

The UBCI-SPR is a spare parts kit which is used to replace the following obsolete JTL product as a spare part:

LACI

The UBCI-SPR comprises of the following parts:

- 1 x UBCI controller
- 1 x TSC01 4-20 mA converter
- 1 x CAB105-030 cable
- 1 x CAB62-02 cable
- 1 x DIN rail kit

Some rewiring is necessary when replacing the obsolete part with the UBCI affecting the pressure transducers and digital input connection. For full details see below.

The UBCI is a controller which provides defrost functionality of the former product as such it requires to be set up correctly to achieve the functionality desired. The attached 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.

UBCI OUTPUT CONVERSION

FUNCTION	UBCI	LACI
PAN HEATER	2 LD 3 LN	1 NO 1 LN
FANS	4 LD 3 LN	2 NO 2 LN
NOT USED (See note 3)	5 LD 6 LN	3 NO 3 LN
DEFROST	7 LD 6 LN	4 NO 4 LN
PULSED EXPANSION VALVE	8 LD 9 LN	5 NO 5 LN

Note 1: Rewire as shown, ensure wiring to LN is rewired to LN LN must be connected to the line voltage and NO/NC to the load to ensure correct EMC operation.

Note 2: Terminal 1 on the UBCI must be connected to the control supply neutral.

Note 3: The UBCI drives a suction valve. This output is not on the LACI.

INPUT CONVERSION

PRESSURE

The UBCI and LACI pressure inputs are 4-20 mA. Where the pressure transducer is directly connected to the controller this can be done simple by connecting the existing pressure transducer directly to the UBCI taking care to maintain the polarity.

4-20 mA	UBCI	LACI
-	15	CON4 (See note 4) C
+	16	7

Note 4: C is terminal 13 and 7 is terminal 14 when reading from right to left.

When the LACI is driven by a pressure splitter card (TSS15/TSS05) then a 4-20 mA converter unit (TSC01) must be used. The wiring for this is shown on drawing 05149.

TEMPERATURES

Rewiring is necessary, sensor connections need to be reconnected to the UBCI

SENSOR	UBCI	LACI
AIR ON (See note 5)	26 25	C 1
AIR OFF	24 23	C 2
EVAPORATOR	22 21	C 3
SUCTION LINE	20 19	C 4
TERMINATION (See note 6)	18 17	C 5
	TSC01 18A 17A	C 5

Note 5: Air on sensor on the LACI is to the right hand end of the connector CON4 adjacent to the edge of the board.

Note 6: When the TSC01 is required the termination sensor (if fitted) must be connected to the TSC01.

DIGITAL INPUTS

FUNCTION	UBCI	LACI (See note 7)
PLANT FAULT	12 14	I1 C
DOOR OPEN	11 14	I2 C
MAN TRAPPED	13 14	I2 C

Note 7: LACI controller uses 230 Vac inputs with a common connected to neutral DO NOT connect the existing wiring directly to UBCI which uses a self excited voltage free contact. External wiring changes must be done to implement the voltage free contact input.

UBCI Jnet Communications Conversion

The UBCI and LACI Jnet network connections are compatible.

Display Connections

The UBCI and LACI display connections are compatible.

Maintenance unit (MU) Connections

The LACI has two connections for the MU. If the DIN connector is being used with an extensions to the coldroom panel door use the CAB62 extension cable to connect the cable to the UBCI.

Controller Setup

To ensure compatibility when replacing the original part with a UBCI, action a factory default setting procedure (Item 9) before setting in the new data. See UBCI user guide.

Applicable Documentation

- Connections Diagram: Doc No. 05211
- Installation Information: Doc No. 03852
- Item Numbers: Doc No. 05208
- User Guide: Doc No. 05210
- Application Drawing: Doc No. 05149