

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

LAPI

The UAPI-SPR comprises of the following parts:

- 1 x UAPI controller
- 1 x TSC01 4-20 mA converter
- 1 x CAB105-030 cable
- 1 x DIN rail kit

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

The UAPI 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.

UAPI OUTPUT CONVERSION

FUNCTION	UAPI	LAPI
LIGHTS	2 LD 3 LN	1 NO 1 LN
AUX HEATER /FANS	4 LD 3 LN	2 NO 2 LN
TRIM HEATER	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 UAPI must be connected to the control supply neutral.

INPUT CONVERSION

PRESSURE

The UAPI and LAPI 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 UAPI taking care to maintain the polarity.

4-20 mA	UAPI	LAPI
-	15	CON4 (See note 3) C
+	16	7

Note 3: C is terminal 13 and 7 is terminal 14 when reading from right to left.

When the LAPI 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 UAPI

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

Note 4: Air on sensor on the LAPI is to the right hand end of the connector CON4 adjacent to the edge of the board.

Note 5: When the TSC01 is required the termination sensor (if fitted) must be connected to the TSC01.

DIGITAL INPUTS

FUNCTION	UAPI	LAPI (See note 6)
PLANT FAULT	12 14	I1 C
LIGHTS OVERRIDE	NOT IMPLEMENTED	I2 C

Note 6: LAPI controller uses 230 Vac inputs with a common connected to neutral DO NOT connect the existing wiring directly to UAPI which uses a self excited voltage free contact. External wiring changes must be done to implement the voltage free contact input.

UAPI Jnet Communications Conversion

The UAPI and LAPI Jnet network connections are compatible.

Display Connections

The UAPI and LAPI display connections are compatible.

Maintenance unit (MU) Connections

The LAPI has two connections for the MU. If the DIN connector is being used with an extensions cable on the control panel, then a CAB62 extension cable is required. This is not supplied in this conversion kit but can be ordered separately.

Controller Setup

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

Applicable Documentation

- Connections Diagram: Doc No. 03790
- Installation Information: Doc No. 03852
- Item Numbers: Doc No. 03880
- User Guide: Doc No. 03877
- Application Drawing: Doc No. 05149