FX-ATV Handheld VAV Box Balancing Tool Catalog Page

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Johnson Controls

Handheld VAV Box Balancing Tool (FX-ATV7003)

The Handheld VAV Box Balancing Tool (FX-ATV7003) lets you set the parameters for VAV box applications that reside on FX-PC Series Controllers.

The VAV box balancing parameters appear on the tool's LCD. A dial and two buttons let you navigate through intuitive menus to balance the VAV box. The menus are customized to the type of application that resides in the controller. The balancing operation features an adjustable time-out parameter that returns the tool and controller to normal operation if you leave the controller in balancing mode.

The Handheld VAV Box Balancing Tool is lightweight and portable. It can plug into any model of network sensor to access the VAV box controller.

The Handheld VAV Box Balancing Tool is compatible with the following FX-PC Series devices:

- FX-PCV loaded with a VAV application
- FX-PCG or FX-PCA loaded with a VAV application
- NS Series Network Sensor connected to an FX-PCV, FX-PCG, or FX-PCA loaded with a VAV box application

Figure 1: Handheld VAV Box Balancing Tool



Application Documentation

Refer to the *FX-PC Series Programmable Controllers and Related Products Product Bulletin (LIT-12011657)* for product application details.

Repair Information

If the product fails to operate within its specifications, replace the product. For a replacement product, contact the nearest Johnson Controls® representative.

Features

- Allows VAV box balancing and commissioning without a laptop.
- Connects directly to the controller or the controller NS Series Network Sensor through standard RJ-12 plug.
- Intuitive, menu-driven operation simplifies balancing tasks.

Accessories

Table 1: Handheld VAV Balancing Tool Accessories

Product Code Number	Description
FX-ATV7003-0	Handheld VAV Box Balancing Tool
FX-BTCVTCBL-700	Cable Replacement Set for the FX-BTCVT-1 or the FX-ATV7003-0; Includes One 5 ft (1.5 m) Retractable Cable
FX-ZFRCBL-0	Wire Harness which allows an FX-PCV1610/1620 to be connected to an SA Bus device (Bluetooth® Commissioning Converter, Local Controller Display, or NS Series Sensor) when its SA Bus RJ-12 jack is occupied by an FX-ZFR1811 router.

Handheld VAV Box Balancing Tool Technical Specifications

Table 2: Handheld VAV Box Balancing Tool Technical Specifications

Product Code	FX-ATV7003-0
Supply Voltage	9.8 to 16.5 VDC; 15 VDC Nominal, supplied by the Sensor Actuator (SA) Bus Port
Current Consumption	90 mA maximum
Terminations	RJ-12, 6-Position Modular Jack
Transmission Speed	**Serial Communication (SA Bus)** 9600, 19.2k, 38.4k, or 76.8k bps
Sensor Addressing	Fixed address of 198
Ambient Conditions	**Operating:** 0°C to 50°C (32°F to 122°F); 5 to 95% RH, Noncondensing; 30°C (86°F) Maximum Dew Point **Storage:** -40°C to 85°C (-40°F to 185°F); 5 to 95% RH, Noncondensing
Dimensions	80 x 80 x 25 mm (3.2 x 3.2 x 1.0 in.)
Weight	0.165 kg (0.365 lb)
Compliance	**United States:** UL Listed, File E107041, CCN PAZX, UL 916, Energy Management Equipment; FCC Compliant to CFR47, Part 15, Subpart B, Class A

Table 2: Handheld VAV Box Balancing Tool Technical Specifications

CE	**Canada:** UL Listed, File E107041, CCN PAZX7, CAN/CSA C22.2 No. 205, Signal Equipment Industry Canada, ICES-003
	Europe: CE Mark – Johnson Controls declares that this product is in compliance with the essential requirements and other relevant provisions of the EMC Directive.
	Australia and New Zealand: RCM Mark, Australia/NZ Emissions Compliant
	BACnet International: BACnet Testing Laboratories (BTL) 135-2004 Listed BACnet Smart Sensor (B-SS)

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products.