

ZoneEase VAV - Release Notes for v1.7

New / changed functionality and product availability with ZoneEase VAV v1.7

July 2023 Rev 01

General Remarks

Existing product type codes remain unchanged. All ZoneEase VAV actuators (L/NMV-BAC-00X YYY) (agreed exceptions on certain customer variants may apply) have been changed to the new actuator **firmware V1.15.0000**:

- Products delivered to EMEA: 2023-07-14
- Products delivered to AP: 2023-07-18

Communication

New communication option Modbus RTU

- BACnet MS/TP (existing) or Modbus RTU (new) over RS-485.
- Bus protocol to be configured during commissioning.

Bus watchdog

- A bus watchdog can be configured with a timer between 5 – 3600s, which monitors the setpoint and overrides DP.
- Override control (bus or ZoneEase VAV App) with higher priority as Bus watchdog, with timer or without timeout (i.e. for air balancing)

Devices

Support of a secondary VAV flow controller

- Pre-addressed VAV-Compact (L/NMV-D3-MP-A7) available as of September '23 to enhance ZoneEase VAV solutions with an Extract Air or a 2nd Supply Air VAV Box
- Standard L/NMV-D3-MP can be used if the MP-Bus address is manually set to #7 during installation or commissioning.
- L/NMV-D3-MP-A7 must be configured with the same OEM values as the ZoneEase VAV controller (Vnom, dp@Vnom, Vmin=0%, Vmax=100%)
- The air flow balance between both VAV boxes can be adjusted by an offset factor to achieve positive / negative room pressure.

New Room Operating Units (ROU)

- Release in September '23 – no RFQ yet!
- The currently sold Room Operating Units remain available until further notice.
- The new ROU will be available as variants with e-Paper or virtual display. The Belimo Display App can be used with both variants.
- Both e-Paper or virtual display ROU types will be available with three sensor options: Room temperature, Room temperature + RH, Room temperature + RH + IAQ (CO₂).
- ROU with virtual display will feature a QR code which guides the user to a website with instructions how to download the Belimo Display App and further information about this operating concept.

Application

Combined T & CO₂ application

- All Room temperature control applications can optionally be configured to run in parallel with CO₂ control if a CO₂ sensing element is present, either in the ROU or as analogue duct sensor. If a duct sensor is used, it must be configured accordingly.
- A pure CO₂ control application is also available.
- Whichever control loop (Room temp. or CO₂) generates a higher air flow demand over a certain period will define the effective air flow.

Reheat aggregate monitoring

- The electrical reheater status (on / off) can be monitored («High-Cut monitoring»)
- The electrical reheater digital output can either be connected to the ROU digital input and the respective datapoints need to be configured accordingly.
- Alternatively, the electrical reheater digital output can be wired to the L/NMV-BAC-.. analogue input which needs to be configured accordingly.
- If the High-Cut input is triggered, the digital outputs of the electrical reheater (DO2 / DO3) are switched off.

Compliance and Data Protection

GDPR compliance

- It is possible to delete all Site Model data belonging to a specific user.
- It is possible to query all Site Model data belonging to a specific user with the purpose to hand it out to that user.
- User specific data that is distributed to other systems are pseudonymized.

OEM data protection with Release Code

- Provided with PC-Tool, same approach as with VAV-Compact.
- Release code can also be entered in the Belimo ZoneEase VAV App.
- Release Codes will be provided by Belimo Room Support.
- Protected parameters: Vnom, dp@Vnom, Calibration Height.
- Unprotected parameters: Rotation Direction, Installation height, Vmin & Vmax, and others.

Workflow / Cloud

New features specific to CBA

- Cloud project data can be downloaded, and newly also be uploaded as ZoneEase VAV Excel sheet.
- A download to Excel can be used for further configuration and data management, or for documentation and archiving.
- By uploading an existing project, this project can be updated with changes made outside the cloud interface ("round trip").
- Project files in Excel format can be uploaded as often as necessary.
- It is possible to change a parameter of the intended configuration of multiple boxes simultaneously ("mass change").
- Only a project administrator can re-open a project marked "DONE".
- It is possible to change VAV box parameters and projects even if boxes have already been published or the project has been closed.
- A warning is shown when the published planned vs. actual configuration of a box are out-of-sync.

- Support of new devices and functionality as described above (new ROU, combined temp. and CO₂ control, Modbus RTU communication, use of a 2nd VAV flow control actuator, Bus Watchdog and Bus fail action).

Documentation

Learn More Page

- Landing Page to provide a brief overview and links to documentation.

Application Description

- Overview about the 19 pre-loaded ZoneEase VAV applications.
- Detailed information of how the applications are working (incl. sequence diagrams).
- Shows dependencies between selected applications and related ecosystem components.

Technical Documentation

- Interface Descriptions (BACnet MS/TP & Modbus RTU)
- Technical data sheet for Actuators, Sensors, and ROUs

Sales Support

- Sales Presentation
- Fact Sheet
- Tender text

Support

- First level support: Local Support will receive training from Belimo HQ and is expected to handle approx. 90-95% of requests from end customers.
- Second level support: Remaining support requests with in-depth clarification needs are handled by Product Management in Switzerland & Germany.
- Please note: Second level support is addressed by Belimo-internal staff only, not by customers.
- The second level support can be reached at support.system@belimo.ch