jtl™

For mechanical and pulsed expansion valve applications.

- Stand alone or networked product
- Registered for Enhanced Capital Allowance (ECA)
- Option to control liquid line valve or condensing unit
- Evaporator fan control
- Datalogging at board level
- Door switch input
- Plant alarm input
- Self detect gas defrost mode
- Set up parameters maintained for restart

Product Data

Temperature Control

LCIS controls the coldroom temperature by measuring upto two air temperatures and operating a pulsed expansion valve, liquid line solenoid valve or condensing unit. The pulsed expansion valve is controlled using a pressure transducer and suction temperature sensor.

Defrost Control

Defrost can be initiated by JTL Network communications, external input or by real time clock within the controller. Self detect defrost is available when using gas defrost systems.

In the event of a communications failure, the controller initiates a "learned defrost" strategy. Upto 12 defrosts per day can be scheduled.

Alarms

LCIS will monitor and alarm on high temperature and if defrosts are not detected. Temperature alarms are inhibited during defrost and defrost recovery. The LCIS monitors coldroom door operation and will alarm if a pre-defined door open delay period is exceeded. Alarm parameters and delay periods are configurable on site or remotely.

Datalogging

Provides comprehensive alarm reporting and datalogging when connected to a JTL Network.

Display

Coldroom temperature, defrost and alarm messages can be indicated locally on a JTL display.

Remote Access

If operating within a JTL Network, alarm parameters and alarm settings can be viewed and adjusted remotely.

PRODUCT DATA

Hardware

Temperature sensor inputs 5
Temperature sensor types supported .... 5 kohm NTC thermistor
Pressure sensor inputs 1
Pressure sensor input (0-7 bar) .... 4-20 mA
Pressure sensor supply voltage .... 15 V dc
Pressure sensor load impedance .... 250 ohms
Temperature display drives 1
Temperature display types .... LED1 or LED5
Voltage-free contact outputs 5
Optically isolated high voltage inputs .... 2 (240 V max)
Datalogging memory capacity .... 800 points on 4 channels
Remote isolation facility

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 .... Defrost termination

Pressure sensor input .... Suction pressure

Output 1 .... Pan heater control
Output 2 .... Fan control
Output 3 .... Liquid valve control
Output 4 (changeover contact) .... Defrost control
Output 5 .... Pulsed expansion valve

Relay output rating .... 5 A resistive (240 V max)

Input 1   .... Door Switch
Input 2   .... Plant alarm, defrost input, remote shutdown (selectable)

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

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

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

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

Ordering Information

LCIS .... Controller unboxed
LCIS-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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