



MUNRO SMARTBOX PUMP CONTROL SPECIFICATION

A. SmartBox Pump Control

1. SmartBox pump start relay control shall include a 40-amp relay capable of starting a single-phase, $\frac{3}{4}$ to 5 hp pump. The relay coil shall be available in 24, 110 or 220-volt configurations. Electrical rating shall be 120v – 24FLA / 240v – 28FLA with a short circuit rating of 120v – 5kA, 240v – 5kA. All power leaving the SmartBox shall be 24 volts.

NOTE: Contact Munro for larger hp and three phase options.

2. The SmartBox shall include a preset pressure sensor and time delay timer. The pressure sensor shall be pre-set for 20PSI and be installed in the pump case or in the mainline just down stream of the pump as shown on the drawings. A field adjustable time delay timer shall be included and factory set at 30 seconds.
3. The SmartBox components shall be installed in a NEMA 3R, 8”w x 8”h x 4” d, UL Listed **blue or grey powder coated steel or non-painted stainless steel** enclosure. The SmartBox shall have a grounding provision and a quick connect color-coded wire hookup.
4. The SmartBox shall be model (**See models below**), UL listed and as manufactured by Munro Pump, Inc. Grand Junction, CO

NOTE: Items in bold to be removed or amended to fit the specific project.

SmartBox 24VAC signal voltage x 110/ 220 VAC Line Voltage Models:

MPLC24– blue powder coated steel enclosure
MPLC24G – gray powder coated steel enclosure
MPLC24S – stainless steel enclosure

NOTE: Add T to above model numbers if adding temperature protection

The SmartBox shall include a temperature sensor that will sense temperatures at the pump housing in excess of 105 degrees causing the SmartBox to shut the pump down to prevent pump and PVC piping damage.

Option: Reduced Incoming Amperage Model – add the following to paragraph one

1. The Smart Box shall be capable of working with irrigation controllers with a pump start output signal of less than .35 amps. Ice cube relay shall have a nominal voltage of 24 VAC coil, 60 Hz.

Reduced Incoming Amperage Model Numbers:

MPLC242W11 – 24VAC signal voltage x 110VAC Line Voltage Model (2hp max) (blue powder coated steel enclosure; add G for gray powder coated steel or S for unpainted stainless steel, to end of model number).



MPLC242W22 – 24VAC signal voltage x 220VAC Line Voltage Model (5hp max) (blue powder coated steel enclosure; add G for gray powder coated steel or S for unpainted stainless steel, to end of model number)

Option: SmartBox Thermal Protection Model – add the following to paragraph one

1. The SmartBox shall include thermal protection to protect the pump motor from damage due to over amping. The thermal protection shall be capable of automatically resetting upon cool down.

SmartBox Thermal Protection Model Numbers:

MPLC243 – 3 hp max. 24VAC signal voltage x 220 VAC line voltage (blue powder coated steel enclosure; add G for gray powder coated steel or S for unpainted stainless steel, to end of model number)

MPLC245 – 5 hp max. 24VAC signal voltage x 220 VAC line voltage (blue powder coated steel enclosure; add G for gray powder coated steel or S for unpainted stainless steel, to end of model number)

MPLC2475 – 7.5 hp max. 24VAC signal voltage x 220 VAC line voltage (blue powder coated steel enclosure; add G for gray powder coated steel or S for unpainted stainless steel, to end of model number)

MPLC2410 – 10 hp max. 24VAC signal voltage x 220 VAC line voltage (blue powder coated steel enclosure; add G for gray powder coated steel or S for unpainted stainless steel, to end of model number)

NOTE: Add T to above model numbers if adding temperature protection

NOTE: Contact Munro for special control requests.