

EN PSM (Power System Module / PCU)

DK 7200.001

DK 7856.201

DK 7856.203

DK 7856.204

Assembly, Installation and Operation



Microsoft Windows is a registered trademark of Microsoft Corporation.
Acrobat Reader is a registered trademark of Adobe Systems Incorporated.

Table of Contents

- 1 Documentation Notes 4**
- 1.1 Associated Documents.....4
- 1.2 Retention of the Documents.....4
- 1.3 Used Symbols4
- 2 Safety Notes 4**
- 3 Unit Description 5**
- 3.1 Housing5
- 3.2 Power Supply5
- 3.3 Network Properties5
- 3.4 Scope of Supply5
- 3.5 Accessories6
- 3.5.1 Required Accessories (CMC-TC).....6
- 3.5.2 Required Accessories (external power pack)7
- 3.6 Proper Use7
- 4 Assembly 8**
- 4.1 Notes for the Installation of the CMC-TC PU8
- 4.2 Assembling CMC-TC.....8
- 4.3 Installation of the PSM Module on the PSM Busbar8
- 4.4 Installation of the PCU in the 19"-level.....9
- 5 Installation 9**
- 5.1 Safety and Other Notes9
- 6 Operation with Power Pack..... 9**
- 6.1 Connecting Additional PSM Modules (power pack operation)9
- 6.2 Specifying the Current Limit Value (power pack operation)10
- 6.2.1 Specifying the Lower Current Limit Value (power pack operation)10
- 6.2.2 Specifying the Upper Current Limit Value (power pack operation)10
- 6.3 Specifying the PSM Module Addresses (power pack operation).....10
- 6.4 Configuring the Display (power pack operation)10
- 6.5 Resetting the PSM Module to the Factory Setting (power pack operation)11
- 7 Operation with CMC-TC..... 11**
- 7.1 Connecting Additional PSM Modules (CMC-TC operation)11
- 7.2 Specifying the PSM Module Addresses (CMC-TC operation).....11
- 7.3 Configuring the Display (CMC-TC operation) .11
- 7.4 Resetting the PSM Module to the Factory Setting (CMC-TC operation).....12
- 7.5 Setting up the PSM Module on the CMC-TC PU II (CMC-TC operation)12

- 8 Browser Monitoring (as of Software 2.45) 12**
- 8.1.1 Login.....12
- 8.1.2 Main Page View12
- 8.1.3 General Overview (Status Window)..13
- 8.1.4 Monitoring Using a Browser.....13
- 8.1.5 Configuring the Active PSM13
- 9 Maintenance and Cleaning15**
- 9.1.1 Cleaning15
- 10 Storage and Disposal..... 15**
- 10.1.1 Storage.....15
- 10.1.2 Disposal.....15
- 11 Customer Service 15**
- 12 Technical Specifications.....16**
- 13 Technical Glossary.....17**
- 14 Notes 18**

1 Documentation Notes

1 Documentation Notes

The audience for this guide is the technical specialists familiar with the assembly, installation and operation of the PSM modules.

- You should read this operating guide prior to the commissioning and store the guide so it is readily accessible for subsequent use.

Rittal cannot accept any liability for damage and operational malfunctions that result from the non-observance of this guide.

1.1 Associated Documents

The guides for other PSM components and their safety notes also apply together with this guide.

1.2 Retention of the Documents

This guide and all associated documents are part of the product. They must be given to the operator of the unit and must be stored so they are available when needed.

1.3 Used Symbols

The following safety and other notes are used in this guide:

Symbol for a handling instruction:

- This bullet point indicates that you should perform an action.

Safety and other notes:



Danger!
Immediate danger to health and life!



Warning!
Possible danger for the product and the environment!



Note!
Useful information and special features.

2 Safety Notes

Observe the subsequent general safety notes for the installation and operation of the unit:

- Assembly and installation of the PSM busbar, in particular for wiring the enclosures with mains power, may be performed only by a trained electrician. Other tasks associated with the PSM, such as the assembly and installation of system components with tested standard connectors, and the operation and configuration of the PSM modules may be performed only by instructed personnel.
- Observe the valid regulations for the electrical installation for the country in which the unit is installed and operated, and the national regulations for accident prevention. Also observe any company-internal regulations (work, operating and safety regulations).
- Prior to performing the wiring on the PSM system, it must be disconnected from the power supply and protected against being switched on again.
- Use only genuine or recommended parts and accessories (see Section 3.5 Accessories). The use of other parts can void the liability for any resulting consequences.
- Do not make any changes to the PSM system that are not described in this guide or in the associated guides.
- The operational safety of the unit is guaranteed only for its approved use. The limit values stated in the technical specifications (see Section 12 Technical Specifications) may not be exceeded under any circumstances. In particular, this applies to the permitted ambient temperature range and to the permitted IP protection category. When used with a higher required IP protection category, the Rittal PSM system must be installed in a housing or enclosure with a higher IP protection category.
- Operation of the PSM system in direct contact with water, aggressive media, or inflammable gases and fumes is prohibited.
- In addition to these general safety notes, also observe any special safety notes listed for the specific tasks in the individual sections.

3 Unit Description

The PSM system is modular socket module system that can be simply plugged into a PSM busbar as appropriate for the requirements. The PSM modules are available in various forms. All PSM modules described in this guide can be monitored and administered in conjunction with the Rittal CMC-TC. The individual mains sockets can be activated for each PSM module. Because all connectors have shock-hazard protection, an electrician is not required for the installation and deinstallation of the PSM modules.

3.1 Housing



Abb. 1 PSM module front side

The PSM module is located in its own aluminium housing. The catches on the outer edges are used to simply latch the PSM module into the pre-installed PSM busbar. Each of the consumer slots located on the front side is standardised and made of plastic. The PSM module has a double 7-segment display on the front side. If this module is connected to the Rittal CMC-TC PU II or to the external power pack (DK 7201.210), the currently consumed current will be displayed. There are also two LEDs located on the front side that indicate the current circuit on which the PSM module is being operated.

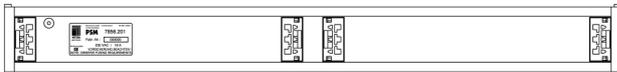


Abb. 2 PSM module rear side

The power supply sockets are located on the rear side of the PSM module. When the PSM module is mounted in the PSM busbar it will be supplied with power.

3.2 Power Supply

When the PSM module is mounted in the PSM busbar supplied with power, the PSM module will be immediately supplied with power and all slots activated as factory setting. The appropriate connection cable to connect consumers to the PSM module are described in Section 3.5 Accessories.

The power supply for the 7-segment display is established either with the connection to the CMC-TC PU II or with the use of an external power pack (DK 7201.210). The use of the power pack requires the appropriate country connection cable (see Section 3.5 Accessories).

3.3 Network Properties

The connection of an RJ45 network cable to the Processing Unit allows the PSM module to be administered and monitored over a network. For details, consult the CMC-TC PU II Operating Instructions.

The following values can be monitored and administered:

- Switching on and off of the slots
- Setting of the lower current limit value for issuing an alarm
- Setting of the upper current limit value for issuing an alarm
- Fetch the momentary current consumption
- Status of the PSM module
- Circuit connection (circuit 1 or 2)
- Time-controlled switching on and off (e.g. reboot of the connected consumers)
- Establish switching combinations (e.g. various slots will be switched off when a temperature alarm is issued)
- Alarm forwarding to an SNMP, SMS or e-mail recipient

3.4 Scope of Supply

The unit will be delivered in a packaging unit in fully-assembled state.

- Check the delivered components for completeness.
- Check that the packaging does not show any signs of damage.

Number	Designation
1	PSM module
2	1 RJ45 connection cable
1	Operating Instructions
1	Checklist for commissioning in German/English

Tab. 1 Scope of supply

3 Unit Description

EN

3.5 Accessories

3.5.1 Required Accessories (CMC-TC)

The basic prerequisite for the operation of the PSM module is a fully installed PSM busbar supplied with power.

If you want to administer and monitor the PSM module over the network, you require the following accessories.

Accessories	Designation	Packs of	Required	Model No.
CMC-TC components	CMC-TC Processing Unit II	1	Yes	7320.100
	CMC-TC power pack for the CMC-TC Processing Unit II	1	Yes	7320.425
	Mounting bracket for the CMC-TC power pack	1	Yes	4597.000
	Length 0.5 m	1	Yes	7320.470
Length 2 m	7320.472			
Length 5 m	7320.475			
Length 10 m	7320.481			
Length 15 m	7320.485			
Mounting unit or module	Mounting unit	1	Yes, depending on the application	7320.440
	Cable clamp strap for the mounting unit	1		7611.000
	Mounting module	1	Yes, depending on the application	7320.450
Connection cable for the DK 7320.425 power pack	Connection cable IEC connector Country version D	1	Yes, 1x for power pack	7200.210
	Connection cable IEC connector Country version GB	1		7200.211
	Connection cable IEC connector Country version F/B	1		7200.210
	Connection cable IEC connector Country version CH	1		7200.213

	Connection cable IEC connector Country version USA/CDN, UL-approval FT1/VW1	1		7200.214
	Extension cable IEC connector and socket	1		7200.215
Connection cable for consumers	C19/C20 connection cable, 2 m	1	Yes, depending on the application	7200.217
	C13/C14 connection cable, 0.5 m	1		7856.014
	C13/C14 connection cable, 2 m	1		7200.215
	Country variant connection cable (D) earthing-pin plug / C19	1		7200.216
	Country variant connection cable (D) earthing-pin plug / C14	1		7200.210

Tab. 2 Required accessories (CMC-TC)

3.5.2 Required Accessories (external power pack)

The basic prerequisite for the operation of the PSM module is a fully installed PSM busbar supplied with power.

You require the following accessories if you want to operate the PSM module without monitoring.

Accessories	Designation	Packs of	Required	Model No.
Power pack	Power pack for stand-alone operation	1	Yes	7201.210
	Mounting bracket for the CMC-TC power pack	1	Yes	4597.000
CMC-TC RJ45 connection cable	Length 0.5 m	1	Yes	7320.470
	Length 2 m			7320.472
	Length 5 m			7320.475
	Length 10 m			7320.481
	Length 15 m			7320.485
Connection cable for the DK 7201.210 power pack	Connection cable IEC connector Country version D	1	Yes, 1x for power pack	7200.210
	Connection cable IEC connector Country version GB	1		7200.211
	Connection cable IEC connector Country version F/B	1		7200.210
	Connection cable IEC connector Country version CH	1		7200.213
	Connection cable IEC connector Country version USA/CDN, UL approval FT1/VW1	1		7200.214
	Extension cable IEC connector and socket	1		7200.215
Connection cable for consumers	C19/C20 connection cable, 2 m	1	Yes, depending on the application	7200.217
	C13/C14 connection cable, 0.5 m	1		7856.014

C13/C14 connection cable, 2 m	1	7200.215
Country variant connection cable (D) earthing-pin plug / C19	1	7200.216
Country variant connection cable (D) earthing-pin plug / C14	1	7200.210

Tab. 3 Required accessories (external power pack)

3.6 Proper Use

The Rittal PSM module serves as a power supply system and power distribution system. It can be connected to the Rittal CMC-TC monitoring system.

A use different from that described here is considered to be an improper use. Rittal cannot accept any liability for damage resulting from the improper use or the non-observance of this guide. The guides for the used accessories may apply.

4 Assembly

4 Assembly

4.1 Notes for the Installation of the CMC-TC PU

Install the CMC-TC PU in an enclosure or in a suitable housing system so that it also has additional protection from external effects. Also consider the permitted ambient temperature and humidity operational areas and the application-related required IP degree of protection (see CMC-TC PU Operating Instructions).

4.2 Assembling CMC-TC

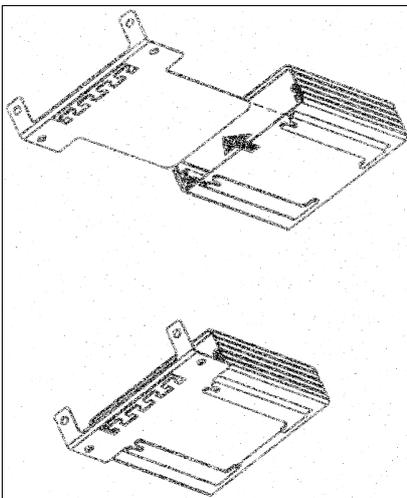


Abb. 3 Assembly with the mounting module

- Move the CMC-TC PU on the retaining plate of the mounting module. Ensure that the retaining plate sits between the guide rails of the CMC-TC PU.

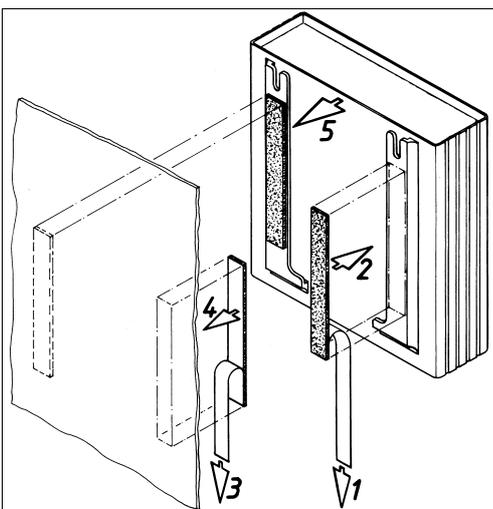


Abb. 4 Assembly with Velcro fasteners

- Take the self-adhesive Velcro fasteners from the supplied accessories and remove the protective foil from the Velcro fasteners.
- Ensure that the adhesion surfaces are free from grease and dust.

- Attach the Velcro fasteners to the housing of the CMC-TC PU and position the CMC-TC PU at the required attachment location.

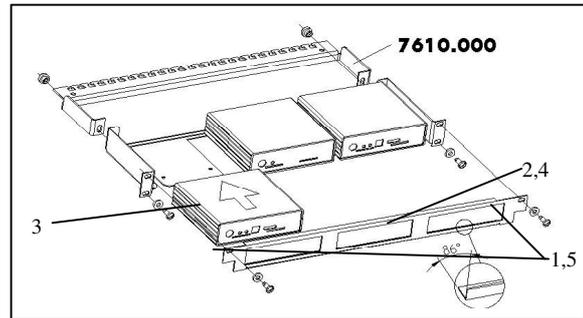


Abb. 5 Assembly with 1 U mounting unit

1. Remove the two upper screws of the trim piece.
2. Remove the trim piece.
3. Move the CMC-TC PU on the retaining plate of the mounting unit. Ensure that the retaining plate sits between the guide rails of the CMC-TC PU.
4. Replace the trim piece on the mounting unit.
5. Screw the trim piece back on the 1 U mounting unit.

4.3 Installation of the PSM Module on the PSM Busbar

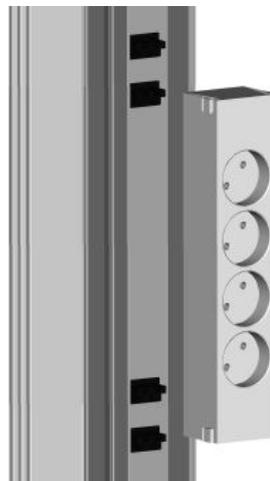


Abb. 6 Installation of the PSM module on the PSM busbar

Remove the PSM module from its packaging. Prior to the installation, decide which infeed of the PSM bus is to supply the module. Latch the PSM module to the PSM busbar as shown in the upper figure.

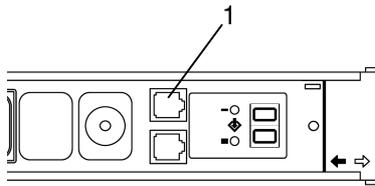


Abb. 7 Insert the RJ45 cable

Now remove the RJ45 cable from the supplied equipment and insert one end of the RJ45 cable in the RJ45 socket (1). To ensure the correct latching of the plug, pay attention during the insertion to the audible latching noise of the RJ45 plug.

To remove the plug, press on the latching lug of the RJ45 plug and pull carefully on the plug.

4.4 Installation of the PCU in the 19"-level

The Rittal PCU (7200.001) has the identical construction as the PSM modules for the PSM busbar except that it has mounting brackets on the sides and its own 1-phase connection cable. This allows the PCU to be installed directly in the 19"-level of the rack.

By turning the mounting brackets, the PCU can also be installed vertically to the 19"-level of the rack.

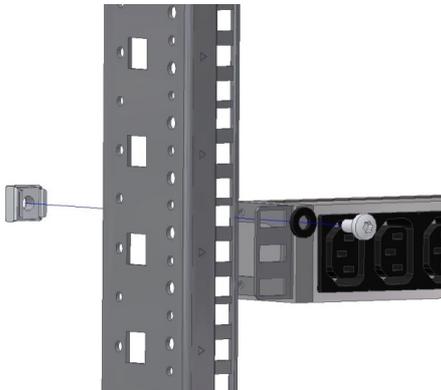


Abb. 8 Installation of the PCU to the 19"-level

5 Installation



Danger!

The assembly and installation of the PSM busbar may be performed only by trained specialists.

5.1 Safety and Other Notes

- The Rittal PSM module must only be operated with a PE connection. The protective earth connection is made when the PSM module latches into the PSM busbar.
- The electrical connection voltage and frequency must conform to the rated values specified in the technical specifications (see Section 12 Technical Specifications).
- Before commencing any work on the Rittal PSM busbar, it must always be disconnected from the power supply and secured to prevent inadvertent reconnection.
- Secure the connection cables using cable ties in immediate vicinity of the connection of the PSM busbar.
- To prevent unnecessary cable losses, the used cable lengths must not exceed the lengths specified in the technical specifications (see Section 12 Technical Specifications).

6 Operation with Power Pack

Insert the RJ45 cable in the RJ45 socket of the power pack (7201.210). Ensure that you hear an audible click when the RJ45 plug latches.

To remove the plug, press on the latching lug of the RJ45 plug and pull carefully on the plug.

Insert the appropriate country connection cable in the power pack and in a non-switchable PSM module. The display of the PSM module now indicates the circuit and "0.0" appears in the display.

Two 3-colour LEDs (green, orange, red), labelled "I" and "II".

These LEDs each flash in accordance with the installation position of the module.

Parameter	Explanation
Green	OK
Orange	Warning, fuse triggered or mains voltage missing.
Red	Maximum or minimum current limit value overshoot or under-shot.

6.1 Connecting Additional PSM Modules (power pack operation)

Up to four modules can be connected in series. Latch the module on the PSM busbar as described

6 Operation with Power Pack

previously. Insert one end of the RJ45 cable in the free socket of the first module and the other end in the RJ45 socket of the new module. Ensure that you hear an audible click when the RJ45 plug latches.

To remove the plug, press on the latching lug of the RJ45 plug and pull carefully on the plug.

6.2 Specifying the Current Limit Value (power pack operation)

You can specify current limit values for alarms. If these values are undershot or overshoot, the 7-segment flashes and displays the momentary current value. The pushbutton on the PSM module must be used to set the current limit values. Proceed as follows:

6.2.1 Specifying the Lower Current Limit Value (power pack operation)

Press the pushbutton for three seconds. An "L" appears in the display.

Press the pushbutton again for three seconds until the "0" digit appears in the display.

Press the pushbutton briefly to specify the lower alarm current limit value.

To save the current limit value, press the pushbutton for three seconds. An "H" appears in the display.

Wait a few seconds until the display in the status display (momentary current value) changes.

6.2.2 Specifying the Upper Current Limit Value (power pack operation)

Press the pushbutton for three seconds. An "L" appears in the display.

Press the button once briefly until an "H" appears in the display.

Press the pushbutton again for three seconds until "15" appears in the display.

Press the pushbutton briefly to specify the upper alarm current limit value.

To save the current limit value, press the pushbutton for three seconds. An "A" appears in the display.

Wait a few seconds until the display in the status display (momentary current value) changes.

6.3 Specifying the PSM Module Addresses (power pack operation)

You must assign an address to each module for stand-alone operation and also for series-connected PSM modules. Proceed as follows:

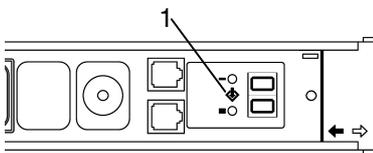


Abb. 9 Assign addresses (power pack operation)

Press the pushbutton (1) on the PSM module for three seconds. An "L" appears in the display.

Then press the pushbutton twice briefly. An "A" appears in the display.

Now press the pushbutton for three seconds. A "0" appears in the display.

Press the button briefly until the address "1" appears in the display.

To save the address, press the pushbutton for three seconds. A small rectangle appears in the display.

Wait a few seconds until the display in the status display (momentary current value) changes.

Now assign an address to each module as described previously. The second module in series receives the address "2", etc.

If a module is connected to another power pack, the address begins with "1" again.

6.4 Configuring the Display (power pack operation)

The PSM module has an integrated position sensor. It is responsible for the correct reading mode of the display. As factory setting, the position sensor is activated. This means that when the PSM module is turned on the PSM busbar (to circuit 2), the display is not at the top but at the bottom. The display will be turned automatically so that the values can be read optimally.

If the PSM busbar is installed with the PSM modules in the twin bottom, the position sensor does not know how the display is to be. This is also the case for the horizontal installation of the PCU (7200.001) in the 19"-level.

To permanently assign the position of the display, proceed as follows:

Press the pushbutton for three seconds. An "L" appears in the display.

Press the pushbutton twice briefly until a small rectangle appears.

Press the pushbutton again for three seconds until "3" appears in the display.

Press the pushbutton briefly to select the position of the display.

- Digit "1": when the PSM module with the display is installed at the top (the black arrow on the PSM module points up).
- Digit "2": when the PSM module with the display is installed at the bottom (the red arrow on the PSM module points up).
- Digit "3": Position sensor is activated (automatic display position).

To save the current limit value, press the pushbutton for three seconds. A "CL" appears in the display.

Wait a few seconds until the display in the status display (momentary current value) changes.

6.5 Resetting the PSM Module to the Factory Setting (power pack operation)

You can reset the PSM module to the factory setting. All settings, such as current limit values, addresses and position sensor, will be lost. Proceed as follows:

Press the pushbutton (1) on the PSM module for three seconds. An "L" appears in the display.

Then press the pushbutton four times briefly. A flashing "CL" appears in the display.

Now press the pushbutton for three seconds. The display extinguishes for several seconds and then appears with the momentary current value.

Reconfigure the PSM module.

7 Operation with CMC-TC

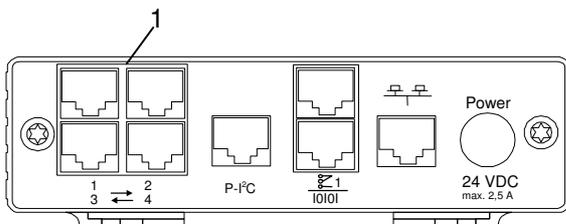


Abb. 10 Connection to the CMC-TC PU II

Insert the RJ45 cable from the PSM module in a free RJ45 socket (1) with the connection identification 1-4. Ensure that you hear an audible click when the RJ45 plug latches.

To remove the plug, press on the latching lug of the RJ45 plug and pull carefully on the plug.

7.1 Connecting Additional PSM Modules (CMC-TC operation)

Up to four modules can be connected to a port of the CMC-TC PU II. The modules are connected successively using the supplied cables. If the cable length of the RJ45 cable is too short, a standard RJ45 patch cable can be used (but no cross-over cable).

If you want to connect more than four modules to the CMC-TC PU II, you must use the next free RJ45 socket (1) on the CMC-TC PU II.

Latch the module on the PSM busbar as described previously. Insert one end of the RJ45 cable in the free socket of the first module and the other end in the RJ45 socket of the new module. Ensure that you hear an audible click when the RJ45 plug latches.

To remove the plug, press on the latching lug of the RJ45 plug and pull carefully on the plug.

7.2 Specifying the PSM Module Addresses (CMC-TC operation)

You must assign an address to each module for stand-alone operation and also for series-connected PSM modules. Proceed as follows:

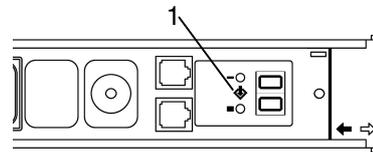


Abb. 11 Assigning addresses (CMC-TC)

Press the pushbutton (1) on the PSM module for three seconds. An "L" appears in the display.

Then press the pushbutton twice briefly. An "A" appears in the display.

Now press the pushbutton for three seconds. A "0" appears in the display.

Press the button briefly until the address "1" appears in the display.

To save the address, press the pushbutton for three seconds. A small rectangle appears in the 7-segment display. Now assign an address to each module as described previously. The second module in series receives the address "2", etc.

If a module is connected to another socket of the CMC-TC PU II or to another power pack, the address begins with "1" again.

7.3 Configuring the Display (CMC-TC operation)

The PSM module has an integrated position sensor. It is responsible for the correct reading mode of the display. As factory setting, the position sensor is activated. This means that when the PSM module is turned on the PSM busbar (to circuit 2), the display is not at the top but at the bottom. The display will be turned automatically so that the values can be read optimally.

If the PSM busbar is installed with the PSM modules in the twin bottom, the position sensor does not know how the display is to be. This is also the case for the horizontal installation of the PCU (7200.001) in the 19"-level.

To permanently assign the position of the display, proceed as follows:

Press the pushbutton for three seconds. An "L" appears in the display.

Press the pushbutton twice briefly until a small rectangle appears.

Press the pushbutton again for three seconds until "3" appears in the display.

Press the pushbutton briefly to select the position of the display.

- Digit "1": when the PSM module with the display is installed at the top (the black arrow on the PSM module points up).

8 Browser Monitoring (as of Software 2.45)

- Digit "2": when the PSM module with the display is installed at the bottom (the red arrow on the PSM module points up).
- Digit "3": Position sensor is activated (automatic display position).

To save the current limit value, press the pushbutton for three seconds. A "CL" appears in the display. Wait a few seconds until the display in the status display (momentary current value) changes.

7.4 Resetting the PSM Module to the Factory Setting (CMC-TC operation)

You can reset the PSM module to the factory setting. All settings, such as current limit values, addresses and position sensor, will be lost. Proceed as follows:

Press the pushbutton (1) on the PSM module for three seconds. An "L" appears in the display.

Then press the pushbutton four times briefly. A flashing "CL" appears in the display.

Now press the pushbutton for three seconds. The display extinguishes for several seconds and then appears with the momentary current value.

Reconfigure the PSM module.

7.5 Setting up the PSM Module on the CMC-TC PU II (CMC-TC operation)

If power is present at the PSM module and an address has been assigned, it will be detected automatically by the CMC-TC PU II.

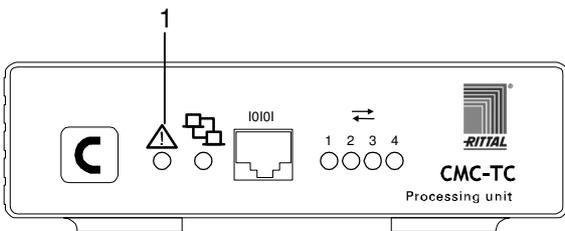


Abb. 12 PSM module detection

Key

- 1 Alarm LED

For the detection of the PSM module, the alarm LED begins to flash successively red, yellow and green. Continue to press the C button on the front side of the CMC-TC PU II until the alarm LED illuminates green continually.

8 Browser Monitoring (as of Software 2.45)

Open your browser as usual. Enter the IP address of the CMC-TC Processing Unit in the address line. The login window appears.

8.1.1 Login

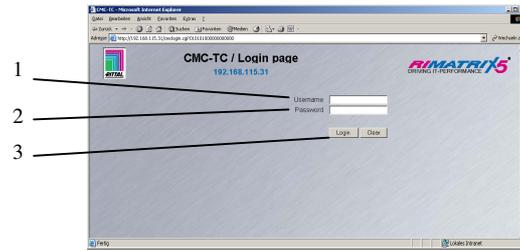


Abb. 13 Login window

Key

- 1 User name
- 2 Password
- 3 Login or Clear button

Enter in the login window the http user name and the http password of the Processing Unit.

Factory setting:

User name: admin

Password: admin

To confirm the input, click the Login button. To clear the input, click the Clear button.

8.1.2 Main Page View

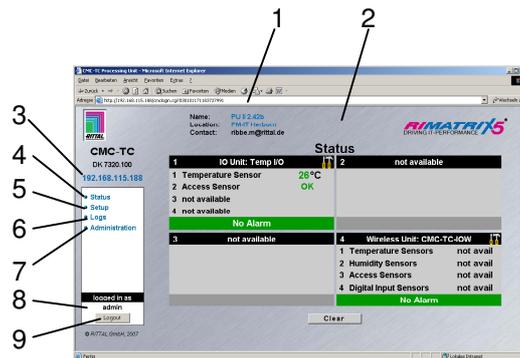


Abb. 14 CMC-TC main page overview

Key

- 1 Address bar
- 2 Status window
As shown above
- 3 IP address of the Processing Unit
- 4 Link to the main page view
- 5 Setup link
- 6 Alarm and event logging link
- 7 Administration link
- 8 User name
- 9 User logout

8.1.3 General Overview (Status Window)

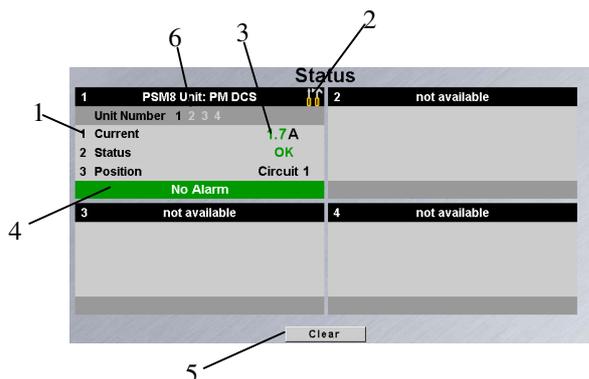


Abb. 15 Sensors overview

Key

- 1 Connection number and sensor name
- 2 Link for configuring the sensor
- 3 Status display of the sensor
- 4 Warning and alarm status of the sensor
green: no warning/alarm
yellow: warning
red: alarm (malfunction)
- 5 Acknowledge events
Click the Clear button to start timeouts, configuration changes or the updating of all connected sensors. This causes the CMC-TC PU to be queried again and the web page rebuilt.
- 6 Connected PSM modules
Black digit: Status display of the called PSM module
White digit: Connected PSM module
Gray digit: Unavailable or not connected PSM modules

8.1.4 Monitoring Using a Browser

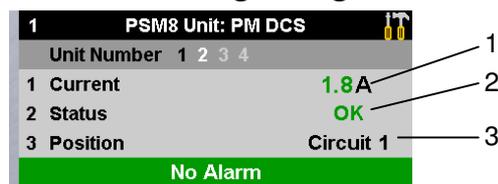


Abb. 16 PSM module overview

- Current:** Display of the momentary current value of the consumers (server, etc.) connected to the ActivePSM.
- Status:** Indicates whether the specified current limit value is observed. A message will be issued if the current lies outside the limit values.
- Position:** Indicates on which circuit the module is connected (for redundant supply of the PSM busbars).

8.1.5 Configuring the Active PSM

Navigation	
Main menu – Status – Click the first current	
Parameter	Explanation
1...n	Connection number of the sensor.
Type	Sensor type. Will be detected automatically.
Sensor Status	Sensor status. Green = OK, red = alarm.
Message Text	The message text which is also transferred when a warning/alarm message is sent. Enter here a designation that uniquely identifies your sensor, e.g. "Current rack 1".
Setpoint High	Current limit which when overshoot causes an alarm message to be issued.
Setpoint Low	Current limit which when undershoot causes an alarm message to be issued.
Delay	Time in seconds how long the power socket should remain switched on.
Relay Output	Off = manual disable of the PSM module; On = manual enable of the PSM module.
Accept	Accept the changes.
Reset	Reset all inputs that have not yet been saved with the Accept button.

Navigation	
Main menu – Status – Click the second status	
Parameter	Explanation
1...n	Connection number of the sensor.
Type	Sensor type. Will be detected automatically.
Sensor Status	Sensor status. Green = OK, red = alarm.
Alarm Relay	Whether (enable) or not (disable) an alarm relay should switch in the event of a warning/alarm.

8 Browser Monitoring (as of Software 2.45)

Alarm Beeper	Whether (enable) or not (disable) an audio signal should be issued in the event of a warning/alarm.
Alarm Reset	Should a warning/alarm be acknowledged automatically (Auto) or does it need to be acknowledged by the operator (Manual).
Trap Receiver	Specify which of the entered trap receivers is to be sent warning/alarm messages.
Scheduled Alarm Off	Specify which alarm configuration should be enabled or disabled. The individual functions can be setup from the "Setup – Timer" menu item.
Send SMS	You can enter up to four mobile wireless numbers that you entered previously at Setup – SMS Unit; each number is separated with the ampersand character "&" (e.g. 1&2&3&4).
Send eMail	You can enter up to four eMail addresses that you entered previously at Setup – eMail (SMTP); each number is separated with the ampersand character "&" (e.g. 1&2&3&4).
Accept	Accept the changes.
Reset	Reset all inputs that have not yet been saved with the Accept button.

Send eMail	You can enter up to four eMail addresses that you entered previously at Setup – eMail (SMTP); each number is separated with the ampersand character "&" (e.g. 1&2&3&4).
Accept	Accept the changes.
Reset	Reset all inputs that have not yet been saved with the Accept button.

Navigation	
Main menu – Status – Click the second status	
Parameter	Explanation
1...n	Connection number of the sensor.
Type	Sensor type. Will be detected automatically.
Sensor Status	Sensor status. Green = OK, red = alarm.
Trap Receiver	Specify which of the entered trap receivers is to be sent warning/alarm messages.
Send SMS	You can enter up to four mobile wireless numbers that you entered previously at Setup – SMS Unit; each number is separated with the ampersand character "&" (e.g. 1&2&3&4).

9 Maintenance and Cleaning

The Rittal PSM module is a maintenance-free system. The housing does not need to be opened for the installation or during operation.



Note!

Opening the housing or any accessory components will void any warranty and liability claims.

9.1.1 Cleaning



Warning!

Danger of damage!
Do not use any aggressive substances, such as white spirit, acid, etc., for cleaning because such substances can damage the unit.

Use a slightly moistened soft cloth to clean the housing.

10 Storage and Disposal

10.1.1 Storage

If the device is not used for a longer period, we recommend that it is disconnected from the mains power supply and is protected from dampness and dust.

Further information concerning the operating conditions is contained in the technical specifications.

10.1.2 Disposal

Because the PSM module consists primarily of the housing and PCB, the unit must be disposed of through the electronic waste recycling system when it is no longer required.

11 Customer Service

If you have any technical questions or questions concerning our product spectrum, contact the following service address:

Tel.: +49 (0)2772/505-1855

<http://www.cmc-tc.com>

eMail: info@rittal.de



Note!

To allow us to process your enquiry quickly and correctly, please always specify the article number in the subject line for eMails.

Further information and the current operating guides and updates of the Rittal CMC-TC are available for download under Security on the Rimatrix5 homepage.

12 Technical Specifications

EN

12 Technical Specifications

Designation	PSM module (7856.201)
Designation	PSM module (7856.203)
Designation	PSM module (7856.204)
Housing	
Housing type	Aluminium, anodised, plastic caps
Height	500 mm
Width	50 mm
Depth	45 mm
Weight without packaging	approx. 0.5 kg
Earthing	Yes
Protection category	IP 20 to EN 60529
Operational area	
Temperature	+5 °C to 45 °C +41 °F to 113 °F
Humidity	5% to 95% relative humidity, non-condensing
Storage temperature	-20 °C to 60 °C -4 °F to 140 °F
Voltage range	1-phase, 110-230 V AC, 50/60 Hz
Max. current	10-16 A for 230 V AC, 10-15 A for 110 V AC, depending on the country version, observe the rating plate
Max. start-up current	25 A per slot for ohmic load, 4 seconds at 10% ED
Max. switching load	4000 VA per slot
Thermal protection	16 A at 25 °C; please note rating plate for busbar! Derating factor 0.55 at 55 °C housing temperature

Technical specifications (7856.201, .203, .204)

Designation	PSM module (7200.001)
Housing	
Housing type	Aluminium, anodised, plastic caps
Height	1 height unit, 44.45 mm
Width	482.6 mm, (19")
Depth	45 mm
Weight without packaging	approx. 0.5 kg
Earthing	Yes
Protection category	IP 20 to EN 60529
Operational area	
Temperature	+5 °C to 45 °C +41 °F to 113 °F
Humidity	5% to 95% relative humidity, non-condensing
Storage temperature	-20 °C to 60 °C -4 °F to 140 °F
Voltage range	1-phase, 110-230 V AC, 50/60 Hz
Max. current	10-16 A for 230 V AC, 10-15 A for 110 V AC, depending on the country version, observe the rating plate
Max. start-up current	25 A per slot for ohmic load, 4 seconds at 10% ED
Max. switching load	4000 VA per slot
Thermal protection	16 A at 25 °C; please note rating plate for busbar! Derating factor 0.55 at 55 °C housing temperature
Connection	Wieland GST18, 3-pole with appropriate adapter

Technical specifications (7200.001)

13 Technical Glossary

CMC-TC

CMC-TC (Computer Multi Control - Top Concept) is a Rittal product used to monitor network enclosure components.

Internet browser

An Internet browser can be used to display html pages (and pages that conform to a similar standard). In the case of CMC-TC PU, they can be configured using a user interface displayed with an Internet browser.

Link

A link causes a jump to another Internet page or establishes a connection between two Internet pages.

SNMP (Simple Network Management Protocol)

The SNMP is a simple network management protocol based on TCP/IP. It was developed to monitor network components on a central management station.

Telnet

Telnet is a protocol for guest access to a remote server. The Telnet program provides the required client functions of the protocol.

Trap

Trap is the sending of SNMP messages.

Trap Receiver

The trap receiver is the receiver of SNMP messages.

Web access

The Web Access is used to define the access possibility via the Internet.

PSM

PSM (Power System Module) is a modular socket strip that can be assigned to satisfy the customer requirement. It consists of a busbar onto which the individual PSM modules can be clipped.

14 Notes

EN

14 Notes

