



Control components with NFC



NFC symbol on control component



ZIP-BT-NFC with BC0



ZIP-BT-NFC with VRU



Operation via the smartphone

Interface converter

ZIP-BT-NFC



For service and commissioning of VAV controllers

Interface converter NFC to Bluetooth for extending the wireless connection with the free TROX FlowCheck App

- Use of a wireless connection for parameterisation and diagnosis
- Extension of Near Field Communication (NFC) to a longer Bluetooth radio link
- Up to approx. 5 m distance between control component and mobile device
- Powerless parameterisation already possible in the construction container
- Suitable for smartphones with the operating systems Apple iOS or Android
- Magnetic suction foil for easy use even overhead
- Charging the battery via USB
- LED display for easy status recognition

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General information

Application

- Bluetooth NFC converter for TROX control components with NFC interface on VAV control units
- Simplification of service, diagnostics and commissioning through wireless connection to the control component
- Can be used in conjunction with free TROX FlowCheck App

Currentless parameterisation

- Read actual values and setpoint values
- Read and change parameters
- Reading and changing operating modes
- Setting communication parameters for bus-compatible control components

With power supply connected

- Functional test
- Trend recording

Parts and characteristics

- ZIP-BT-NFC-Konverter (akkubetrieben)
- Kleines handliches Kunststoffgehäuse mit Positionierungshilfe
- Ein-/Aus-Schalter
- LED-Statusanzeigen für Einschalt- und Ladezustand sowie Kommunikation
- NFC-Schnittstelle zu TROX/Belimo Regelkomponenten/ Geräten
- Bluetooth-Schnittstelle zum Mobilgerät
- Magnetische Saugdruckfolie für einfache Befestigung auch Überkopf
- Halteschleife für Sicherheitsbefestigung gegen Herabfallen
- Micro-USB-Ladebuchse

Commissioning

- TROX FlowCheck App erforderlich
- Bluetooth-Pairing für ZIP-BT-NFC mit Mobilgerät erforderlich
- Weitere Details siehe Abschnitt Produktdetails

Supply package

- Converter ZIP-BT-NFC (battery-powered)
- USB charging cable with USB type A plug;
- USB power supply unit for charging not included in the scope of delivery
- Retaining loop
- Installation Quick Start Guide

Useful additions

- Free TROX FlowCheck App (Android or iOS version)
 - Android version in the Google Play Store
 - iOS version in the Apple App Store
- Third-party USB charger

Specification text

This specification text describes the general properties of the product. Texts for variants can be generated with our Easy Product Finder design programme.

Application

Converter for wireless parameterisation/diagnosis of NFC-capable TROX/Belimo volume flow controllers via Bluetooth. With the TROX FlowCheck app and the ZIP-BT NFC converter, it is possible to access volume flow controllers up to 5 m away. Enables wireless reading and setting of operating modes, parameters and reading of current actual and setpoint values on control components with NFC interface.

Energieversorgung

Battery operated (not replaceable)

Area of application

Für Service und Inbetriebnahmen an TROX/Belimo Regelkomponenten mit NFC-Schnittstelle in Kombination mit Bluetooth-fähigem Smartphone

Anschluss/Schnittstelle

- NFC interface: to the control component

- Bluetooth interface: to the smartphone
- Micro-USB 2.0 for charging the internal battery

Eigenschaften

Add-on module with LED signalling for easy status recognition

- Parameterisation of a control component without supply voltage
- Suction pressure foil for attaching the converter to the control component
- Hand strap as additional securing e.g. for overhead mounting
- Expert function for showing and hiding additional parameterisations

Auslieferungszustand

- NFC-Bluetooth-Konverter ZIP-BT-NFC
- USB-Ladekabel mit USB-Typ-A-Stecker
- Handschlaufe

Order code

AT-VAV – BT
| |
1 2

1 Type

AT-VAV Adjustment devices for VAV terminal units

2 Variants

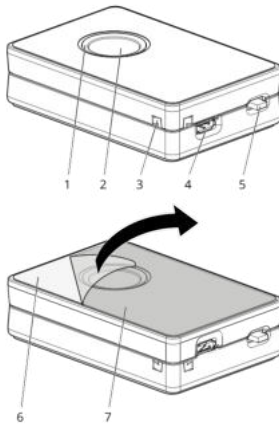
BT ZIP-BT-NFC for TROX/Belimo volume flow controllers (NFC-Bluetooth interface converter)

Order example: AT-VAV-S

Adjustment devices AST20 for air terminal units with Siemens control component

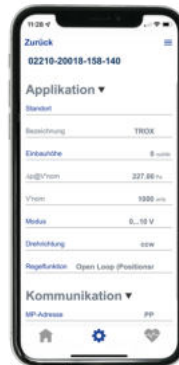
Variants

ZIP-BT-NFC: Operating elements



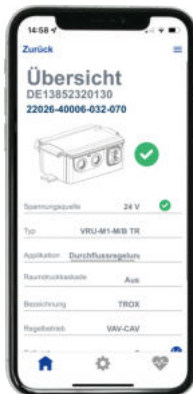
- 1: On and off switch
- 2: Micro USB charging socket
- 3: Fastening hole for retaining loop
- 4: Opening for positioning for NFC antenna
- 5: LED tunnel operation indicator
- 6: Back side with suction pressure foil
- 7: Protective suction print film

FlowCheck App with ZIP-BT-NFC

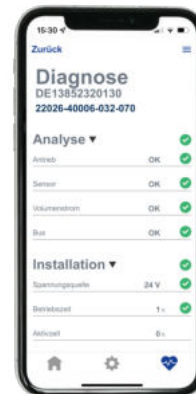


Operation via the smartphone

Extract from the TROX FlowCheck App: Overview



Extract from the TROX FlowCheck App: Diagnosis



Note: Diagnostic and trend display only when power supply is connected to controller

Technical data

ZIP-BT-NFC: NFC-Bluetooth-Konverter



Energy supply	Battery operation non-replaceable, 450 mAh
Charging input	Micro-USB 2.0 type B; charging time approx. 2 h with charger 5 W
Interfaces	Bluetooth 4.0 Low Energy (BLE) NFC - Near Field Communication for TROX control components with NFC interface
Detection range	maximum approx. 5 m (depending on environment)
Control	Smartphone with TROX FlowCheck App
Equipment class	Protection class III
Protection level	IP 20
Operating temperature	0 – 50 °C
Dimensions L × W × H	70 × 46 × 19 mm
EC conformity	2014/53/EU RED, 2011/65/EU RoHS
Weight	50 g
Storage temperature	-20 – 85 °C

Product details

Mode of action

The ZIP-BT-NFC converter extends the range for wireless parameterisation of control components up to approx. 5 m. The range with NFC is only a few centimetres. The converter increases the distance to a Bluetooth radio link. Data can thus be transmitted over a distance of several metres. In this way, a more convenient parameterisation is made possible.

To set up the communication connection between FlowCheck App on a mobile device and the control component, the ZIP-BT-NFC converter used must be paired once with the smartphone, as is usual with Bluetooth, and prepared for the TROX FlowCheck App. The ZIP-BT NFC converter is possible for all TROX/Belimo control components or actuators with NFC symbol, e.g. BC0, BUDN, BUSNF attachments.

The differences and advantages of using the converter are explained in more detail below.

Access only via NFC interface

To read out and overwrite the parameters in the control component, the smartphone must remain positioned exactly on the NFC antenna of the control component for up to 4 seconds. This is not always possible in difficult installation situations.

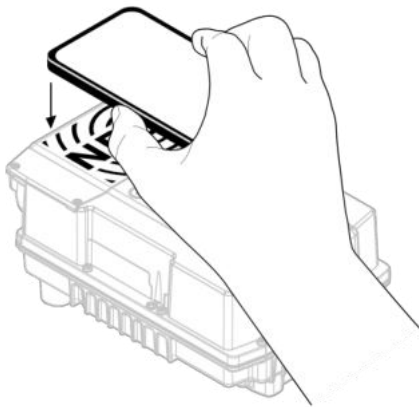
The trend display function is not available with NFC connection only.

Simplified access with ZIP-BT-NFC (NFC interface converted to Bluetooth radio link)

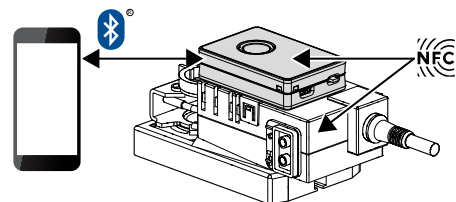
The ZIP-BT-NFC converter is positioned once on the controller after switching on. Subsequently, more convenient wireless parameterisation is possible over a distance of approx. 5 m.

Reading and writing actions can thus be carried out easily and safely. When the supply voltage is applied to the control component, data can be continuously retrieved from the connected device which enables a trend display on the mobile device.

Access only via NFC interface



Simplified access via Bluetooth



Up to 5 m distance between ZIP-BT-NFC and smartphone

Ansichten und Parametriermöglichkeiten in der TROX FlowCheck App (abhängig von der jeweiligen TROX Regelkomponente)

Die TROX FlowCheck App bietet eine umfangreiche Übersicht über z. B.:

- Angeschlossene Spannungsversorgung der Regelkomponente
- Regelkomponententyp
- Applikation (Durchflussregelung, Kanaldruckregelung, Raumdruckregelung)
- Aktueller Sollwert, Istwert, aktuelle Klappenposition

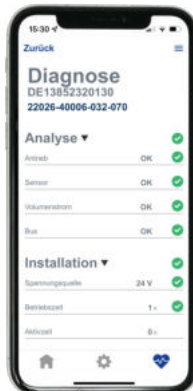
In der TROX FlowCheck App sind alle gängigen Parametereinstellungen stromlos möglich wie:

- Maximal- und Minimaleinstellung für Volumenstrom, Kanaldruck oder Raumdruck
- Analoge Kennlinien, Sollwertvorgabe 0 – 10 V oder 2 – 10 V
- Analoge Kennlinien, Istwertrückgabe 0 – 10 V oder 2 – 10 V
- Kommunikationsparameter (Modbus, BACnet oder MP-Bus) wie z. B. Adressierungseinstellung

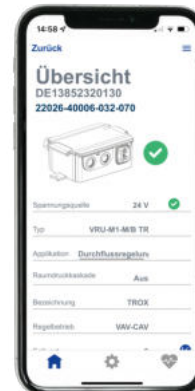
Die TROX FlowCheck App bietet beispielsweise Analyse- und Installationsdarstellungen:

- Status über Regelkomponente, Antrieb, Sensor, Volumenstrom, Buskommunikation
- Angeschlossene Spannungsquelle
- Betriebsdauer
- Aktivzeit
- Softwareversion

Extract from the TROX FlowCheck App: Diagnosis



Extract from the TROX FlowCheck App: Overview



Note: Diagnostic and trend display only when power supply is connected to controller

Commissioning and assembly

An installed TROX FlowCheck app is required to use the ZIP-BT-NFC converter. This is available free of charge in the Apple iOS Store or the Google Play Store and must be installed on the smartphone or tablet. When using the ZIP-BT-NFC converter, take the following steps into account:

Preparation

- Fully charge converter ZIP-BT-NFC with power supply unit
- LED flashes green during the charging process. Continuous light signals the end of the charging process
- Remove the protective film from the magnetic suction foil on the back of the ZIP-BT-NFC converter

Positioning on control component

- Attach the ZIP-BT-NFC to the cable or similar using the retaining loop (to prevent it from falling down (Fig. 2))
- Clean the contact surface of the control component (NFC symbol) so that the suction pressure foil works
- Switch on the ZIP-BT-NFC (green LED lights up) and position it on the control component
- Position so that the NFC symbol is visible through the positioning opening (Fig. 1)
- ZIP-BT-NFC is held in place on the control component by a magnetic connection and a suction-pressure foil

Establish connection

- Open the TROX FlowCheck app and open the connection selection via the menu in the top right-hand corner
- Select switched-on ZIP-BT-NFC under Converter ZIP-BT-NFC (Pairing)
- After setting up the connection in the TROX FlowCheck App, select Back

Data exchange

- The control component is read out after the connection is established. A status bar appears, showing the current progress of the edit
- After completion of the processing, the status and parameterisation can be analysed

Parameter changes

- Changes in attitude are feasible. The message Write changes appears in the upper area of the application
- Confirmation in the TROX FlowCheck App is required to transfer the parameter changes to the control component

Figure 1: Assembly instructions for the ZIP-BT-NFC

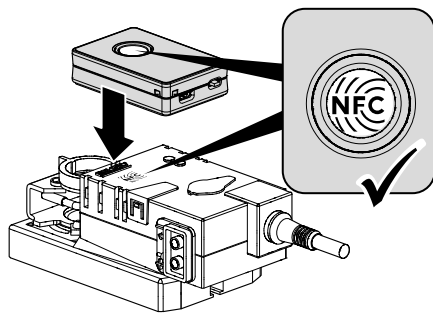
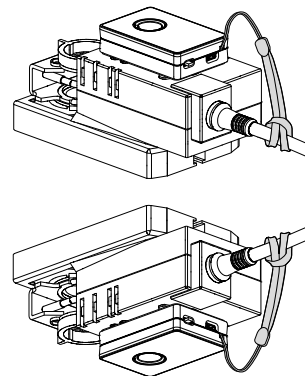


Figure 2: Safety attachment with retaining loop



Manufacturer's notes and data

Reference to the manufacturer's instructions

The product documents of the ZIP-BT-NFC interface converter from Belimo Holding AG are authoritative for the scope of functions and technical data. For further information, please consult the detailed manufacturer documentation such as product data sheet and installation and commissioning instructions on the manufacturer's website.

- Technical data
- Function and application description
- Dimensions and dimensional drawing
- Accessories
- Commissioning and assembly instructions

Manufacturer of the converter:

Belimo Holding AG

www.belimo.com