

## Section 23 09 00 – INSTRUMENTATION AND CONTROL FOR HVAC

### 23 09 13 Instrumentation and Control Devices for HVAC

#### 13.13 ACTUATORS

##### A. Industrial Electric Actuators (*ONLY TO BE USED WITH 13.33. E Butterfly Valves – Resilient Seat and 13.33. F Butterfly Valves – High Performance.*)

1. The combination of valve and actuator shall meet the close-off requirements as specified in Section 2.16.D/E – Butterfly Valves.
2. Coupling: ISO 5211 mounting standards.
3. Overload Protection: 120VAC and 220VAC line voltage units shall have a built-in thermal overload protector with automatic reset.
4. Manual Override: Actuator shall be equipped with a declutchable hand wheel for manual operation. Engagement of the manual hand wheel shall disconnect power to the motor.
5. Actuator shall have an option to provide remote indication of manual vs. automatic mode of operation.
6. Power Requirements: 24VAC, 120VAC or 220VAC
7. Auxiliary Switches: Two SPDT rated 10A at 120 VAC or 10A at 220 VAC.
8. Temperature Rating: -20 to +150°F.(-29 to +65°C)
9. Housing: Minimum requirement NEMA type 4X/ IP65 with polyester coating. Actuator shall have an option for an internal heater to prevent condensation within the housing. A visual indication beacon shall indicate position status of the device.
10. Agency Listing: UL, CE, CSA
11. The manufacturer shall warrant for 18 months from shipment or one year from service date.
12. Bray S-70 or equal.