruction booklet carefully in order to ensure safe installation and optimum performance.

1. INSTALLATION

- The BR1-28 controller, size 107x95x47 mm (WxHxD), is to be secured to a DIN rail in such a position as to ensure that no liquid infiltrates causing serious damage and compromising safety.
Make sure that electrical connections comply with the paragraph "wiring diagrams". To reduce the effects of electromagnetic disturbance, keep the sensor and signal cables well separate from the power wires.
Place the probe T1 inside the room in a point that truly represents the temperature of the stored product.
Place the probe T2 on the evaporator where there is the maximum formation of frost.
The function of probe T3 is determined by the parameter T3. With T3=DSP the probe measures the temperature to be displayed.
With T3=CND the probe measures the condenser temperature, it must therefore be placed between the fins of the condensing unit.
With T3=2EU the probe measures the temperature of the second evaporator and it must therefore be placed where there is the maximum formation of frost.
At the first power-up or after a long power failure, the display might show "TIM": press any of the buttons to mute the buzzer, then check if the real time clock is correct (MIN, HRS).

2. DISPLAY INFO

Table with 2 columns: Symbol, Description. Includes Alarm, Room high temperature alarm, Thermostat output, Room low temperature alarm, Fan output, Condenser high temperature, Defrost output, Generic alarm, etc.



In case of alarm, press any key to mute the buzzer sound.

Navigation diagram showing keypad symbols and actions. Columns include Info items, Navigation, Real Time Clock (RTC) modification, Keypad Lock, and TH1 / TLO / CND reset.

3. OPERATION

Diagram showing Setpoint I and II: display and modification, and Standby (SB=YES) actions.

3.1 SELECTION OF SECOND PARAMETER GROUP

Table with 4 columns: Manual (IISM=MAN), Automatic (IISM=ECO), Contact (IISM=D1), Real time clock (IISM=RTC).

3.2 DEFOST START

Diagram showing manual, real time clock (DFM=RTC), timed (DFM=TIM), optimized (DFM=FRO), and remote (DxO=RDS) defrost start methods. Includes a synchronized (D3O=DSY) diagram.

3.3 DEFOST TERMINATION

Diagram showing time limit, survey of 1 evaporator before time limit, and survey of 2 evaporators before time limit.

Resuming thermostatic cycle. When defrost is over, if DRN is greater than 0, all outputs will remain off for DRN minutes, in order for the ice to melt completely and the resulting water to drain. Moreover, if probe T2 is active (T2=YES), the fans will re-start when the evaporator gets to a temperature lower than FDD; Vice versa, if probe T2 is not active (T2=NO) or after defrost has come to an end, such condition does not occur by end of the time FTO, after FTO minutes have elapsed the fans will be switched on anyway.

4. CONFIGURATION PARAMETERS

Diagram showing Access / Navigation / Modification keypad symbols and actions: Visualize value, Increase or decrease value, Next or previous parameter, Exit.

Table with 3 columns: PAR, RANGE, DESCRIPTION. Includes SPL, SPH, SP, C-H, HY0, HY1, CRT parameters.

Main parameter table for BR1-28 with columns: Parameter, Range, Description. Includes CT1, CT2, DFM, DFT, DFB, DH1, DH6, DLI, DTO, DTY, DSO, SOD, DPD, DRN, DDM, DDY, FID, FDD, FTO, FCM, FDT, FDH, FT1, FT2, FT3, ATM, ALA, AHA, ALR, AHR, ATI, ATD, ACC, IISM, IISL, IISH, IISP, IIH0, IIH1, IIDF, IIFC, ECS, EPT, SB, DSM, DAD.

Table with 3 columns: Parameter, Range, Description. Includes CSD, D10, D1A, D20, D2A, D30, D3A, LSM, LSA, STT, EDT, OA1, OA2, ZCD, OS1, T2, OS2, T3, OS3, AHM, AHT, TLD, TDS, AVG, SCL, SIM, ADR.

6. TECHNICAL DATA

Power supply and Relay output max loads (240Vac) table.

Input: NTC 10KΩ@25°C, LAE Part No. SN4...

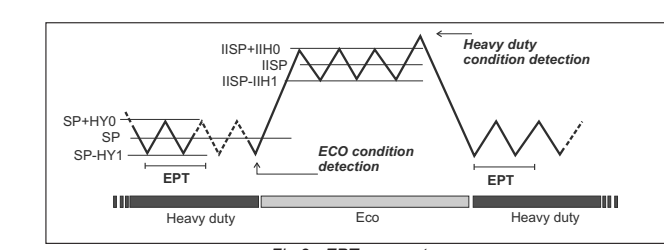
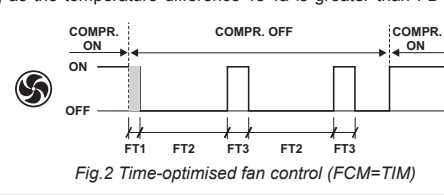
Measurement Range: -50...110°C, -58...180°F, -50 / -9.9 ... 9.9 / 110°C

Measurement accuracy: <0.5°C within the measurement range

Real Time Clock battery: >150 hours; self-rechargeable

Operating conditions: -10 ... +50°C; 15%...80% r.H. Pollution degree 2

Approvals and Reference Norms: - RoHS 2011/65/UE - EN50082-1; EN55022 (Class B); - EN60730-1; EN60730-2-9; - UL60730-1, File SA32385



5. WIRING DIAGRAMS

