



Operating Instructions

RFID-RDR-2-xxx

R. STAHL HMI Systems GmbH
Adolf-Grimme-Allee 8
D 50829 Köln

Version 01.01.00
Issue date: 25.01.2016

Disclaimer

Publisher and copyright holder:

R. STAHL HMI Systems GmbH
Adolf-Grimme-Allee 8
D 50829 Köln

Registered place of business: Cologne
Court of registration: District court Cologne, HRB 30512
VAT number: DE 812 454 820

Phone:	(switchboard)	+49 (0) 221 76 806	- 1000
	(hotline)		- 5000
Fax:			- 4100
E-mail:	(switchboard)	office@stahl-hmi.de	
	(hotline)	support@stahl-hmi.de	

- All rights reserved.
- This document may not be reproduced in whole or in part except with the written consent of the publisher.
- This document may be subject to change without notice.

Any warranty claims are limited to the right to demand amendments. Liability for any damage that might result from the content of this description or all other documentation is limited to clear cases of premeditation.

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) or in the operating instructions included with the HMI device applies.

Trademarks

The terms and names used in this document are registered trademarks and / or products of the companies in question.

Copyright © 2016 R. STAHL HMI Systems GmbH. Subject to alterations.

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 !

Table of contents

	Description	Page
	Disclaimer	2
	Specific markings	3
	Table of contents	4
1	Function RFID	5
2	Marking	5
3	Power supply	5
4	Ambient temperature range	5
5	Type of protection	5
6	Type code	5
7	Assembly and disassembly	6
7.1	Views	6
7.2	Mechanical dimensions	8
7.2.1	Overview	8
7.2.2	Dimensional drawing	8
7.3	Installation instructions	10
8	Operation	11
8.1	General information	11
8.2	Connections RFID-RDR-2-MIF	11
8.2.1	Connection diagram	11
9	Maintenance, service	11
10	Troubleshooting	11
11	Disposal	12
11.1	ROHS directive 2011/65/EC	12
11.1.1	China ROHS labelling	12
12	Release notes	13

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

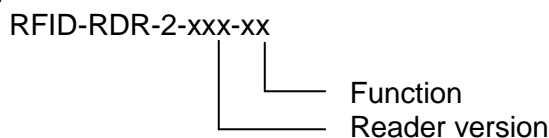
The temperature range is -30 ... +60 °C.

5 Type of protection

- Front IP66
- Rear IP20


6 Type code

Type code:



Product type:

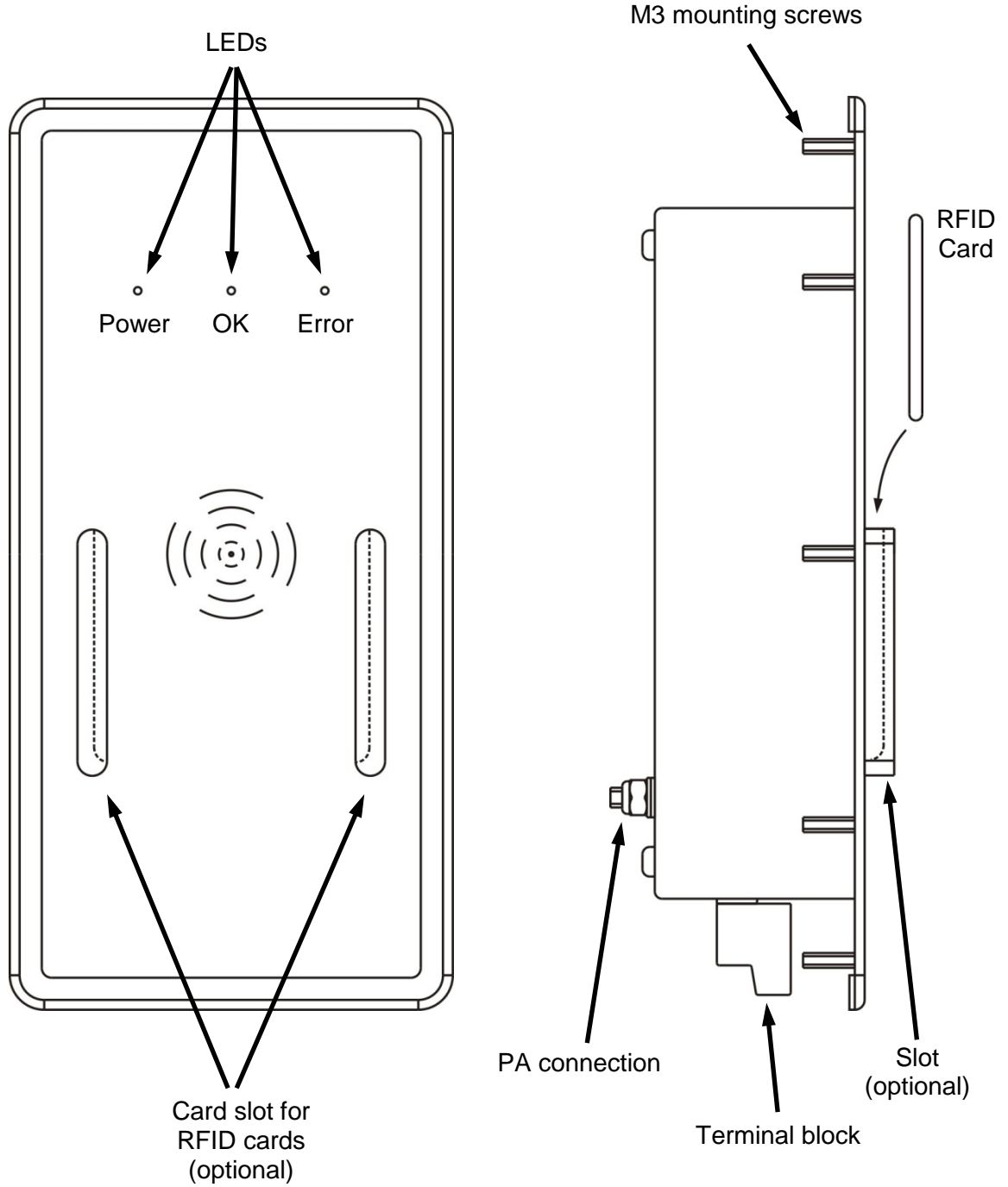
Order number	Description
	Version
RFID-RDR-2-MIF-ASC	Mifare reader, sends ASCII value with CR and LF *
RFID-RDR-2-MIF-ASC-KF	Mifare reader, with card slot, sends ASCII value with CR and LF *

 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.
---	---

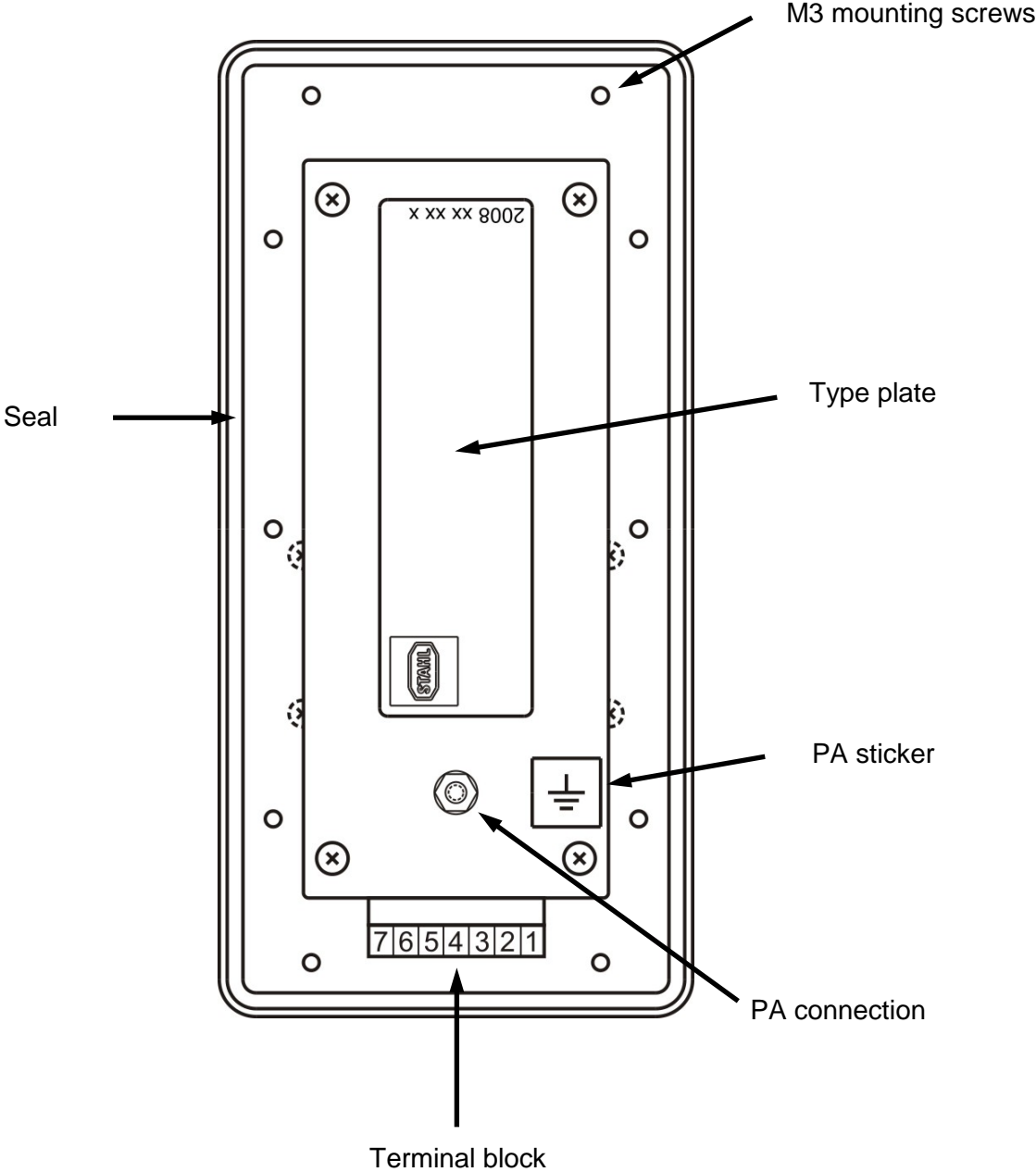
7 Assembly and disassembly

7.1 Views

Type with card slot:



Back view with terminals:



7.2 Mechanical dimensions

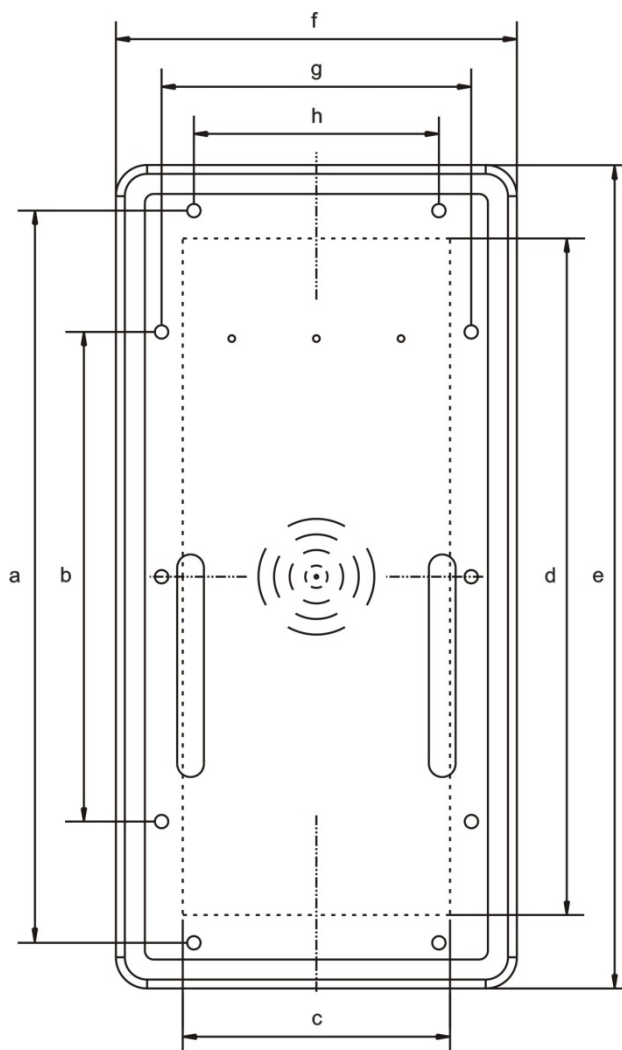
Dimensions in mm

7.2.1 Overview

Chipcard reader	Front plate (h x w)	Cut-out (h x w)	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	

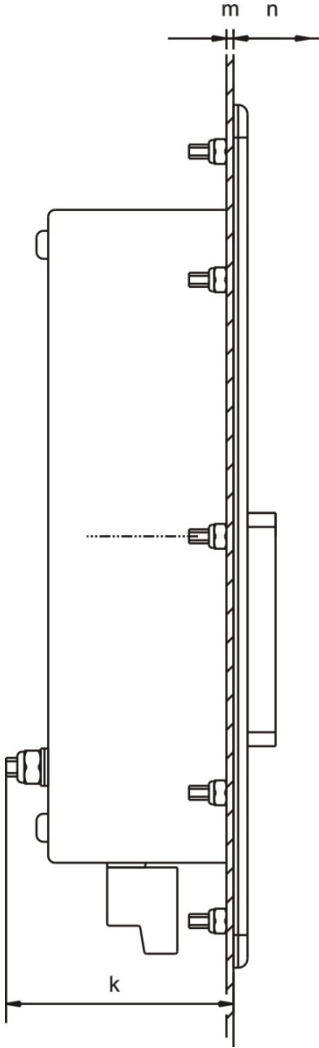
7.2.2 Dimensional drawing

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

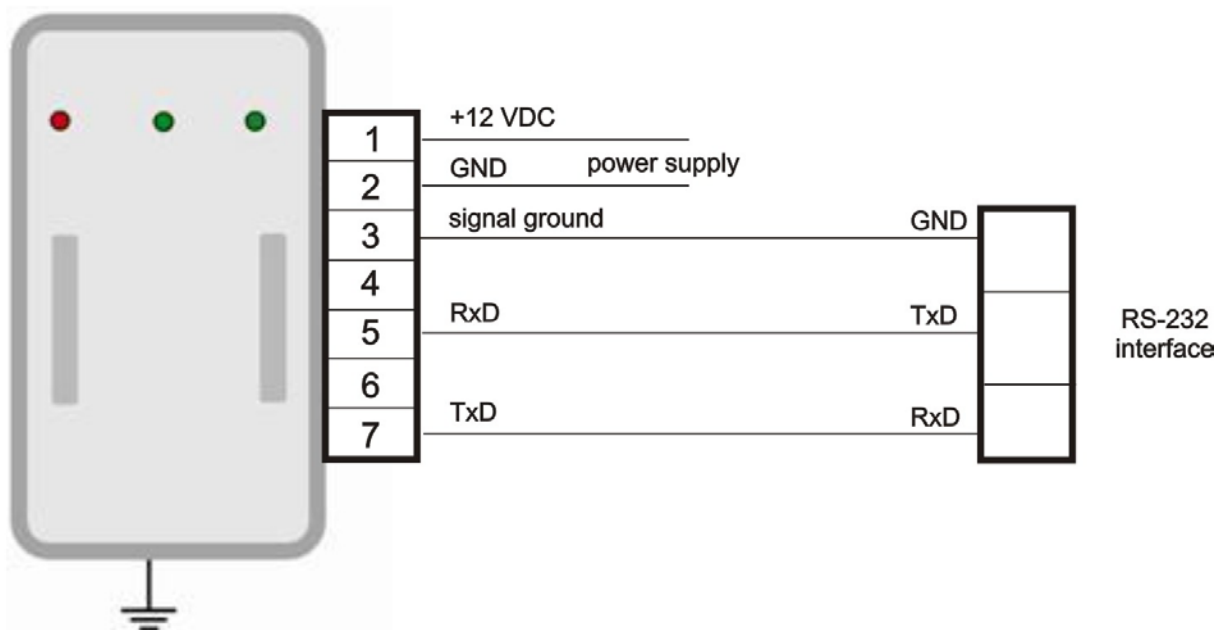
 NOTICE	<p>When operating the devices, particular care shall be taken that:</p> <ul style="list-style-type: none"> • The chipcard reader has been properly installed according to instructions, • the chipcard reader is not damaged, • all screws are tightened fast, • the cable is connected properly.
---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

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.

In the case of reader devices (category 9 – monitoring and controlling devices) a transitional period applies until 22.07.2017, after which the banned substances listed in ROHS 2011/65/EC directive apply to all devices newly put on the market.

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.

For our chipcard readers, the following conditions apply:

Names and contents of toxic or hazardous substances or elements:

Part Name	Toxic or hazardous substances and elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexa- valent Chromium (Cr (VI))	Poly- brominated Biphenyls (PBB)	Poly- brominated diphenyl ethers (PBDE)
Housing	O	O	O	O	O	O
Display	O	O	O	O	O	O
all PCBs	X	O	O	O	O	O
Miscellaneous	O	O	O	O	O	O

O Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirements in SJ/T11363-2006.

X Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials for this part is below the limit requirements in SJ/T11363-2006.

12 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

R. STAHL HMI Systems GmbH
Adolf-Grimme-Allee 8
D 50829 Köln

Phone: (switchboard) +49 (0) 221 76 806 - 1000
(Hotline) - 5000
Fax: - 4100
E-mail: (switchboard) office@stahl-hmi.de
(hotline) support@stahl-hmi.de

www.stahl.de
www.stahl-hmi.de

