Installation Manual

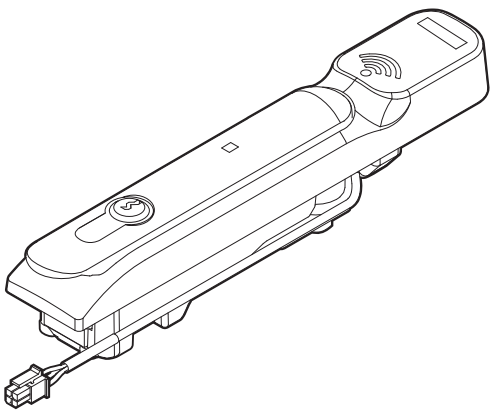
NetBotz®

Handle Kit

NBHN1356/NBHN1356S
NBHN125/NBHN125S

990-9868C

Publication Date: April 2021



APC™

by Schneider Electric

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Introduction

This manual provides instructions to install the APC by Schneider Electric NetBotz 125 kHz Handle Kit (NBHN125, NBHN125S) and NetBotz 13.56 MHz Handle Kit (NBHN1356, NBHHN1356S). You can find updates to this manual on **www.apc.com**.

You can connect up to two handles to a compatible NetBotz appliance. Both handles must be the same model, either two 125 kHZ handles (840-9084A) or two 13.56 MHz handles (840-9085A).

NetBotz handles work in conjunction with Rack Access Proximity cards. The same kind of proximity card must be used with both handles.

Product Compatibility

Racks. These Handle Kits are compatible with the following racks:

- NetShelter® SX
- NetShelter SX Colocation rack (AR3200)
- NetShelter WX With Swing Handle (AR106SH4, AR109SH4, AR112SH4, AR106SH6, AR109SH6, AR112SH6)
- NetShelter SV
- Chatsworth GlobalFrame™ Cabinet

NOTE: The NetBotz gear box (NBHN4340) allows a Handle Kit to be installed on some additional products such as the EcoStruxure Micro Data Center C-Series, 43U. See the documentation for your product for compatibility and installation instructions.

NOTE: For the most recent information on the racks compatible with this product, check the APC by Schneider Electric website, **www.apc.com,** or contact your APC by Schneider Electric representative.

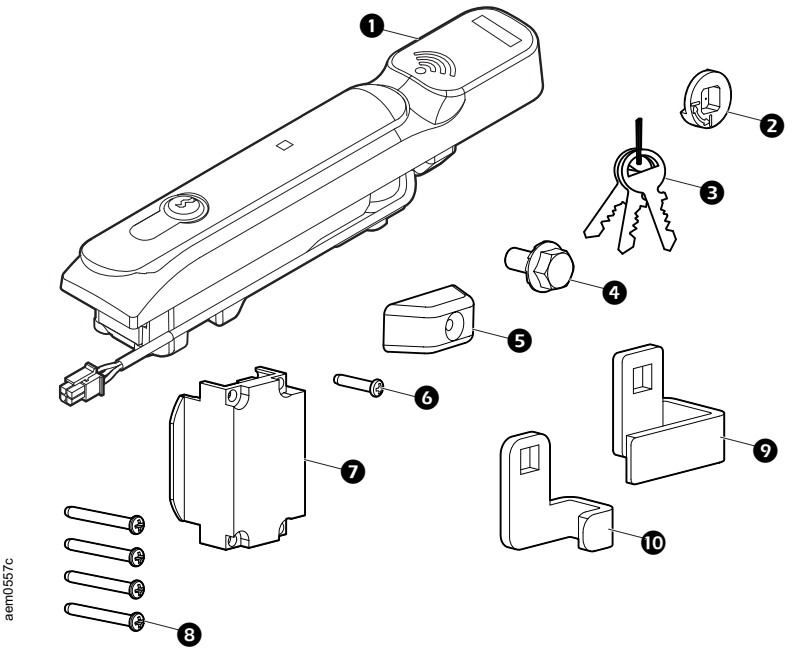
Software. These Handle Kits can be used with StruxureWare for Data Centers® systems, EcoStruxure™ systems, and compatible NetBotz appliances.

Receiving Inspection

Inspect the package and its contents for shipping damage and ensure that the parts included in the shipment match all of the parts listed in the inventory table. Immediately report any shipping damage to the shipping agent. Report missing contents, damage, or other problems to APC by Schneider Electric or your APC by Schneider Electric reseller.

The shipping materials are recyclable. Please save them for later use, or dispose of them appropriately.

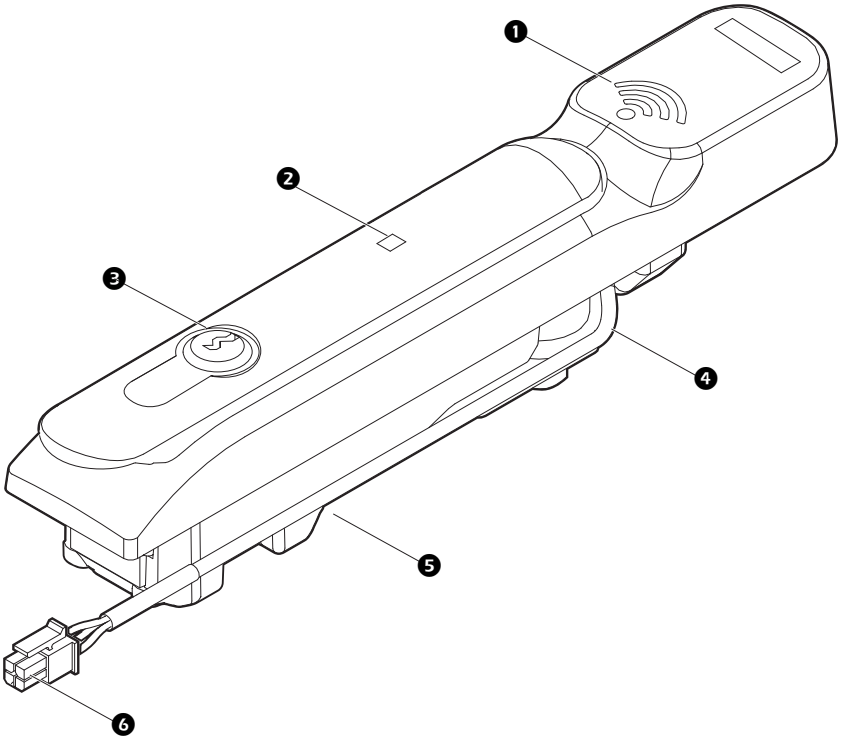
Inventory



Item	Description	Not shown:
❶	Handle (NBHN125/NBHN1356–2) (NBHN125S/NBHN1356S–1)	• Cable assembly (NBHN125/NBHN1356–2) (NBHN125S/NBHN1356S–1) • In line RJ45/RJ45 coupler • Wire tie 8 x 0.1 x 0.06 in. (20) • CAT5 RJ45M/RJ45M patch cable (2) • HID 125 kHz 26 bit proximity card with APC by Schneider Electric logo, included with only NBHN125/NBHN125S (NBHN125–2) (NBHN125S–1)
❷	Rotation limiter	
❸	Keys (3)	
❹	Cam screw	
❺	Top mounting bracket	
❻	Phillips mounting screw, M3 x 14	
❼	Bottom mounting bracket	
❽	Phillips mounting screw, M3 x 25 (4)	
❾	Long cam, for use with NetShelter SV and NetShelter SX Colocation (AR3200) (2)	
❿	Short cam for use with NetShelter SX/WX (2)	

Physical Description

Swing handle with proximity reader



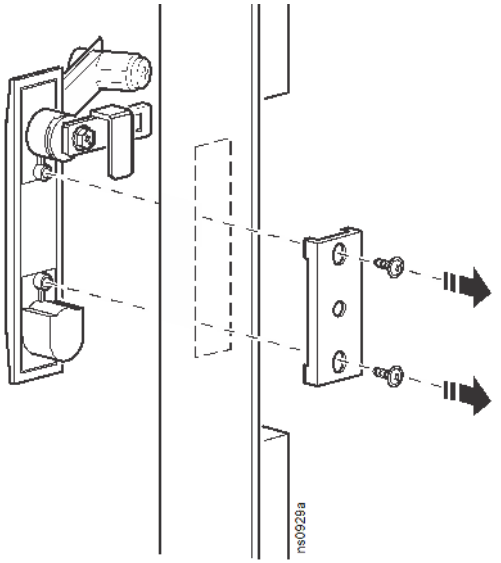
Item	Description
1	Proximity reader
2	Status LED
3	Lock plug
4	Sensor wire
5	Lock connector port (not shown)
6	Proximity reader connector

Installation

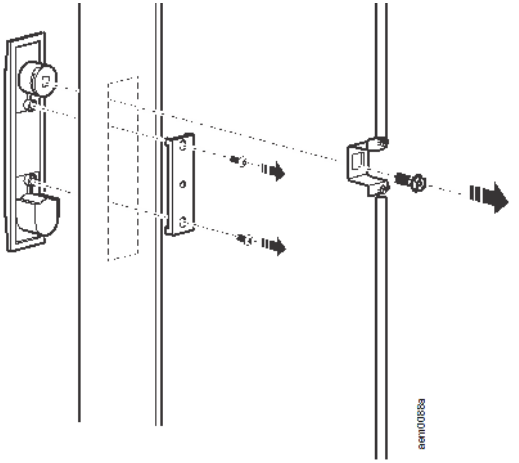
Before installing the Handle Kit, you must remove the front and rear door handles on your rack. You will need a #1 Phillips screwdriver to install the handle kit.

For products requiring a gear box (NBHN4340), see your product's installation manual for instructions to remove the handle and install the gear box.

Remove the front door handle



Remove the rear door handle

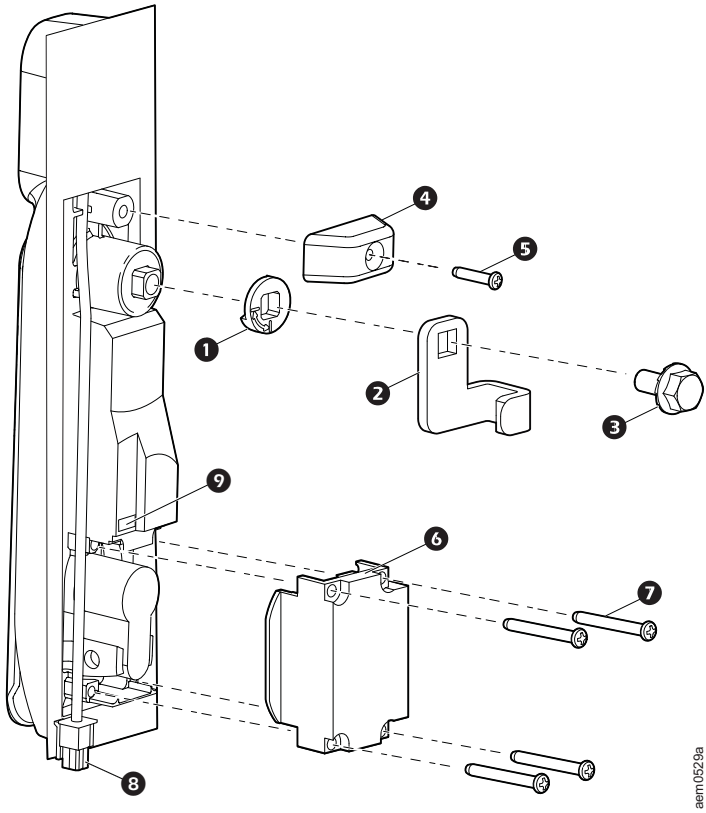


Install the handle kit

1. Remove the existing rack handles (see “Remove the front door handle” on page 4 or “Remove the rear door handle” on page 4). Remove the cam from the door handle, and save it for step 5.
2. Slide the new handle through the opening in the door.
3. With the swing handle closed, position the rotation limiter (❶) with the arrows in the lower right corner for right-hand mounting, or in the lower left for left-hand mounting. Ensure the swing handle moves toward the inside of the rack in the open position. Reposition the rotation limiter if necessary.
4. Attach the top mounting bracket (❹) with the M3x14 Phillips screw (❺).
5. Reattach the cam (❷) with the cam screw (❸), or use the cam screw to attach the cam provided for your rack.
6. Attach the bottom mounting bracket (❻) using four M3x25 Phillips screws (❼), with the tab on the right for right hand mounting, or on the left for left hand mounting.

   NOTE: Make sure the handle wire is outside the mounting bracket and does not interfere with the latch. **Do not crimp the wire during installation.**
7. Attach the included cable assembly to the proximity reader connector on the handle wire (❽) and the lock connector port (❾) on the handle. Route the cable assembly through the rack door.

   NOTE: Only use the cable assembly that came with the Handle Kit.
8. At the hinge between the door and the rack, use the RJ45/RJ45 coupler to connect the cable assembly to the CAT5 cable.
9. Continue routing the CAT5 cable through the rack.
10. Connect the cable to the appropriate port on a compatible NetBotz appliance.



Item	Description
❶	Rotation limiter
❷	Cam from your rack
❸	Cam screw
❹	Top mounting bracket
❺	M3x14 Phillips mounting screw
❻	Bottom mounting bracket
❼	M3x25 Phillips mounting screws (4)
❽	Proximity reader connector
❾	Lock connector port

Status LED

The LED activity on the front of the handle (blue, magenta, red) signifies its status.

LED Activity	Status	Action
Solid blue	**Locked** The handle is secured, the cam and lock slide are in the locked position.	Normal. Rack is secured.
Flashing blue/magenta	**Unlocked electronically** The handle is secured, the cam is in the locked position. The lock slide is in the unlocked position.	Normal. Rack can be accessed.
Flashing blue	**Unlocked manually** The handle is open, or the cam is in the unlocked position.	Normal. Rack can be accessed.
Flashing blue/red	**Handle not fully closed** The cam is open.	Close handle.
Flashing blue/red/red	The cam is closed. The lock slide is not positioned correctly.	Possible tampering or mechanical failure. Call technical support.
Flashing magenta	**Lock slide error** The lock slide is locked and not responding electronically.	Contact technical support.
Flashing red/magenta	The lock slide is not responding electronically, and was unlocked manually.	
Solid blue	**Unlocked electronically** The handle is secured, the cam is in the locked position. The lock slide is in the unlocked position.	Normal. Rack is secured.

Compatible Rack Access Cards

Handle	Supported card types
NetBotz 125 kHz Handle Kit (NBHN0125/NBHN0125S)	• H10301 26-bit • H10302 37-bit • H10304 37-bit with facility code • CORP-1000 35-bit
NetBotz 13.56 MHz Handle Kit (NBHN1356/NBHN1356S)	• MIFARE Classic 4-byte UID • MIFARE Classic 7-byte UID • MIFARE DESFIRE • MIFARE PLUS • iClass

You must access the NetBotz appliance's user interface to register a rack access card. See the *User Guide* for your NetBotz appliance for instructions.

Specifications

Electrical

Lock

Supply voltage (Vsupply)	12 VDC to 24 VDC
Standby current	50 mA maximum at 12 VDC
Operating current	200 mA maximum at 12 VDC (with no external mechanical load)
Stall current	1 A maximum at 12 VDC (limited to 2 seconds)
Operating transit time	1 second maximum (with power present)
Electronic unlock time	3 seconds minimum
Open collector outputs	Rated for Vsupply maximum load

Proximity reader

Supply voltage (Vcc)	12 VDC to 24 VDC
Operating current	20 mA maximum at 12 VDC (with no external devices)
Transmit frequency	125 kHz FSK
DATA signal voltage	5 VDC
DATA pulse interval time	40 µs
DATA signal delay	2 ms

Handle

Maximum length of CAT5 sensor cable	100 m (330 ft)

Environmental

Operating temperature	0 to 45ºC (32 to 113°F)

Physical

Dimensions (H x W)	212.6 x 37.0 mm (8.37 x 1.45 in)
Weight	0.4 kg (0.9 lb)

Two Year Limited Factory Warranty

APC by Schneider Electric warrants its products to be free from defects in materials and workmanship for a period of two (2) years excluding the batteries. The APC by Schneider Electric obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products. Repair or replacement of a defective product or parts thereof does not extend the original warranty period.

This warranty applies only to the original purchaser who must have properly registered the product within 10 days of purchase. Products may be registered online at **warranty.apc.com**.

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To obtain service under warranty you must obtain a Returned Material Authorization (RMA) number from customer support. Customers with warranty claims issues may access the APC by Schneider Electric worldwide customer support network through the APC by Schneider Electric Web site: **www.apc.com**. Select your country from the country selection drop down menu. Open the Support tab at the top of the web page to obtain information for customer support in your region. Products must be returned with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase.

Obtaining service

To obtain support for problems with your NetBotz Handle Kit:

1. Contact Customer Support using the information on the back cover of this manual. A technician will try to help you solve the problem.
2. If you must return the product, the technician will give you a return material authorization (RMA) number. If the warranty has expired, you will be charged for repair or replacement.
3. Pack the unit carefully. The warranty does not cover damage sustained in transit. Enclose a letter with your name, address, RMA number and daytime phone number; a copy of the sales receipt; and a check as payment, if applicable.
4. Mark the RMA number clearly on the outside of the shipping carton.
5. Ship by insured, prepaid carrier to the address provided by the Customer Support technician.

Compliance

FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference and

2. This device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Warning: The equipment complies with RF exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

European Union

This product is in conformity with the protection requirements of EU Council Directive 2014/30/EU on the approximation of the laws of the Member States relating to electromagnetic compatibility. APC cannot accept responsibility for any failure to satisfy the protection requirements resulting from an unapproved modification of the product.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to CISPR 32/ European Standard EN 55032. The limits for Class A equipment were derived for commercial and industrial environments to provide a reasonable protection against interference with licensed communication equipment.

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



Worldwide Customer Support

Customer support for this product is available at **www.apc.com.**

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990-9868C **4/2021**