

EN Automatic Door Opening Control Unit
DK 7320.790
Assembly, Installation and Operation



Documentation Notes

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1. Documentation Notes

The audience for this guide is the technical specialists familiar with the assembly, installation and operation of the Automatic Door Opening Control Unit.

- You should read this operating guide prior to the commissioning and store it 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 CMC-TC components and their safety notes also apply together with this guide. This guide is also available as a file on the CD-ROM that accompanies the Processing Unit II or can be downloaded from <http://www.rimatrix5.com>

German: 7320100VXXd.pdf

English: 7320100VXXe.pdf

To view the guide, you require the Acrobat Reader program; Acrobat Reader can be downloaded from www.adobe.com

1.2. CE certification

The declaration of conformity is contained in chapter 5.

1.3. 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.

1.4. Used symbols

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

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:

The Control Unit can only be used with the Rittal CMC-TC system, other than when NC contacts are used.

- The following documents apply: the operating/safety instructions for the Processing Unit (7320.100). This guide contains the detailed description of the configuration of the Control Unit in conjunction with other CMC-TC components. It also lists the conditions of use, safety instructions and warranties that must be observed.
- The operational safety of the unit is guaranteed only for its approved use. The limit values stated in the technical specifications (see the Technical Specifications section) may not be exceeded under any circumstances. In particular, this applies to the permitted ambient temperature range and to the permitted IP protection category. If a higher IP protection category is required, the Rittal Automatic Door Opening Control Unit must be installed in a housing or enclosure with a higher IP protection category.
- The provided connection cables or article 7320.470, 7320.472 or 7320.481 are required to connect the unit. The specified Cat5 cable can also be used for special applications. The operating instructions manual for the Processing Unit (7320.100) contains a detailed description. If necessary, please contact our headquarters.
- It is imperative that all leads are connected separately from cables carrying the supply voltage.
- The Control Unit must be used exclusively within the specified environmental limits.
- The Control Unit must not be opened. The unit does not contain any parts that need servicing.
- Before connecting the unit, ensure that the Control Unit is appropriate for I/O Unit, Basic CMC or LCP Plus and they have the required software version: Processing Unit II 7320.100 (software version as of V2.60) with I/O Unit, Basic CMC 7320.111 (software version as of V2.60), LCP Plus 3301.480 (software version as of V6.21).
- Safety devices must not be deactivated.
- It is imperative that the Control Unit does not come into direct contact with water (e.g. dew), oil, or aggressive substances.
- The unit must not be operated in environments subject to flammable gases or vapours. The unit must be installed in a cabinet/rack to protect it from water and dust.
- There must be no voltage across the CMC-TC system when the Control Unit is connected to the I/O Unit, Basic CMC or LCP Plus.
- The fault limits for analogue inputs can increase in an environment subject to electromagnetic interference.
- When NC contacts are used, the connected systems must be designed for 30 V DC / 1 A.
- Additional measures can improve the EMC resistance. If necessary, please contact our headquarters.
- In environments subject to increased electromagnetic interference (e.g. industrial areas), appropriate additional protective measures can ensure the EMC resistance. If necessary, please contact our headquarters.
- The conditions of use / safety instructions listed in the instructions must be observed.
- All warranty claims on the grounds of damage become void when this damage is incurred by failure to observe these instructions / conditions of use or the instructions for the processing unit 7320.100. Rittal assumes no liability for consequential damage!
- Rittal assumes no liability for any damage to property or bodily injury incurred by improper use or failure to observe the safety instructions. Every warranty claim becomes void in such cases!

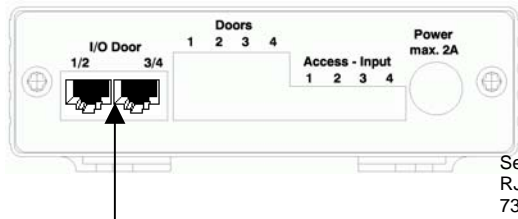
3. Unit Description



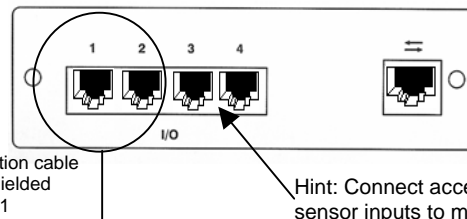
Note!

For reasons of clarity, this operating guide does not contain all detailed information nor can it take into account every conceivable case of installation, operation and maintenance. Specifications subject to alterations at any time. The German wording shall apply in cases of doubt.

**Automatic Door Opening:
Control Unit 7320.790**



**Sensor unit:
I/O Unit: 7320.210**

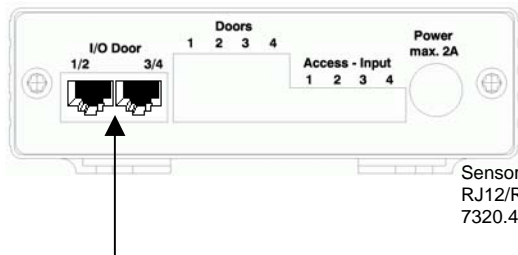


Sensor unit connection cable
RJ12/RJ12 Cat5 shielded
7320.470 / .472 / .481

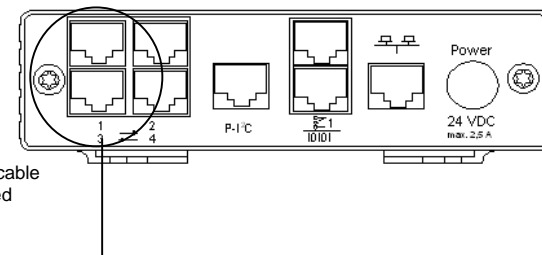
Hint: Connect access sensors 73 sensor inputs to monitor the door

Fig. 1 Connecting the Automatic Door Opening with an I/O Unit

**Automatic Door Opening:
Control Unit 7320.790**



**Basic CMC 7320.111 /
LCP Plus 3301.480**



Sensor unit connection cable
RJ12/RJ12 Cat5 shielded
7320.470 / .472 / .481

Fig. 2 Connecting the Automatic Door Opening with Basic CMC / LCP Plus



Warning!

When the Automatic Door Opening Unit is connected with an I/O Unit, Basic CMC or LCP Plus, both devices must be disconnected from the power supply!

The Control Unit can be connected to the I/O Unit 7320.210 or to the Basic CMC 7320.111/ LCP Plus 3301.480 (maximum two units for full assignment). The Control Unit provides the function for the connection of up to four Door Kits 7320.791 / 7320.792 for controlling a maximum of four doors, where two doors can be controlled by a CMC-TC channel using the CMC-TC system.

In addition, the provided four NC contacts can be assigned individually.

The Control Unit receives an identification, so it can be detected and set-up automatically by the CMC-TC system. The operation of the sensor unit requires the following components:

- Power pack (e.g. 7320.425) with the appropriate country connection cable
- Door Kit, each one unit/door (max. four per Control Unit) 7320.791 / 7320.792

Unit Description

3.1. Description of the Automatic Door Opening Control Unit 7320.790 front view

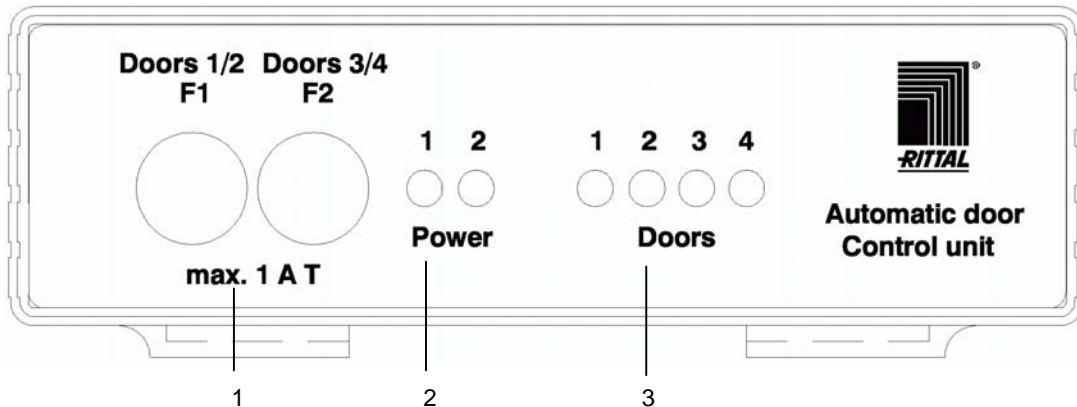


Fig. 3 Automatic Door Opening Unit front view

Key

1 **F1 / F2** – Fuse holder

F1 fuse for protection of the door outputs 1 and 2, F2 fuse for protection of the door outputs 3 and 4. Miniature fuses of the type 5x20 mm 1 A slow.

2 **Power** – Power Status LED

- 1: LED lights up green: The supply voltage is present at door outputs 1 and 2.
- 2: LED lights up green: The supply voltage is present at door outputs 3 and 4.

3 **Doors** – Door Control LED

LED 1, 2, 3, 4 light up red: The circuit at the door outputs (Doors) is opened by the CMC activation (the doors are open); the LEDs do not light up if the circuit is interrupted by the NC contacts (Access Input).

The **Automatic Door Opening Control Unit** has two main functions

1. Realisation of the control signals of the I/O Unit, Basic CMC or LCP Plus.
2. Supply voltage and controller of up to four Automatic Door Opening Door Kits 7320.791 / 7320.792

Unit Description

3.2. Description of the Automatic Door Opening Control Unit 7320.790 rear view

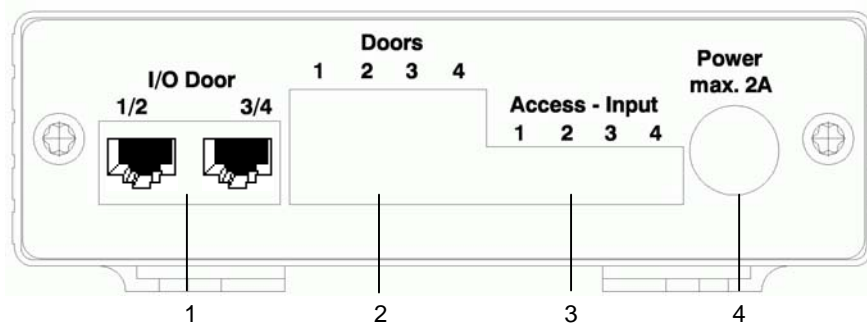


Fig. 4 Automatic Door Opening Unit rear view

Key

1 I/O Doors – I/O RJ12 input/outputs

The two provided channels can each activate two door outputs (Doors) using the CMC-TC.

Channel 1/2 for door 1 & 2

Channel 3/4 for door 3 & 4



Note!

Because the Control Unit is equipped with automatic identification electronics, the system is detected as Door Unit on the I/O Unit, the CMC Basic or the LCP Plus. The configuration of the activation of the Control Unit is described in the operating guide of the Processing Unit (7320.100).

2 Doors – Outputs for connecting the Automatic Door Opening Door Kit

Up to four Door Kits 7320.791 / 7320.792 can be connected at these outputs to the Control Unit.

3 Access Input – NC contact

The four NC contacts are bridged in the delivered state and each assigned to one of the outputs (Doors 1-4). These outputs can be assigned individually using opening systems, e.g. Automatic Door button (7320.793).

This requires removal of the jumper.

The NC contact must be designed to handle **30 V DC / 1 A**.

4 Power

The Automatic Door Opening Control Unit is supplied with power using an external power pack. The connection cable for the external power pack is available as an accessory in various country variants. Choose the variant appropriate for the country-specific regulations.

4. Technical Specifications

Designation	Automatic Door Opening Control Unit
Housing	
Housing type	Plastic covering with metal trim
Height	1 U / 44.5 mm
Width	136 mm
Depth	129 mm
Weight without packaging	approx. 0.6 kg
Potential equalisation	- ¹⁾
Earthing	- ¹⁾
Protection category	IP 40 in accordance with EN 60529
Interfaces	
LED display	2x, Power Control 4x, Doors Status
Door outputs	4x, max. 24 V DC, 400 mA
NC contacts	4x, 30 V DC, 1 A
Operational area	
Temperature	+5° to +45° C +42° to +113° F
Humidity	5 – 95%
Storage temperature	-20° to +60° C -4° to +140° F
Rated voltage	1 x 24 V DC, 2.0 A SELV
Fuses	Miniature fuse 1.0 A T, UL approval
CMC-TC connection	2 x RJ12 sockets, shielded, for shielded twisted-pair patch cable, Category 5
Maximum cable length	
CU to the I/O Unit	10 m; after consultation with Rittal maximum 50 m, UL approval
CU to the Basic CMC	10 m; after consultation with Rittal maximum 50 m, UL approval
CU to the LCP Plus	10 m; after consultation with Rittal maximum 50 m, UL approval

Technical specifications

¹⁾ Not required because safety extra-low voltage 24 V DC

5. Declaration of conformity

Konformitätserklärung

Declaration of Conformity

Reg. Nr.: CE 5 414 811-0

Wir
We

Rittal
GmbH & Co. KG
Auf dem Stützelberg
35726 Herborn
Germany



erklären, dass das/die Produkt(e)
declare that the product(s)

Automatische Türöffnung, Steuereinheit
Automatic Door Opening, Control Unit

7320.790 Automatic Door – Control Unit

mit der/den folgenden Norm(en) oder Normativen Dokument(en) übereinstimmt.
is in conformity with the following standard(s) or other normative document(s)

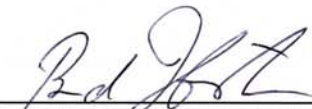
EN60950-1 (2003)
EN61000-6-3 (2007) Emission
EN61000-6-2 (2005) Störfestigkeit
EN61000-3-2 (2006) Stromoberwellen
EN61000-3-3 (1995) + A1, A2 Flicker

Gemäß den Bestimmungen der Richtlinie(n)
Following the provisions of Directive(s)

Niederspannungsrichtlinie Nr.: 2006/95 EG und Änderungen
Low Voltage Directive and updates
EMV – Richtlinie Nr.: 2004/108 EG und Änderungen
EMC Directive and updates

Herborn, 28.11. 2008

Jahr der ersten Kennzeichnung:
Year of first marking:


Dipl.-Phys. B. Hanstein, Leitung PME

Diese Konformitätserklärung entspricht der Europäischen Norm EN 45014 "Allgemeine Kriterien für Konformitätserklärungen von Anbietern"
This declaration of conformity is suitable to the European Standard EN 45014 "General criteria for suppliers declaration of conformity"

Address:

Rittal GmbH & Co. KG · Auf dem Stützelberg · 35726 Herborn · Germany / Tel. +49 (0) 2772 505 – 0 /
Fax: +49 (0)2772 505-2319 / e-mail: Info@rittal.de / internet: <http://www.rittal.de>