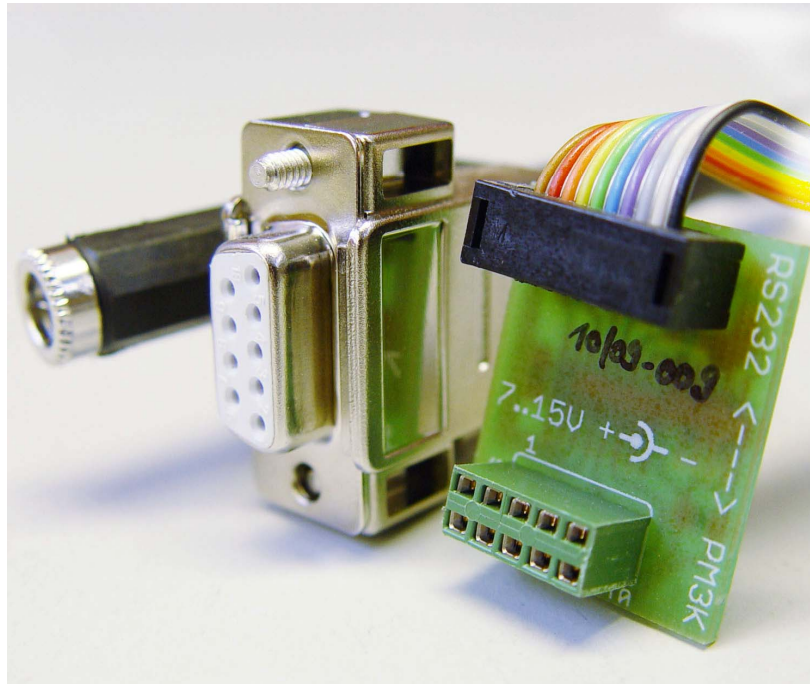


# User manual



## PM3OP10

RS232 interface adapter cable

**FLEXIVA**<sup>®</sup>  
automation & Robotik

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## Preface

This technical documentation shall provide an appropriate manipulation of the RS232 adapter cable. The cable is used to run a power module in single-mode operation at a single RS232 interface.

The instruction handbook should be preserved.

Texts, diagrams and tables shall neither be copied nor reproduced nor shall they be made available to third parties without our express authorisation.

We are also pointing out that this technical documentation is not part of an existing or previous agreement or consent or part of a legal relationship.

All obligations and liability result from the sales contract that also, solely contains the guarantee regulation. The contractual provisions are not affected by the technical documentation.

The documentations of the sub-suppliers are also effective to this documentation of the manufacturer.

As a supplement to this instruction handbook, all the universally valid legal and other binding regulations with respect to prevention of accidents and on environmental protection shall be respected and instructed.

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## 1 Introduction

In order to ensure the operator's safety as well as to avoid possible damages on the adapter, it must be unconditionally assured, before utilisation of the module or facility connected thereto, that this user manual is completely read.

The present user manual shall thereby help to better understanding of the RS232 interface adapter as well as to be able to appropriately make use of the application/employment possibilities in accordance with the regulations.

The operating personnel shall be very acquainted with all the components before start of operation. Special attention shall be paid to the section safety.

The present user manual contains important information on the proper and economical utilisation of the DC/DC-Module. Observation of these instructions shall contribute to avoidance of danger, reduction of repair and maintenance costs as well as reduction of the breakdown periods, and an increase in the lifespan of the module.

In the chapters of this manual there are some symbols at the margins. These symbols refer to function of the corresponding text paragraph, and are of importance with respect to the operation or maintenance. They refer to important descriptions or remarks:



### ***Danger***

*All sections in this technical documentation that contain indications of possible dangers or hazards shall be characterised with the adjoining symbol.  
Non-observance can lead to severe injuries! The instructions must be strictly followed.*



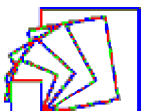
### ***Caution!***

*All sections with this symbol give hints on avoidance of damages on the equipment.*



### ***Information***

*Sections with this symbol give important information on an effective utilisation.*



*The work steps that have been illustrated in logical sequence at the side of this symbol instruct the operator on the most ergonomical procedure of the operation.*

## **2 Identification**

### **2.1 Product make and model designation**

ZEMIS<sup>®</sup> PM3OP10

### **2.2 Product versions / Edition**

Product versions: 01

Edition: 06/2009

## 3 Product description

### 3.1 General information / Utilisation in accordance with the regulations

The RS232 interface adapter is used to connect a power module in single-mode operation to an RS232 interface, as found in computers.

For the intended use it is necessary to read this manual and the manual of the power module to use carefully.

The following modules from FLEXIVA can be connected with this adapter:

ZEMIS<sup>®</sup> PM3AC10

ZEMIS<sup>®</sup> PM3K030

ZEMIS<sup>®</sup> PM3K045

ZEMIS<sup>®</sup> PM3K060

ZEMIS<sup>®</sup> PM3K120

ZEMIS<sup>®</sup> PM3K350

### 3.2 Technical information and data

Type: RS232 interface adapter to adjust the levels between a PC interface and the communication interface of the power module.

#### Performance data

Power supply: 7...15V DC (30mA) DC Jack

#### Ambient conditions

Ambient temperature range -20...50°C (during operation)

Degree of protection IP 00

Maximum humidity up to 90% (not condensed)

Pollutants The surroundings should not have a great amount of dust, and especially no metal or graphite dust.

#### Scope of delivery

- Interface Adapter
- Manual

### 3.3 Safety information

The Interface adapter was designed and manufactured according to recognised regulations and provisions of technology, and came under safety test scrutiny before delivery.

There is however danger for persons in case of faulty operation.

Every person, who installs, operates or carries out maintenance on the module must:

1. Read and particularly respect the instructions in this user manual,
2. Must be trained for this function and be well instructed.

#### 3.3.1 Safety measures during installation

Remember, they read the information given in the manual of the connected power module.



***Caution!***

*The cooling elements of the Transformer module are connected to potentials, i.e. it is not permitted to touch them!*

#### 3.3.2 Residual dangers

The described product meets the technological standards and the recognised technical safety provisions. However danger might still occur.

The possible residual dangers in connection with the operation of the module that might occur, can originate through:

- utilisation of electrical / electronic components of the third party supplier.
- electricity itself

The effective specifications and safety instructions of all the corresponding components mounted hereby, with respect to the operation and installation or mounting location must be respected and followed.

### **3.3.3 Skills and qualification of the operating staff**

Placing into operation and the connection of the module shall be carried out only by persons who have undergone professional training in electro-technics or electrical engineering and who are in position to carrying out the power connections professionally.

Basic knowledge of PCs and handling of the current WINDOWS operating system is necessary for the utilisation of the delivered software in the scope of delivery. Details in this respect are found in the enclosed comprehensive programme description.

## **4 Preparation/priming of the product for application**

### **4.1 Transportation**

During transportation the adapter shall not be exposed to vibrations, intense agitations as well as thrust, else this might possibly lead to damages of the sensible components.

### **4.2 Packaging**

Basically, appropriate, proper and environmentally friendly packaging materials shall be used for transportation and consignment.

Due to the fact that the module itself possesses a degree of protection IP00, a transport package that averts infiltration of water, dirt and dust must be selected. Positioning of conventional dehumidification materials in the package is recommended.

### **4.3 Storage**

Permanent or long-lasting storage: closed rooms, dry, and room temperature

### **4.4 Initial operation**

The following conditions must be ensured and checked before initial operation:

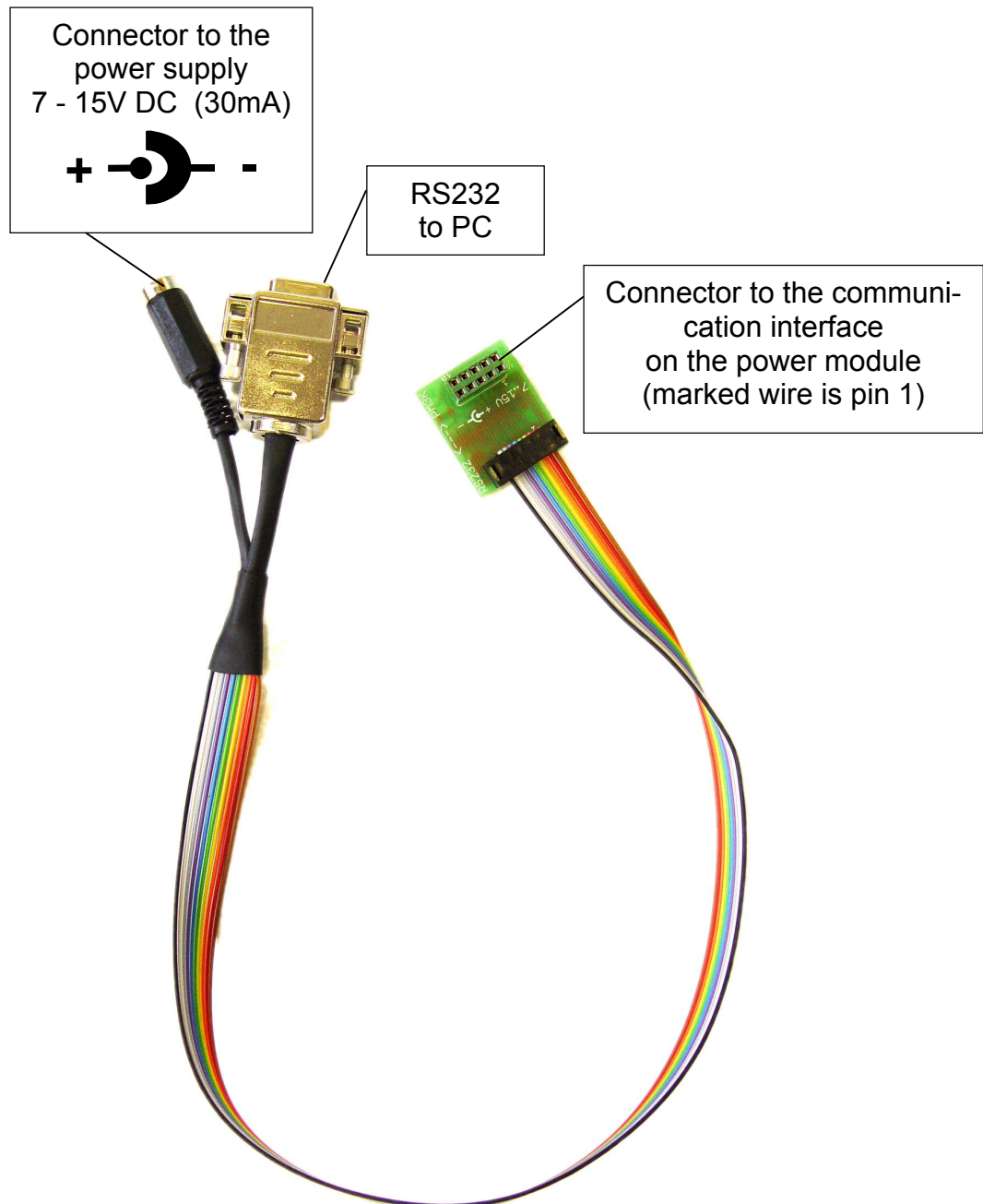
- the professional installation and layout of all the necessary electrical connecting cables as well as the correct connection to the module
- the acknowledgement of the instructions and guidelines of this user manual and that of the attached power module

## 5 Operation

### 5.1 Mode of operation

In the next picture the individual connections are explained.

In relation to other conditions for the operation of the power modules, please refer to the relevant manuals, which comes with the modules.



**Fig. 1 Connections**

## 6 Maintenance service and repairs by the customer service

In accordance with the general terms of sale GUARANTEE is issued for the devices provided by the manufacturer. In case, within the warranty period, a fault or faulty operation or damages occur on the device for which a guarantee is issued in accordance with the terms of guarantee, the manufacturer carries out repairs or replaces the defective components after prior inspection.

The manufacturer is responsible for the device in its original configuration.

All interventions in the device, the structure/configuration, the software or the operation cycle of the device shall be carried out only by the manufacturer or effected exclusively with express authorisation of the manufacturer.



***Please note***

***The contractually stipulated ambient conditions must be observed.***

The manufacturer is not responsible for damages that occur as a result of inappropriate application or improper use of the device, as well as for damages that occur as a result of intervention in the device, intervention that is not stipulated in the present user manual.