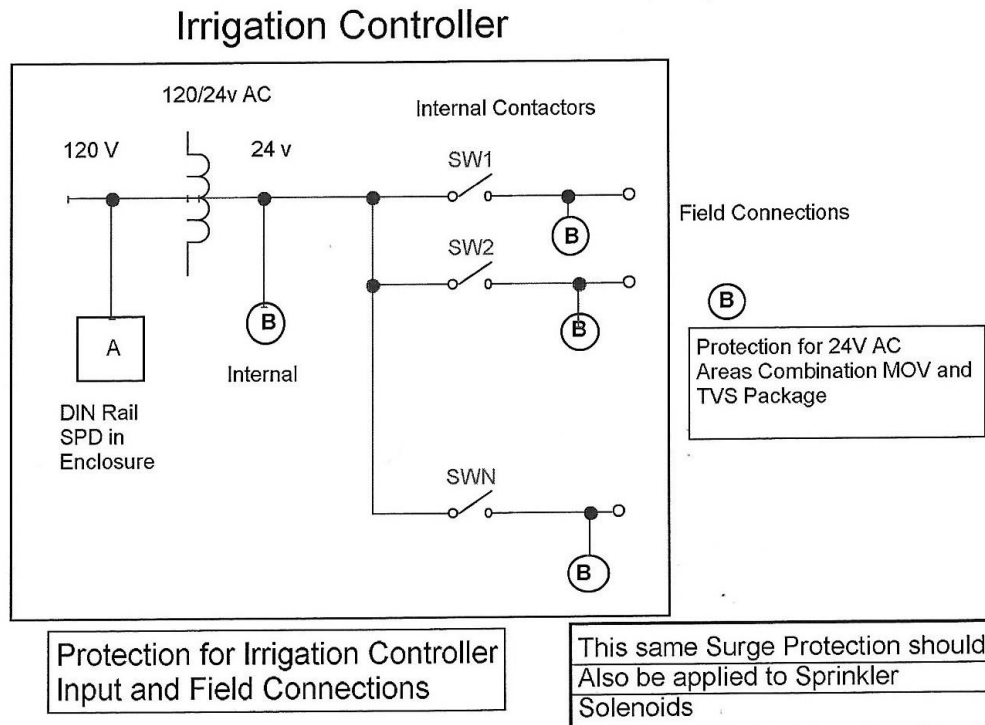


Means of Protecting Irrigation Controls and Solenoids

Irrigation Systems are vulnerable to lightning strikes, since they are typically located in very exposed locations. Most irrigation systems, such as those used on golf courses, are also lacking in protection from lightning strikes.

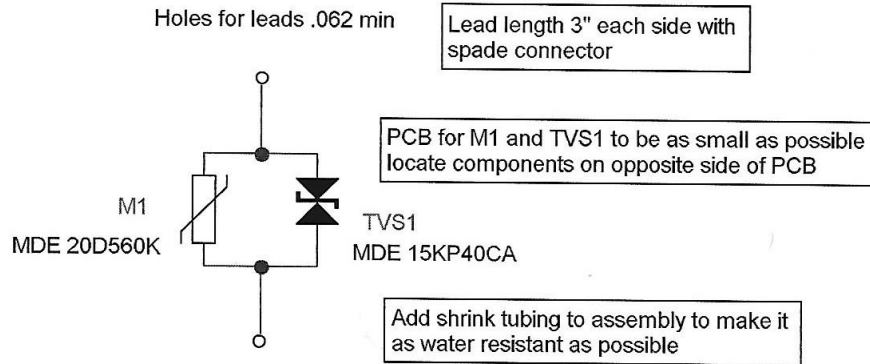
The following is a recommendation that should be considered for inclusion in the plans for protecting the irrigation systems on golf courses and other similar locations.



Irrigation System Protection Recommendations

This is a typical, simplified diagram of an Irrigation Controller

Irrigation controllers may not be protected and may not be grounded. But care must be taken to apply protection carefully and to ground the systems effectively. The aim should be to provide a single point ground that will ground the system effectively, while limiting the effect of ground current.



Field Protection Recommendation - B

In addition, there should be attention paid to the field controls and solenoid valves that are located in the field and remote from the controller. Shown here is a simplified diagram and typical means of protecting the field controls and solenoids to minimize the exposure of the controller to lightning currents and extend the life of solenoid valves. Though lightning strikes cannot be eliminated, the effects can be reduced.

The Components Specified are:

- SS150DIN DINRail SPD
- MDE 15KP40CA TVS device
- MDE 20D560K MOV

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