# AB-QM Pressure Independent Balance and Control Valve



Actuator Submittal, Proportional AME 120 NLX- 1 Motor Actuator					
DATE:	SPECIFICATION SECTION	<b>:</b>		PAGE:	of
PROJECT	ARCHITECT/ENGINEER	AGENCY	REPRESENTATIVE	DATE	NOTES
		ARCHITECT			
		ENGINEER			
		CONTRACTOR 1			
SUPPLIER	CONTRACTOR	CONTRACTOR 2			
		OTHER			
		NOTE		COMMENT	
ORDER NO.					
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Model	Number	Unit Tag	Qnty
AME120 NLX - 1			

### Specification

The motor actuator shall be 24VAC powered and mount to the AB-QM valve body in sizes ranging from ½" to 1½" valve sizes. The actuator shall be UL listed according to ANSI/ UL 6073-1 and 6073-2-14 and plenum rated according to UL2043. Control input signal for the actuator shall utilize a proportional control signal selectable via internal DIP switch setting in the ranges of 0(2)-10VDC or 0(4) to 20mA. The actuator shall have feedback signal and periodic exercise valve stem function. The operation of the actuator shall have integrated no load calibration fuction to learn and apply the input signal to the calibrated stem travel. The actuator shall have a visual indication to monitor the actuator's travel and LED feedback for actuator operation.

### Description

The AME 120 NLX is a gear motor actuator assembled to the AB-QM valves. The AME actuator utilizes a proportional control signal to precisely adjust the valve to the necessary load requirement within the space. The compact profile of the actuator and valve are ideal for fan coil units, induction units, and zone heating and cooling terminal applications located in plenum locations or within enclosures. Other features include:

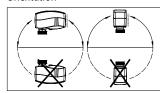
- Gap detection at stem up position
- Force switch-off at stem down position preventing overload of actuator and valve.
- · No tools required for mounting
- Maintenance free during lifetime
- · Low noise operation
- Manual override

Actuator Type		AME 120 NLX- 1	
Code No.		082H5004	
Power Supply		24 VAC; +10%15%	
Electrical Connection		½" electrical conduit, wiring terminal block	
Power Consump	tion	1.5VA	
Frequency		50/60 Hz	
Control Input		0(2)10VDC / 0(4)20mA	
Output Signal		010VDC	
Actuator Force		29.2 lbf (130N)	
Max. Stem Travel		5mm	
Travel Speed		12 s/mm @ 50Hz, 10 s/mm @ 60Hz	
Max. Medium Temp.		248°F (120°C)	
Ambient Temp.		32 to 131°F (0 to 55 °C)	
Humidity		5 to 95% RH, noncondensing	
Weight		0.66lb (0.3kg)	
Regulatory Compliance:			
c UL us	USA	UL Listed, CCN XABE, File E480529; to ANSI/UL 60730-1 and ANSI/UL 60730-2-14	
		Investigated and approved for plenum use in accordance with UL 2043	
	Canada	UL Listed, CCN XABE7, FileE48029; to CAN/CSA-E60730-1:13 and CAN/CSA-E60730-2-14:13	
C€	Europe	CE Mark - Danfoss declares that this prod- uct complies with all relevant CE-marking directives	

## **Submittal**

# AB-QM Pressure Independent Balance and Control Valve

### Orientation



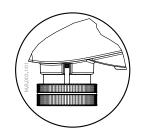
The actuator should be mounted with the valve stem in either horizontal position or pointing upwards. The actuator is fixed to the valve body by means of a threaded mounting ring which is tightened by hand and requires no additional tools for mounting. Mount the actuator prior to wiring it with power.

# Wiring AME120 NLX-1 SN SP Y A field supplied 1/2" trade size electrician's fitting and lock nut can be mounted to the actuator enclosure. Insert wiring material through the

block.

### Position Indication

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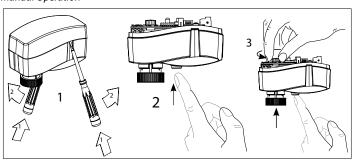


External position indication located at the neck of the motor actuator

removable plug or conduit fitting,

and wire connection to the terminal

### Manual Operation

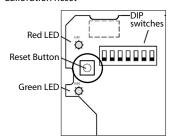


### **DIP Switches**

### AME120 NLX-1 (082H5001)

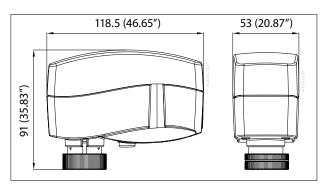
DIP Switch	Function	Description
1	Input Range	0(2) to 10 VDC or 0(4) to 20 mA
2	Direct/ Reverse Reaction	Reaction of actuator based upon input signal
3	Sequential option	Splitting of input signal
4	Sequential selection range	Operation of input signal range
5	Equal percentage/ Linear characteristic	Actuator's characteristic response to input signal
6	Excercise function	Fully opens and closes valve every 7 days
7	Input Range	Voltage (VDC) / Current (mA)

### Calibration Reset



To initiate the calibration of the actuator to match the travel of the valve press and hold the RESET button for 2 seconds.

### Dimensions



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