The IF14 is a product which is used to replace the following obsolete JTL product:

IF1, IF4, IF5, IF6, IF11

The IF14 provides full functionality of the former products and includes some enhanced features.

Mechanical
The IF14 is physically able to replace the IF1, IF4, IF5, IF6 or IF11 products without significant rework. The fixings are in the same place as the original IF fixings.

The rotary and configuration bitswitches on IF1, IF4, IF5 and IF6 have been removed in favour of electrical configuration using the JTL Maintenance Unit.

As the IF1, IF4, IF5 & IF6 did not require a maintenance unit, care should be taken to allow sufficient access to the MU socket

Electrical
The connector identification has been changed.

IF14 CONNECTIONS

CONNECTOR	IF14, IF11	IF1, IF4, IF5, IF6
SUPPLY	CON1	CON2
PLANT DATABUS	CON2	CON1
INPUTS	CON7	CON3
OUTPUTS	CON8	CON4
ANALOGUE	CON9	Not Marked

Rewiring for IF4, IF5 & IF6
Minor rewiring is necessary when replacing the IF4, IF5 or IF6 with the IF14.

Relay 1 is a normally open relay and replicates the function of the changeover relay on the IF4, IF5 or IF6 daughter board. ie, it is energised when command from pack controller is non zero.

When replacing an IF4 or IF6 (4-20mA output) CON9 terminal labelled V+ is current source, Iout is current sink. When replacing IF5 (0-10V output), V out is voltage output with respect to GND terminal.

Maintenance Unit Connection
The MU connection on IF14 & IF11 uses a 6 pin connector. It will be necessary to allow space for access to the socket. In the case where access is very restricted a short MU extension (CAB62) is available on request, for connection via CON6.

MAINTENANCE UNIT CONNECTION	IF14, IF11	IF1, IF4, IF5, IF6
	CON5/6	None

Interface Configuration
To ensure compatibility when replacing the original part with an IF14, action a factory default setting procedure (Item 9) before setting in the new data.

Interface Addressing
Item 30 value is the equivalent of the rotary switch setting (SW1). Eg, if the part to be replaced had the rotary switch set to 3, Item 30 on the IF14 should be set to 3.

Item 31 value is the equivalent of SW2 setting. See the table below for conversion.

FUNCTION	ITEM 31 (IF14, IF11)	SW2 (See note 1) (IF1, IF4, IF5, IF6) X = Don't care O = Open C = Closed
COMPRESSOR CONTROL	3	X C O O
CONDENSER CONTROL	4	X O C C

Note 1: In certain cases wire links may have been fitted in place of SW2. In this situation "no link" corresponds to switch "open" and "link fitted" corresponds to switch "closed".

Digital Configuration IF1 & IF11

ITEM No	SET VALUE	FUNCTION
32	0	Legacy digital Operation

Analogue Configuration IF4, IF5 &IF6

ITEM No	SET VALUE	SW2	FUNCTION
32	2		Analogue output
34	0	1 - ON 2,3, 4 - OFF	IF4 (4-20 mA)
34	3	2 - ON 1,3, 4 - OFF	IF5 (0-10 V)
34	1	1 - ON 2,3, 4 - OFF	IF6 (4-20 mA)
35	See note 2		Analogue backup

Note 2: SW1 on IF14 is not used for backup when operating in analogue output mode. Instead, a value (0-99 in the case of IF14 and 0-127 in the case of IF5 and IF6) is programmed into item 35. This value is used to drive the output in case of plant comms failure.

Documentation
Full documentation exists for the IF14 but if this is not available the IF1, IF4, IF5, IF6 or IF11 documents may be used in conjunction with this information.

Applicable Documentation

Connections Diagram:	Doc No. 02905
Installation Information:	Doc No. 02777
Item Numbers:	Doc No. 02786
User Guide:	Doc No. 02942

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