



CONTROL SYSTEMS UJCD Coldroom Controller



For motorised expansion valve applications

- Stand alone or networked product
- Evaporator fan control
- Plant alarm input
- JTL PREDICT defrost enabled



Product Data

Temperature Control

UJCD controls the coldroom temperature by measuring upto two air temperatures and operating a pulsed expansion valve. The pulsed expansion valve is controlled using a pressure transducer and suction temperature sensor. The pressure can also be delivered via the JTL network.

Defrost Control

Defrost can be initiated by JTL Network communications or by real time clock within the controller.

This controller supports JTL PREDICT (defrost on demand) and coordinated defrost scheduling.

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

Alarms

UJCD will monitor and alarm on high temperature 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

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.

Hardware

Temperature sensor inputs	6
Temperature sensor types supported	5k thermistor
Pressure sensor input (programmable range)	4-20 mA
Pressure sensor supply voltage	15 to 30 V dc
Pressure sensor load impedance	100 ohms
Temperature display drives	1
Temperature display types	LCD14
Voltage-free contact outputs	4
Voltage free inputs	4
Analogue outputs	2

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
Temperature sensor input 6	Not used
Pressure sensor	Suction pressure
Output 1	Pan heater control
Output 2	Fan control
Output 3	Defrost control
Output 4	Not used
Relay output rating (outputs 1-4)	2 A resistive (240 V max)
Analogue output 1 (0-10 V)	Expansion valve
Analogue output 2 (4-20 mA)	Expansion valve
Input 1	Auto
Input 2	Plant fault
Input 3	Fans Healthy
Input 4	Shutdown
Communications port	RS485 2 wire
Communications data rate	4800 baud
Communications protocol	JTL Jnet zone protoco
Ethernet Port	10/100 Base T
Controller dimensions boxed (L x W x H)	105 x 120 x 79 mm
Controller weight boxed	0.35 kg
Power supply (standard)	85-265 Vac (47-440 Hz)
.....	85-265 Vdc
(optional).....	6-26 Vac (47-440 Hz)
.....	18-36 Vdc

Ordering Information

UJCD Controller

Power Supply Options:

For 24 V append-24 to order code

PREDICT® is the patented JTL pattern recognition algorithm for providing defrost on demand for the cabinets on a system.

SUCCEEDS® is the patented JTL algorithm for control of liquid injection into an evaporator using electronic expansion valves



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

Doc No. 05420-UJCD.pmd Issue 1 Oct 2019

JTL Systems Limited

Head Office
Technical Support Centre
Monitoring Centre

tel: 44 (0)1635 263646
tel: 44 (0) 871 3157535
tel: 44 (0)871 3157531