

# DISPLAY CABINET CONTROLLER WITH NIGHT BLIND AND LIGHTING CONTROL

## LCNL

Type LCNL is a unit suitable for the **control** of Linde single evaporator ATR refrigerated display cabinets where defrost is initiated by external equipment. The unit controls the cabinet temperature by measuring three air temperatures and operating the evaporator liquid solenoid valve.

The unit can be set for terminating or **controlling the defrost**. Defrost is detected by a probe mounted on the suction line, by communications, or by volt free contact closure. The defrost is terminated when the temperature of the air leaving the evaporator exceeds an adjustable defrost termination value, or when an adjustable time is reached.

Evaporator **fans** run while refrigerating and are stopped 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 temperatures together with a simple alarm and defrost mode messages can be indicated locally by using JTL **display** units.

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

## FEATURES

- ◆ Temperature measurement inputs
- ◆ Temperature display drives
- ◆ Relay outputs
- ◆ Maintenance unit socket
- ◆ JTL Network communications sockets
- ◆ Network initiated defrost
- ◆ Network Comms initiated lighting control
- ◆ Network initiated blinds control
- ◆ Defrost input contact
- ◆ Blind and lighting override input contact
- ◆ Default data set-up switches
- ◆ Non-volatile set-up memory
- ◆ Watchdog to ensure reliable operation
- ◆ Batterybacked data-logging memory
- ◆ Battery backed real time clock

## HARDWARE

- ◆ Temperature probe inputs . . . . . 5
- ◆ Probe types supported . . . . . JTL
- ◆ Temperature display drives . . . . . 2 (using CONVD4 splitter)
- ◆ Voltage-free contact outputs . . . . . 4
- ◆ Voltage-free contact inputs . . . . . 2
- ◆ Data logging memory capacity . . . . . 930 points on 4 channels



## TECHNICAL SPECIFICATION

Temperature probe input 1	.....	Air On (well)
Temperature probe input 2	.....	Air Off
Temperature probe input 3	.....	Evaporator
Temperature probe input 4	.....	Suction Line
Temperature probe input 5	.....	Air On (Half glass door)
Output 1	.....	Blind closed/lights off
Output 2	.....	Fan Control
Output 3	.....	Liquid valve control (Normally closed valve)
Output 4 (changeover contact)	.....	Defrost control
Communications port	.....	RS485 2 wire
Communications data rate	.....	4800/38400 baud (auto selected)
Communications protocol	.....	JTL zone protocol
Relay output rating	.....	2 A resistive (240 V max)
Unboxed dimensions(L x W x H)	.....	208 x 167 x 43 mm
Unboxed weight	.....	0.52 kg
Power supply (Standard)	.....	230 V 48-62 Hz
(Optional)	.....	110 V

## ORDERING INFORMATION

LCNL ..... Printed Circuit board only

### Power Supply Options:

For 110 V append - 110 to order code

For suitable enclosures see appropriate datasheet.



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

Doc No. 01080 LCNL\_datasheet.wpd Issue 2 Sept 1997

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