

The LACN-USPR is a spare parts kit which is used to replace the following obsolete JTL products as a spare part:

RCCS
RCCT (formerly known as RCCK)
LCCS

LCCT
LCCE (in most applications)
LCCP

LCCU
ECCS
LCIS (TEV application only)

The LACN-USPR comprises three parts:

- a) LAPN-B boxed controller
- b) CAB65-10 Jnet network comms. cable
- c) CAB40-05 7 to 5 pin display converter cable

Some rewiring is necessary when replacing the obsolete part with the LACN affecting the network connections or the input and output connections. For full details see below.

The LACN is a universal controller which provides defrost functionality of all the former products. As such it requires to be set up correctly to achieve the functionality desired. The LACN user guide gives full details of programming information to set up the controller. Your attention is drawn in particular to item 107 which selects the appropriate defrost initiation method, and item 144 which selects the defrost termination method.

Note the LACN is only suitable for liquid line solenoid valve control with a mechanical (thermostatic) expansion valve.

LACN OUTPUT CONVERSION

FUNCTION	LACN	LCIS (see note 1)	LCCU (see note 1)	LCCE, LCCP (see notes 2 & 3)	LCCS, LCCT	RCCS, RCCT (RCCK) (see note 4)	ECCS (see note 4)
PAN HEATER	1 NO 1 LN	1 NO 1 LN	1 NO 1 LN	1 NO 1 LN	1 NO 1 LN	LD1 LN1	
FANS	2 NO 2 LN	2 NO 2 LN	2 NO 2 LN	2 NO 2 LN	2 NO 2 LN	LD2 LN2	
SUCTION VALVE	3 NO 3 LN	1 NO 1 LN	1 NO 1 LN	1 NO 1 LN			
DEFROST	4 NO 4 LN 4 NC	4 NO 4 LN 4 NC	4 NO 4 LN 4 NC	4 NO 4 LN 4 NC	4 NO 4 LN 4 NC	LD3 LN3 X	LD1 LN1 X
LIQUID SOLENOID	5 NO 5 LN	3 NO 3 LN	3 NO 3 LN	3 NO 3 LN	3 NO 3 LN	LD4 LN4	LD2 LN2

NOTE 1: Rewire the liquid solenoid on the LACN onto output 5 from output 3. If the controller is operating a suction valve on output 1 rewire this to output 3

NOTE 2: Output 5 on LCCE is for a second defrost heater, LACN DOES NOT support this function.

NOTE 3: Output 5 on LCCP is for an alarm output, LACN DOES NOT supports this function.

NOTE 4: Rewire as shown, ensure wiring to LN is rewired to LN which requires crossover. LN must be connected to the line voltage and NO/NC to the load to ensure correct EMC operation.

LACN INPUT CONVERSION

Input

FUNCTION	LACN, LCCU, LCCE, LCCP, LCIS (see note 5)	LCCS/LCCT (see note 5)	RCCS/RCCT (RCCK) (see note 6)	ECCS (see note 6)
DOOR CLOSED	I1 C	IN1 C	CON3 (VOLT FREE CONTACT)	IP1 (VOLT FREE CONTACT)
DEFROST INPUT/ PLANT ALARM	I2 C	IN2 C		IP2 (VOLT FREE CONTACT)

NOTE 5: No rewiring is necessary for LCCS/LCCT/LCCE/LCCP/LCCU/LCIS

NOTE 6: Rewiring is essential. The volt free contact must be replaced with a 230 Vac input. C must be connected to the supply neutral.

Temperature

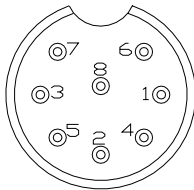
Rewiring is necessary, sensor connections need to be reconnected directly to the LACN

SENSOR	LACN	LCCU, LCIS (DIN)	LCCE (DIN) (See note 7)	RCCS, RCCT, RCCK, LCCP, LCCS, LCCT (DIN)	DIN WITH CONVERTER BOARD
AIR ON	CON4 - 1 CON4 - 2	PIN 1 PIN 2	PIN 1 PIN 2	PIN 1 PIN 2	1
AIR OFF	CON4 - 3 CON4 - 4	PIN 4 PIN 2	PIN 4 PIN 2	PIN 4 PIN 2	2
EVAPORATOR	CON4 - 5 CON4 - 6	PIN 5 PIN 2	PIN 5 PIN 2	PIN 5 PIN 2	3
SUCTION LINE	CON4 - 7 CON4 - 8	PIN 3 PIN 2	PIN 3 PIN 2	PIN 3 PIN 2	4
TERMINATION	CON4 - 9 CON4 - 10	PIN 6 PIN 2	PIN 6 PIN 2		5
TERMINATION 2			PIN 7 PIN 2		6

NOTE 7: LCCE can control a second independent defrost heater, sensor 6 is used to terminate the 2nd evaporator defrost. LACN does not support this function.

Temperature Connection DIN

View from plug wiring side



LACN Jnet Communications Conversion

The controllers being converted are fitted with 3 pin din sockets for Jnet Network connection. The LACN is fitted with different connections for this purpose.

To connect the legacy network to the LACN the NJ11 junction box & CAB60-05 cable supplied in the kit are necessary. The NJ11 converts the DIN connection on the legacy network cable to the telephone style RJ8 network connector on the CAB60, which is used to connect to the LACN.

LACN Display Connections

The display connection on the LACN uses a 7 pin connector. To convert the 5 pin display used on the LCCS, LCCT, RCCS, RCCT, RCCK & ECCS to this connection, use the CAB40-05 cable supplied with the LACN.

Display Types

The LACN supports the LCD13 and the old LED1 and LED5 displays. The LCD13 is a backlit LCD display in a black plastic enclosure. The LED1 is fitted behind a black bezel and the LED5 display has a grey mounting with 3 pushbuttons. Item 129 on the maintenance unit selects the type of display, 0=LED5 and 1=LED1 and LCD13.

Note: if the wrong display is selected, the display characters will appear to be “backwards”.