# VAV Compact D3 – Comparison of function

| Function | VAV Compact D3 | VAV Compact D2 |
|---|---|---|
| **Application** | Pressure-independent control of CAV/VAV units in the comfort zone | |
| **Control function** | VAV and CAV units | |
| **Control characteristics** | PI control | |
| **Sensor** | Integrated dynamic differential pressure sensor | |
| -Sensor type | D3 sensor, calorimeter | D2 sensor, thermo-anemometer |
| -Measurement range | ~0.5…600Pa | 2…300Pa |
| -Warm-up time of sensor element | ~10s | > 15min |
| -Pressure display | ZTH-GEN / PC-Tool | None |
| **-Adjustment to V'nom parameter** | Δp@V'nom [Pa] / V'nom [$m^3$/h / l/s / cfm] | Calibration value [1500…7000] V'nom [$m^3$/h / l/s / cfm] |
| **VAV / CAV control signal** -VAV: Mode 0…10V | V'min…V'max | |
| Mode 2…10V | 0V = closed / V'min…V'max | 0V = closed / V'min…V'max |
| Shut-off level (2…10V) | 0.1 (default) / 0.5V selectable | 0.1V fixed |
| -CAV: Input w (3) | CLOSED / V'min / V'max / OPEN V'mid fixed 50% | CLOSED / V'min / V'max / OPEN V'mid adjustable |
| -U5 feedback signal | 0…100% of V flow / damper position / Δp | 0…100% of V flow / damper position |
| **Operating volumetric flow** -V'min range | 0…100% V'max | |
| -V'max range | 20…100% V'nom | 30…100% V'nom |
| **Adjustment tools** -ZTH-VAV | "same" as Compact D2 (no Δp display) | V1.x full support |
| -ZTH-GEN (starting V4.xx) | full support | full support |
| -PC-Tools | full support starting V3.6 | full support starting V3.1 |
| **Wiring connection** | "same" as Compact D2 | full support |
| **Accuracy** | Δp -20…+20Pa → +/-1Pa Δp +20…500Pa → +/-5% | ~+/-10% (approx.) |
| **Dimensions** | "same" as Compact D2 | full support |

- Please keep in mind: **Compact D3 works ONLY together with PC-Tool V3.6**
- Also a new manufacturing code (OEM-code) is needed. To receive a new code for your OEM, please get in contact with our LRD PM or AP PM.