

## Access Terminal IF-800

### 1 Slave Terminal IF-800

Thank you for using a terminal of the series IF-800 for recording access data.

Scope of Delivery:

- Slave terminal IF-800.
  - I/O controller board for controlling locking devices
  - Terminal strip board
  - Material required for mounting in a DIN appliance case
  - Peripherals CD
- Please check the completeness and condition of the shipment upon receipt.



#### 1.1 Intended Use

Terminals of the IF-800 series are designed for controlling access as well as for controlling and monitoring locking devices. Any other use is not in accordance with the intended purpose and is therefore not permitted.

## 2 Danger Due to Electric Current



**Electric shock can cause severe injuries or death.  
De-energize the device.**

Please observe the accident prevention regulations and take all precautionary measures to ensure the safe installation of the devices.

- Connection to power supply voltage and initial operation may therefore only be carried out by people trained in electrical engineering.
- The electrical installation, in which the device is to be operated, must comply with national standards. To guarantee trouble-free operation, we recommend carrying out the electrical installation according to the principles of a TN-S system, which means using separate neutral and grounding conductors.
- Secure the power cable with a strain relief.
- The device must be equipped with an external separator to ensure that the device can be de-energized.
- The device must be equipped with an external fuse protection with a maximum nominal current of 16 A.

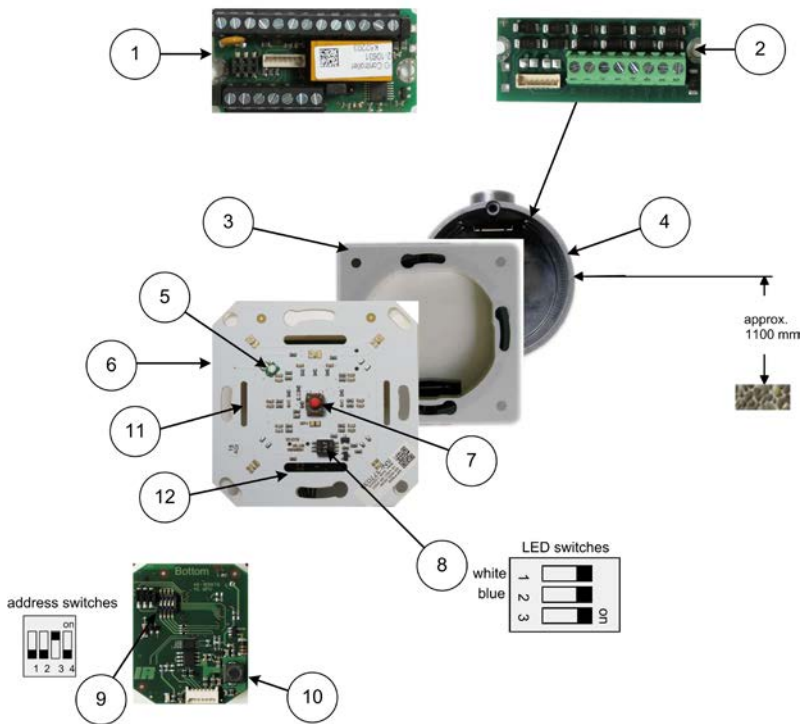
## 3 Function

Access terminals of the series IF-800 are part of an access control system. They are preferably installed directly next to locking devices. In general, they are connected with an RS485 data cable to a master terminal, access manager or terminal controller. Terminals of the series IF-800 are designed for controlling the access of persons, who identify themselves with RFID credentials, as well as for controlling and monitoring locking devices.

We recommend:

- installing a separate, fuse-protected circuit.
- keeping a distance of 30 cm between the device and other systems with RFID readers.
- keeping a distance of 10cm between connecting cables and power lines.

## 4 Installation into an Appliance Case



1	I/ O controller board installation in protected area	7	Anti-tamper switch
2	Terminal board	8	DIP switches for light emitting diodes
3	Protective cover	9	Address switch
4	DIN appliance case	10	MPU board
5	Adjusting screw for reader adjustment	11	narrow cutout
6	RFID reader	12	wide cutout must be at the top and bottom

The terminal strip board is mounted into the DIN appliance case with the adhesive tape supplied.

## 5 Shielded Cables

To guarantee trouble-free operation, we recommend the use of shielded cables.

Operation, however, is also possible with unshielded cables. Data transfer problems must be examined on a case-by-case basis. Where necessary, a shielded cable must be used for the corresponding devices.

## 6 Installation

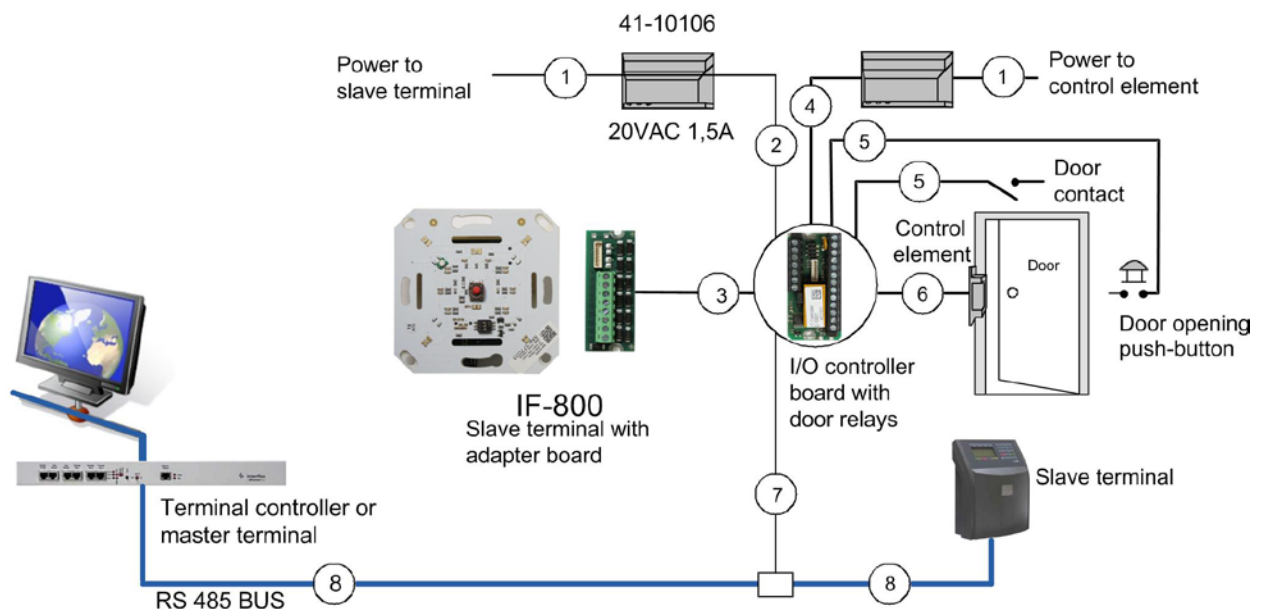
1. Install all cables. Use the correct cable types. See: Function of the Cables and Cable Types
2. Plaster the appliance case into the wall at the installation site. Make sure that the screws of the case are at the top and bottom.
  - Make electrical connections.
  - Fasten the terminal strip board into the appliance case (see NOTE below).  
Connect the power supply
  - Connect the data cables
  - Connect the actuators and any required feedback sensors
3. Set the device address
4. Install the terminal  
Mount the IF-800 terminal into the appliance case so that the large cutouts of the reader are at the top and bottom.
5. Switch on the operating voltage
6. Initiate operation and check the device functions
  - Adjust the reader
  - Set the LEDs
7. Mount the front design panel so that the Interflex logo is at the top

### NOTE

The I/O controller board must not be installed inside the appliance case due to the risk of manipulation or tampering.

Install the I/O controller board in a secured area.

### 6.1 Electrical Connections



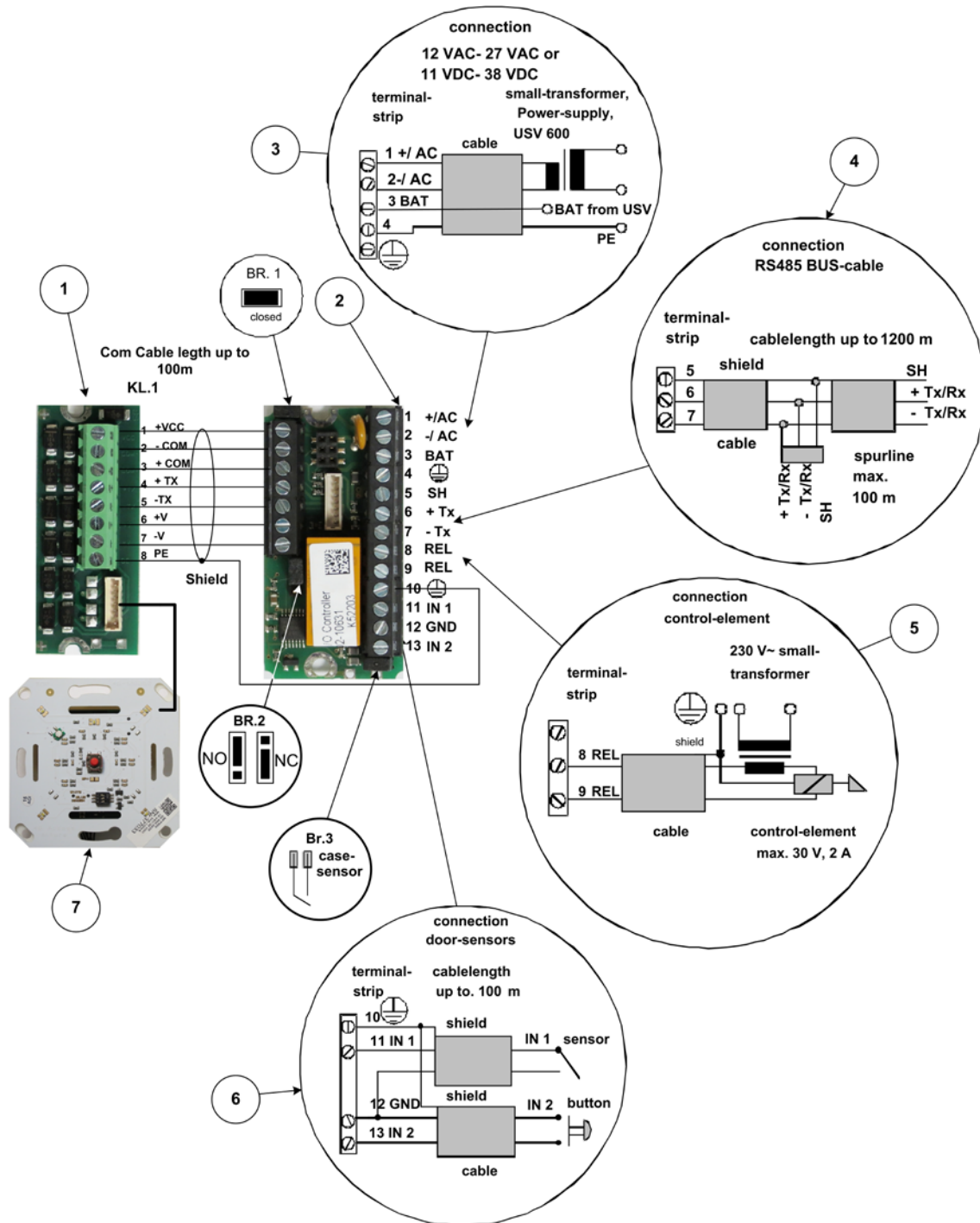
### 6.1.1 Function of the Cables and Cable Types

	Function of Cable	Max. Length	Recommended Cable Type
1	Voltage supply 230 VAC to power transformer 20 VAC 1.5 A (order number 41-10106)		NYM 3 x 1.5 mm <sup>2</sup>
2	Low-voltage cable		J-Y(ST) Y 4x 2 x 0.6 mm <sup>2</sup>
3	Shielded cable from terminal strip board to I/O controller in secured area	100 m	J-Y(ST) Y 4x 2 x 0.6 mm <sup>2</sup>
4	Voltage supply to actuator		J-Y(ST) Y 4x 2 x 0.6 mm <sup>2</sup>
5	Connection cable to floating sensors	100 m	J-Y(ST) Y 2x 2 x 0.6 mm <sup>2</sup>
6	Connection to actuator (up to max. 30 V, 2 A)		J-Y(ST) Y 4x 2 x 0.6 mm <sup>2</sup>
7	Spur line from bus to installation site	100 m	J-Y(ST) Y 4x 2 x 0.6 mm <sup>2</sup>
8	RS485 bus cable	1,200 m	J-Y(ST) Y 4x 2 x 0.6 mm <sup>2</sup>

#### **NOTE**

Install the power supply line in duplicate (one conductor pair each). The protective ground conductor should likewise be installed in duplicate and, in doing so, the drain wire can also be installed.

## 6.2 Connections



1	Terminal strip board	5	Circuit example: Control of an actuator (door opener)
2	I/O controller board	6	Circuit example: Connection of both inputs
3	Circuit example: Voltage supply	7	IF-800 Terminal
4	Circuit example: RS485 connection		

BR.1	For operation as I/O controller board (relay 1), the jumper is plugged in. For operation as an I/O expansion (relay 2), the jumper is removed.
BR.2	Normal open / Normal closed. This jumper is used to set the relay contact. Opening or closing contact.
BR.3	When the jumper is removed, an external anti-tamper switch can be connected.

## NOTE

A shielded cable with a core diameter of at least 0.6 mm<sup>2</sup> must be used for the connection between the terminal strip board and the I/O controller board.

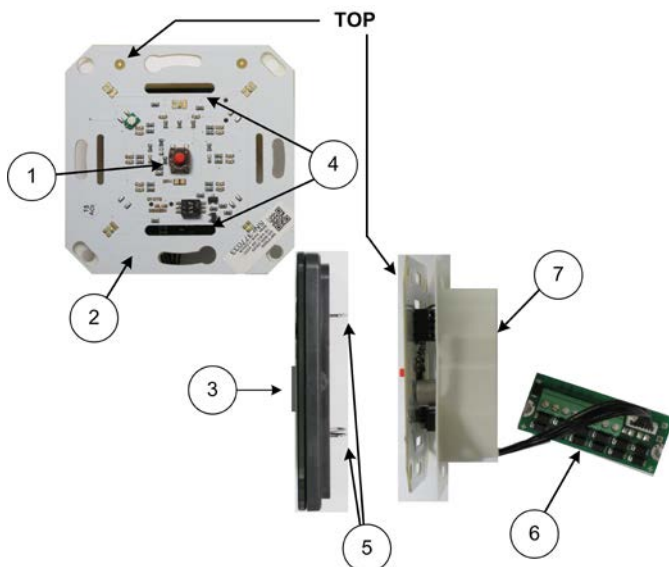
For security reasons, the I/O controller board should be mounted in a secured area.

### 6.3 How to Set the Hardware Address

There is a 4-way DIP switch on the MPU board for setting the device address.

Switch	1	2	3	4
Address 1	OFF	OFF	OFF	OFF (not required if connected to a master terminal)
Address 2	ON	OFF	OFF	OFF
Address 3	OFF	ON	OFF	OFF
Address 4	ON	ON	OFF	OFF
Address 5	OFF	OFF	ON	OFF
Address 6	ON	OFF	ON	OFF
Address 7	OFF	ON	ON	OFF
Address 8	ON	ON	ON	OFF

### 6.4 Installing the Terminal



1	Anti-tamper switch
2	RFID board
3	Design kit
4	Large cutouts for latching the front panel
5	Metal retaining clips for fastening in the front panel
6	7-wire cable from terminal to terminal strip board
7	Protective cover

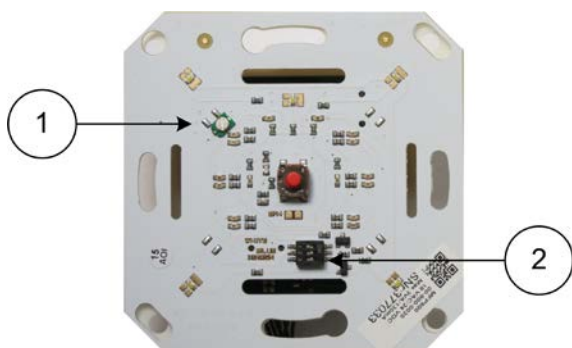
## NOTE

Make sure that the lettering "TOP" on the IF-800 terminal is always on top. Only then can the design kit (accessory) be properly installed.

### 6.5 Adjusting the Reader

Due to certain conditions at the installation site, it may become necessary to readjust the reader.

- After mounting the reader into the appliance case, adjust it using the adjustment set (order no. 75-99-0004).
- Turn the adjusting screw until the field indicator reaches maximum.



1	Adjusting screw
2	3-pin DIP switch for setting the LEDs

### 6.6 Setting the LEDs

- According to the design kit chosen, set the function of the light-emitting diodes using the 3 DIP switches on the front panel

Design kit	Switch 1/white	Switch 2/blue	Switch 3
Glass, white	OFF	ON	ON
Glass, black	ON	ON	ON
IF design	OFF	ON	ON
Third-party design	OFF	OFF	OFF

## 7 Remote Placement of the I/O Controller Board

### NOTE

To protect the I/O controller board against manipulation, it should be installed in a secured area.

It can, for example, be installed in a junction box together with the power supply. In such case, the terminal strip board must be connected directly to the terminal.

- A shielded cable should be used for the connection between the terminal strip board and the I/O controller board.
- The cable length may not exceed 100 m.
- Adhesive tape for fastening the terminal strip board in the appliance case is included in delivery.

## 8 Technical Specifications of IF-800

Power Supply	
Low-voltage	12 - 24 VAC/DC measured directly at the terminal
Power consumption	Max. 4 VA
Protection	Via PTC resistor
Interfaces	RS485; 9600/ 19200 baud (automatic configuration)
Reader	RFID reader, MIFARE or LEGIC (depending on order)
Read range	Up to 50 mm
Sensor inputs	4 floating sensors (2 per I/O controller board)
Output relays	2 relays with max. 30 V 2 A (1 per each I/O controller board)
User information	Buzzer; Green and red LEDs (white and blue are not visible)

General Data	
Anti-tamper switch	Activated when front panel (design kit) is removed
Ambient temperature	-25° C to +55° C
Humidity	Max. 95%, non-condensing
Product safety	EN 60950-1
Compatibility (EMC)	EN 300330-1/-2 EN 301489-1/-3
Dimensions (H x W x D)	71 x 71 x 27 mm
Weight	Approx. 0.35 kg

## 9 Disposal



Once its service life comes to an end, the device must be disposed of properly as electronic waste. The owner can dispose of the device himself or return it to the supplier.

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Version Date: October 28, 2016

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