basIP

USER MANUAL

CR-02BD



NETWORK READER WITH CONTROLLER



Main features

- Standard of cards and key fobs used: UKEY (EM-Marin / MIFARE® / NFC / Bluetooth).
- Integration with ACS: WIEGAND-26, 32, 34, 37, 40, 42, 56, 58, 64 bit output.
- Protection class: IP65.
- IK-Code: IK07.
- Working temperature: -40 — +65 °C.
- Power consumption: 6,5 W, in standby — 2,5 W.
- Power supply: +12 V DC, PoE 802.3af.
- Number of admin cards: 1.
- Number of identifiers: 20 000.
- Body: Metal alloy with a high level of anti-vandalism and corrosion resistance (on the front panel there is a glass decorative overlay).
- Colors: Black, Gold, Silver.
- Dimensions for installation: 94 × 151 × 45 mm.
- Size of the panel: 99 × 159 × 48 mm.
- Installation: Flush, surface with BR-AV2.

The specifications and appearance of the device may differ from those stated or may change without prior notice.

READER WITH CONTROLLER

CR-02BD

Full User Manual
wiki.bas-ip.com

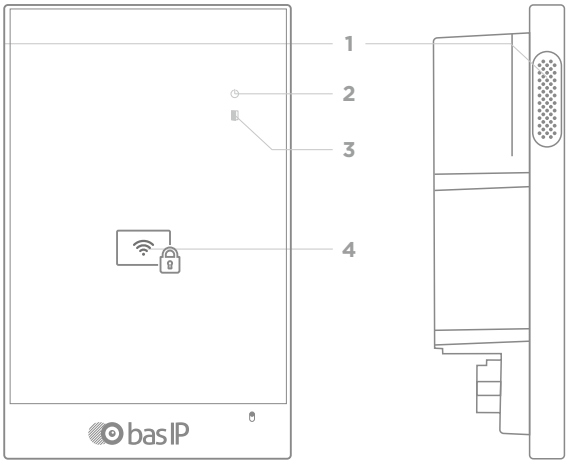
Device description

External contactless card and key fob reader with built-in controller and UKEY technology support: Mifare® Plus and Mifare® Classic, Bluetooth, NFC card, key fob, and mobile ID reader.

Using an external network proximity card reader BAS-IP CR-02BD, you can read contactless cards, key fobs, as well as mobile identifiers from mobile devices and open the connected lock.

Appearance

1 - Loudspeaker.
2 - Power indicator.
3 - Opens door indicator.
4 - Card reader.



EAN: 5060514912911 (GOLD)
EAN: 5060514913727 (SILVER)
EAN: 5060514913734 (BLACK)

Completeness check of the product

Before installation of the reader, it is necessary to check that it is complete and all components are available.

Reader kit includes:

Reader	1 pc
Flush mounting bracket	1 pc
Manual	1 pc
Set of wires with connectors for connection of power supply, lock, and additional modules	1 pc
A set of plugs for connections	1 pc
Set of screws with a wrench	1 pc

Electrical connection

After verifying the device's completeness, you can switch to the reader connection.

For connection you will need:

- An Ethernet UTP CAT5 or higher cable connected to a network switch / router.

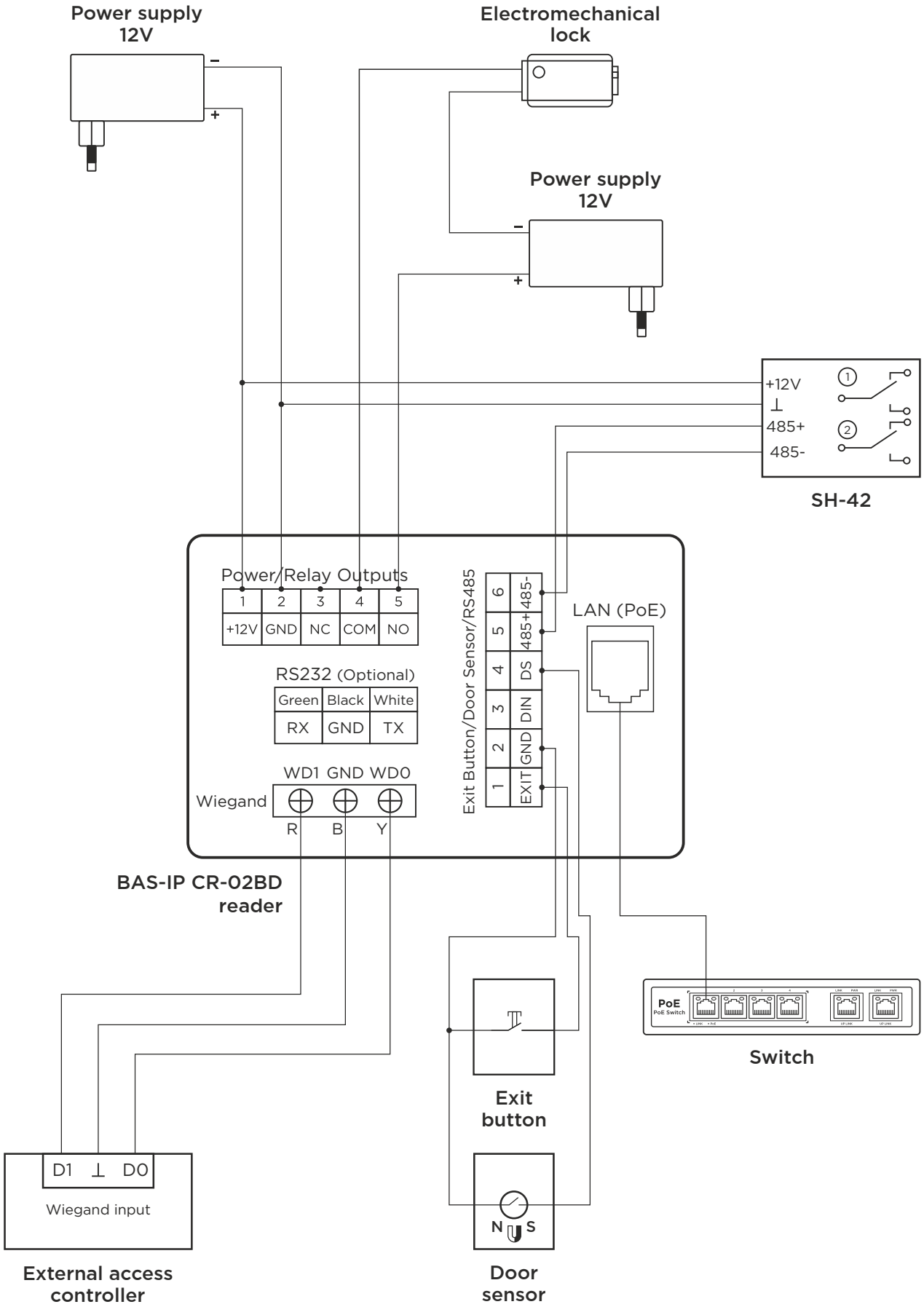
Cable length recommendations
The maximum length of the UTP CAT5 cable segment should not exceed 100 meters, according to the IEEE 802.3 standard.

- Power supply at +12 V, 2 amps, if there is no PoE.
- Wires must be brought for the connection of the lock, exit button and additional modules (optional).

You can connect any type of electromechanical or electromagnetic lock for which the switched current does not exceed 5 Amps.

Electromagnetic lock connection
If CR-02BD controller uses third party power supply and doesn't have UPS-BAS-IP then avoid using CR-02BD internal relay for direct electromagnetic lock connection. In this case electromagnetic lock must be connected through the SH-42.2 - SH-42.8.

Diagram 1. Electromechanical lock connection using external power supply for the reader and the lock.



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Diagram 2. Wiring diagram for SH-42.2 with two electromechanical locks, each powered by its own separate power supply.

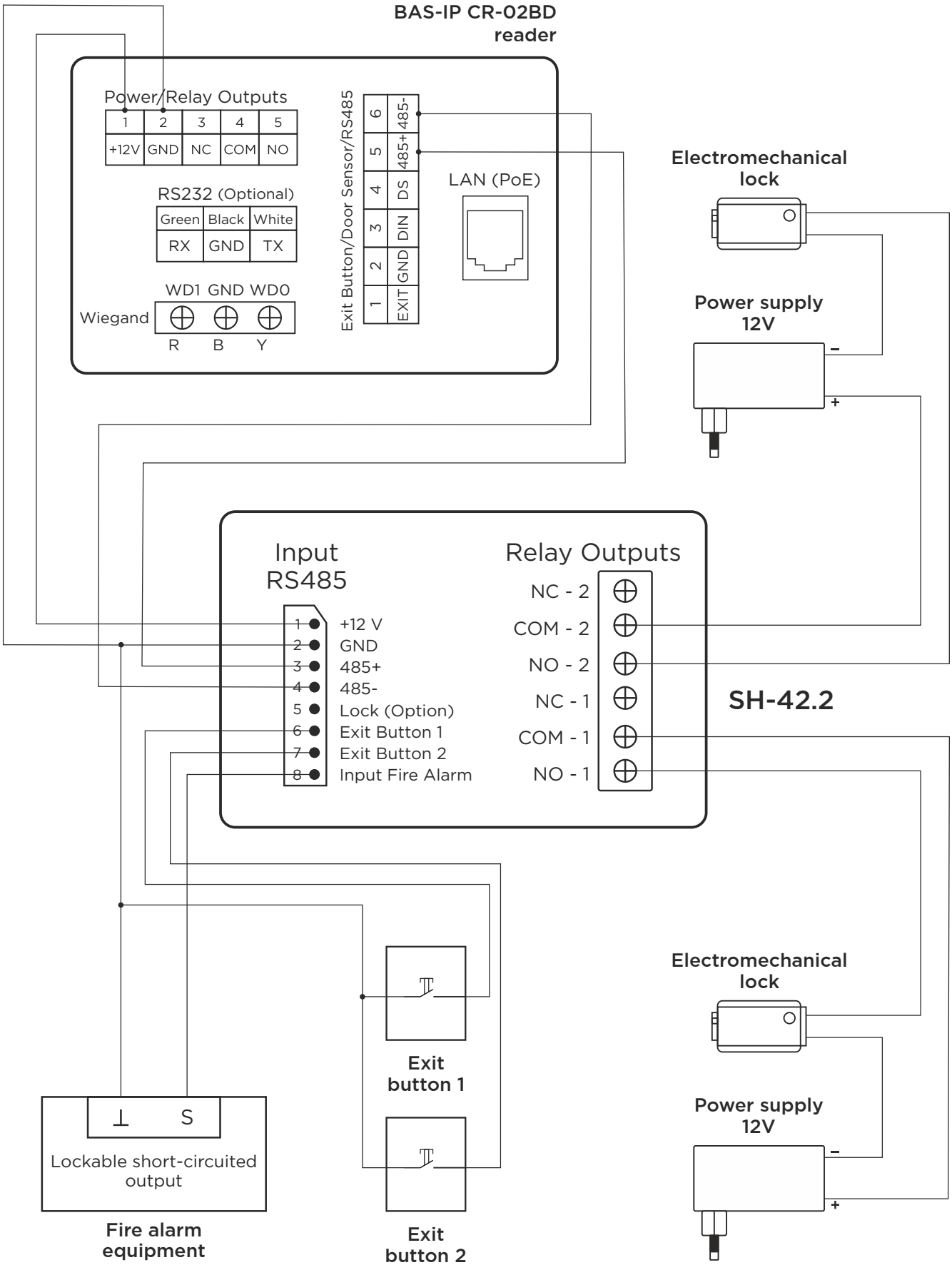


Diagram 3. Wiring diagram for SH-42.2 with two electromagnetic locks, each powered by its own separate power supply.

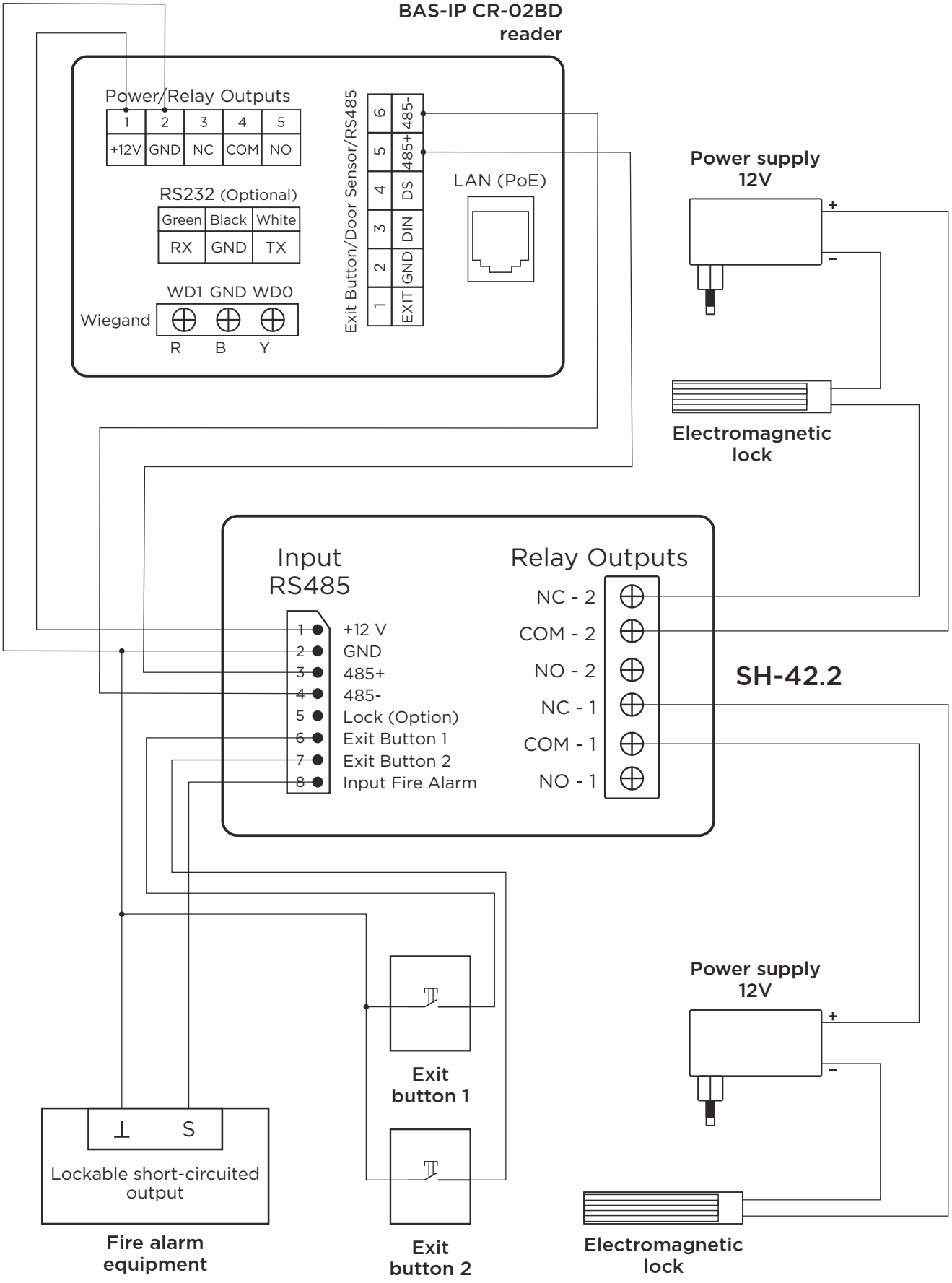


Diagram 4. Wiring diagram for SH-42.2 using the «Lock» input and an electromechanical lock powered by its own separate power supply.

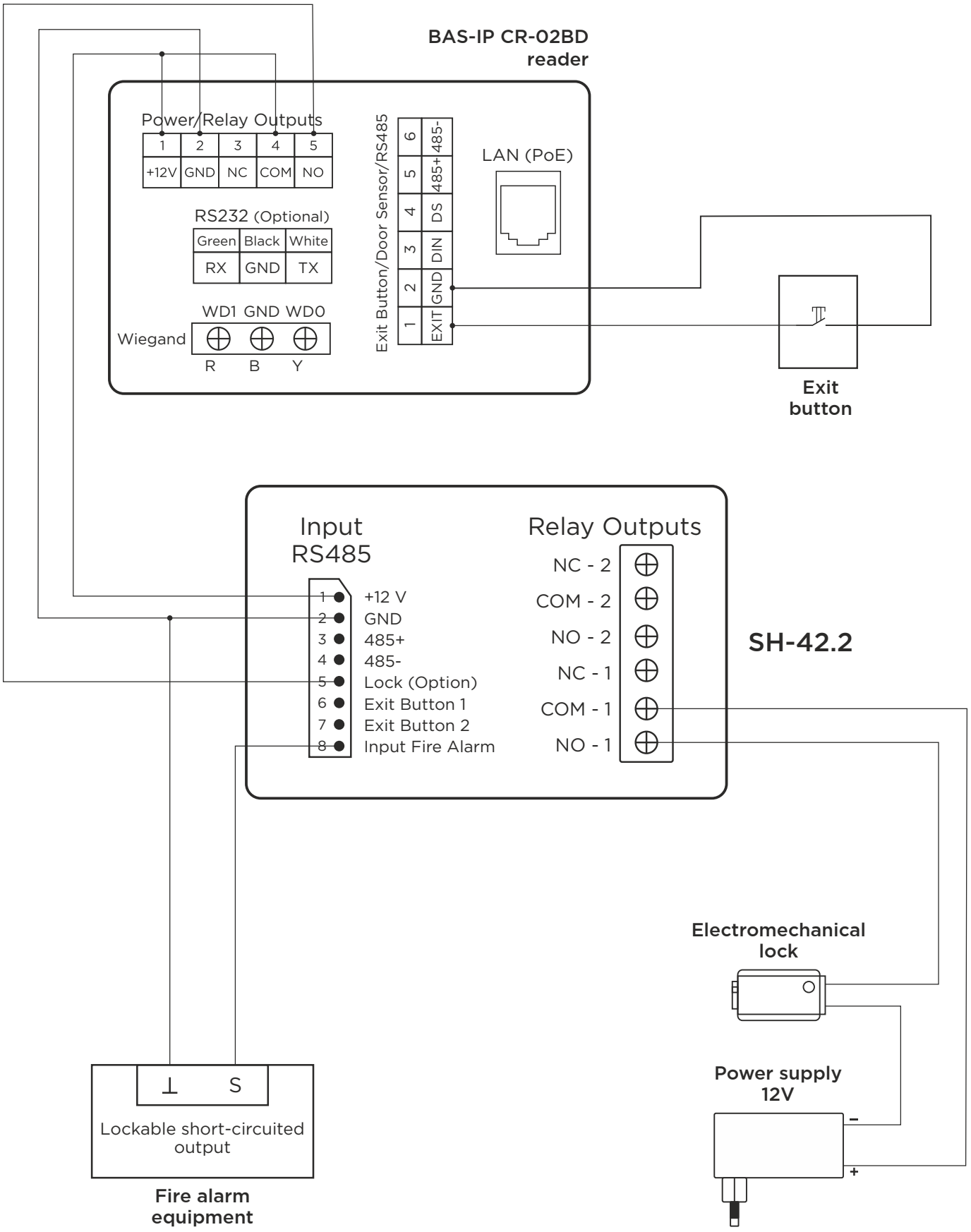
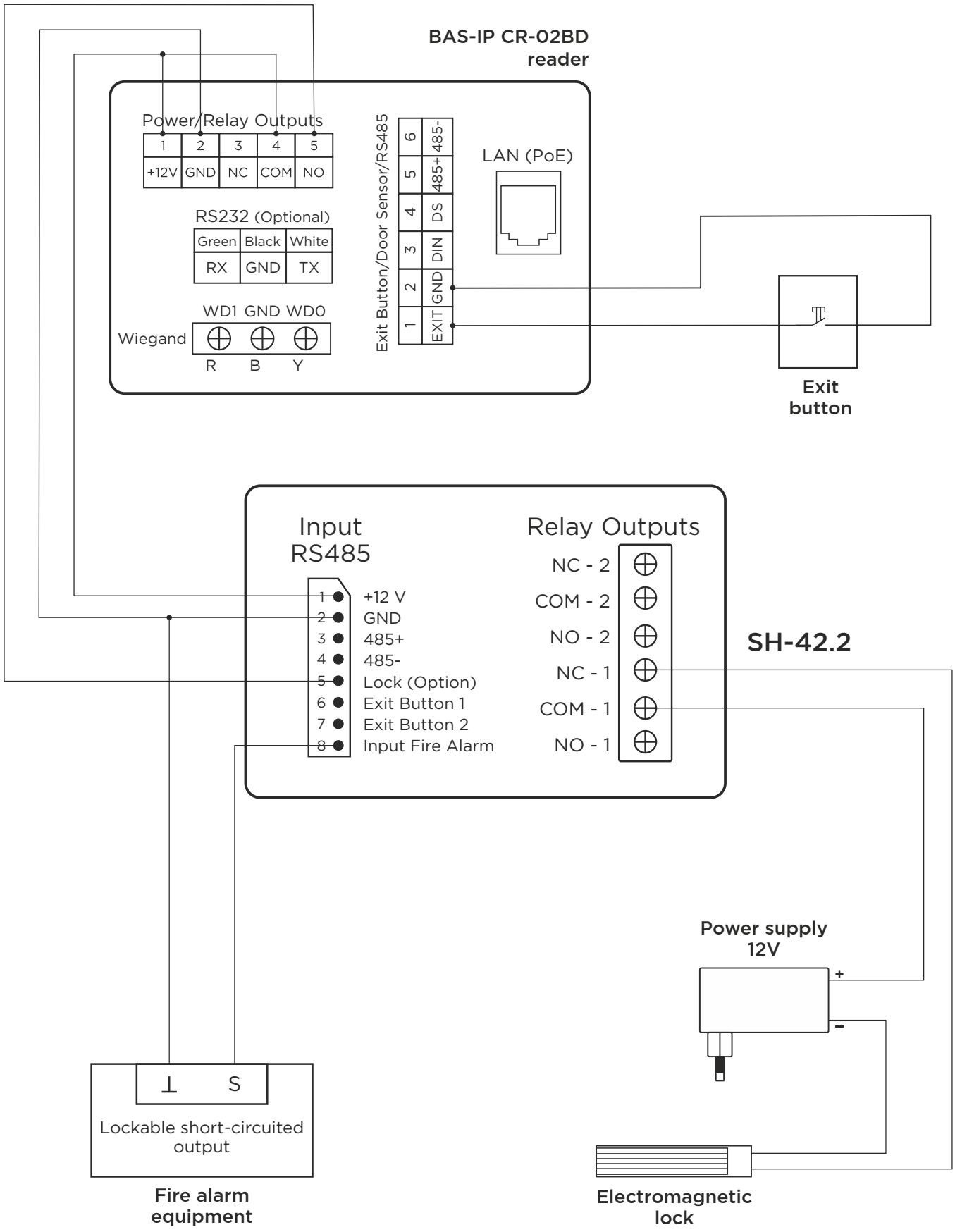


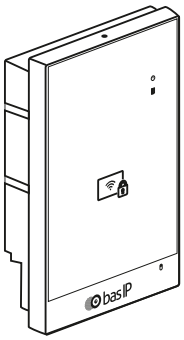
Diagram 5. Wiring diagram for SH-42.2 using the «Lock» input and an electromagnetic lock powered by its own separate power supply.



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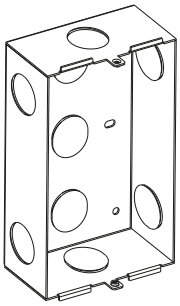
Surface installation process

1 Check the availability of all the components required for the installation, connection and fastening.



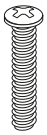
CR-02BD reader with controller

x1



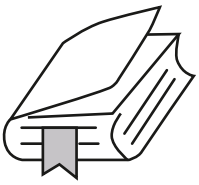
flush mounting bracket

x1



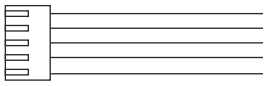
fastening screws set

x1



user manual

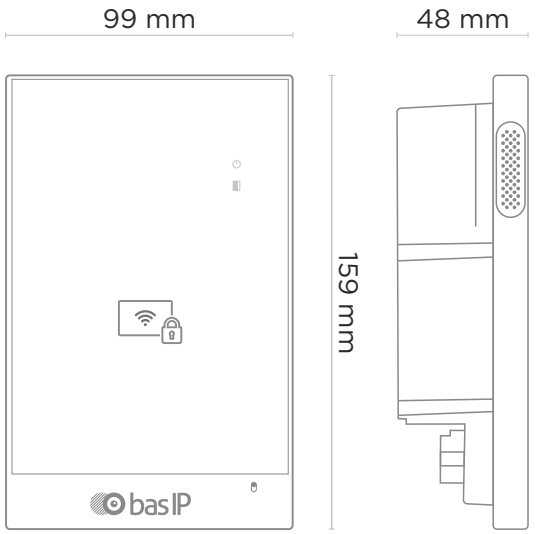
x1



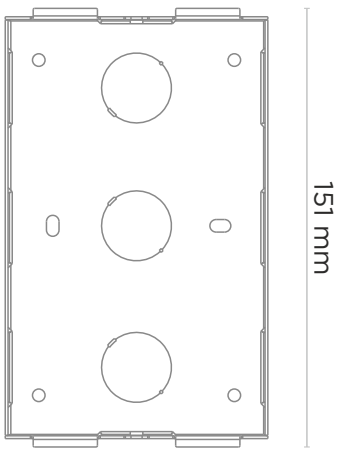
x1 set of wires with connectors

2 Verify all the diamensions of the flush mounting bracket and the reader to suit intentional place of installation. Also it is necessary to provide power supply cable, cable from additional modules and local network cable to the place of reader installation.

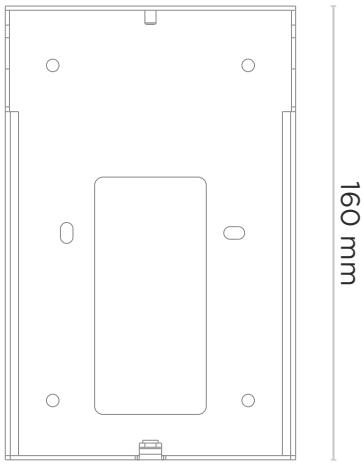
Controller with reader



Flush bracket

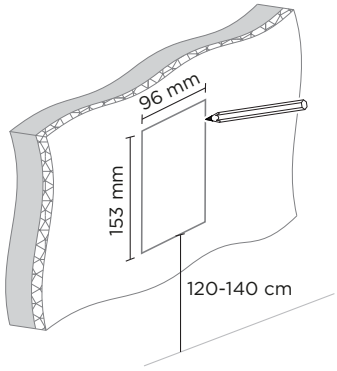


Surface bracket BR-AV2 (sold separately)

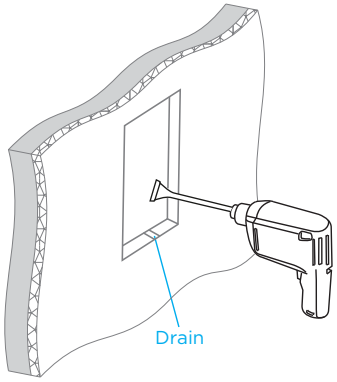


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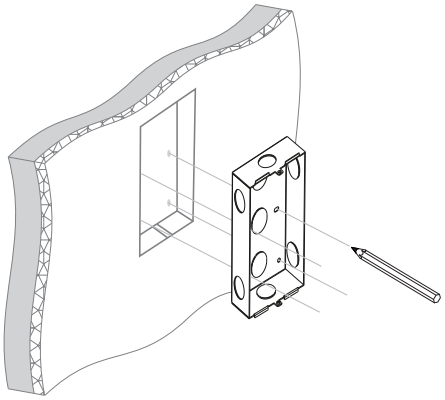
3 Draw a rectangle on the wall with specified dimensions.



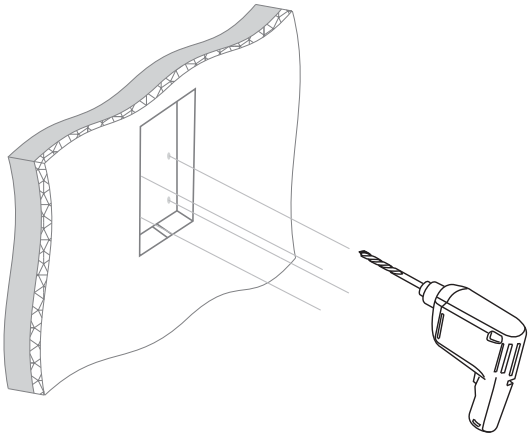
4 Create the hollow in the wall 60 mm depth for the flush mounting box. Also create the drain for the water on the bottom of the hollow.



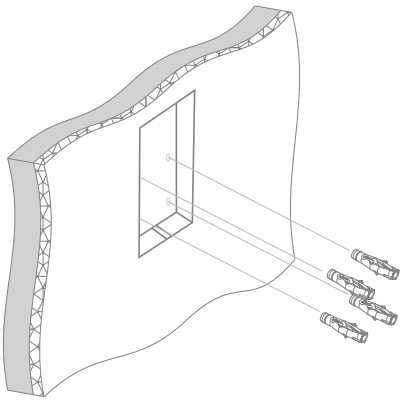
5 Put the flush mounting box into the hollow and mark four holes for the fixing anchors.



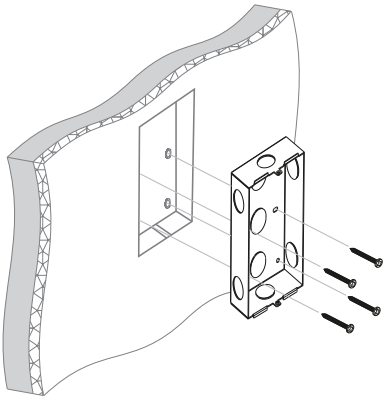
6 Drill four holes for the anchors inside the hollow.



7 Install the anchors inside the drilled holes.

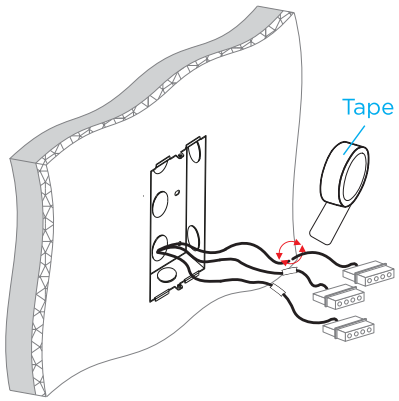


8 Fix the flush mounting box inside the hollow using screws. Attention: do not close the water drain on the bottom while fixing the flush box!

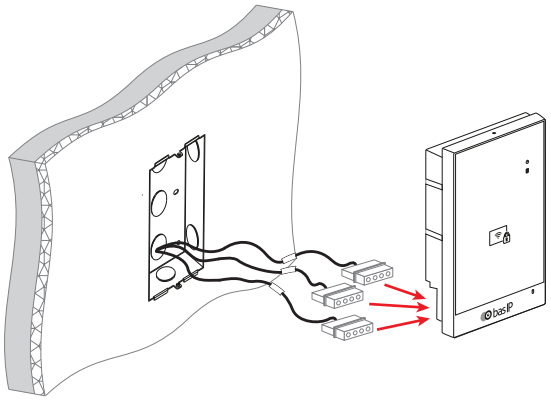


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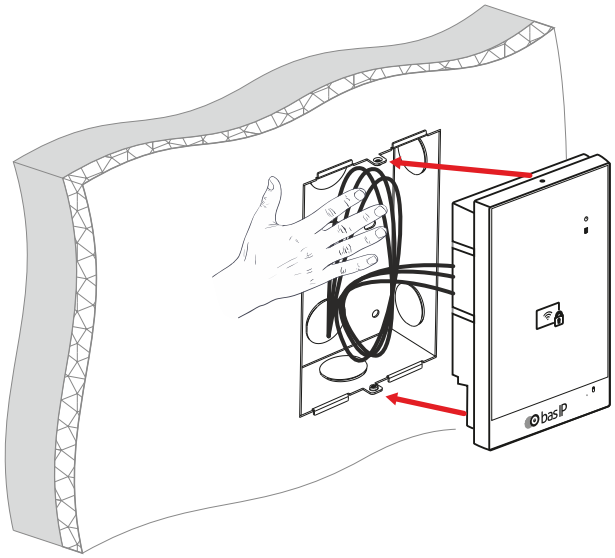
9 Connect all the necessary cables from the flush box to the connectors and isolate them using tape.

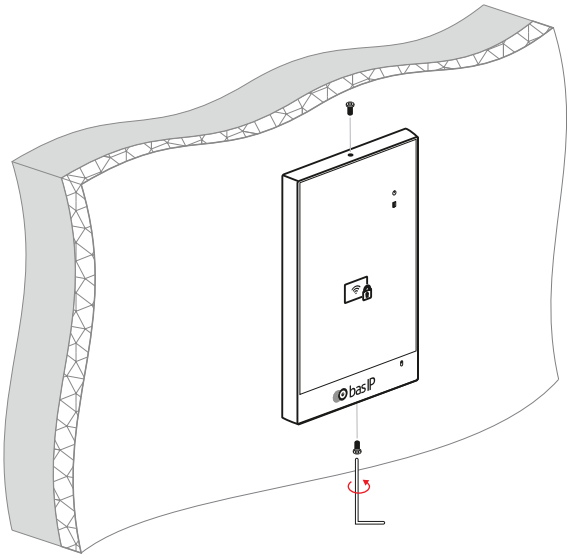


10 Join all the connectors to the reader connection terminals.



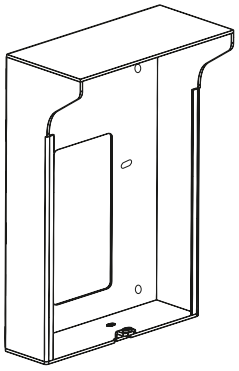
11 Install the reader into the flush mounting box while carefully laying all the wires inside it. Use the loop pattern to lay all the excessive wires into the box. Avoid squeezing the wires between the reader back and metal parts of the flush mounting box. Fix the reader using two screws and the wrench from the kit.





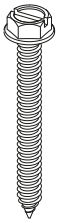
Surface installation process with BR-AV2 rain cover (sold separately)

1 Check the availability of all the components required for the installation, connection and fastening.



surface mounting bracket with raincover BR-AV2

x1



bracket fastening screws

x4



user manual

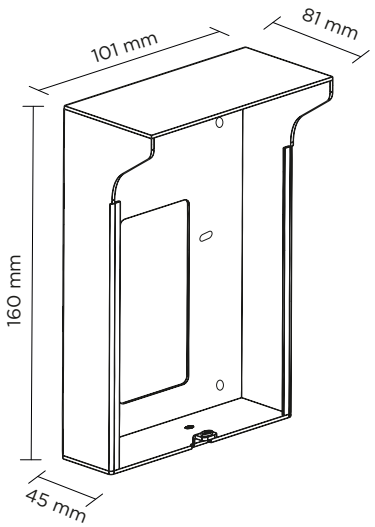
x1

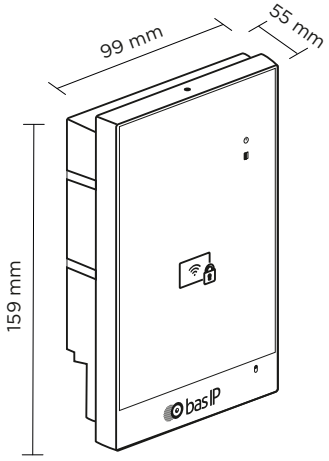


bracket fastening anchors

x4

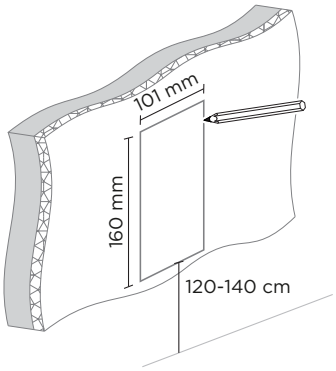
2 Verify all the diamensions of the rain cover and the outdoor panel to suit intentional place of installation.



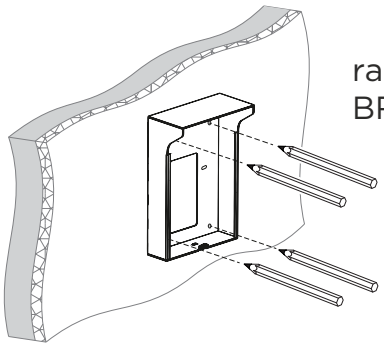


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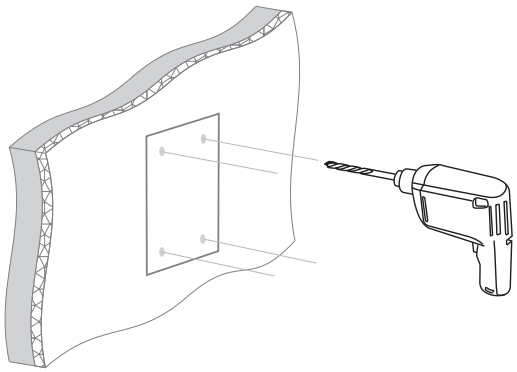
3 Draw a rectangle on the wall according to the dimensions mentioned below.



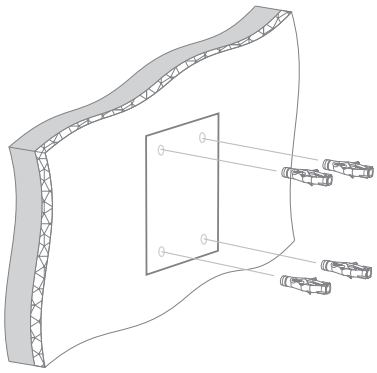
4 Place the rain cover against the rectangle. Mark four holes for the anchors.



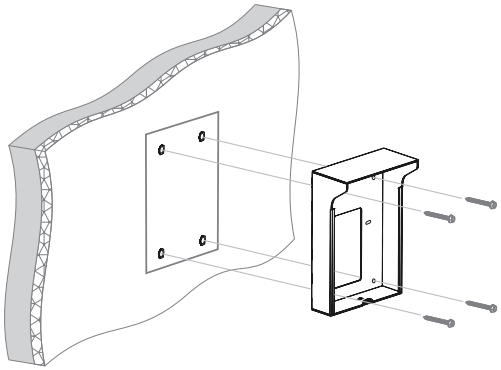
5 Drill four holes for the anchors.



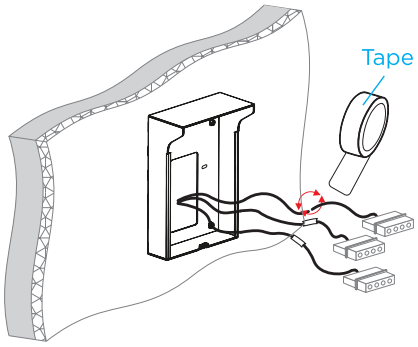
6 Install anchors into the drilled holes.



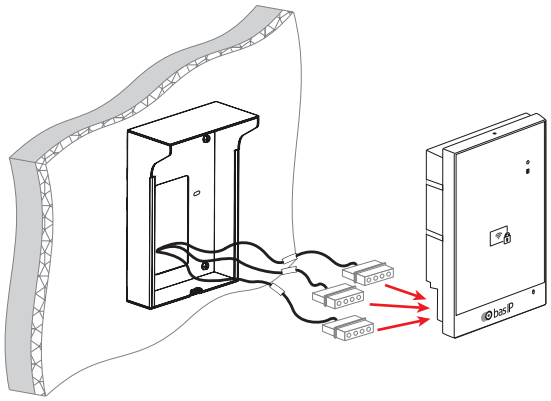
7 Fix surface mounting bracket on the wall using screws from the kit.



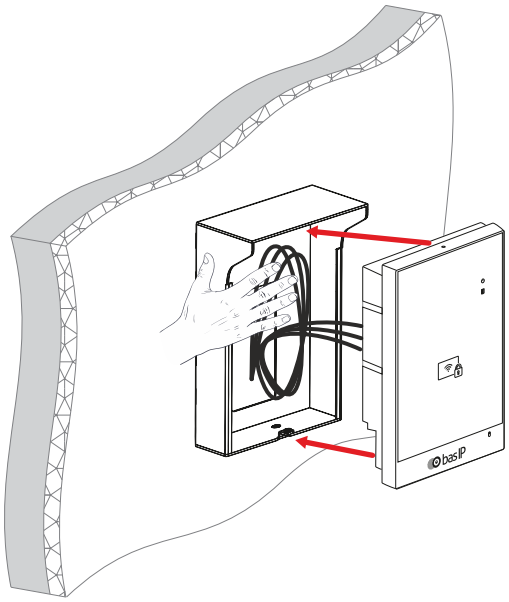
8 Connect all the necessary cables from the wall to the connectors from the panel kit and isolate them using tape.

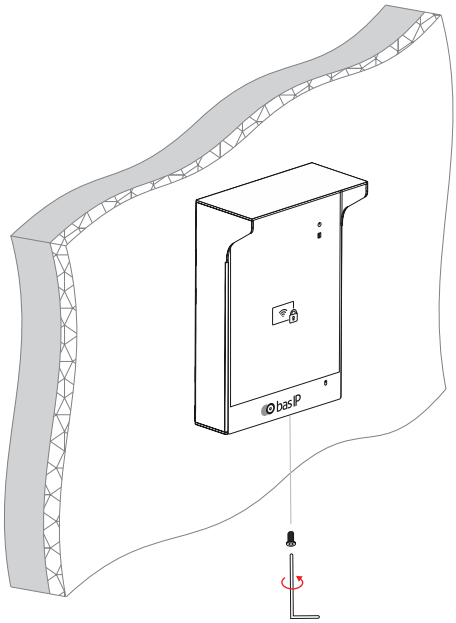


9 Join all the connectors to the reader connection terminals.



10 Install the reader into the surface mounting mounting bracket while carefully laying all the wires. Use the loop pattern to lay all the excessive wires to the hollow inside the wall. Avoid squeezing the wires between the reader back and plastic parts of the surface mounting bracket.
Fix the reader using the screw and the wrench from the panel kit.





EAN: 5060514912911 (GOLD) EAN: 5060514913734 (BLACK)
EAN: 5060514913727 (SILVER)

Warranty

The warranty card number _____
Model name _____
Serial number _____
Seller name _____

With following stated terms of warranty is familiar, functional test was performed in my presence:

Customer signature _____

Warranty conditions

The warranty period of the product — 36 (thirty six) months from the date of sale.

- Transportation of product must be in its original packaging or supplied one by the seller.
- The product is accepted in warranty repair only with a properly filled warranty card and the presence of intact stickers or labels.
- The product is accepted for examination in accordance with the cases provided by law, only in the original packaging, in a full complete set, appearance corresponding to the new equipment and presence of all relevant properly filled documents.
- This warranty is in addition to the constitutional and other consumer rights and in no way restrict them.

Terms of warranty

- The warranty card must indicate the name of the model, serial number, purchase date, name of the seller, seller company stamp and the customer's signature.
- Delivery to the warranty repair is carried out by the buyer himself.
- Warranty repairs carried out only during the warranty period specified in the warranty card.
- The service center is committed to do everything possible to carry out the repair warranty products, up to 24 working days. The period spent on the restoration of product functionality is added to the warranty period.

Version 2.1 (2026-09)



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