

JTL SYSTEMS REFRIGERATED DISPLAY CABINET CONTROLLERS HISTORY

UA range (TEV control)

Introduced 2012

Includes JTL patented PREDICT defrost scheduling

Din rail enclosure with:

- 5 electromechanical relays
- 5 temperature sensors (2 part screw connections)
- 1 socket for Mark 2 LCD displays (RJ45)
- 2 JTL network connections (RJ8)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	Sensor type	Features
UAPN	2012				5k thermistor	PREDICT defrost scheduling. Functionally replaces LCPN, LCPT, LCED, LCNS, LAPN, SDPN
UAPA	2012				PT1000	PREDICT defrost scheduling. Functionally replaces LAPA, SDPA

UA range (PEV control)

Introduced 2012

Includes JTL patented SUCCEEDS pulsed expansion valve control

Includes JTL patented PREDICT defrost scheduling

Din rail enclosure with:

- 4 electromechanical relays
- 1 solid state relay
- 5 temperature sensors (2 part screw connections)
- 1 pressure sensor (2 part screw connections)
- 1 socket for Mark 2 LCD displays (RJ45)
- 2 voltage free digital inputs
- 2 JTL network connections (RJ8)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	Sensor type	Features
UAPJ	2015				5K themistor	PREDICT defrost scheduling. Functionally replaces LCIC, LAPE
UAPI	2012				PT1000	PEV control only. PREDICT defrost scheduling. Fixed and floating superheat control. Functionally replaces LAPI.

JTL SYSTEMS REFRIGERATED DISPLAY CABINET CONTROLLERS HISTORY

UA Range (Integral Unit Control)

Introduced 2013

Din rail enclosure with:

- 6 Electromechanical relays
- 5 Temperature sensors (2 part screw connections)
- 1 Socket for Mark 2 LCD display (RJ45)
- 3 Voltage free inputs
- 2 JTL network connections (RJ8)

Product	Introduced	Withdrawn	Spares until	Currently replaced with	Senor type	Features
UAIC	2013				PT1000	Integral control for 1 or 2 compressors

LA range (TEV control)

Introduced 2003

Includes JTL patented PREDICT defrost scheduling

Comprises 1 board with:

- 5 electromechanical relays
- 7 temperature sensors (2 part screw connections)
- 2 sockets for Mark 2 LCD displays (RJ45 & 7 pin DIN)
- 2 opto isolated digital inputs (230 V)
- 2 JTL network connections (RJ8)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	Sensor type	New installations	Features
LAPN	2003	2012	2017	UAPN-SPR	5k thermistor	UAPN	PREDICT defrost scheduling. Functionally replaces LCPN, LCPT, LCED, LCNS
LAPA	2006	2012	2017	UAPA-SPR	PT1000	UAPA	PREDICT defrost scheduling

JTL SYSTEMS REFRIGERATED DISPLAY CABINET CONTROLLERS HISTORY

LA range (PEV control)

Introduced 2003

Includes JTL patented SUCCEEDS pulsed expansion valve control

Includes JTL patented PREDICT defrost scheduling

Comprises 1 board with:

- 4 electromechanical relays
- 1 solid state relay
- 5 temperature sensors (2 part screw connections)
- 1 pressure sensor (2 part screw connections)
- 2 sockets for Mark 2 LCD displays (RJ45 & 7 pin DIN)
- 2 opto isolated digital inputs (230 V)
- 2 JTL network connections (RJ8)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	Sensor type	New installations	Features
LAPE	2004	2012			5k thermistor	UAPN (TEV) UAPI (PEV)	PEV and TEV control PREDICT defrost scheduling. Functionally replaces LCIC
LAPI	2007	2012			PT1000	UAPI	PEV control only. PREDICT defrost scheduling. Fixed and floating superheat control. RJ45 display socket only.

SD range

Original models introduced 2001

Comprises 1 board with:

- 3 electromechanical relays
- 5 temperature sensors (screw terminals) (see note 1)
- 1 socket for Mark 2 LCD displays (RJ45)
- 1 opto isolated digital input (230 V)
- 2 JTL network connections (RJ8)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	Sensor type	New installations	Features
SDPN	2001	2012		SDPN-CPU	5k, 2k2 & 2k thermistor	UAPN	Functionally replaces EC, ECCN, ECAS, ECED, ECEL
SDPA	2005	2012		SDPA-CPU	PT1000	UAPA	

Note 1: SDPN from v4 support 2k and 2k2 thermistors

JTL SYSTEMS REFRIGERATED DISPLAY CABINET CONTROLLERS HISTORY

LC range (upgrade 2)

Original models introduced 1996

Includes JTL patented SUCCEEDS pulsed expansion valve control

Comprises 1 board with:

- 4 electromechanical relays
- 1 solid state relay
- 5 5k thermistor temperature sensors (DIN) (see note 2)
- 1 pressure sensor (DIN)
- 1 7 pin DIN socket for Mark 1 LCD display (see note 3)
- 2 opto isolated digital inputs (230 V)
- 2 JTL network connections (DIN)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	New installations	Features
LCIC	1996	2003			UAPI (PEV) UAPN (TEV)	PEV and TEV control
LCIL	1996	2001	2002		UAPN (TEV) UAPI (PEV)	For Linde Single evaporator Half Glass Door cabinet
LCIP	1997	1997	1997		UAPI (PEV) UAPN (TEV)	Pushbutton features added to temperature display
LCPC	1997	2003			UAPI (PEV) UAPN (TEV)	Keypad added to temperature display
LCPL	2001	2012			UAPN (TEV) UAPI (PEV)	LCIL upgraded

Note 2: LCPC from v1 supports 2k thermistors

Note 3: LCPL & later models of the LCIC & LCPC support Mark 1 & Mark 2 displays.

JTL SYSTEMS REFRIGERATED DISPLAY CABINET CONTROLLERS HISTORY

LC range (upgrade 1)

Original models introduced 1994
Spare parts still available

Comprises 1 board with:

- 5 electromechanical relays
- 7 2k and 5k thermistor temperature sensors (DIN/screw terminals (LCPN)) (see note 4)
- 1 7 pin DIN socket for Mark 1 LCD display (see note 5)
- 2 opto isolated digital inputs (230 V)
- 2 JTL network connections (DIN)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	New installations	Features
LCED	1994	1996	2001		UAPN	For Timed Electric Defrost
LCID	1994	1996	1999			Multiple evaporator control
LCNS	1994	2012			UAPN	Pushbutton features added to temperature display
LCPT	1998	2001	2001	UAPN-USPR2	UAPN	5 relays including trim heater isolation Keyswitch display support
LCPN	2000	2004	2007	UAPN-USPR2	UAPN	LCPT with screw terminals for temperature sensors Keyswitch display support

Note 4: LCPN does not supports 2k thermistor sensors

Note 5: LCPN & later models of the LCPT firmware support both Mark 1 & Mark 2 displays.

JTL SYSTEMS REFRIGERATED DISPLAY CABINET CONTROLLERS HISTORY

LC range (original)

Original models introduced 1993
Replacement parts available

Comprises 1 board with:

- 4 electromechanical relays
- 7 5k thermistor temperature sensors (DIN) (see note 6)
- 1 5 pin DIN socket for Mark 1 LCD displays
- 2 opto isolated digital inputs (230 V)
- 2 JTL network connections (DIN)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	New installations	Features
LCGD	1991	1994	2001	UAPN-USPR	UAPN	
LCAL	1993	1994	2002		UAPA	For Linde Single evaporator Half Glass Door cabinet
LCCN	1991	1994	2001	UAPN-USPR	UAPN	As LCGD for Elm temperature sensors
LCDC	1994	1999	2003			For Dual Evaporator Chillers
LCNB	1993	1997	2001	UAPN-USPR	UAPN	LCGD with Lighting control
LCNL	1994	1997	2002		UAPA	LCAL with Lighting control

Note 6: LCCN and LCNB also supports 2k thermistor sensors

LC (special)

Original models introduced 1999

Comprises 1 board with:

- 1 Elm power module drive
- 5 2k and 5k thermistor temperature sensors (DIN/screw terminals(LCPG))
- 1 pressure sensor (DIN/screw terminals(LCPG))
- 1 7 pin DIN socket for Mark 1 LCD display (see note 7)
- Keyswitch display support
- 2 opto isolated digital inputs (230 V)
- 2 JTL network connections (DIN)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	Features
LCPG	1999	2000	2017		Special for Waitrose with screw terminals for sensors
LCPP	1999	2000	2017		Special for Waitrose

Note 7: Later models of firmware support both Mark 1 & Mark 2 LCD displays.

JTL SYSTEMS REFRIGERATED DISPLAY CABINET CONTROLLERS HISTORY

EC range

Introduced 1986

Withdrawn 1996

Replacement parts available

Comprises 1 board with:

2 electromechanical relays

7 5k thermistor temperature sensors (DIN) (see notes 8 - 11)

1 5 pin DIN socket for Mark 1 LCD displays

2 volt free digital inputs

2 JTL network connections (DIN)

Variants

Product	Introduced	Withdrawn	Spares until	Currently replace with	New installations	Features
EC	1986	1995	1995	UAPN-USPR	UAPN	
ECAS	1990	1995	1995	UAPN-USPR	UAPN	Originally for ASDA
ECAS-C	1995	2001	2004	UAPN-USPR	UAPN	For spare parts
ECCN	1989	1995	1995	UAPN-USPR	UAPN	As EC for Elm temperature sensors
ECDC	1992	1996	2002			For Dual Evaporator Chillers
ECRB	1992	1995	1995	UAPN-USPR	UAPN	As EC for CDK temperature sensors
ECDH	1993	1996	2000			For Hussmann Dual Evaporator Chillers
ECED	1989	1996	2003	UAPN-USPR	UAPN	For Timed Electric Defrost
ECEL	1988	1996	2000		UAPN	For Linde Electric Defrost
ECME	1990	1995	1999			For Marks & Spencer

Note 8: ECAS from v5 supports 2k and 2k2 thermistor sensors

Note 9: ECCN and ECDH supports 2k thermistor sensors

Note 10: ECED from v6 supports 2k thermistor sensors

Note 11: ECRB supports 2k2 thermistor sensors

JTL SYSTEMS REFRIGERATED DISPLAY CABINET CONTROLLERS HISTORY

RC range

Introduced 1985

Withdrawn 1994

Comprised 2 boards joined by a flexible cable with:

- 4 electromechanical relays
- 7 5k thermistor temperature sensors (DIN) (see note 12)
- 1 5 pin DIN socket for Mark 1 LCD displays
- 1 volt free digital input
- 2 JTL network connections (DIN)

Variants:

Product	Introduced	Withdrawn	Spares until	Currently replaced with	New installations	Features
RCCG	1985	1985	1993			For Presto
RCGD	1990	1994	2002		UAPN	For Frozen food cabinets
RCCN	1989	1994	2002		UAPN	As RCGD for Elm temperature sensors
RCAL	1991	1993	2002		UAPN	For Linde Single evaporator Half Glass Door cabinet
RCAS	1991	1993	2002		UAPN	For ASDA
RCMS	1989	1990	1995			For Marks & Spencer

Note 12: RCCN supports 2k thermistor sensors