Operating instructions and spare parts list

OptiControl CM22
Plant control

Translation of the original operating instructions
Documentation OptiControl CM22

© Copyright 2010 Gema Switzerland GmbH
All rights reserved.

This publication is protected by copyright. Unauthorized copying is prohibited by law. No part of this publication may be reproduced, photocopied, translated, stored on a retrieval system or transmitted in any form or by any means for any purpose, neither as a whole nor partially, without the express written consent of Gema Switzerland GmbH.

OptiTronic, OptiGun, EasyTronic, EasySelect, OptiFlow and SuperCorona are registered trademarks of Gema Switzerland GmbH.

OptiMatic, OptiMove, OptiMaster, OptiPlus, MultiTronic and Gematic are trademarks of Gema Switzerland GmbH.

All other product names are trademarks or registered trademarks of their respective holders.

Reference is made in this manual to different trademarks or registered trademarks. Such references do not mean that the manufacturers concerned approve of or are bound in any form by this manual. We have endeavored to retain the preferred spelling of the trademarks, and registered trademarks of the copyright holders.

To the best of our knowledge and belief, the information contained in this publication was correct and valid on the date of publication. Gema Switzerland GmbH makes no representations or warranties with respect to the contents or use of this publication, and reserves the right to revise this publication and make changes to its content without prior notice.

Printed in Switzerland

Gema Switzerland GmbH
Mövenstrasse 17
9015 St.Gallen
Switzerland
Phone: +41-71-313 83 00
Fax.: +41-71-313 83 83
E-Mail: info@gema.eu.com
Homepage: www.gemapowdercoating.com
Table of contents

General safety regulations .................................................. 3
  Safety symbols (pictograms) .................................................. 3
  Conformity of use ................................................................. 3
  Product-specific safety measures ........................................... 4
    General information .......................................................... 4

About this manual ............................................................... 5
  General information .......................................................... 5
  Software version ................................................................. 5

Function description ........................................................... 7
  Field of application ............................................................. 7
  OptiControl CM22 - Overview .............................................. 7
    Typical characteristics ...................................................... 7

Technical data ................................................................. 9
  OptiControl CM22 Plant control unit .................................... 9
    System ............................................................................. 9
    Electrical data ............................................................... 9
    Display ........................................................................... 9
    Dimensions ..................................................................... 10
    Connections ................................................................... 10
    Environmental conditions ................................................. 10

Operating and display elements ............................................ 11
  Operation .......................................................................... 11
  Front side ........................................................................ 11
  Rear side ........................................................................ 12

Start-up ............................................................................. 13
  General information .......................................................... 13
  General operating instructions ............................................ 14
    Symbols ........................................................................ 14
    Meaning of the colors ..................................................... 14
    Function keys ................................................................ 15
    Touch key fields ............................................................ 16

Starting the equipment ....................................................... 17
  General information .......................................................... 17
  Automatic operation mode .................................................... 22
  Manual operating mode .................................................... 24
    Edit axis values, select or deselect ..................................... 24
    Axes start independently from the conveyor ..................... 25
    Edit gun values, select or deselect ..................................... 26
    Guns start independently from the conveyor ..................... 27
Table of contents OptiControl CM22

- Daily correction ................................................................. 28
- Simulation of the CAN bus sensor ........................................ 28
- Cleaning operation mode .................................................... 29

Object data administration 33

- Load and save object data .................................................. 33
- Copy and insert object data ............................................... 34
- Indicate object data ........................................................... 34

Error messages / Diagnosis 35

- Main page error display ..................................................... 35
- Check the light grid ........................................................... 36

User levels and access 37

- User level 0 (gema) ............................................................ 37
- User level 1 (user 1) .......................................................... 37
- User level 2 (user 2) .......................................................... 37
- User level 3 (user 3) .......................................................... 37

Spare parts list 39

- Ordering spare parts .......................................................... 39
- OptiControl CM22 - spare parts list ................................. 40
- OptiControl CM22 - spare parts ........................................ 41
- OptiControl CM22 - spare parts (rear side) ....................... 42
General safety regulations

This chapter sets out the fundamental safety regulations that must be followed by the user and third parties using the OptiControl CM22.

These safety regulations must be read and understood before the OptiControl CM22 is put into operation.

Safety symbols (pictograms)

The following warnings with their meanings can be found in the Gema operating instructions. The general safety precautions must also be followed as well as the regulations in the operating instructions.

DANGER!
danger due to live electricity or moving parts. Possible consequences: death or serious injury

WARNING!
improper use of the equipment could damage the machine or cause it to malfunction. Possible consequences: minor injuries or damage to equipment

INFORMATION!
Useful tips and other information

Conformity of use

1. The OptiControl CM22 is built to the latest specification and conforms to the recognized technical safety regulations and is designed for the normal application of powder coating.

2. Any other use is considered non-compliant. The manufacturer shall not be liable for damage resulting from such use; the user bears sole responsibility for such actions. Gema Switzerland GmbH must be consulted prior to any use of the OptiControl CM22 for any purposes or substances other than those indicated in our guidelines.

3. Observance of the operating, service and maintenance instructions specified by the manufacturer is also part of conformity of use. The OptiControl CM22 should only be used,
maintained and started up by trained personnel, who are informed about and are familiar with the possible hazards involved.

4. Start-up (i.e. the execution of approved operational tasks) is forbidden until it has been established that the OptiControl CM22 has been set up and wired according to the guidelines for machinery (2006/42/EC). EN 60204-1 (machine safety) must also be observed.

5. Unauthorized modifications to the OptiControl CM22 exempt the manufacturer from any liability from resulting damage.

6. The relevant accident prevention regulations, as well as other generally recognized safety regulations, occupational health and structural regulations are to be observed.

7. Furthermore, the country-specific safety regulations also must be observed.

<table>
<thead>
<tr>
<th>Explosion protection</th>
<th>Protection type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE Ex II 3D</td>
<td>IP54</td>
</tr>
</tbody>
</table>

**Product-specific safety measures**

**General information**

The OptiControl CM22 is a constituent part of the system and is thus integrated into the safety system of the plant.

If it is to be used in a manner outside the scope of the safety concept, then corresponding measures must be taken.

**Note:**

For further information, see the more detailed Gema safety regulations!
About this manual

General information

These operating manual contains all important information which you require for the working with the OptiControl CM22. It will safely guide you through the start-up process and give you references and tips for the optimal use of your new powder coating system.

Information about the functionality of the individual system components – booth, gun control unit, manual gun or powder injector – should be referenced to their enclosed corresponding documents.

DANGER:
Working without operating instructions
Working without operating instructions or with individual pages from the operating instructions may result in damage to property and personal injury if relevant safety information is not observed.
- Before working with the device, organize the required documents and read the section «Safety requirements».
- Work should only be carried out in accordance with the instructions of the relevant documents.
- Always work with the complete original document.

Software version

This document describes the operation of the CM22 plant control with software version starting from:

<table>
<thead>
<tr>
<th>Software</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galileo</td>
<td>CM-22_V2_2a</td>
</tr>
<tr>
<td>MXPro</td>
<td>CM-22_V2_2a</td>
</tr>
</tbody>
</table>
Function description

Field of application

The OptiControl CM22 plant control is built exclusively for electrostatic coating using organic powders. Any other use is considered non-compliant. The manufacturer shall not be liable for damage resulting from such use; the user bears sole responsibility for such actions.

The OptiControl CM22 plant control is especially well suited for the fully automatic coating of any parts. The OptiControl CM22 plant control also supports the operator optimally during a color change. The OptiControl CM22 plant control is especially well suited for operation in Magic booths.

OptiControl CM22 - Overview

Typical characteristics

All OptiStar gun control units, CR0x axis control units, light grids, powder centers and the digital in- and outputs communicate by CAN-Bus (field bus).

<table>
<thead>
<tr>
<th>System</th>
<th>Monitor</th>
<th>SD Card</th>
<th>Number of guns</th>
<th>Number of stations</th>
<th>Axes per Station</th>
<th>Axis type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM22</td>
<td>5.7&quot;</td>
<td>1</td>
<td>max 24</td>
<td>2</td>
<td>4</td>
<td>from ZA04</td>
</tr>
<tr>
<td>OptiControl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>from XT09</td>
</tr>
</tbody>
</table>
## Technical data

### OptiControl CM22 Plant control unit

#### System

<table>
<thead>
<tr>
<th>OptiControl CM22</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>RISC/32 Bit, 400 MHz</td>
</tr>
<tr>
<td>Memory</td>
<td>64 MB</td>
</tr>
<tr>
<td>Remanent memory</td>
<td>125 kByte</td>
</tr>
</tbody>
</table>

#### Electrical data

<table>
<thead>
<tr>
<th>OptiControl CM22</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>24 VDC SELV safety extra-low voltage</td>
</tr>
</tbody>
</table>
| Voltage range    | 24 VDC according to DIN 19240  
19.2 - 30.0 VDC actual |
| Reverse voltage protection | yes |
| Protection       | yes (internal melting fuse) |
| Electrical insulation | no |
| Current consumption | max. 9.5 W/24 VDC |
| Switch-on current max. | 1.5 A^2/s |

#### Display

<table>
<thead>
<tr>
<th>OptiControl CM22</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>TFT color LCD</td>
</tr>
<tr>
<td>Resolution</td>
<td>5.7&quot; - 640 x 480 pixels (VGA)</td>
</tr>
<tr>
<td>Number of colors</td>
<td>65536</td>
</tr>
<tr>
<td>Display surface</td>
<td>115 x 86 mm</td>
</tr>
<tr>
<td>Operation</td>
<td>resistive touch</td>
</tr>
<tr>
<td>Front screen</td>
<td>VGA laminated safety glass, anti reflex coated, scratch-proof</td>
</tr>
</tbody>
</table>
### Dimensions

<table>
<thead>
<tr>
<th>OptiControl CM22</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical dimensions</td>
<td>170 x 130 x 39 mm</td>
</tr>
<tr>
<td>Window</td>
<td>157 x 117 mm</td>
</tr>
</tbody>
</table>

### Connections

<table>
<thead>
<tr>
<th>OptiControl CM22</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet</td>
<td>100Base-TX / 10Base-T</td>
</tr>
<tr>
<td>CAN</td>
<td>1 x CAN, not galvanic isolated</td>
</tr>
<tr>
<td>USB</td>
<td>USB 2.0</td>
</tr>
<tr>
<td>SD Memory Card Slot</td>
<td>1 x SDA Specification 1.00</td>
</tr>
</tbody>
</table>

### Environmental conditions

<table>
<thead>
<tr>
<th>OptiControl CM22</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate</td>
<td>0-50°C, 10-85% rel. relative humidity, not condensing</td>
</tr>
</tbody>
</table>
Operating and display elements

Operation

All devices are operated exclusively by the touch panel, which program sequence is described on the following pages. Additionally, the following described switches and displays are available.

Front side

OptiControl CM22 - operating and display elements

- S1 Key switch (control voltage ON/OFF)
- S2 Emergency stop key (plant switch off in emergency case)
- S3 Illuminated push button (malfunction acknowledgement)
- H1 Illuminated element (control voltage OK)
- TP Touch panel
Rear side

2.3 AUX Internal control signals connection
2.5 CAN IN
2.6 CAN OUT

OptiControl CM22 - operating and display elements (rear side)
General information

The OptiControl CM22 plant control is parameterized, configured and tested at the Gema factory. This allows for faster initial start up, with fewer parameters requiring configuration on site.

The application data in the lab report offers additional assistance, since it can be used as the default setting for guns and lifting equipment.
General operating instructions

Symbols

<table>
<thead>
<tr>
<th>MODE</th>
<th>30.00.2011 16:25</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Automatic" /></td>
<td>Automatic</td>
</tr>
<tr>
<td><img src="image" alt="Manual" /></td>
<td>Manual</td>
</tr>
<tr>
<td><img src="image" alt="Cleaning" /></td>
<td>Cleaning</td>
</tr>
<tr>
<td><img src="image" alt="Parameterization" /></td>
<td>Parameterization</td>
</tr>
<tr>
<td><img src="image" alt="Configuration" /></td>
<td>Configuration</td>
</tr>
<tr>
<td><img src="image" alt="Settings" /></td>
<td>Settings</td>
</tr>
<tr>
<td><img src="image" alt="Exit" /></td>
<td>Exit</td>
</tr>
</tbody>
</table>

Meaning of the colors

**Background color Grey**
- = present, but not active

**Background color White**
- = Interaction

**Border color Orange**
- = active state
  - i.e. gun is performing powder coating, fan is running, powder management system is ready

**Border color Red**
- = Error
Function keys

Open / close the cone caps

1. Press the key to open the cone caps
2. Press the key to close the cone caps

Open / close the doors

1. Press the key to close the doors
2. Press the key to open the doors

Error acknowledgement, alarm horn switches off.

Help key

Object data key

Reference point key

Light grid key
**Touch key fields**

- **Activated touch key fields**
- **Edit axis values, select or deselect axes**
- **Edit gun values and select or deselect**
- **Daily correction, select or deselect guns**
- **Conveyor simulation, if conveyor does not run or CAN bus sensor is not installed or defective**
- **Start and stop guns**
- **Start and stop axes**
- **Object data is loaded directly onto the gun and axis controller**
- **Object data are not downloaded**
Starting the equipment

General information

1. Turn main switch.

2. Turn key switch to turn on the control voltage. The control lamps illuminate. The OptiControl CM22 plant control starts the operating system, the PLC control and the operating software up to the start page.

3. Touch the screen
   The screen switches to the main page:
4. Push the **button**

5. Press the **or** **keys to select the desired user profile**

6. Push the **button**
7. Password Push

8. Input password and confirm with RET
Starting the equipment OptiControl CM22

9. Press the key

10. Press the key
    All axes move to their reference point position.
11. Move all other system components such as the powder management system into the proper operating mode (More information on this in the respective operating instructions)

12. Select operating mode:
   - Automatic operation mode
   - Manual operating mode
   - Cleaning operation mode

13. A message is displayed if the system components are not yet operational:
Starting the equipment OptiControl CM22

- The guns and axes start automatically based on the information from the light grid or the light barrier
- Object changes are carried out manually or automatically
- Daily correction of the powder output can be modified
- Guns can be selected or deselected
- Light grid can be controlled

1. Press the key to select the automatic operating mode (For manual operation see below)

Note:
For systems with a regulated secondary filter, the motor switches into the “ECO mode” during automated operation. The motor does not switch to a higher frequency until parts are moved through the object recognition module.

2. Press on the symbol to charge the coating objects (More information on this below)
3. Select desired object:
   - \( \uparrow \) = Jump to first object in the list
   - \( \uparrow \) = Page up
   - \( \uparrow \) = Up one row
   - \( \downarrow \) = Down one row
   - \( \downarrow \) = Page down
   - \( \downarrow \) = Jump to the last object in the list

4. Press the key to confirm the change

5. The CM22 is now ready for production
**Manual operating mode**

1. Press the button to select the manual operating mode

---

**Edit axis values, select or deselect**

1. Press the key

The following page is displayed:

<table>
<thead>
<tr>
<th>AXIS PARAMETER</th>
<th>value</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>object</td>
<td>A Z</td>
<td>20</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>A X</td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>No</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>B Z</td>
<td>20</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>B X</td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>No</td>
<td>20</td>
</tr>
</tbody>
</table>

---

Edit and start axes
If the symbol is orange, then the changes can be implemented directly.

Open object data management system

Save

Save as

Leave current page without saving, discard changes.

2. Press the key \( A \ Z \) 
The key turns orange \( A \ Z \) and the axis is selected. Only selected axes can be started.

3. Press the key 
The axes start

4. Press the key 
The axes stop

5. Touch the corresponding input field to change the position of the axes

6. By pressing the key , the error description is displayed

Axes start independently from the conveyor

1. Press the key 
The key turns orange \( \uparrow \) and the activated conveyor is simulated

2. Press the key 
The key turns orange \( \uparrow \) and the lifting devices move if the axes are selected
Edit gun values, select or deselect

1. Press the key

The following page is displayed:

<table>
<thead>
<tr>
<th>GUN DATA PARAMETER</th>
<th>D</th>
<th>TIME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>object</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A 01</td>
<td>80</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td>A 02</td>
<td>80</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td>A 03</td>
<td>80</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td>A 04</td>
<td>80</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td>B 01</td>
<td>80</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td>B 02</td>
<td>80</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td>B 03</td>
<td>80</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td>B 04</td>
<td>80</td>
<td>5.0</td>
<td>100</td>
</tr>
</tbody>
</table>

Select or deselect guns.

1. Press the key

The key turns orange and the gun is selected

Change gun data

Gun data can either be changed individually, for each station or for all guns at once.

Change gun data for station

1. Push the button

2. Station is selected. The values are automatically changed for the selected station

3. Touch the corresponding input field to change the gun data

Change gun data for all guns at once

1. Push the button

2. The values are automatically changed simultaneously for all guns

3. Touch the corresponding input field to change the gun data
4. Input the desired value and confirm with RET

5. Press the key to save the changes

**Guns start independently from the conveyor**

1. Press the key

   The key turns orange and the activated conveyor is simulated

2. Press the key

   The key turns orange and the guns spray powder if the guns are selected
Daily correction

The CM22 control unit offers the option of making a percent-based correction of the powder output for all guns at a station.

1. Press the corresponding key
2. Input desired value (max. 150, min. 50)
3. Press RET key to confirm

Simulation of the CAN bus sensor

1. Press the key
   The key turns orange and the CAN-bus sensor is simulated

Note:
This function is used if the CAN Bus sensor is defective or the conveyor is not operational. This simulation of the CAN Bus sensor allows for coating to be performed anyway.
Cleaning operation mode

1. Press the key [image]
   The following page is displayed:

2. Press [image] to close the booth doors

The cleaning of the booth floor functions at an increased cleaning frequency.
Move the axes into the cleaning position and the guns are cleaner from the exterior.

3. Switch the powder management system into cleaning mode.

4. Press the key. The external gun cleaning is started and the key turns orange.
   The exterior cleaning of the gun can be repeated using the key as often as desired.

5. Follow the cleaning steps for the respective powder management system (MagicCenter, OptiCenter or powder center).

6. Once the interior of the hoses have been cleaned, the guns and nozzles can then be cleaned manually.

7. Press the button to extend the guns completely out of the booth.

8. Press key to retract the gun into the booth.

9. Continue to follow the cleaning steps for the powder management system.

10. Open the booth doors and close the caps (if present).

11. Press to leave the cleaning mode.
12. The cleaning of the booth floor continues to run
13. Select the desired operating mode
14. Finish production
15. Push
16. Push
Object data administration

Load and save object data

Load object data

= Jump to first object in the list
= Page up
= Up one row
= Down one row
= Page down
= Jump to the last object in the list

Data search by name entry

Copy data

Insert data

Set default value

Abort
Copy and insert object data

1. Select object data

   Select object data

2. Press the key
   Object data is copied to the clipboard

3. With help of the arrow keys, select the object to which the data from the clipboard should be copied

4. Press the key
   Object data is copied to the current object

Indicate object data

By pressing the table field, a keyboard is displayed with which the data set can be named.
Error messages / Diagnosis

Main page error display

Error display

= Jump to first entry in the list
= Page up
= Up one row
= Down one row
= Page down
= Jump to the last entry in the list

Display error history (History)

Delete error history (History)

Jump forward to next info page

Acknowledge error
Check the light grid

Press the key to call up the following page:

Light grid - information

- Display of the width on the left and on the right
- Display the height (for beam interrupted vertically)
- Display of the segments
User levels and access

User level 0 (gema)
- The panel can be used without any limitation
- The level is reserved for Gema’s technical staff
- After 3 minutes, the system logs out automatically

User level 1 (user 1)
- No configuration possible
- Plant parameters and object-related data (gun and axis data) can be modified
- No automatic log-out

User level 2 (user 2)
- No configuration and parameterization possible
- Plant parameters cannot be modified
- Object-related data (gun and axis data) can be modified
- No automatic log-out

User level 3 (user 3)
- No configuration and parameterization possible
- The user can only activate existing object data and modify the daily correction
- If no user is logged in to the panel, then the user panel is locked
- No automatic log-out
Spare parts list

Ordering spare parts

When ordering spare parts for powder coating equipment, please indicate the following specifications:

- Type and serial number of your powder coating equipment
- Order number, quantity and description of each spare part

Example:

- **Type** OptiControl CM22
  - **Serial number** 1234 5678
  - Order no. 1009 230, 1 piece, SD card

When ordering cable or hose material, the required length must also be given. The spare part numbers of this bulk stock is always marked with an *.

Wearing parts are always marked with a #.

All dimensions of plastic hoses are specified with the external and internal diameter:

Example:

Ø 8/6 mm, 8 mm outside diameter (o/d) / 6 mm inside diameter (i/d)

**WARNING!**
Only original Gema spare parts should be used, because the explosion protection will also be preserved that way. The use of spare parts from other manufacturers will invalidate the Gema guarantee conditions!
# OptiControl CM22 - spare parts list

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Micro Touch Panel – XV102-5.7&quot;, complete</td>
<td>1008 968</td>
</tr>
<tr>
<td>2</td>
<td>Key switch 3, central position</td>
<td>268 038</td>
</tr>
<tr>
<td>3</td>
<td>Switch lower part - complete, maker</td>
<td>267 821</td>
</tr>
<tr>
<td>4</td>
<td>Warning lamp - 24 VDC, white</td>
<td>268 070</td>
</tr>
<tr>
<td>5</td>
<td>Illuminated push button - red</td>
<td>267 880</td>
</tr>
<tr>
<td>6</td>
<td>Standard auxiliary switch - ZBE-102, breaker</td>
<td>267 805</td>
</tr>
<tr>
<td>7</td>
<td>Emergency stop button - Ø 40 mm</td>
<td>267 856</td>
</tr>
<tr>
<td>8</td>
<td>Switch lower part - complete, breaker</td>
<td>268 160</td>
</tr>
<tr>
<td>9</td>
<td>Internal CAN connection</td>
<td>1001 828</td>
</tr>
<tr>
<td>10</td>
<td>Control signals connection AUX 2.3 - complete</td>
<td>1001 825</td>
</tr>
<tr>
<td>11</td>
<td>CAN OUT 2.6 connection - complete</td>
<td>1001 827</td>
</tr>
<tr>
<td>12</td>
<td>CAN IN 2.5 connection - complete</td>
<td>1001 826</td>
</tr>
<tr>
<td>13</td>
<td>Blind grommet - Ø 22,3 mm, black</td>
<td>203 653</td>
</tr>
<tr>
<td>14</td>
<td>CM20 adaptor</td>
<td>1001 806</td>
</tr>
<tr>
<td>15</td>
<td>Error push button cable set</td>
<td>1001 813</td>
</tr>
<tr>
<td>16</td>
<td>Warning lamp cable set</td>
<td>1001 812</td>
</tr>
<tr>
<td>17</td>
<td>Key switch cable set</td>
<td>1001 811</td>
</tr>
<tr>
<td>18</td>
<td>Emergency stop button cable set</td>
<td>1001 810</td>
</tr>
<tr>
<td>19</td>
<td>Touch Panel cable set</td>
<td>1001 814</td>
</tr>
<tr>
<td>20</td>
<td>Triple conductor end clamp - 6 mm</td>
<td>251 151</td>
</tr>
<tr>
<td>21</td>
<td>Triple conductor terminal - 2,5 mm², P</td>
<td>241 636</td>
</tr>
<tr>
<td>22</td>
<td>Triple conductor terminal end plate - 2,5 mm</td>
<td>241 660</td>
</tr>
<tr>
<td>23</td>
<td>Triple conductor terminal - 2,5 mm², PE</td>
<td>241 652</td>
</tr>
<tr>
<td>24</td>
<td>SD card</td>
<td>1009 230</td>
</tr>
</tbody>
</table>
OptiControl CM22 - spare parts (rear side)