





5-year warranty



Technical data

Functional data

Valve Size	2.5" [65]
Fluid	chilled or hot water, up to 60% glycol
Fluid Temp Range (water)	32350°F [0176°C]
Body Pressure Rating	ANSI Class 125, up to 175 psi below 150°F
Flow characteristic	linear
Servicing	repack/rebuild kits available
Rangeability Sv	50:1
Flow Pattern	3-way Mixing
Leakage rate	ANSI Class III
Controllable flow range	stem up - open B – AB
Cv	68
ANSI Class	125
Body pressure rating note	up to 175 psi below 150°F
Valve body	Cast iron - ASTM A126 Class B
Valve plug	bronze
Stem seal	NLP EPDM (no lip packing)
Seat	Stainless steel AISI 316
Pipe connection	125 lb flanged
Non-Spring	EVB(X)

Safety notes



Electronic fail-safe

Materials

Suitable actuators

 WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

RVB(X)

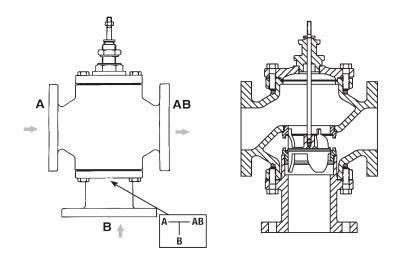
AVKB(X) (2*GKB(X))

- The valve has been designed for use in stationary heating, ventilation and air-conditioning systems and
 must not be used outside the specified field of application, especially in aircraft or in any other airborne
 means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The valve does not contain any parts that can be replaced or repaired by the user.
- When determining the flow rate characteristic of controlled devices, the recognised directives must be observed.

Product features

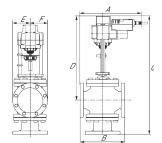


Flow/Mounting details



Dimensions

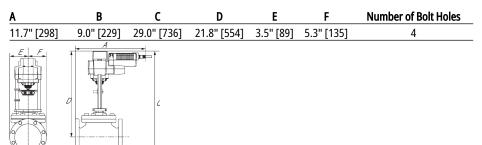
Dimensional drawings



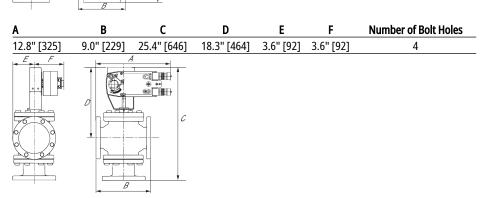
EVB, EVX, RVB, RVX

A	В	C	D	E	F	Number of Bolt Holes
11.7" [298]	9.0" [229]	25.4" [646]	18.3" [464]	3.6" [92]	3.6" [92]	4
EF	A	¢				

2*GMB, 2*GMX, 2*GKB, 2*GKX



AVKB, AVKX



AFB, AFX



Technical data sheet G765

 A
 B
 C
 D
 E
 F
 Number of Bolt Holes

 11.7" [298]
 9.0" [229]
 24.0" [610]
 16.9" [428]
 3.5" [89]
 5.3" [135]
 4

2*AFB, 2*AFX

Α	В	C	D	E	F	Number of Bolt Holes
11.7" [298]	9.0" [229]	29.0" [736]	21.8" [554]	3.5" [89]	5.3" [135]	4









Technical data			
	Electrical data	Nominal voltage	AC 24240 V / DC 24125 V
		Nominal voltage frequency	50/60 Hz

3	
Nominal voltage frequency	50/60 Hz
Power consumption in operation	7.5 W
Power consumption in rest position	3.5 W
Transformer sizing	7 VA @ AC 24 V (class 2 power source), 8.5 VA @ AC 120 V, 18 VA @ AC 240 V
Auxiliary switch	2 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, one set at 10°, one adjustable 1090°
Switching capacity auxiliary switch	3 A resistive (0.5 A inductive) @ AC 250 V
Electrical Connection	(2) 18 GA appliance cables with 1/2" conduit connectors, 3 ft [1 m],
Overload Protection	electronic throughout 095° rotation
Position feedback U note	No Feedback
	1 (11 1 / 2

Functional data

Position feedback U note	No Feedback
Direction of motion motor	selectable by ccw/cw mounting
Direction of motion fail-safe	reversible with cw/ccw mounting
Manual override	5 mm hex crank (3/16" Allen), supplied
Angle of rotation	95°,
Running Time (Motor)	75 s
Running time fail-safe	<20 s
Noise level, motor	50 dB(A)
Noise level, fail-safe	62 dB(A)
Position indication	Mechanical
Degree of protection IEC/EN	IP54

Safety data

Weight

Materials

Degree of protection IEC/EN	IP54
Degree of protection NEMA/UL	NEMA 2 UL Enclosure Type 2
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/ EU; Listed to UL 2043 - suitable for use in air plenums per Section 300.22(c) of the NEC and Section 602.2 of the IMC
Quality Standard	ISO 9001
Ambient temperature	-22122°F [-3050°C]
Storage temperature	-40176°F [-4080°C]
Ambient humidity	max. 95% r.H., non-condensing
Servicing	maintenance-free
Weight	4.6 lb [2.1 kg]
Housing material	Galvanized steel and plastic housing

Electrical installation

Technical data sheet AFBUP-S-X1

/ Warning! Live Electrical Components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



Meets cULus requirements without the need of an electrical ground connection.



(A) Actuators with appliance cables are numbered.



(UP) Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC. Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.



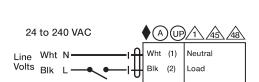
Provide overload protection and disconnect as required.



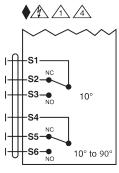
Actuators may also be powered by 24 VDC. Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.



AR Parallel wiring required for piggy-back applications.



On/Off



Auxiliary Switches