

# RVP-P Series Rectangular VAV Terminal Boxes

A complete range from 130 m<sup>3</sup>/h to 36 000 m<sup>3</sup>/h



#### **FX-PCV1630-1**

Regulator with 8 physical points; 3UI, 3BO, 2CO; Integrated 4 Nm transducer and motor, 24 V AC power supply

#### **FX-PCV1930-0**

IP port controller for Bacnet IP communication (number 2) with 8 physical points; 3UI, 3BO, 2CO; Integrated 4 Nm transducer and motor, 24 V AC power supply.

#### **NS-ATV7003-0**

Room sensor for flow calibration

**PCV Accessories (must be ordered separately)**

VAV terminal boxes are capable of regulating and maintaining environmental comfort in a variable flow system by controlling the air flow in the best way.

This type of system allows you to control ventilation and air conditioning directly in rooms, according to the real flow needs and the cool-heat requirements.

This allows significant savings, especially in applications such as offices, classrooms and hotel rooms where there are large load differences during the various time intervals.

## Features

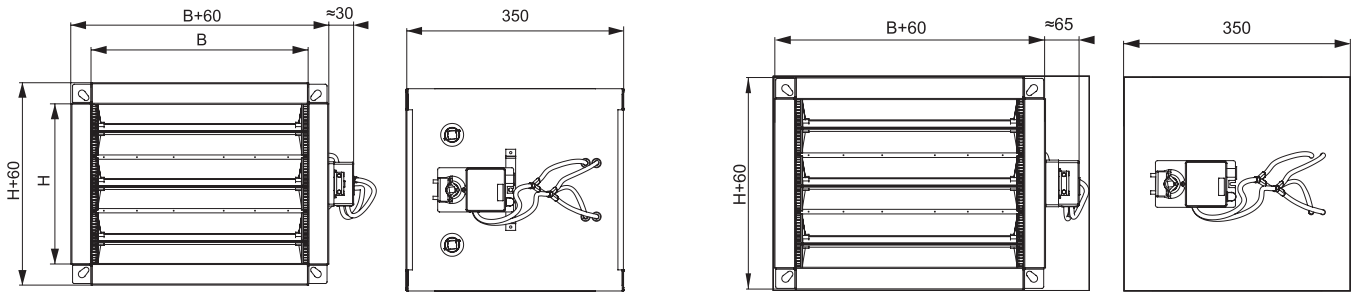
- Continuous flow regulation according to the set point.
- Assembled with factory calibrated FX-CVM regulators
- High adjustment accuracy
- No maintenance required
- Possibility of use with constant or variable flow
- Master-slave mode
- BACnet and N2Open protocols
- Adjustment of maximum-minimum cold flow, hot flow and k factor from the bus probe equipped with display and parameter adjustment knob. It is not necessary to reach the regulator itself, just connect this device to the bus probe cable

## VAV Controller, PCV

The PCV family controllers are equipped with the BACnet protocol in accordance with all ASHRAE specifications. They are equipped with SA Bus and with various input/output configurations.

The regulator includes the differential air pressure transducer to calculate the flow rate and the 4 Nm rotary motor to control the damper. This regulator has been designed for the regulation of VAV terminal boxes with variable flow.

- Support peer to peer communication
- PID control with self-adaptive calculation of the regulation parameters.
- Tested by BACnet Testing Labs (BTL)
- BACnet or N2open protocol selectable by software
- SA bus



### Special configurations

The isolated version is also available with ~ 60 mm thickness

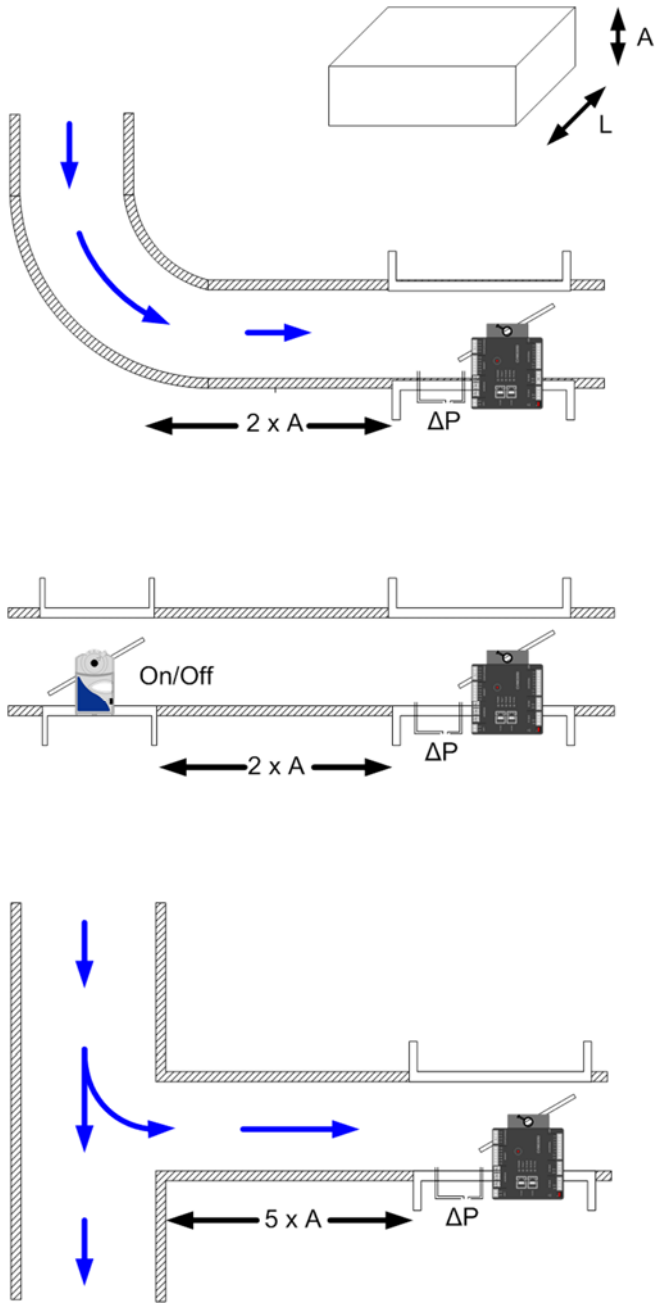
## Dimensions Rectangular VAV

Model	Dimensions	Volume min [ m <sup>3</sup> /h]	Volume max [ m <sup>3</sup> /h]
BPN-RVP-P-200x100	200 mm x 100 mm	130	720
BPN-RVP-P-300x100	300 mm x 100 mm	190	1,080
BPN-RVP-P-400x100	400 mm x 100 mm	255	1,440
BPN-RVP-P-500x100	500 mm x 100 mm	315	1,800
BPN-RVP-P-600x100	600 mm x 100 mm	380	2,160
BPN-RVP-P-200x200	200 mm x 200 mm	255	1,440
BPN-RVP-P-300x200	300 mm x 200 mm	380	2,160
BPN-RVP-P-400x200	400 mm x 200 mm	505	2,880
BPN-RVP-P-500x200	500 mm x 200 mm	630	3,600
BPN-RVP-P-600x200	600 mm x 200 mm	755	4,320
BPN-RVP-P-700x200	700 mm x 200 mm	880	4,320
BPN-RVP-P-800x200	800 mm x 200 mm	1,005	5,040
BPN-RVP-P-300x300	300 mm x 300 mm	570	3,240
BPN-RVP-P-400x300	400 mm x 300 mm	755	4,320
BPN-RVP-P-500x300	500 mm x 300 mm	940	5,400
BPN-RVP-P-600x300	600 mm x 300 mm	1,130	6,480
BPN-RVP-P-700x300	700 mm x 300 mm	1,320	7,560
BPN-RVP-P-800x300	800 mm x 300 mm	1,505	8,640
BPN-RVP-P-900x300	900 mm x 300 mm	1,695	9,720
BPN-RVP-P-1000x300	1000 mm x 300 mm	1,880	10,800
BPN-RVP-P-400x400	400 mm x 400 mm	1,005	5,760
BPN-RVP-P-500x400	500 mm x 400 mm	1,255	7,200
BPN-RVP-P-600x400	600 mm x 400 mm	1,505	8,640
BPN-RVP-P-700x400	700 mm x 400 mm	1,755	10,080
BPN-RVP-P-800x400	800 mm x 400 mm	2,005	11,520
BPN-RVP-P-900x400	900 mm x 400 mm	2,260	12,960
BPN-RVP-P-1000x400	1000 mm x 400 mm	2,510	14,400
BPN-RVP-P-500x500	500 mm x 500 mm	1,570	9,000
BPN-RVP-P-600x500	600 mm x 500 mm	1,880	10,800
BPN-RVP-P-700x500	700 mm x 500 mm	2,195	12,600
BPN-RVP-P-800x500	800 mm x 500 mm	2,510	14,400
BPN-RVP-P-900x500	900 mm x 500 mm	2,820	16,200
BPN-RVP-P-1000x500	1000 mm x 500 mm	3,135	18,000
BPN-RVP-P-600x600	600 mm x 600 mm	2,260	12,960
BPN-RVP-P-700x600	700 mm x 600 mm	2,635	15,120
BPN-RVP-P-800x600	800 mm x 600 mm	3,010	17,280
BPN-RVP-P-900x600	900 mm x 600 mm	3,385	19,440
BPN-RVP-P-1000x600	1000 mm x 600 mm	3,760	21,600
BPN-RVP-P-700x700	700 mm x 700 mm	3,070	17,640
BPN-RVP-P-800x700	800 mm x 700 mm	3,510	20,160
BPN-RVP-P-900x700	900 mm x 700 mm	3,950	22,680
BPN-RVP-P-1000x700	1000 mm x 700 mm	4,385	25,200
BPN-RVP-P-800x800	800 mm x 800 mm	4,010	23,040
BPN-RVP-P-900x800	900 mm x 800 mm	4,510	25,920
BPN-RVP-P-1000x800	1000 mm x 800 mm	5,015	28,820
BPN-RVP-P-900x900	900 mm x 900 mm	5,075	29,160
BPN-RVP-P-1000x900	1000 mm x 900 mm	5,640	32,400
BPN-RVP-P-1000x1000	1000 mm x 1000 mm	6,265	36,000

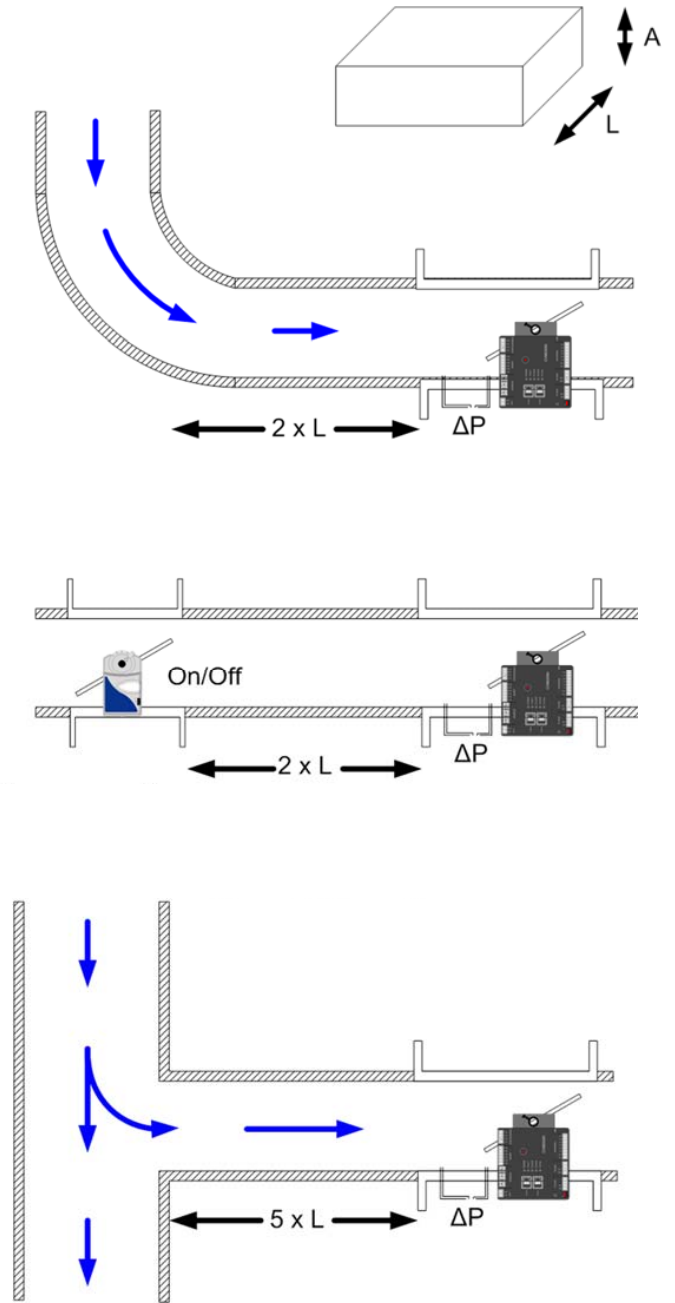


Manufacturer reserves the rights to change specifications without prior notice.

Installation with duct from top to bottom



Flat duct installation



## Table of order codes

### BPN-RVP-Px00 x 100 models

Code	BPN-RVP-P-200x100	BPN-RVP-P-300x100	BPN-RVP-P-400x100
FX-PCV1630-1	BPN-RVP-P-200x100-PCV1630	BPN-RVP-P-300x100-PCV1630	BPN-RVP-P-400x100-PCV1630
Code	BPN-RVP-P-500x100	BPN-RVP-P-600x100	
FX-PCV1630-1	BPN-RVP-P-500x100-PCV1630	BPN-RVP-P-600x100-PCV1630	

### BPN-RVP-Px00 x 200 models

Code	BPN-RVP-P-200x200	BPN-RVP-P-300x200	BPN-RVP-P-400x200
FX-PCV1630-1	BPN-RVP-P-200x200-PCV1630	BPN-RVP-P-300x200-PCV1630	BPN-RVP-P-400x200-PCV1630
Code	BPN-RVP-P-500x200	BPN-RVP-P-600x200	BPN-RVP-P-700x200
FX-PCV1630-1	BPN-RVP-P-500x200-PCV1630	BPN-RVP-P-600x200-PCV1630	BPN-RVP-P-700x200-PCV1630
Code	BPN-RVP-P-800x200		
FX-PCV1630-1	BPN-RVP-P-800x200-PCV1630		

### BPN-RVP-Px00 x 300 models

Code	BPN-RVP-P-300x300	BPN-RVP-P-400x300	BPN-RVP-P-500x300
FX-PCV1630-1	BPN-RVP-P-300x300-PCV1630	BPN-RVP-P-400x300-PCV1630	BPN-RVP-P-500x300-PCV1630
Code	BPN-RVP-P-600x300	BPN-RVP-P-700x300	BPN-RVP-P-800x300
FX-PCV1630-1	BPN-RVP-P-600x300-PCV1630	BPN-RVP-P-700x300-PCV1630	BPN-RVP-P-800x300-PCV1630
Code	BPN-RVP-P-900x300	BPN-RVP-P-1000x300	
FX-PCV1630-1	BPN-RVP-P-900x300-PCV1630	BPN-RVP-P-1000x300-PCV1630	

### BPN-RVP-Px00 x 400 models

Code	BPN-RVP-P-400x400	BPN-RVP-P-500x400	BPN-RVP-P-600x400
FX-PCV1630-1	BPN-RVP-P-400x400-PCV1630	BPN-RVP-P-500x400-PCV1630	BPN-RVP-P-600x400-PCV1630
Code	BPN-RVP-P-700x400	BPN-RVP-P-800x400	BPN-RVP-P-900x400
FX-PCV1630-1	BPN-RVP-P-700x400-PCV1630	BPN-RVP-P-800x400-PCV1630	BPN-RVP-P-900x400-PCV1630
Code	BPN-RVP-P-1000x400		
FX-PCV1630-1	BPN-RVP-P-1000x400-PCV1630		

### BPN-RVP-Px00 x 500 models

Code	BPN-RVP-P-500x500	BPN-RVP-P-600x500	BPN-RVP-P-700x500
FX-PCV1630-1	BPN-RVP-P-500x500-PCV1630	BPN-RVP-P-600x500-PCV1630	BPN-RVP-P-700x500-PCV1630
Code	BPN-RVP-P-800x500	BPN-RVP-P-900x500	BPN-RVP-P-1000x500
FX-PCV1630-1	BPN-RVP-P-800x500-PCV1630	BPN-RVP-P-900x500-PCV1630	BPN-RVP-P-1000x500-PCV1630

### BPN-RVP-Px00 x 600 models

Code	BPN-RVP-P-600x600	BPN-RVP-P-700x600	BPN-RVP-P-800x600
FX-PCV1630-1	BPN-RVP-P-600x600-PCV1630	BPN-RVP-P-700x600-PCV1630	BPN-RVP-P-800x600-PCV1630
Code	BPN-RVP-P-900x600	BPN-RVP-P-1000x600	
FX-PCV1630-1	BPN-RVP-P-900x600-PCV1630	BPN-RVP-P-1000x600-PCV1630	

### BPN-RVP-Px00 x 700 models

Code	BPN-RVP-P-700x700	BPN-RVP-P-800x700	BPN-RVP-P-900x700
FX-PCV1630-1	BPN-RVP-P-700x700-PCV1630	BPN-RVP-P-800x700-PCV1630	BPN-RVP-P-900x700-PCV1630
Code	BPN-RVP-P-1000x700		
FX-PCV1630-1	BPN-RVP-P-1000x700-PCV1630		

### BPN-RVP-Px00 x 800 models

Code	BPN-RVP-P-800x800	BPN-RVP-P-900x800	BPN-RVP-P-1000x800
FX-PCV1630-1	BPN-RVP-P-800x800-PCV1630	BPN-RVP-P-900x800-PCV1630	BPN-RVP-P-1000x800-PCV1630

### BPN-RVP-Px00 x 900 models

Code	BPN-RVP-P-900x900	BPN-RVP-P-1000x900
FX-PCV1630-1	BPN-RVP-P-900x900-PCV1630	BPN-RVP-P-1000x900-PCV1630

### Modelli BPN-RVP-P- x00 x 1000 models

Code	BPN-RVP-P-1000x1000
FX-PCV1630-1	BPN-RVP-P-1000x1000-PCV1630