For pulsed expansion valve applications incorporating all common defrost types.

- Stand alone or Networked product
- Registered for Enhanced Capital Allowance (ECA)
- Option to control liquid line valve or condensing unit
- Cabinet lighting/night blind control
- Fan control
- Datalogging at board level
- Multiple temperature control (up to 4 temperature ranges)
- Keyswitched case clean mode
- Set up parameters maintained for restart
- JTL PREDICT defrost enabled

Product Data

Temperature Control

LAPE controls the display cabinet temperature by measuring 2 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. Up to 4 cabinet operating temperatures can be selected when using the LAPE in conjunction with an LCD11 keyswitched display.

Defrost Control

Defrost can be initiated by JTL network communications, external input or by real time clock within the controller. Suitable for use with all common defrost methods.

This controller supports JTL PREDICT and co-ordinated defrost scheduling.

In the event of a communications failure, the controller initiates a "learned defrost" strategy or a preprogrammed schedule.

Up to 12 defrosts per day can be scheduled.

Trim Heater Control

There are 4 separate strategies for trim heater control.
- Controlled with an adjustment received from the network.
- Controlled to a fixed percentage output which can vary in and out of trading hours.
- Controlled to set percentage output.
- Switched off when controller shutdown using display keyswitch.

Alarms

LAPE will monitor and alarm on high temperatures and if defrosts are not detected. Temperature alarms are inhibited during defrost and defrost recovery. 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

Cabinet temperature, defrost and alarm messages can be indicated locally on a JTL display with or without keyswitch operation.

Remote Access

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

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 outputs 1
Temperature display types .... LCD8, LCD9 & LCD11
Voltage-free contact outputs 5
Optically isolated high voltage inputs .... 2 (240 V max)
Datalogging 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

Pressure sensor input .... Suction pressure

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

Relay output rating (Outputs 1-4) .... 5 A resistive (240 V max)

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

Communications port .... RS485 2 wire
Communications data rate .... 4800 baud
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 .... 230 V 48-62 Hz

Ordering Information

LAPE .... Controller unboxed
LAPE-B .... Controller boxed

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

Qualified for
**Energy
Technology
List**
www.eca.gov.uk

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JTL Systems Limited