

ENGINEERING  
TOMORROW

*Danfoss*

AB-QM™ Valves

# Achieving **Energy Efficiency** & **Comfortable Classroom** Settings In Universities

Learn how AB-QM™ Pressure Independent Temperature Control Valves (PICVs) have been increasing student comfort, reducing noise/complaints, and providing substantial energy savings for Universities.

**20-50%**

**HVAC Energy  
Consumption  
Savings** by installing  
the AB-QM specialty  
control valve.



Scan to access  
ABQMvalves.com

[www.ABQMvalves.com](http://www.ABQMvalves.com)

# EXPERIENCING PROBLEMS WITH YOUR HVAC SYSTEM?

- Student Comfort Issues?
- Room Temperature Complaints (Some are hot, others are cold)?
- Increased Maintenance Costs?
- Noise issues?
- Balancing and Flow Issues?
- Wasted energy?

**So what if there was a way to:**

- ✓ **Reach federal energy reduction requirements by cutting energy consumption?**
- ✓ **Increase classroom comfort?**
- ✓ **Reduce complaints & minimize maintenance?**

**Would you be interested?...**



## INTERESTED IN A MORE EFFICIENT SOLUTION?

**ENERGY  
SAVING  
DEVICE**

### Danfoss AB-QM™ Pressure Independent Control Valves

The AB-QM™ is a specialty control valve that provides flows to match loads & **cuts energy consumption for HVAC by 20-50%!**

### How They Work:

- *Continual Balancing function maintains system performance even at varying loads!*
- Pressure Regulator **eliminates over-pumping** providing favorable energy savings!
- AB-QM™ valves **prevent energizing additional chillers (\$\$\$)** by *maintaining desired Delta T.*
- AB-QM™ valves **improve system operation** reducing equipment requirement.



**Treat the Cause, Not the Symptom!**



# AB-QM™ BENEFITS EVERYONE INVOLVED...



## Student/Professor

### Benefits Include:

- **Comfortable** Room Temperatures
- Less Noise
- More Conducive Learning Environment
- Overall Better Reputation



## Facility Director

### Benefits Include:

- **Happy Students & Professors**
- **Real Energy Savings \$\$\$**
- Maintenance Minimized
- System Back into Proper Balance (Less Problems, Less Calls)
- Less Classroom Noise
- Perfect Classroom/Laboratory Temperatures



## Contractor

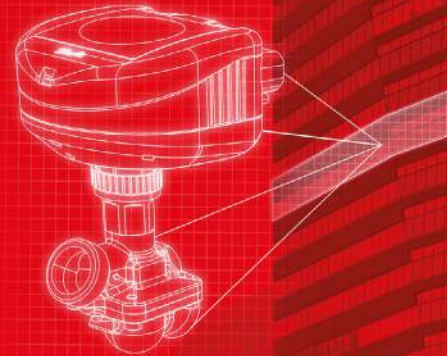
### Benefits Include:

- **Reduced installation time**
- Easy Selection - No CV calculation required
- Simplified - no need to continually rebalance system
- Compact design that saves space in small areas like air handler units
- Designed room temperatures achieved
- Less hassle with hydronic system

## WHY DANFOSS IS DIFFERENT...

Danfoss AB-QM™ is the only PICV on the market with third-party testing that proves it's accuracy!

- Third party testing proves accuracies of  $\pm 5\%$  of setpoint
- Danfoss rated the most accurate PICV when tested with other major leading competitors on the market.<sup>1</sup>
- Analysis indicates that the uncertainty was better than 0.25% at the 95% confidence level for each test run.<sup>2</sup>



<sup>1</sup> BSRIA Report 52724/1. <sup>2</sup> Alden Research Laboratory Report No. 2141DFI001-R1.  
For more information or to view the reports in entirety please contact your local representative.

# UNIVERSITY PROJECT REFERENCES

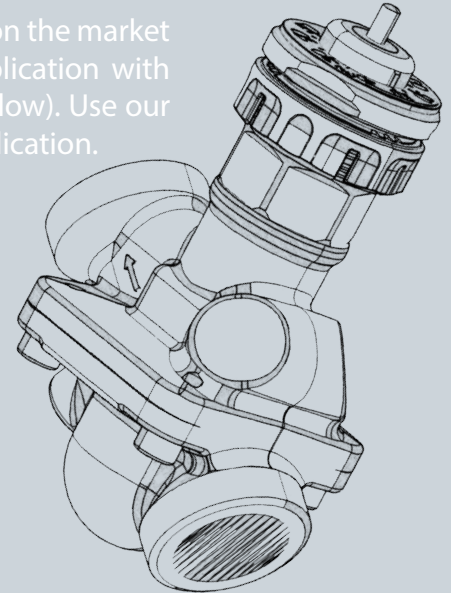
The AB-QM™ PICV has proven it's accuracy & reliability, which is evident from the list of prestigious Universities who have installed only the very best; the Danfoss AB-QM™ valve.

- Caltech
- Colorado University
- Purdue University
- Georgia Tech
- Kansas State University
- Louisiana State University
- Missouri University of Science & Technology
- Northwestern University
- Pensacola Christian College
- Purdue University
- Rochester Institute of Technology
- Syracuse University
- The Pennsylvania State University
- UC Santa Barbara
- University of Buffalo, New York
- University of California, Irvine
- University of Florida
- University of Omaha, Nebraska
- and more!

## QUICK SELECT GUIDE

Danfoss knows that size matters and is the only manufacturer of PICV's on the market with sizes ranging from ½" to 10". We offer valves to fit any size application with extensive flow ranges; .25 GPM (½" Low Flow) to 1629 GPM (10" High Flow). Use our quick select guide below to find the perfect AB-QM™ valve for your application.

Valve Size	Flow Range (GPM)	Valve Size	Flow Range (GPM)
½" Low Flow	0.25 to 1.2	4" ANSI Flanged	66 to 165
½"	1.0 to 5	5" ANSI Flanged	158 to 395
¾"	1.5 to 7.5	5" High Flow	211 to 528
1"	2.4 to 12	6" ANSI Flanged	256 to 640
1-¼"	3.5 to 17.5	6" High Flow	403 to 1008
1-½"	7 to 33	8" ISO Flanged	335 to 836
2"	22 to 55	8" High Flow	440 to 1100
2 ½" ANSI Flanged	34 to 85	10" ISO Flanged	493 to 1232
3" ANSI Flanged	48 to 120	10" High Flow	652 to 1629



For more information on **AB-QM™** & how they can **help your University** please contact us!

Please contact your local representative or call: 1.866.375.4822, or email: [heatingsales@danfoss.com](mailto:heatingsales@danfoss.com).

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