P6250SU-127 Technical Data Sheet





Technical Data				
Fluid	chilled or hot water, up to 60% glycol max			
The state of the	(open loop/steam not allowed)			
Flow characteristic	equal percentage or linear			
Valve Size [mm]	2.5" [65]			
Pipe connector	pattern to mate with ANSI 125 flange			
Housing	Cast iron - GG 25			
Flow measuring pipe	Ductile cast iron - GGG50			
Ball	stainless steel			
Stem	stainless steel			
Stem seal	EPDM (lubricated)			
Seat	PTFE			
O-ring	Viton			
Characterized disc	stainless steel			
Package	EPDM			
Body Pressure Rating	ANSI Class 125, standard class B			
ANSI Class	125			
Number of Bolt Holes	4			
Differential Pressure Range	550 psi or 150 psi see flow reductions			
-	chart in tech doc			
Close-off pressure Δps	175 psi			
Ambient temperature	-22122°F [-3050°C]			
Inlet Length to Meet Specified	5X nominal pipe size (NPS)			
Measurement Accuracy				
Ambient humidity	max. 95% r.H., non-condensing			
Measuring accuracy flow	±2%*			
Control accuracy	±5%			
Flow Measurement Repeatability	±0.5%			
Sensor Technology	ultrasonic with glycol and temperature compensation			
Rangeability Sv	100:1			
Power supply for the flow sensor	sensor is powered by the actuator			
Weight	58.2 lb [26 kg]			
GPM	127			
Fluid Temp Range (water)	14250°F [-10120°C]			
Leakage rate	0%			

^{*}All flow tolerances are at 68°F (20°C) & water.

Application

Water-side control of heating and cooling systems for AHUs and water coils. Equal Percentage/ Linear: heating and cooling applications.

Operation

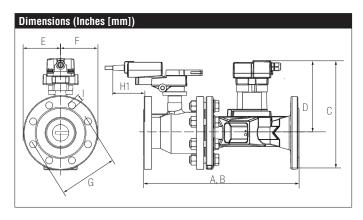
The Electronic Pressure Independent Control Valve is a two-way valve that maintains constant flow regardless of pressure variations in the system.

Product Features

Provides constant flow regardless of pressure variations in the system. Maximizes chiller Delta T, preventing energizing additional chillers due to low Delta T. Simplified valve sizing and selection, no Cv calculations required.

Suitable Actuators

	Non-Spring	Electronic fail-safe					
P6250SU-127	ARB(X)	(AKRB(X))					
1 020000 127	71110(71)	(/ (((((((((((((((((((



A B	C	D	E	F	G	H1	
14.9" [379]	11.5"	7.9"	3.7"	[95]	5.5"	2.8"	0.7"
	[292]	[200]		_	[140]	[72]	[19]

ARX24-EP2 Technical Data Sheet





Technical Data	
Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, -10% / +20%
Power consumption in operation	8.5 W
Transformer sizing	11 VA (class 2 power source)
Electrical Connection	18 GA plenum cable, 3 ft [1 m], with 1/2" conduit connector
Overload Protection	electronic thoughout 090° rotation
Operating Range	210 V (default), 420 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), VDC variable
Input Impedance	100 kΩ (0.1 mA), 500 Ω
Position Feedback	default 210 V, VDC variable
Angle of rotation	90°
Torque motor	180 in-lb [20 Nm]
Direction of motion motor	reversible with pc tool
Position indication	Mechanically, pluggable
Manual override	external push button
Running Time (Motor)	90 s
Ambient humidity	max. 95% r.H., non-condensing
Ambient temperature	-22122°F [-3050°C]
Storage temperature	-40176°F [-4080°C]
Degree of Protection	IP54, NEMA 2, UL Enclosure Type 2
Housing material	UL94-5VA
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU
Noise level, motor	45 dB(A)
Servicing	maintenance-free
Quality Standard	ISO 9001
Weight	2.65 lb [1.2 kg]

†Rated Impulse Voltage 800V, Type action 1.B, Control Pollution Degree 3. †Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3



ARX24-EP2 Technical Data Sheet

Wiring Diagrams



X INSTALLATION NOTES



Provide overload protection and disconnect as required.



Actuators may be connected in parallel. Power consumption and input impedance must be observed.



Actuators may also be powered by 24 VDC.



Actuators are provided with color coded wires. Wire numbers are provided for reference. Actuators are provided with a numbered screw terminal strip instead of



a cable.



IN4004 or IN4007 diode required



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



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.

