UNIVERSAL
DISPLAY CABINET CONTROLLER LCPT
FOR MECHANICAL EXPANSION VALVES

Type LCPT is a unit suitable for the **control** of refrigerated display cabinets with all types of defrost. The unit controls the cabinet temperature by measuring 2 air temperatures and operating a liquid solenoid valve or condensing unit.

The unit can be set for terminating or **controlling the defrost**. Defrost can be detected by a sensor mounted on the suction line, by JTL Network communications, by a voltage free contact closure or by a real time clock within the unit. Up to 12 defrosts per day can be achieved by setting a schedule of defrost start times and durations in the unit.

The defrost is terminated when the temperature of the air leaving the evaporator or the evaporator temperature exceeds an adjustable **defrost termination** value, or when an adjustable time is reached. Evaporator **fans** or an **auxiliary heaters** can be controlled during defrost.

The unit detects and **alarms high temperatures**. The alarm level and its response time are adjustable. High temperature alarms are cancelled during defrost.

Cabinet temperature together with a simple alarm and defrost mode messages can be indicated locally by using a JTL **display** unit. A keyswitch on this display can be used to select one of the 2 temperature setpoints and 2 methods of cabinet shutdown.

Type LCPT provides a comprehensive alarm reporting, **data-logging** and **remote access** when connected to a JTL Communications Unit.

Type LCPT can be used with off cycle, electric, 2, 3 pipe or ring main gas defrost systems.

Cabinet lights and blinds can be operated by the LCPT on receipt of commands from the JTL network.

Trim heaters can be switched by the LCPT when the unit is shutdown under switch or JTL network control.

FEATURES

- Dual temperature operation
- Display keyswitch selected shutdown
- Temperature measurement inputs
- Temperature display drive
- Relay outputs
- Maintenance unit socket
- JTL Network communications sockets
- Network initiated defrost option
- Network initiated lighting control
- Network initiated blind control
- Network initiated shutdown facility
- Trim heater isolation
- Defrost input contact
- Suction temperature defrost detection
- Up to 12 timed defrosts per day
- Display keyswitch input
- Blind and lighting override input contact
- Default data set-up switches
- Non-volatile set-up memory
- Watchdog to ensure reliable operation
- Battery supported data-logging memory
- Battery supported real time clock

HARDWARE

- Temperature sensor inputs 5
- Sensor types supported . . . . . JTL
- Temperature display drives 1
- Voltage-free contact outputs 5
- Optionally isolated high voltage inputs . . . . . 2 (240 V max)
- Data logging memory capacity . . . . . 1000 points on 3 channels

TECHNICAL SPECIFICATION

Temperature sensor input 1 . . . . . Air On
Temperature sensor input 2 . . . . . Air Off
Temperature sensor input 3 . . . . . Evaporator
Temperature sensor input 4 . . . . . Suction Line
Temperature sensor input 5 . . . . . Energy saving or defrost termination

Input 1 . . . . . Lighting and Blind override
Input 2 . . . . . Defrost initiation

Output 1 . . . . . Blind closed/Lights off
Output 2 . . . . . Fan Control or heater Control
Output 3 . . . . . Trim heater
Output 4 (changeover contact) . . . . . Defrost control
Output 5 (changeover contact) . . . . . Liquid valve control

Relay output rating . . . . . 2 A resistive (240 V max)

Communications port . . . . . RS485 2 wire
Communications data rate . . . . . 4800/38400 baud (auto detected)
Communications protocol . . . . . JTL zone protocol

Controller dimensions unboxed (L x W x H) . . . . . 208 x 167 x 43 mm
Controller weight unboxed . . . . . 0.52 kg

Controller dimensions boxed (L x W x H) . . . . . 248 x 176 x 56 mm
Controller weight boxed 1.56kg

Power supply (Standard) . . . . . 230 V 48-62 Hz
(Optional) . . . . . 110 V

ORDERING INFORMATION

LCPT . . . . . Controller
LCPT-B . . . . . Controller boxed

Power Supply Options:
For 110 V append - 110 to order code

CE This unit conforms with the relevant EU standards when fitted in accordance with its installation instructions.

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