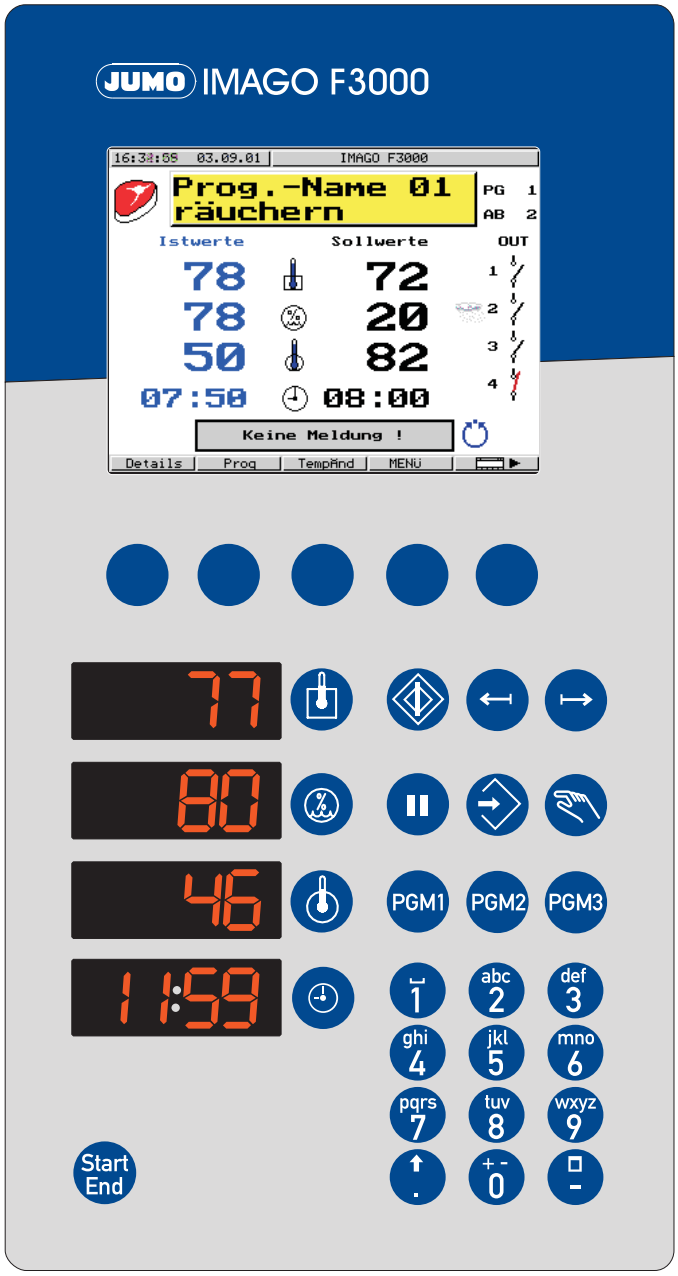

JUMO IMAGO F3000

Process controller for the meat processing industry

B 70.0101.5.1
Retrofitting/converting

06.07 /00525821

1.1 Preface

Hardware intervention

This manual describes how to change hardware components in the device and is only intended for qualified personnel having special knowledge about the handling of electronic components.

Carry out the following actions:

- Save the programs, process steps and the configuration using set-up program.
- Write-protect the Plug & Play module
- Be certain of the possible implications when removing hardware components.

Warranty

Hardware intervention can lead to unauthorized manipulations on the device. You thereby jeopardize your warranty claims as well as claims in conjunction with the Product Liability Law.

Please contact the closest branch or the factory if you wish to have your JUMO device upgraded or converted.

Electrostatic charge

When accessing the inner parts of the unit and returning controller modules, assemblies or components, please observe the regulations per DIN EN 61340-5-1 and DIN EN 61340-5-2 „Protection of electrostatic sensitive devices“. Only use **ESD** packaging for transport.

Please note that we cannot accept any liability for damage caused by ESD.

ESD=**E**lectro **S**tatic **D**ischarge

Service hotline

For technical questions - phone support in Germany:
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1 Retrofitting of modules

Technical data

Technical data can be found on the Internet at: www.jumo.net

Products ⇨ Electronic controllers ⇨ Units for meat markets ⇨ JUMO Imago F3000 ⇨ Download type sheet

1.2 Disconnecting the device from the voltage supply

* Switch the device off
* Remove plug-type screw terminal strips from the back of the device
* Disconnect interface connections
* Disconnect (all poles) the converter from the voltage supply.

1.3 Opening the device casing

* Place the device on a support protected against electro-static discharges.

The person opening the device must also be protected from electro-static discharge (e.g. at the wrist) to prevent damage to the PCB's when touching.

* Use a screw driver to undo the screw from the back of the device
* Carefully remove the metal back plate

1.4 Which is the permitted slot position?

Each PCB is assigned a code from 1 to 9, shown in the table on the left.

An x identifies whether or not this PCB may be plugged in one of the slots 1 to 6 (on the right in the table).

Example:

Do you want to extend your standard design device by an input module (code 3), may this be connected to slot position No.2?

Slot 1 is already assigned an input module.

Combination possibilities

	(3) Slot assignments	Slot Number					
Code	Plug-in cards for inputs, outputs and interfaces	1	2	3	4	5	6
0	not used	-	0	0	-	0	0
1	relay module: 10 relay outputs (8 make, 2 changeover)	-	-	-	1	X	X
2	input module: 4 analog inputs, 5 logic inputs for floating contacts	2	X	-	-	-	-
3	I/O module: 4 analog inputs, 5 logic inputs for floating contacts, 2 analog outputs	X	X	-	-	-	-
4	logic module: 11 logic inputs for floating contacts, 5 relay outputs (make)	-	-	X	-	-	X
5	universal interface MODbus (electrically isolated)	-	-	X	-	-	-
6	universal interface PROFIBUS-DP (electrically isolated)	-	-	X	-	-	-
7	I/O module: 4 analog inputs, 5 logic inputs for PLC level	X	X	-	-	-	-
8	I/O module: 4 analog inputs, 5 logic inputs for PLC level, 2 analog outputs	X	X	-	-	-	-
9	Logic module: 11 logic inputs for PLC level, 5 relay outputs (make)	-	-	X	-	-	-

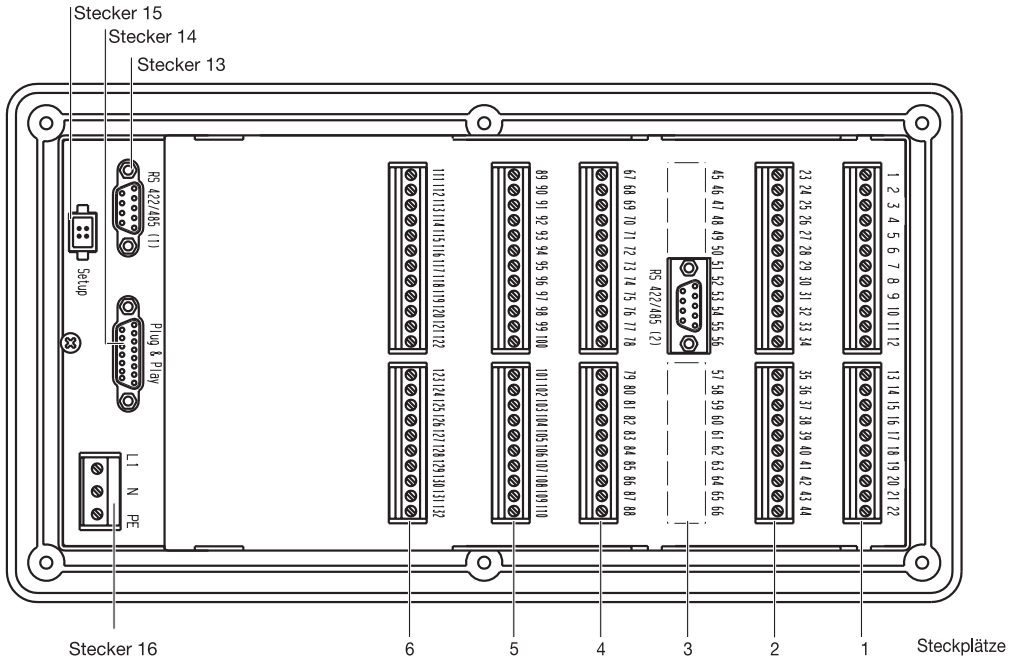
- assignment not possible
X assignment possible
factory-set

Sales article Nos.

Indicated on the PCB label.

Plug-in cards for retrofitting/converting	Sales No.
Available from stock:	
Relay module: 10 relay outputs (8 make, 2 changeover)	70/00398349
Input module: 4 analog inputs, 5 logic inputs	70/00398351
I/O module: 4 analog inputs, 5 logic inputs, 2 analog outputs	70/00398352
Logic module: 11 logic inputs, 5 relay outputs (make)	70/00398350
Interface for teleservice and visualization, RS422/485 (connector 13, MODbus slave, Code 54)	70/00398353
Delivery time approx. 2 weeks:	
Universal interface MODbus (slot 3)	70/00411250
Universal interface for PROFIBUS-DP (slot 3)	70/00411248
Input module for PLC level	70/00433065
Logic module for PLC level	70/00433064

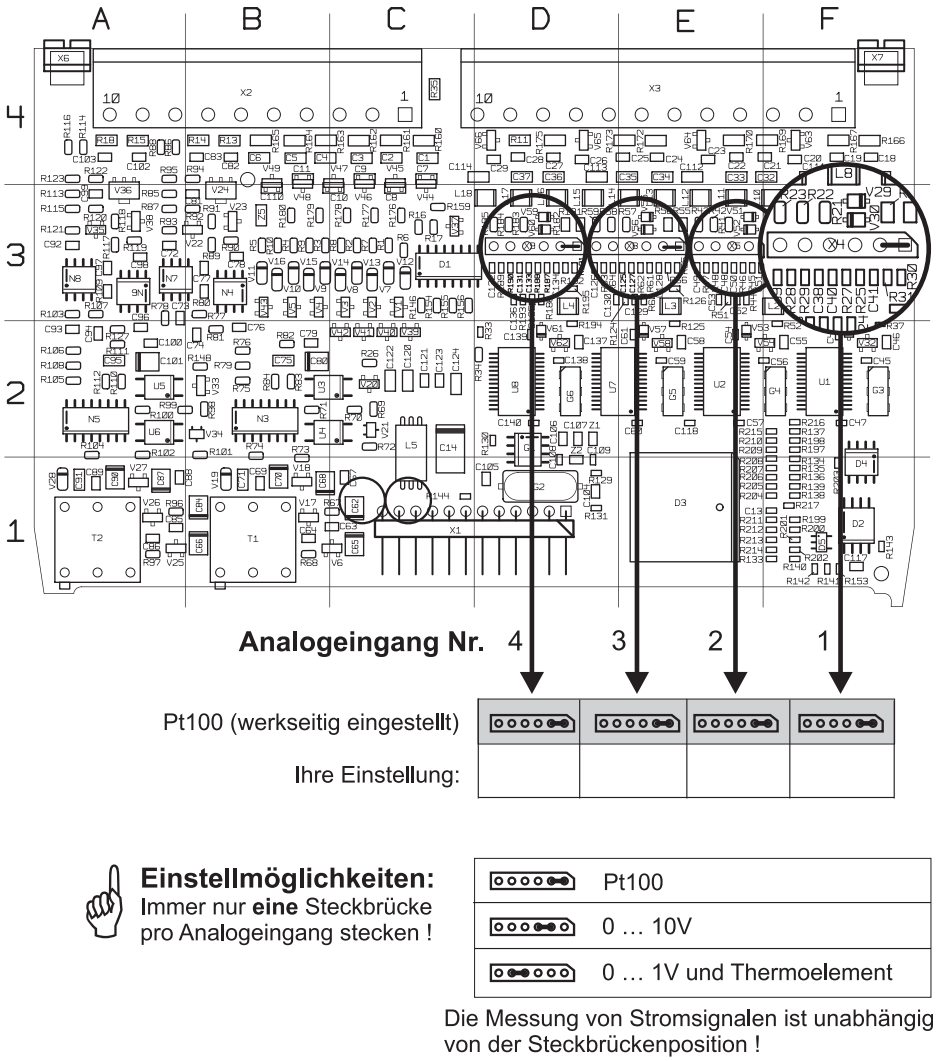
Slot position



1 Retrofitting of modules

1.4.1 Changing analog inputs from Pt100 to 0...10V, 0...1V and thermocouples

The analog inputs on the analog PCB (I/O PCB) can be changed by means of jumpers. Suitable tools are tweezers or a pair of small pliers.
This being the prerequisite for an analog input configured in the same manner to show correct values.



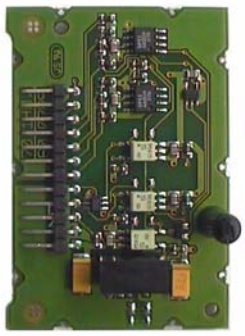
Einstellmöglichkeiten:
Immer nur **eine** Steckbrücke pro Analogeingang stecken !

	Pt100
	0 … 10V
	0 … 1V und Thermoelement

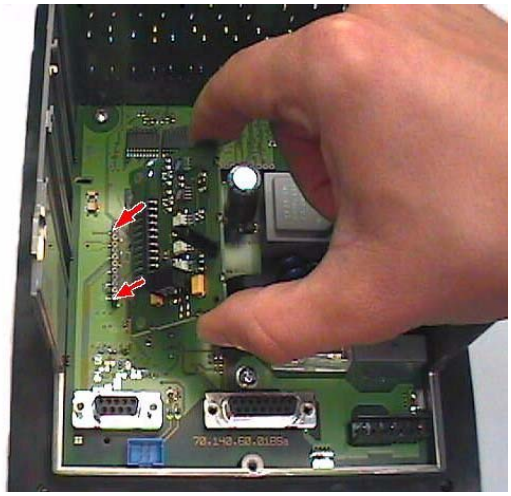
Die Messung von Stromsignalen ist unabhängig von der Steckbrückenposition !

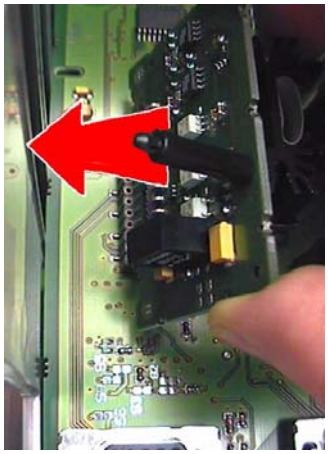
1.4.2 Installing a teleservice interface, visualization (plug 13)

This interface has a black spacer pin.



* Plug the PCB into the female connector from above ensuring that all pins are inserted





* Insert the black spacer pin to the left into the hole provided for this purpose and allow to engage

1.4.3 Installation of the universal interface (slot 3)

The interface card stands out by its 9 pole D-SUB socket.

* Plug-connect the plug-type PCB to the permitted slot.

* Break out the section in the metal casing that covers the new PCB

This step is required to ensure that the newly fitted PCB will fit in the cut-out when assembling the metal casing.

1.4.4 Buffer battery is empty

JUMO guarantees an operating life of 5 years on the function of the back-up battery starting with the purchase date.

Battery symbol and information text

Immediately replace the back-up battery when discharged to ensure that no data will be lost.

A symbol and an information text appear on the screen.

There is still a time allowance for the back-up battery to be replaced **within the next two weeks** without the risk of any data loss when switching on again!

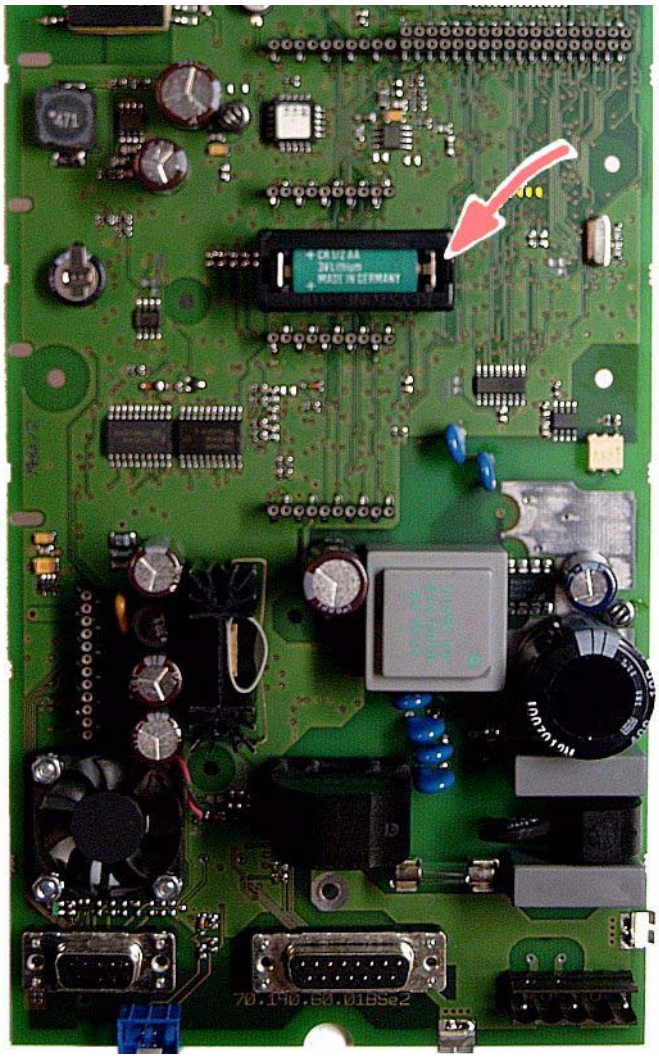
If despite of a reminder the back-up battery is not changed within this time frame, data will be lost when the device is without power.
The following data will no longer be available when switching the device on following a power failure:

Retentive data

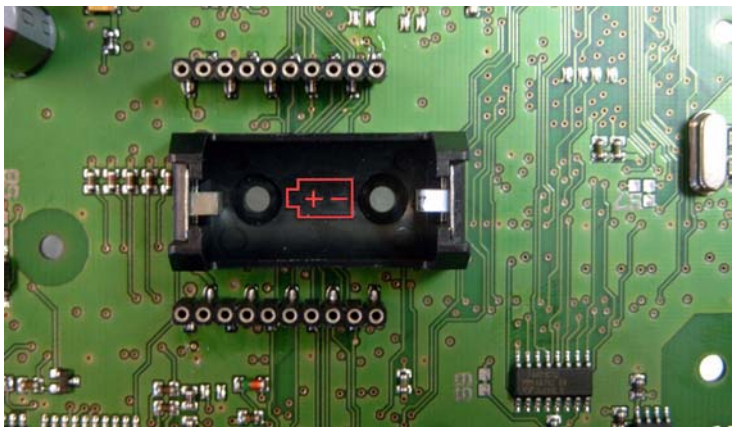
- Date and time
- Restart data, such as, for instance, to quick-start a program
- Restart data when the „Continued run following a power failure“ behavior is set.
- Recorded data of the registry function

Position of the back-up battery

The back-up battery located in the centre of the main PCB is protected from falling out by means of a black safety brace.

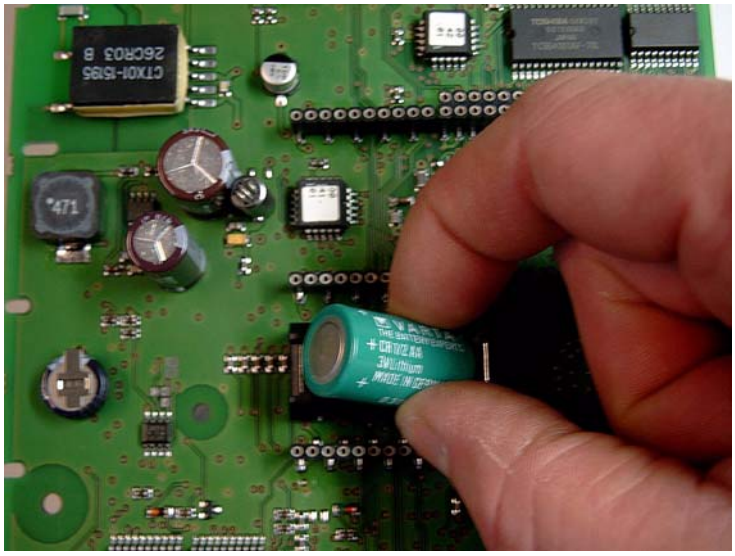


* Remove the black safety brace by pulling it upward, then remove the old back-up battery



* Insert the new back-up battery into the holder. Note its correct pole position

1 Retrofitting of modules



* Refit the black safety brace

1.5 Closing the casing

* Reassemble the device in the reverse order

- Plug in and screw-tighten the metal casing
- Fit plug-type screw terminal for inputs and outputs as well as the voltage supply, restore interface connections.

Slots changed by retrofitting can easily result in incorrect electrical connections.

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