

CONTROL THAT ADAPTS TO REAL AIRFLOW

# Compact VAV Controller For Precise Airflow Control

Pressure and Volumetric Flow Control  
for VAV Terminal Units



#### Integrated VAV control concept

One unit replaces three components: differential pressure sensor, controller, and damper actuator — factory-calibrated and OEM-ready

#### Proven control accuracy

Closed-loop volumetric or pressure control with  $\pm 5\%$  synchronised speed tolerance. Silent as  $<35$  dB(A) at standard running time

#### Compact Integration — Flexible mounting

Position-independent mounting. Universal shaft clamp fits  $\varnothing 20$  mm or form-fit 8/10/12 mm — compatible with existing damper hardware

#### Built for the long term

$>100\ 000$  full-stroke cycles. Maintenance-free. That is typically 20+ years of daily operation without a service call

Application: VAV terminal units · Commercial HVAC zones · Air distribution systems

## 327 VAV Compact — product range

|                       |                                    |
|-----------------------|------------------------------------|
| Controls              | Analogue, Modbus RTU, BACnet MS/TP |
| Torque options        | 8 / 16 N·m                         |
| Sensor — dynamic      | 500 / 1 500 Pa                     |
| Sensor — static       | 400 / 600 / 1 000 Pa               |
| Running time (8 N·m)  | 100 s / 90° adj.                   |
| Running time (16 N·m) | 150 s / 90° adj.                   |
| Sound level           | $<35$ dB(A)                        |
| Service life          | $>100\ 000$ cycles                 |
| Supply voltage        | 24 V AC/DC                         |

## WHY ENGINEERS SPECIFY THIS VAV

- Closed-loop airflow control — no external sensor, no additional wiring
- BTL-listed BACnet B-ASC profile — no interoperability surprises
- Hybrid mode: analogue and bus run in parallel — ideal for retrofit
- Full diagnostic menu on-unit: open, close, min, max, adapt
- Master/Slave wiring supported for supply/extract tracking
- Adjustable running time, direction, and end-stop — full flexibility

ENGINEERED FOR STABLE AIRFLOW CONTROL  
— IN OEM PRODUCTION AND HVAC PROJECTS



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CONTROL STARTS IN THE ROOM

# Room Unit for Precise VAV Temperature Control

Room-based Control for Variable Air Volume Systems



## ANALOGUE

### CRW1-T-VAV01

Standalone analogue room controller. Direct 0–10 V output to the 327 VAV Compact — no bus, no complexity.

|                           |               |
|---------------------------|---------------|
| Output                    | 0–10 V        |
| Communication             | Analogue only |
| Power supply              | 24 V AC/DC    |
| Accuracy                  | ±0.5 °C       |
| Resolution                | 0.1 °C        |
| Economy setpoints (C / H) | 26 °C / 16 °C |

Best for: standalone zones

## MODBUS RTU

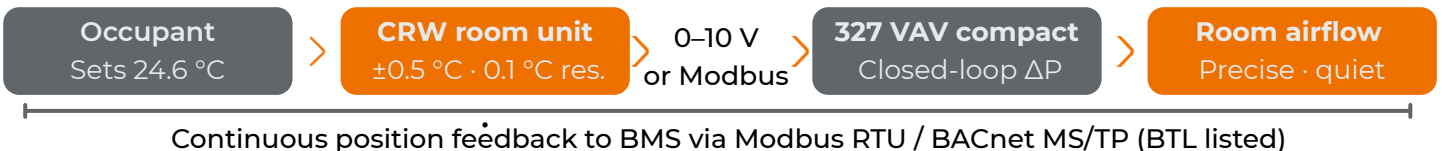
### CRW9-T-VAV01

BMS-integrated room controller. Full Modbus RTU access to PID parameters — commission remotely, not at the wall.

|                  |                     |
|------------------|---------------------|
| Output           | 0(2)–10 V + Modbus  |
| Communication    | Modbus RTU (RS-485) |
| Power supply     | 24 V AC/DC          |
| Accuracy         | ±0.5 °C             |
| Control settings | via Modbus          |
| Addresses        | 1–254 selectable    |

Best for: networked BMS

## COMPLETE AIRSIDE CONTROL — ROOM DEMAND TO AIRFLOW



## WHY SYSTEM DESIGNERS SPECIFY THIS SOLUTION

- Defined control logic from room demand to damper position — no intermediate controller needed
- Reduced wiring — room unit connects directly to VAV Compact, 3-wire or RS-485
- CRW9 exposes full PID tuning via Modbus — commission from the BMS, not the wall
- Same hardware, different config — suitable standalone or fully networked



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