



## MC Plus Series Controller

### Bidding Specifications

Automatic Controller(s) shall be MC Plus-B Series with stations (4, 6, 8, 12, 18, 24, 30, 36 or 42) as manufactured under the brand name of Irritrol Systems to be installed or wired in accordance with manufacturer's published instructions.

**Operation:** Controller shall be electronically controlled and have 4 independent watering programs that can run concurrently with each station's watering time independently variable from 1 minute to 24 hours in 1-minute increments. Controller shall have a single entry option for watering time to enter the same watering time for each station. Controller shall also have a programmable watering calendar with up to 16 days. Programs 1, 2 and 3 shall have 3 daily start times with program 4 having 2 daily start times. Program 4 shall have cycle looping with cycle delay from 1 second to 24 minutes and optional seconds watering time from 1 second to 24 minutes. Controller shall have 2 separate sensor hook-ups for shutdown and cycle initiation, an alarm to signal incomplete programming and a water budgeting feature that changes all stations within a program from 1 to 255% in increments of 1% (with 100% as normal). All programming shall be accomplished by use of keyboard pads with LEDs to indicate which station is operating. Programmable delay between stations shall range from 1 second to 4 minutes. Controller shall have programmable "Valve Test" capable of turning each station on from 1 to 9 minutes sequentially. Controller shall have a programmable "Rain Off" up to 7 days. Programs shall be held in non-volatile memory throughout power failures of any duration. Controller shall have real-time battery backup capable of keeping accurate time during power failures up to 30 days. Controller shall have self-diagnostic electronic circuit breaker with valve short detection that identifies and overrides an electrical malfunction. Programming shall be available in automatic, semi-automatic, single station timed manual and true manual operation with a single program option for seasonal pre-programming. Controller shall have start time stacking within each program and simple program review scrolling.

**Construction:** Controller shall be enclosed in a UL listed, rust-resistant, locking steel cabinet. Quick disconnect cables to terminal strip shall be standard on 18- to 42-station models. Optional pedestal mounts shall be available (P-2B: 4- to 12-station models; P-6B: 18- to 42-station models).

**Electric:** Transformer input shall be 120 V ac, 60Hz (220/240 V ac, 50Hz). Transformer output shall be 24 V ac, 2.08 amps. Maximum output per station shall be 24 V ac, 1.24 amps. Maximum operating output to valves shall be 24 V ac, 1.80 amps (including master valve). Controller shall have optimum 2-stage primary and secondary surge protection.