

Actuator Submittal, Proportional/ 3-point Floating, AME 655-1, AME 658 SU/SD-1 Motor Actuator					
DATE:	SPECIFICATION SECTION:			PAGE:	of
PROJECT	ARCHITECT/ENGINEER	AGENCY	REPRESENTATIVE	DATE	NOTES
		ARCHITECT			
		ENGINEER			
		CONTRACTOR 1			
SUPPLIER	CONTRACTOR	CONTRACTOR 2			
		OTHER			
		NOTE	COMMENT		
ORDER NO.					



Other features of the AME 655/658 include:

- LED visual operation feedback
- Selectable stem travel speed
- Selectable linear or equal percentage actuator characteristic
- Adjustment of actuator characteristic under equal percentage
- Self stem travel calibration
- Incorporated safety function
- External reset button
- Overload protection



Model	Number	Unit Tag	Qty
AME 655-1			
AME 658 SU-1			
AME 658 SD-1			

Specification

The motorized actuator shall be 24VAC/DC powered and mount directly to the AB-QM valve body. The actuator shall clamp to the valve body and stem and the actuator shall have a push pull linear actuation. The actuator shall be capable of self calibrating its travel to the required stem travel of the valve. The operation of the actuator shall be determined based upon DIP switches located beneath the cover of the actuator that provides the options of actuator speed, signal input, direction, and actuator characteristic. The actuator shall also have the option of valve flow adjustment if the equal percentage characteristic is selected. The motorized actuator shall have a visible LED feedback to provide operation information and a manual knob for override adjustment of the actuator.

Description

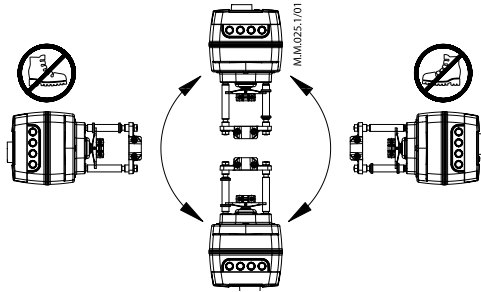
AME 655/658 series of actuator is specifically used with the AB-QM 2-way valve bodies in sizes ranging from 5" to 6". This actuator receives a modulating input signal and can provide an output signal for feedback.

Actuator type	AME 655-1	AME 658 SU-1	AME 658 SD-1
Code No.	082H5010	082H5012	082H5011
Power supply	24 V AC or DC; +10 ... -15% @ 50 or 60 Hz		
Electrical connection	½" electrical conduit, wiring terminal block		
Power consumption	14.4	19.2 VA	
Control input	Modulating 0(2) -10VDC, 0(4) -20mA / Floating point		
Control output X	0(2) -10VDC, 0(4) -20mA		
Closing force	2000 N		
Max. travel distance	50 mm		
Speed (selectable)	3 or 6 s/mm	4 or 6 s/mm	
Max. medium temp.	392 °F (200 °C)		
Ambient temperature	32 to 131 °F (0 to 55 °C)		
Power failure response	None	Valve open	Valve closed
Spring return runtime	-	120 sec	
Humidity	5 to 95% RH, noncondensing		
Weight	11.7 lb (5.3 kg)	18.9 lb (8.6 kg)	
Regulatory Compliance:			
	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, File E48029; to CAN/CSA-E60730-1:13 and CAN/CSA-E60730-2-14:13	
	Europe	CE Mark - Danfoss declares that this product complies with all relevant CE-marking directives	

Submittal

AB-QM Pressure Independent Balance and Control Valve

Orientation / Mounting



The allowable orientation of the actuator can be installed in all positions. Allow for necessary clearance for maintenance and for the mounting of the actuator to the valve. A M8 socket to mount the actuator to the valve and a 4mm Allen key to link the valve stem to the actuator.

DIP Switches

DIP1: FAST/SLOW – Speed selection

- Speed of actuator travel: 3 (4) or 6 s/mm

DIP2: DIR/INV – Direct or inverse acting selector:

- Direction of the actuator movement based input signal:
 - Opens on increase of input signal
 - Closes on increase of input signal

DIP3: 2-10V/0-10V – Input/output

- Selection of available input signal range. Signal range selector sets input (Y) and output (X) signal.
 - 0-10VDC / 0-20 mA
 - 2-10VDC / 4-20 mA

DIP4: LIN/MDF – Characteristic modification function:

- Determines the characteristic of the actuator as either a linear or logarithmic (MDF selection). Under MDF the characteristic curve can be fine tuned by the setting of the potentiometer CM.

DIP5: 100%/95% – Stem travel limitation:

- Selectable full travel (100%) or limited to 95% stem travel.

DIP6: C/P – Output signal mode selector:

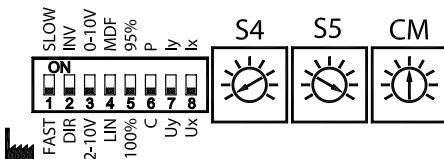
- Reaction of terminal 4 & 5 based upon input signal. Under selection C potentiometers S4 & S5 can be adjusted.
 - C: activates with modulating signal
 - P: activates with 3-point floating signal

DIP7: Uy/Iy – Input signal type selector:

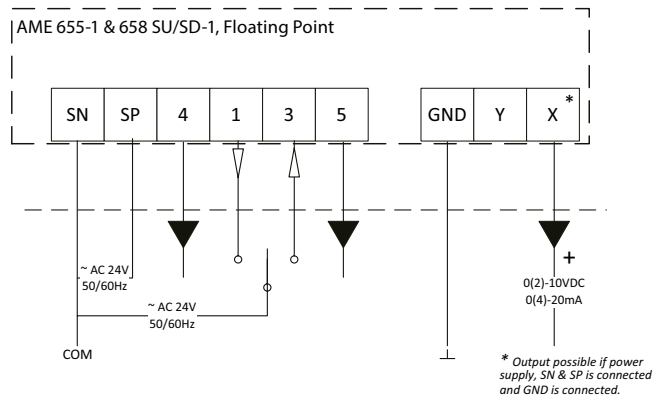
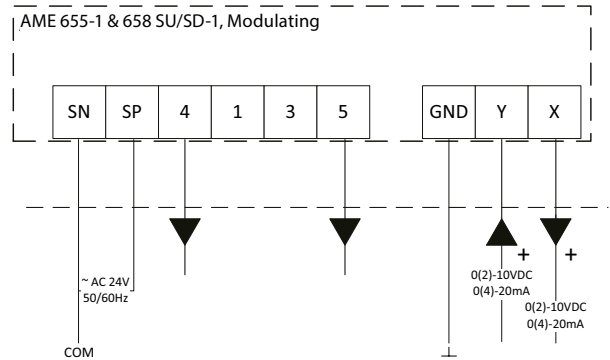
- Selection between voltage or current input signal

DIP8: Ux/Ix – Output signal type selector:

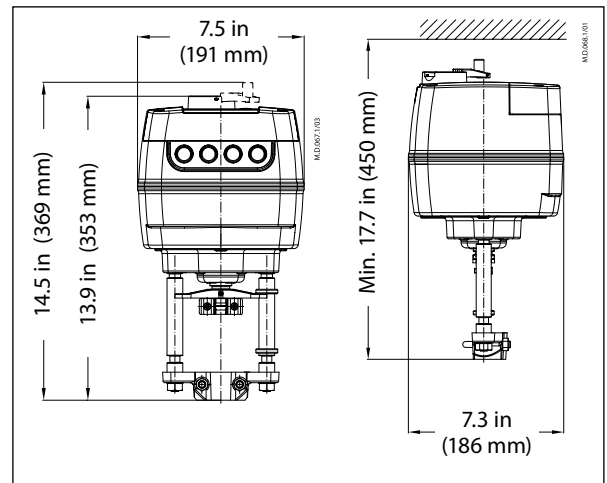
- Selection between voltage or current output signal



Wiring



Dimensions



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