

## POWER CONSUMPTION

THE ELECTRICAL POWER REQUIREMENTS of the **Xpac** series actuators can be divided into four system components. These are the Control Enclosure, Spring Failure Solenoid, Heater and the Motor (Stepping or Servo).

- ① The **Control Enclosure** contains the position control processor (PCP), power supplies, fuses and filters, motor drivers and a termination area. Steady state power consumption will vary with the size of the power module and the input power.

PCP: 5 watts, continuous  
B size; 110 Vac, 220 Vac: 50 watts  
B size, dc powered: 30 watts  
C size: 30 watts  
D sizes: 30 watts

- ② The **Spring Failure Solenoid** is included only with the actuators which include a Fail-Safe spring. This solenoid draws electrical power to close a Normal Open solenoid built into a hydraulic by-pass line. If the actuator loses electrical power, this solenoid opens equalizing hydraulic pressure, allowing the spring to move the actuator.

Spring Failure Solenoid (Spring Fail Units Only)  
Standard (Internal): 30 watts, continuous  
Optional High Capacity (External): 50 watts, continuous

- ③ The **Heater** is included on all Power Modules with a temperature requirement below 50 degrees Fahrenheit. This heater is controlled by a thermostat which maintains automatic control of the temperature between 60 and 80 degrees Fahrenheit.

Heater (off with Ambient Temperatures above 60°F)  
Standard (20W-50 oil): 150 watts for each power module, intermittent

- ④ The **Motor** operates when the actuator is instructed by the PCP to move to a new position. Actual duty cycle will vary with Deadband setting and application, but is typically less than 10% of the time. Various size power modules are available and the electrical power requirement varies accordingly:

"B" Power Module		150 watts, intermittent; Only when required to move.	
"¼D, C"	"	500 watts	"
"½D, 2C"	"	1000 watts	"
"D"	"	2000 watts	"
"2D"	"	4000 watts	"

For circuit breaker ratings, total the maximum potential capacity and increase by a minimum of 25%.