

# COLDROOM CONTROLLERS

LCCS  
LCCP

Type LCCS and LCCP are units suitable for the **control** of coldrooms where defrost is initiated by external equipment. The units control the coldroom temperature by measuring two air temperatures and operating the evaporator solenoid valve.

The units can be set for terminating or **controlling the defrost**. Defrost is detected by a probe mounted on the suction line, a contact input or by communications.

The defrost is terminated when the temperature of the evaporator exceeds an adjustable **defrost termination** value, or when an adjustable time is reached.

Evaporator **fans** are run while refrigerating and are stopped during defrost. The **pan heater** output is turned on during defrost, remains on for an adjustable drain-down period and is off at all other times.

The unit detects and **alarms high temperatures**. The alarm level and its response time are adjustable. High temperature alarms are not cancelled during defrost.

The fans may be stopped when the **coldroom door** is open and an alarm is raised if the door remains open beyond an adjustable time limit.

Coldroom temperature together with simple alarm and defrost mode messages can be indicated locally using a JTL **display** unit.

Types LCCS and LCCP provide comprehensive alarm reporting, **data-logging** and **remote access** when connected to a JTL Communications Unit.

## FEATURES

- ◆ Temperature measurement inputs
- ◆ Temperature display drive
- ◆ Defrost initiation contact
- ◆ Suction temperature defrost detection
- ◆ Door switch monitoring
- ◆ Relay outputs
- ◆ Maintenance Unit socket
- ◆ JTL Network communications socket
- ◆ Network initiated defrost
- ◆ Default data set-up switches
- ◆ Non volatile set-up memory
- ◆ Watchdog to ensure reliable operation
- ◆ Battery supported data-logging memory
- ◆ Alarm relay output (LCCP only)



## HARDWARE

- ◆ Temperature probe inputs ..... 4
- ◆ Probe types supported ..... JTL, Elm (selectable)
- ◆ Temperature display drives ..... 1
- ◆ Temperature display type (LCCS) ..... LED1
- ◆ Temperature display type (LCCP) ..... LED5
- ◆ Voltage-free contact outputs ..... 4 (LCCS) 5 (LCCP)
- ◆ Voltage-free contact inputs ..... 2
- ◆ Data-logging memory capacity ..... 950 points on 4 channels

## TECHNICAL SPECIFICATION

Temperature probe input 1	Air on
Temperature probe input 2	Air off
Temperature probe input 3	Evaporator
Temperature probe input 4	Suction line
Output 1	Pan heater control
Output 2	Fan control
Output 3	Liquid valve control (Normally closed valve)
Output 4 (changeover contact)	Defrost control
Output 5 (changeover contact)	Alarm relay (LCCP only)
Relay output rating	2A resistive (240 V max)
Input 1	Door switch
Input 2	Defrost initiation
Communications port	RS485 2 wire
Communications data rate	4800/38400 baud (auto selected)
Communications protocol	JTL zone protocol
Unboxed dimensions (LxWxH)	208 x 167 x 43 mm
Unboxed weight	0.52 kg
Power supply (Standard)	230 V 48-62 Hz
(Optional)	110 V

## ORDERING INFORMATION

LCCP	Printed circuit board only
LCCS	Printed circuit board only

### Power Supply Options:

For 110 V append - 110 to order

For suitable enclosures see appropriate datasheet.



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

Doc No. 01378 LCCS\_LCCP\_datasheet.wpd Issue 2 Sept 1997

**JTL SYSTEMS LTD**

Sales: 41 Kingfisher Court, Hambridge Road, NEWBURY, Berkshire, RG14 5SJ  
Service: 1 Petre House, Petre Street, SHEFFIELD, S. Yorks, S4 8LJ

Tel: (01635) 263646  
Tel: (0114) 256 0908