



Operating Instructions

RFID-RDR-2-xxx

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Disclaimer

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We reserve the right to change our products and their specifications at any time, provided it is in the interest of technical progress. The information in the current manual (in the internet and on CD / DVD / USB stick) or in the operating instructions included with the device applies.

Trademarks


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Specific markings


The markings in these operating instructions refer to specific features that must be noted.


In detail, these are:


 DANGER	This sign alerts users to hazards that will result in death or serious injury if ignored !
---	---

 WARNING	This sign alerts users to hazards that may result in death or serious injury if ignored !
--	--

 CAUTION	This sign alerts users to hazards that may damage machinery or equipment or result in injury if ignored !
--	---

 ATTENTION	Information highlighted by this symbol indicates measures for the prevention of damage to machinery or equipment !
--	--

 NOTICE	Information highlighted by this symbol indicates important information of which particular note should be taken !
--	---

 DOCUMENTATION	Information highlighted by this symbol refers to a different chapter or section in this manual or other documentation or a web-page !
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Warnings


	<p>Caution !</p> <p>The device surface may heat up at ambient temperatures higher than 45 °C !</p> <p>Caution at contact !</p>
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1 Function RFID

The RFID-RDR-2-xxx chipcard readers are equipment for installation in regular industrial environments. They can be connected to standard RS-232 interfaces. The chipcard readers are supplied with power via a connection to an external 12 VDC power supply. The RFID chipcard readers are proximity readers. Data is read with appropriate cards and passed on to any system. This data transfer requires additional software. The RFIDi chipcard readers can be mounted inside a front panel or a desktop housing.

2 Marking

Manufacturer	R. STAHL HMI Systems GmbH
Type code	RFID-RDR-2-xxx

3 Power supply

Nominal values:

Voltage: 12 VDC +/-10 %
 Current: 200 mA

4 Ambient temperature range

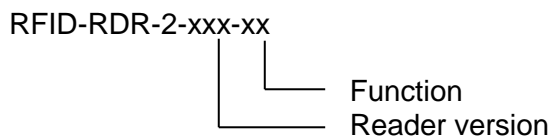
The temperature range is -30 ... +60 °C.

5 Type of protection

- Front IP66
- Rear IP20

6 Type code

Type code:



Product type:

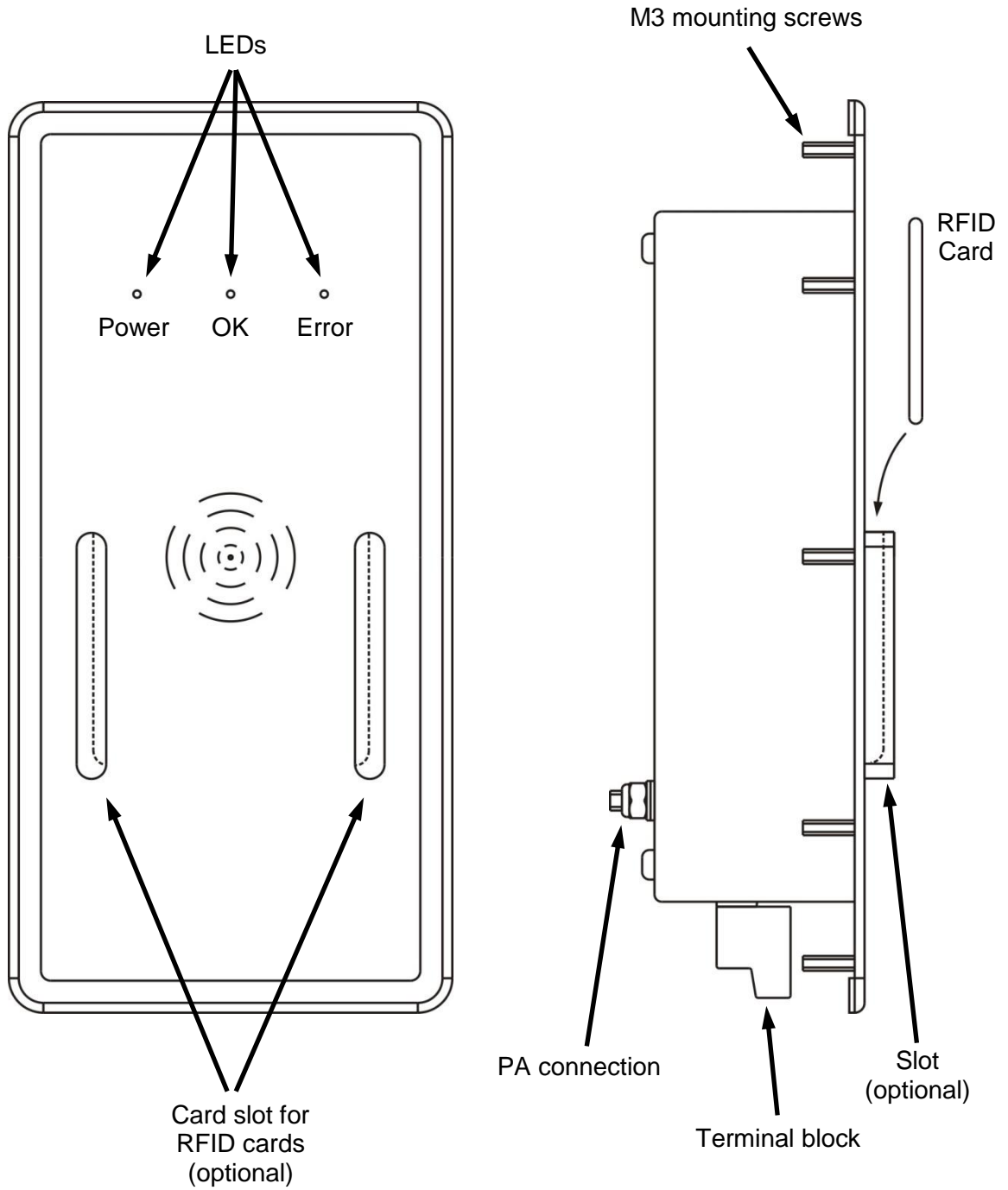
Order number	Description
	Version
RFID-RDR-2-MIF-ASC	Mifare reader, sends ASCII value with CR and LF *
RFID-RDR-2-MIF-ASC-KF	Mifare reader, with card slot, sends ASCII value with CR and LF *

NOTICE	* Serial RFID-RDR-1-MIF-ASC Mifare reader, sending card information to the connected system in the form of an ASCII value with CR and LF.
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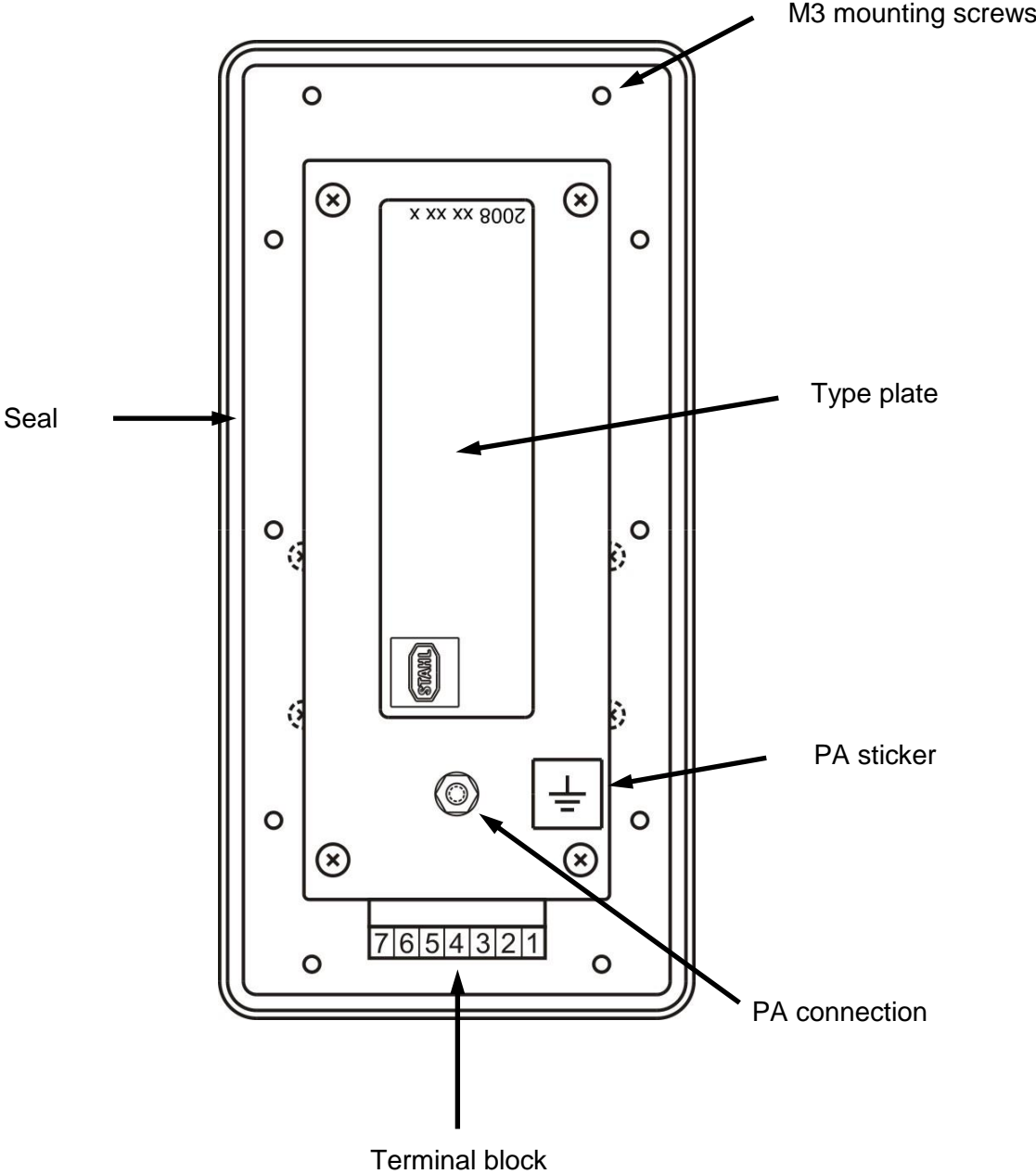
7 Assembly and disassembly

7.1 Views

Type with card slot:



Back view with terminals:



7.2 Mechanical dimensions

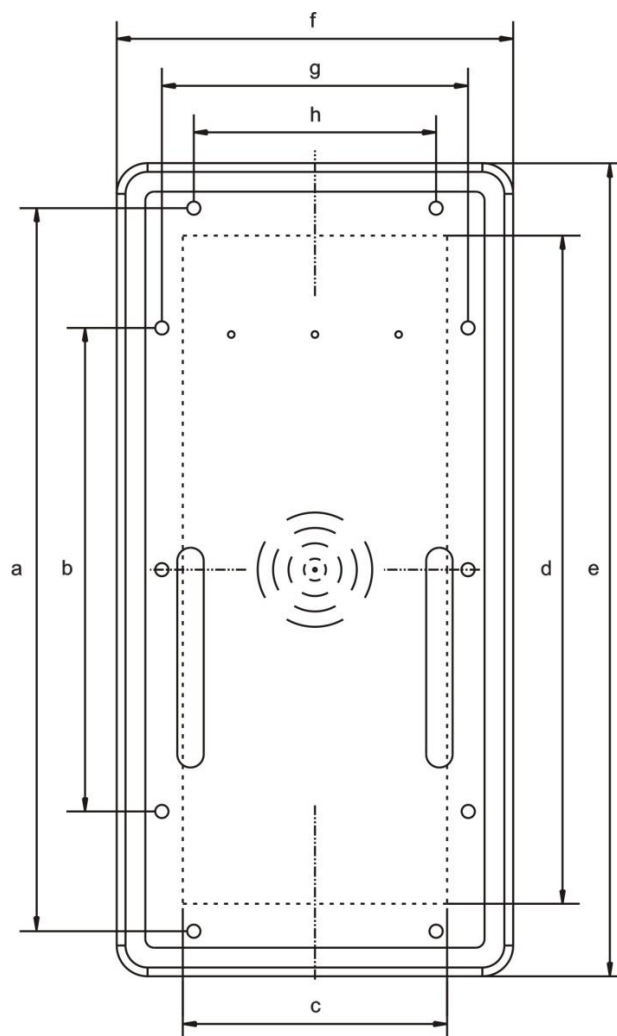
Dimensions in mm

7.2.1 Overview

Chipcard reader	Front plate (hxw)	Cut-out (hxw)	Hole pattern	Material thickness
RFID-RDR-2-xxx	185 x 90	152 x 60 (± 1)	see diagram	up to 6
	Depth of cut-out (depth)		Design front (height)	
	50		9 with slot 3 without slot	

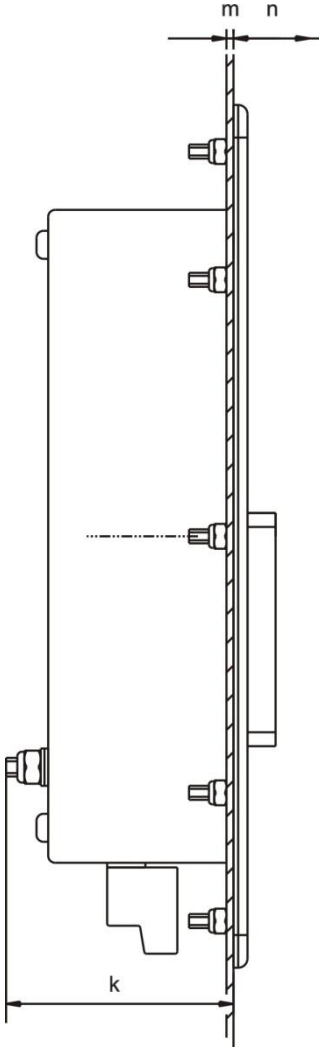
7.2.2 Dimensional drawing

Front view:



- e = dimensions front plate height (h) = 185
- f = dimensions front plate width (w) = 90
- c = cut-out width (w) = 60 (± 1)
- d = cut-out height (h) = 152 (± 1)
- a = distance fitting holes = 164.5
- b = distance fitting holes = 110
- g = distance fitting holes = 69.5
- hb = distance fitting holes = 55

Lateral view:




- k = depth of cut-out = 50
- m = material thickness = 1.5 mm up to 6 mm for metallic enclosures
2.5 mm up to 6 mm for plastic enclosures
- n = Design front height
with slot = 9
without slot = 3

7.3 Installation instructions

The RFID chipcard reader is intended for installation in an appropriate desk housing or control panel. It may be installed in any position.


If the RFID chipcard reader has **NOT** been mounted by the manufacturer, a sufficiently large cut-out and a hole pattern for mounting the chipcard reader must be provided.

- Make a cut-out with the following dimensions:
152 (±1) mm (height) x 60 (±1) mm (width).
- Drill 10 holes of a diameter of 3.5 mm according to the hole pattern.
- Mount the chipcard reader inside the cut-out and use the self-locking nuts (10x M3) provided to affix the chipcard reader.

 ATTENTION	<p>Optimum sealing:</p> <ul style="list-style-type: none">• Tighten the nuts lightly.• Check the position of the chipcard reader, ensuring above all that it is correctly positioned.• Now fully tighten the nuts.• Connect the reader's cable according to the connection diagram.
	<p>Earth:</p> <ul style="list-style-type: none">• An equipotential bonding connection (earthing screw) is located on the back of the chipcard reader housing.• A wire cross section of 4 mm² is recommended for earthing the device.

8 Operation

8.1 General information

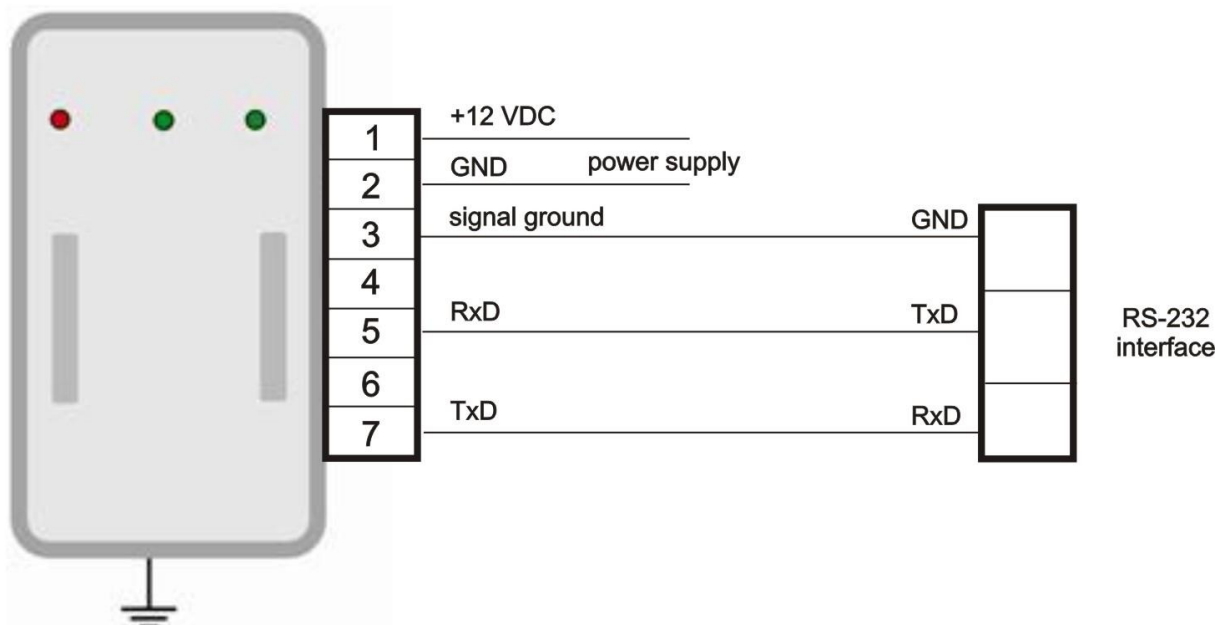
 NOTICE	<p>When operating the devices, particular care shall be taken that:</p> <ul style="list-style-type: none"> • The chipcard reader has been properly installed according to instructions, • the chipcard reader is not damaged, • all screws are tightened fast, • the cable is connected properly.
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8.2 Connections RFID-RDR-2-MIF

If the chipcard reader is mounted ex factory, it is fully wired and ready to run. If the card reader is mounted at the customer's, the connection must be made according to the following diagram.

8.2.1 Connection diagram

A chipcard reader requires a power supply of 12 VDC.



9 Maintenance, service

The chipcard readers contain no replaceable parts. It is therefore not necessary to carry out regular adjustments.

Maintenance should focus on the following:

- Seal wear
- Damage to the front plate
- All cables and lines are properly connected and undamaged
- Housing damage

10 Troubleshooting

The RFID chipcard readers cannot be repaired.

11 Disposal

Disposal of packaging and used parts is subject to regulations valid in whichever country the device has been installed.

The disposal of devices sold after August 13th, 2005, and installed in countries under the jurisdiction of the EU is governed by directive (amendment) 2012/19/EU on waste electrical and electronic equipment (WEEE). Under this directive, reader devices are listed in category 9 (monitoring and control instruments).

We shall take back our devices according to our General Terms and Conditions.

11.1 RoHS directive 2011/65/EC

The revised version of the RoHS (restriction of hazardous substances) 2002/95/EC directive, directive 2011/65/EC, extends its area of application to all electric and electronic products.

The readers (category 9 – monitoring and controlling devices) conform with the requirements from RoHS directive 2011/65/EU, dated 03.01.2013.

11.1.1 China RoHS labelling

According to new Chinese legislation in force since 01.03.2007, all devices containing hazardous substances must be labeled accordingly.

The part of all toxic or hazardous substance contained in the homogeneous materials of the readers is below the limit stipulated in SJ/T11363-2006.

12 Declaration of EC conformity

EU-Konformitätserklärung
EU Declaration of Conformity
Déclaration de Conformité UE



R. STAHL HMI Systems GmbH • Adolf-Grimme-Allee 8 • 50829 Köln, Germany
 erklärt in alleiniger Verantwortung, *declares in its sole responsibility, déclare sous sa seule responsabilité,*

dass das Produkt: **RFID-Chipcard Reader**
that the product:
que le produit:

Typ(en), type(s), type(s): **RFID-RDR-2-MIF**

mit den Anforderungen der folgenden Richtlinien und Normen übereinstimmt.
is in conformity with the requirements of the following directives and standards.
est conforme aux exigences des directives et des normes suivantes.

Richtlinie(n) / Directive(s) / Directive(s)		Norm(en) / Standard(s) / Norme(s)
EMV-Richtlinie EMC Directive Directive CEM	2014/30/EU 2014/30/EU 2014/30/UE	EN 61326-1:2013
Produktnormen nach RoHS-Richtlinie (2011/65/EU): Product standards according to RoHS Directive: Normes des produit pour la Directive RoHS:		EN 50581:2012

Köln, 2016-11-09

Ort und Datum
Place and date
Lieu et date

i.V.

J. Düren
 Technical Director

i.V.

A. Jung
 Representative Explosion Protection

13 Release notes

The chapter entitled "Release Notes" contains all the changes made in every version of the Operating Instructions.

Version 1.00.00

- Original version of the operating instructions

Version 01.01.00

- Addition of data reader version "**RDR-2**"
- Addition of disclaimer
- Changing of address and phone numbers
- Addition of "specific markings"
- Addition of "notice in type code"
- Adaptation section "Disposal" according to the newest WEEE and ROHS directive
- Text- and layout changes

Version 01.01.01

- Addition of Warning "High Temperature" in section "Warnings"
- Adaption section "RoHS directive" with device conformity
- Layout and formal corrections

Version 01.01.02

- Addition of "Declaration of EC conformity"
- Layout and formal corrections

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