

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

**LACI**

**NOTE**

This kit is for use only when the pressure transducer is directly connected and not when a pressure splitter card is in use.

The UACI-SPR comprises of the following parts:

- 1 x UACI controller
- 1 x CAB62-02 cable
- 1 x DIN rail kit

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

The UACI 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.

**UACI OUTPUT CONVERSION**

| FUNCTION                  | UACI         | LACI         |
|---------------------------|--------------|--------------|
| PAN HEATER                | 2 LD<br>3 LN | 1 NO<br>1 LN |
| FANS                      | 4 LD<br>3 LN | 2 NO<br>2 LN |
| NOT USED<br>(See note 3)  | 5 LD<br>6 LN | 3 NO<br>3 LN |
| DEFROST                   | 7 LD<br>6 LN | 4 NO<br>4 LN |
| PULSED<br>EXPANSION VALVE | 8 LD<br>9 LN | 5 NO<br>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 UACI must be connected to the control supply neutral.

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

**INPUT CONVERSION**

**PRESSURE**

The UACI 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 UACI taking care to maintain the polarity.

| 4-20 mA | UACI | LACI                   |
|---------|------|------------------------|
| -       | 15   | CON4 (See note 4)<br>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. The TSC01 is not supplied in this kit. Kit UACI-SPR includes the necessary parts or these can be ordered separately.

**TEMPERATURES**

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

| SENSOR                      | UACI                | LACI   |
|-----------------------------|---------------------|--------|
| AIR ON<br>(See note 5)      | 26<br>25            | C<br>1 |
| AIR OFF                     | 24<br>23            | C<br>2 |
| EVAPORATOR                  | 22<br>21            | C<br>3 |
| SUCTION LINE                | 20<br>19            | C<br>4 |
| TERMINATION<br>(See note 6) | 18<br>17            | C<br>5 |
|                             | TSC01<br>18A<br>17A | C<br>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                    | UACI     | LACI (See note 7) |
|-----------------------------|----------|-------------------|
| PLANT FAULT                 | 12<br>14 | I1<br>C           |
| DOOR OPEN or<br>MAN TRAPPED | 13<br>14 | I2<br>C           |

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

**UACI Jnet Communications Conversion**

The UACI and LACI Jnet network connections are compatible.

**Display Connections**

The UACI 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 UACI.

**Controller Setup**

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

**Applicable Documentation**

- Connections Diagram: Doc No. 03789
- Installation Information: Doc No. 03852
- Item Numbers: Doc No. 03872
- User Guide: Doc No. 03874
- Application Drawing: Doc No. 05149