SIEMENS

EN

Mifare Reader

MF1040 & MF1050

HW version 1.6 or later

Installation Note

MF1040

MF1050

Siemens AG

ENGLISH – MF1040 & MF1050 Installation

Description

MF1040 and MF1050 is a compact Smartcard reader using Mifare reading technology. By using Mifare high security can be achieved by means of password-protected cards. The card can also be used in several applications aside form security. With a PIN-code (MF1050) the level of security is extended even further. The unit can be mounted in a standard flush fitting back box or flush-mounted (frame supplied).

Details of ordering

Type	Item Number
MF1040	**GBI:** SE2:21-551 **Siemens**: S54201-Z56-A1
MF1050	**GBI**: SE2:21-552 **Siemens:** S54201-Z55-A1

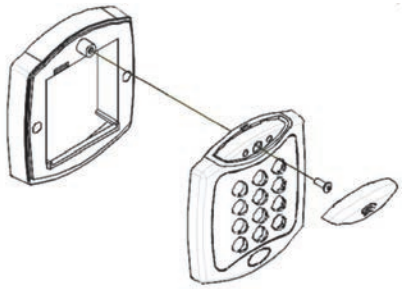
Technical data

Operating voltage:	8-24 V DC
Current consumption:	70 mA 12 VDC (max 140 mA)
Indicators:	4 x LED, blue, red, yellow, green 1 x Buzzer
Keypad:	12, 0-9, A and B
Connections:	8 pole, fixed terminal block
Tamper switch:	No **2010**: loop can be connected via FBK
Dimensions (W x H x D):	110 x 100 x 35 mm (including frame)
Weight:	0.2 kg
Operating temperature:	-20 to +50 °C
IP rating:	IP67
Cabling:	EKKX / ELLXEB 4x2x0,5
Max cable length:	25 m
Interface:	Clock & Data. **Note!** Connect between 0V and Sense.
Communication:	• Clock&Data for Omnis 2010 • Wiegand for Entro & SiPass integrated. • MK2 Swipe reader for Granta.
Reading technology:	13.56 MHz Mifare Classic ISO14443A
Reading:	Selectable between Serial or Sector (Programming via programming card)

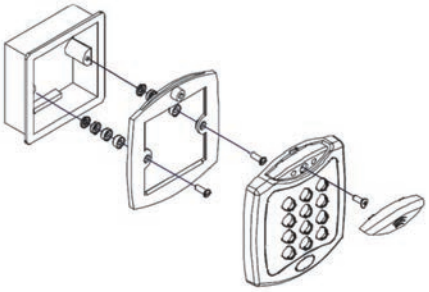
Mounting

1. When needed use the supplied spacers behind the mounting frame.
2. Connect the cable and mount the reader to the mounting frame by pressing it downwards so the lower edge hooks into the frame.
3. Secure the reader with the supplied screw (tools supplied) and mount the cover with a heavy pressure.

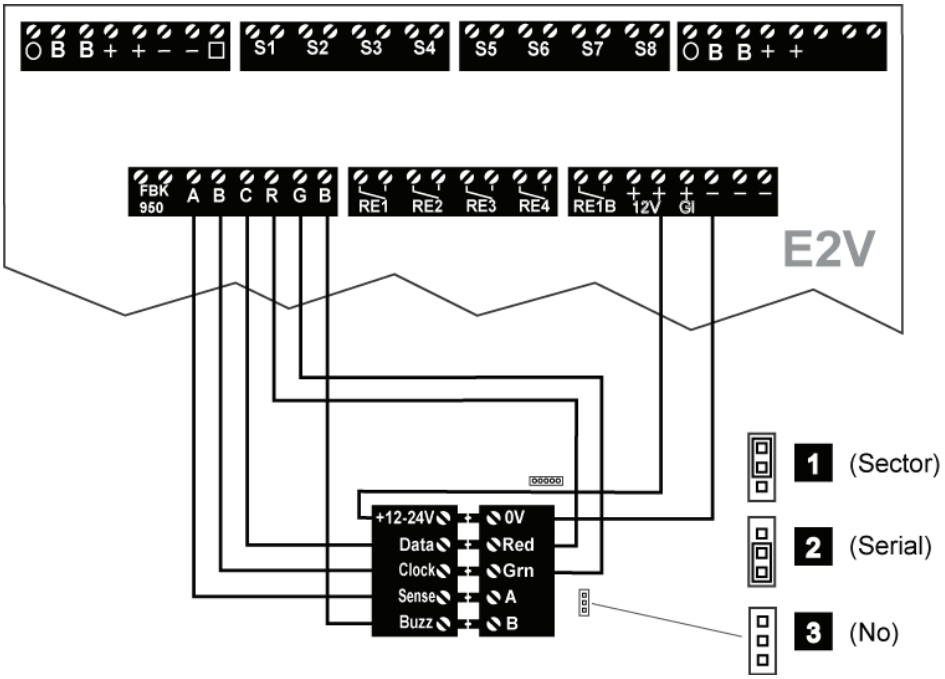
Surface mounted



Flush mounted

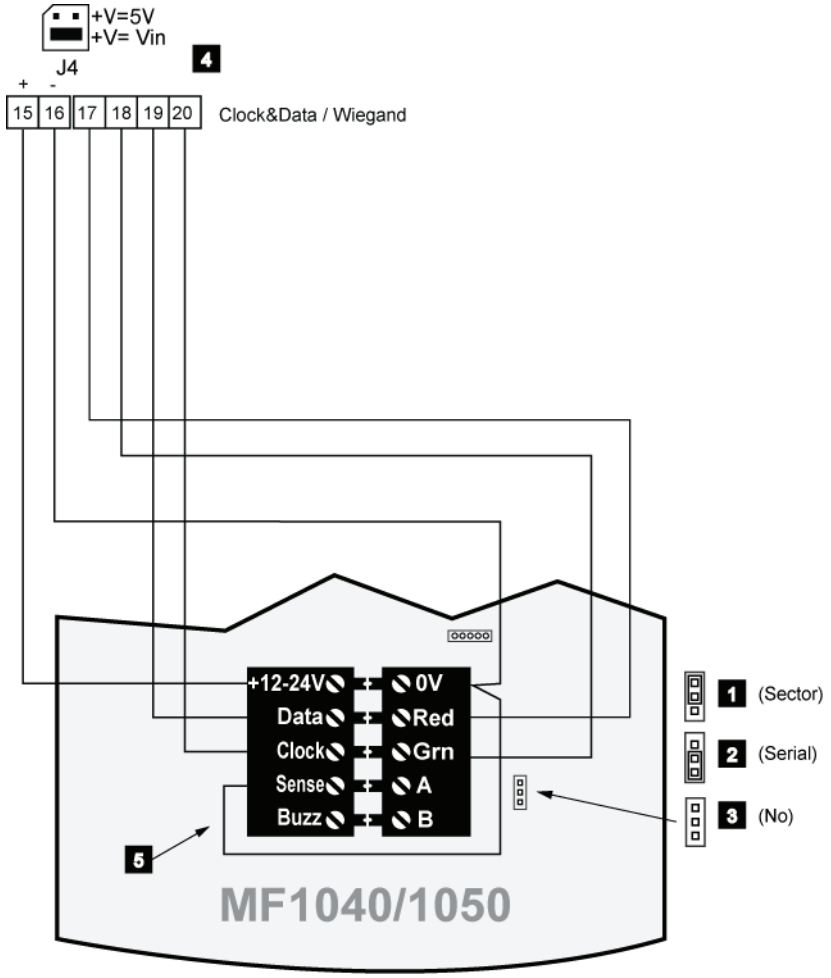


Wiring to Omnis 2010 E2V



1.	Sector reading
2.	Serial reading
3.	No jumper = Serial number reading for Omnis 2010

Wiring to Entro DC12/DC22



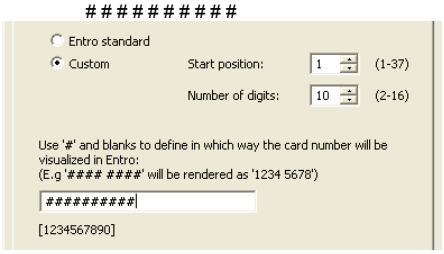
1.	Sector reading
2.	Serial reading
3.	No jumper = Serial number reading for Entro.
4.	Reader connections for communication and power supply. Note that the link **J4** must be placed on **Vin**. This wiring ensures that the voltage to the reader is rectified.
5.	Note! Connection between 0V and Sense applies.

Programming Entro

MF1040/1050 with firmware version 1.6 or later is delivered with a factory setting for 32 bit Wiegand.
This means that the following settings must be entered in the Installer program.

Card reader settings

- Custom parameters
- Start position 1
- Number of digits 10
- ##########



Wiring to SiPass® integrated

If SiPass integrated **ADD5100** (DRI), **ADS5200** (SRI) or **ADE5300** (ERI) is used as door controllers for the MF1040/MF1050 the following wiring should be used.

MF1040/MF1040	DRI / SRI / ERI
+V	12V
Data	D0
Clock	D1
Sense	Shortcut to 0V
Buzz	
0V	0V
Red	RED
Grn	GRN
A	
B	

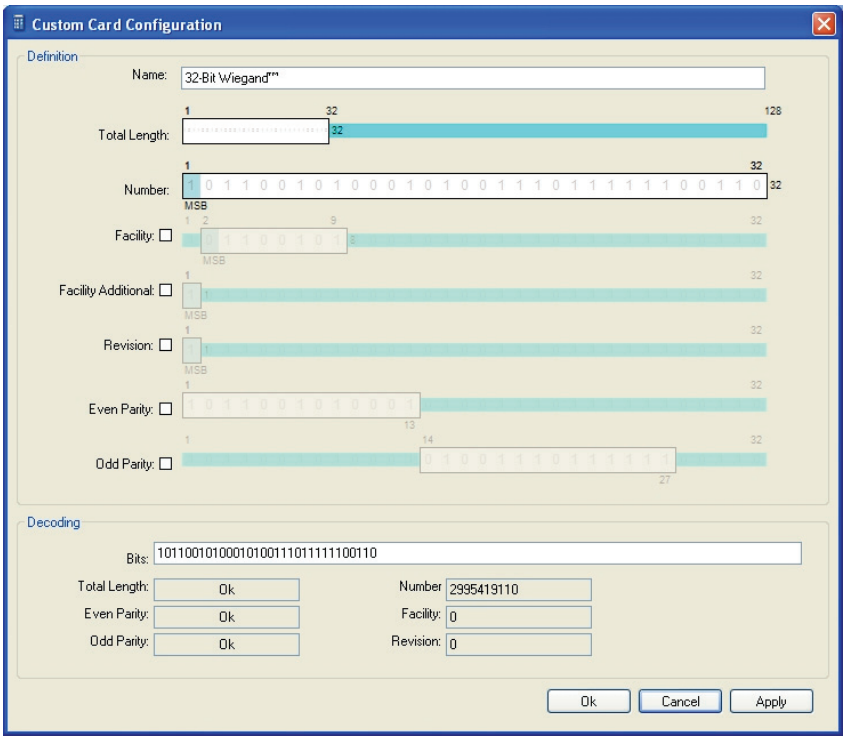
Indicators

Standby mode:	Blue LED.
Void card:	Red LED for three sec. & short sound.
Access granted:	Red LED for three sec. & short sound followed by green LED.
Any key press:	Short sound.
Waiting for PIN:	Amber/red blinking / amber/blue blinking& short sound

Wiegand configuration

- 32 bit card data
- No parity or start/stop bits.
- All bits into the card number

Below is the software settings in SiPass® integrated:



Migrating from Entro to SiPass® integrated

There is a possibility to migrate an Entro installation into a SiPass® integrated system. Normally this migration means that the reader installation is already done – and kept as is. Rather it is the system architecture that is changed.
So the MF1040/MF1050 readers can be kept but there are two ways how the controllers are installed.

- DC12/DC22 directly wired to AC5100 (ACC)
- Any SR34i is re-programmed to an ACC-X.

AC5100 (ACC) and DC12/DC22

The migration is initially carried out according to the *Entro Integration manual* supplied with the SiPass® integrated system.

AC5100	DC12/DC22
FLN +	3 - COM A
FLN -	4 - COM B
	+12-24V and 0V from power supply.
	Resistors on last DC in chain.

ACC-X and DC12/DC22

Keep Entro equipment but order new ACC-X firmware (for 4, 8, 16 or 32 doors) and substitute the firmware in the Entro Segment controller to become an ACC-X.
The MF1040/MF1050 is wired as previous Entro page.

Wiring to Granta Controller 4422

If the reader is used in the Granta system the following wiring applies:

MF1040/MF1050	Granta 4422
12V	+V
Data	D0
Clock	D1
Sense	Shortcut to 0V
Buzz	
0V	0V
Red	R
GN	G
A	
B	

Indicators

Standard state:	Red LED.
Access granted:	Green LED.

Configuration

- Type: MK2 Swipe Reader
- Interface number: 309

Below are the Granta software settings: