



Electrical operating elements, lines and connectors for modulog modules



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1 Description of the product

1.1 Hand panel with up/down function

The hand panel has two buttons which operate the functions "up" and "down".

At the back of the body, there is a hook to hang up the hand panel in an ergonomically favourable place.

The relaxed coiled cable is approx. 0.9 m long and can be pulled up to a length of 1.6 m.

1.2 Hand panel with memory function

The hand panel with memory function has two push-buttons "up" and "down" to adjust the lifting modules and 5 programmable buttons for the memory function.

1.3 Foot switch with up/down function

The foot switch is equipped with two push-buttons for the functions "up" and "down".

The bottom side is skid-proof so that also in industrial applications a fixed position can be guaranteed.

2 Validity of the documentation

This document applies to the following products:

Electrical operating elements of the data sheet M8.203. The following types or part numbers are concerned:

Hand panel with up/down function

- 3823 025

Hand panel with memory function

- 3823 160

Foot switch with up/down function

- 3823 038

3 Target group of this document

- Specialists, fitters and set-up men of machines and installations with expert knowledge in electrical engineering.

Qualification of the personnel

Expert knowledge means that the personnel must

- be in the position to read and completely understand technical specifications such as circuit diagrams and product-specific drawing documents,
- have expert knowledge (electric, hydraulic, pneumatic knowledge, etc.) of function and design of the corresponding components.

An **expert** is somebody who has due to its professional education and experiences sufficient knowledge and is familiar with the relevant regulations so that he

- can judge the entrusted works,
- can recognize the possible dangers,
- can take the required measures to eliminate dangers,
- knows the acknowledged standards, rules and guidelines of the technology.
- has the required knowledge for repair and mounting.

4 Symbols and signal words

WARNING

Person damage

Stands for a possibly dangerous situation.
 If it is not avoided, death or very severe injuries will result.

CAUTION

Easy injuries / property damage

Stands for a possibly dangerous situation.
 If it is not avoided, minor injuries or material damages will result.



Hazardous to the environment

The symbol stands for important information for the proper handling with materials that are hazardous to the environment.
 Ignoring these notes can lead to heavy damages to the environment.

Note

This symbol stands for tips for users or especially useful information. This is no signal word for a dangerous or harmful situation.

5 For your safety

5.1 Basic information

The operating instructions serve for information and avoidance of dangers when installing the products into the machine as well as information and references for transport, storage and maintenance.

Only in strict compliance with these operating instructions, accidents and property damages can be avoided as well as trouble-free operation of the products can be guaranteed.

Furthermore, the consideration of the operating instructions will:

- avoid injuries
- reduce down times and repair costs,
- increase the service life of the products.

5.2 Safety instructions

WARNING

Injury / burning due to contact with energized parts!

- Before working on electric equipment, the energized parts must be de-energized and secured.
- Do not open protection covers at electric parts.
- All electrical works must only be realised by electricians.

Injuries, material damages or malfunctions!

- Do not modify the product!

Injuries due to non-compliance of the operating instructions!

- The product may only be operated, if the operating instructions - especially the chapter "Safety instructions" have been read and understood.

WARNING

Injuries due to misuse, incorrect operation or abuse!

Injuries can occur if the product is not used within the intended use and the technical performance data.

- Before start up, read the operating instructions!

Injury due to a lifting or lowering movement!

- Before cleaning switch off power supply.

CAUTION

Fixing the connecting cable

- The cables must be fixed by the user so that no bending and tensile stress will act and the cable cannot be damaged in any way.

Aggressive cleaning agents

The product must not be cleaned with:

- Corrosive or corroding components or
- Organic solvents as halogen or aromatic hydrocarbons and ketones (cellulose thinner, acetone, etc.), because this can destroy the seals.

All work by service personnel only!

- All works only to be effected by ROEMHELD service staff.

5.3 Product-specific safety instructions

5.3.1 Safety hazards

- If the product or one of the associated components are visibly impaired in their function or if external damage is visible, the equipment must no longer be operated. In this case, the product should be immediately disconnected from the mains!
- The system must only be operated if the lifting modules and the load are securely fixed!
- Consider the admissible maximum load!
- The housing of the control module must never be opened!
- The plug-type connectors must only be connected and disconnected in idle mode of the control module!
- In the case of opened plug-type connectors, the precautions against electrostatic discharge (ESD) must be taken. Open plug contacts must not be touched.

6 Application

6.1 Intended use

The products are used for industrial applications to operate lifting modules as per data sheet M4.XXX.

Furthermore the following belongs to possible uses:

- Use only within closed, low-dust rooms
- Use within the capacity indicated in the technical data sheets.
- Use as per operating instructions.
- Qualified and trained personnel for the corresponding activities.
- Mounting of spare parts only with the same specifications as the original part.

6.2 Misapplication

WARNING

Injuries, material damages or malfunctions!

- Do not modify the product!

The use of these products is not admitted:

- For the domestic use.
- On pallets or machine tool tables in primary shaping and metal forming machine tools.
- If due to physical / chemical effects (vibrations, welding currents or others) damages of the products or seals can be caused.
- On pallets or machine tool tables that are used to change the characteristics of the material (magnetise, radiation, photochemical procedures, etc.).
- In areas for which special guidelines apply, especially installations and machines:
 - For the use at fun fairs and in leisure parks.
 - In food processing or special hygiene regulations.
 - For military purposes.
 - In mines.
 - In explosive and aggressive environments (e.g. ATEX).
 - In medical engineering.
 - In the aerospace industry.
 - For passenger transport.

Special solutions are available on request!

7 Assembly

7.1 Design



Figure 1: Hand panel

b Connector plug	e Coiled cable
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7.2 Fixing of the product

CAUTION

Fixing the connecting cable

- The cables must be fixed by the user so that no bending and tensile stress will act and the cable cannot be damaged in any way.

8 Start up

NOTE

Combinable with the control modules

- See data sheet M8.203

WARNING

Injury / burning due to contact with energized parts!

- Before working on electric equipment, the energized parts must be de-energized and secured.
- Do not open protection covers at electric parts.
- All electrical works must only be realised by electricians.

CAUTION

Fixing the connecting cable

- The cables must be fixed by the user so that no bending and tensile stress will act and the cable cannot be damaged in any way.

9 Operation

9.1 Lifting and lowering

9.1.1 Electrical hand panel and foot switch for the operation of electrical modules.



Figure 2: Hand panel and foot switch

By operating the direction key up (↑) or down (↓) at the hand panel or foot switch the connected lifting modules are extended or retracted. Due to the touch control the respective direction key must remain operated during lifting and/or lowering. An electronic current limitation in the control module protects the lifting module against overload. If the lifting module works longer than 1 second in the range of the current limitation, for example due to overload, the stroke module is switched off. The function is restored after release of the push-button operation.

NOTE

Electrical current limitation

- See data sheet M8.200

9.1.2 Electrical operating panel for the operation of electrical modules with memory function



Figure 3: Operating panel

a Direction keys up/down	c Memory function
b Connector plug	d Position push-button 1-5

The operating panel has six push-buttons:

- Two directional keys Up (↑) or Down (↓) to adjust the position of the lifting modules.,
- the memory key - memory function (M) and
- position push-buttons (1), (2), (3), (4) and (5).

By pressing the directional key Up (↑) or Down (↓) the lifting modules are moved to the desired position.

In order to store the position, proceed as follows:

- Press push-button (M) simultaneously with one of the position push-buttons (1), (2), (3), (4) or (5) or
- push-button (M) and then one of the position push-buttons, where the position shall be stored.

Then the stored positions can be approached by pressing the position push-buttons (1), (2), (3), (4) or (5) in push-button mode.

The stored positions are durably kept until they are overwritten by a new storage process.

The electronic current limitation integrated in the control module protects the lifting modules and the power supply against overload.

If the control module works longer than 2 second with current limitation, all actuators will be switched off. The function is restored after release of the push-button operation.

NOTE

Electrical current limitation

- See data sheet M8.200

10 Maintenance

10.1 Plan for maintenance

Maintenance works	Interval	by...
Visual inspection and cleaning	daily	operator
The electrically connected components must be checked by an expert at regular intervals, but at least once a year.	yearly checks	expert
Repair	in case of damages	ROEMHELD service staff

NOTE

Qualification of the personnel

- Pay attention to the qualification of the personnel.

The product cannot be repaired. In the event of an error it must be replaced.

10.2 Cleaning

CAUTION

Aggressive cleaning agents

The product must not be cleaned with:

- Corrosive or corroding components or
- Organic solvents as halogen or aromatic hydrocarbons and ketones (cellulose thinner, acetone, etc.), because this can destroy the seals.

The following cleaning works have to be effected daily at the components.

1. Clean with cleaning clothes or cleaning rags.

10.2.1 Daily checks

WARNING

Injury due to a lifting or lowering movement!

- Before cleaning switch off power supply.

- Visual inspection of all parts

10.2.2 Yearly checks

WARNING

Injury due to a lifting or lowering movement!

- Before cleaning switch off power supply.

The electrically-connected components must be checked by an expert at regular intervals, but at least once a year.

The check has to include:

- Perfect functioning
- The condition of the components
- Test as per DGUV regulation 3

10.3 Repair

WARNING

Injury / burning due to contact with energized parts!

- Before working on electric equipment, the energized parts must be de-energized and secured.
- Do not open protection covers at electric parts.
- All electrical works must only be realised by electricians.

CAUTION

All work by service personnel only!

- All works only to be effected by ROEMHELD service staff.

11 Technical characteristics

Hand panel with up/down function	
Dimensions	55 x 130 x 23 mm
Code class	IP 66
connecting cable	Coiled cable 1.6 m (usable length) with connector

Hand panel with memory function	
Dimensions	56 x 130 x 23 mm
Code class	IP 66
connecting cable	Coiled cable 1.9 m (usable length) with connector

Foot switch with up/down function	
Dimensions	109 x 209 x 38 mm
Code class	IP 65
connecting cable	3 m, smooth with connector

NOTE

Further information

- For further technical data see ROEMHELD data sheet.

12 Accessory

NOTE

Accessories

- See data sheet.

13 Disposal

The individual materials have to be disposed as per the existing regulations and directives as well as the environmental conditions.

For the disposal of electrical and electronic components (e.g. stroke measuring systems, proximity switches, etc.) country-specific legal regulations and specifications have to be kept.



Hazardous to the environment

Due to possible environmental pollution, the individual components must be disposed only by an authorised expert company.

14 Declaration of manufacture

Manufacturer

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Declaration of manufacture of the products

14.1 Validity of the documentation

This document applies to the following products:

Electrical operating elements of the data sheet M8.203. The following types or part numbers are concerned:

Hand panel with up/down function

- 3823 025

Hand panel with memory function

- 3823 160

Foot switch with up/down function

- 3823 038

They are designed and manufactured in line with the relevant versions of the directives **2006/42/EC** (EC MSRL) and in compliance with the valid technical rules and standards.

In accordance with EC-MSRL and EN 982, these products are components that are not yet ready for use and are exclusively designed for the installation in a machine, a fixture or a plant.

According to the pressure equipment directives the products are not to be classified as pressure reservoirs but as hydraulic placing devices, since pressure is not the essential factor for the design, but the strength, the inherent stability and solidity with regard to static or dynamic operating stress.

The products may only be put into operation after it was assessed that the incomplete machine/machine, in which the product shall be installed, corresponds to the machinery directives (2006/42/EC).

The manufacturer commits to transmit the special documents of the products to state authorities on request.

The technical documentation as per appendix VII part B was prepared for the products.

Responsible person for the documentation:

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Römheld GmbH
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