

Features and Highlights

- Five pre-defined inputs for common control strategies
- Five pre-defined outputs for modulating heat or staged heat, no additional engineering required
- Integrated airflow sensor and actuator simplify installation
- LonMark certified, compatible with LonMark profile 8502 for open systems integration capability
- Fully compatible with other Novar IQ system components when used with a LINC
- Compatible with RD-IQL display sensor
- Enhanced damper control
- Final calibration capability



The Novar Controls IQLVAV is a terminal unit controller with an integral damper actuator for pressure-independent VAV applications. The IQLVAV supports communication with other IQL and LonMark devices over a LonWorks network. A LINC unit provides an interface to other Novar IQ System current-loop networked devices.

The direct-coupled actuator is a maintenance-free, ON-OFF/floating point control model manufactured by Belimo Aircontrols Inc. Its universal U-bolt clamp assembly mounts directly to the damper operating shaft.

The IQLVAV offers five pre-defined inputs, five triac outputs, and an integral differential pressure sensor with a range of 0–2 inches water column. A pre-programmed control strategy backed by Flash RAM ensures reliable operation.

Technical Data

- **Power** 24 VAC 50/60 Hz, +/- 15% @ 15 VA min. plus peripheral loads.
- **Inputs** 5 pre-defined inputs with 10-bit resolution support variable resistance or digital inputs. Resistance 0–29 kOhm. Input 5 supports TBus input for RD-IQL display sensor.
- **Outputs** Five triacs equivalent to 24 VAC solid state relays switch 24 VAC @ 0.7 A max.
- **Airflow Sensor** Barbed connectors accept 3/16" tubing. Calibrated for 0–2 inches water column.
- **Processor & Memory** 3150 Neuron 10 MHz. 4K Flash, 8K SRAM.
- **Maximum Dimensions** 5.25" (134mm) H x 8.87" (226mm) x 2.46" (63mm).
- **Electrical Terminations** Two-part connectors accept 14–22 AWG cable.
- **Environmental** 32–122 deg. F (0–50 deg. C). 0–90% RH, non-condensing.
- **Ratings**
 - **US** UL916, PAZX.E90949, Listed - Open Energy Management Equipment. UL873, SDFY2.E134292, Recognized -Temperature Indicating and Regulating Equipment. Complies with FCC Part 15.
 - **Canada** CSA C22.2, No. 205-M1983, PAZX7.E90949, Listed - Signal Equipment CSA C22.2, No. 24-93, SDFY8.E1434292, Recognized - Temperature Indicating and Regulating Equipment. Complies with C108.8.

Actuator

- **Manufacturer** Belimo Aircontrols Inc.
- **Model** LM24-M.
- **Damper Connection** U clamp type accepts 1/4" (6.35mm) to 5/8" (15.88mm) diameter shafts.
- **Overload Protection** Electronic throughout 0–95 degrees rotation.
- **Angle of Rotation** Maximum 95 degree angle, adjustable with mechanical stops.
- **Torque** Minimum 35-in-lb. (4Nm)
- **Running time** 80-110 seconds for 0–35 in-lb
- **Manual Override** External pushbutton
- **Ratings** UL 873 listed. CSA 4813 02 certified

Ordering Information

Part number	Model	Description
882001280	IQLVAV/VAV/NOVAR/UL/24VAC	IQLVAV Controller with VAV Program

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