P6400SU-317-250 Technical Data Sheet





Technical Data	shilled or bet water up to 600/ glysel may
riuiu	chilled or hot water, up to 60% glycol max (open loop/steam not allowed)
Flow characteristic	equal percentage or linear
Valve Size [mm]	4" [100]
Pipe connector	pattern to mate with ANSI 250 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 250, standard class B
ANSI Class	250
Number of Bolt Holes	8
Differential Pressure Range	550 psi or 150 psi see flow reductions
	chart in tech doc
Close-off pressure ∆ps	310 psi
Ambient temperature	-22122°F [-3050°C]
Inlet Length to Meet Specified Measurement Accuracy	5X nominal pipe size (NPS)
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	137.6 lb [63 kg]
GPM	317
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

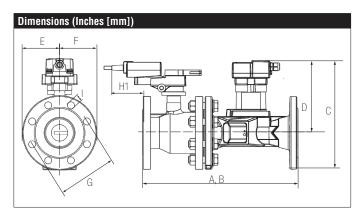
The Electronic Pressure Independent Control Valve is a two-way valve that maintains constant flow regardless of pressure variations in the system.

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	
Non opinig Electronic ian said	e
P6400SU-317-250 GRB(X) GKRB(X)	



A B	C	D	E F	G	H1	
18.7" [474]	13.1"	8.1"	5.0" [127]	7.9"	3.1"	0.9"
	[333]	[206]		[200]	[80]	[22]

GRX24-EP2 Technical Data Sheet







Technical Data Power Supply 24 VAC, ±20%, 50/60 Hz, 24 VDC, -10% / ±20% Power consumption in operation 9.5 W Transformer sizing 13 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 360 in-lb [40 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 <		incorego(i)
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$\begin{array}{c} \text{conduit connector} \\ \text{Overload Protection} \\ \text{Operating Range} \\ \text{210 V (default), 420 mA w/ ZG-R01 (500 }\\ \Omega, 1/4 \text{ W resistor), VDC variable} \\ \text{Input Impedance} \\ \text{100 k}\Omega (0.1 \text{ mA}), 500 \Omega \\ \text{Position Feedback} \\ \text{Angle of rotation} \\ \text{90}^{\circ} \\ \text{Torque motor} \\ \text{360 in-lb [40 Nm]} \\ \text{Direction of motion motor} \\ \text{reversible with pc tool} \\ \text{Position indication} \\ \text{Manual override} \\ \text{Running Time (Motor)} \\ \text{Ambient humidity} \\ \text{Amb. external push button} \\ \text{Ambient temperature} \\ \text{-22122°F [-3050°C]} \\ \text{Storage temperature} \\ \text{-40176°F [-4080°C]} \\ \text{Degree of Protection} \\ \text{IP54, NEMA 2, UL Enclosure Type 2} \\ \text{Housing material} \\ \text{UL94-5VA} \\ \text{Agency Listing} \\ \text{CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU} \\ \text{Noise level, motor} \\ \text{45 dB(A)} \\ \text{Servicing} \\ \text{maintenance-free} \\ \text{Quality Standard} \\ \text{ISO 9001} \\ \end{array}$	Transformer sizing	13 VA (class 2 power source)
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Noise level, motor 45 dB(A) Servicing maintenance-free Quality Standard ISO 9001		1
Servicing maintenance-free Quality Standard ISO 9001		
Quality Standard ISO 9001		` '
,		
Weight 4 85 lh [2 2 kg]		
7.00 to [2.2 kg]	Weight	4.85 lb [2.2 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



GRX24-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.

