

TECHNICAL DIRECTIVE

Trident Sub Pump Decoder

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Distribution Regions: All Regions

Product Relevance: PC, EC,

For use by: Distributors, Consultants, Contractors

Introduction

The Trident Sub Pump decoder (TRI-SPD) is used to control a pump that supplies a specific group of stations. A good example is for a booster pump that supplies the stations belonging to one CSG that are located at a high elevation.

The Trident SPD looks very similar to a 1-way decoder.

Note: There is no Gemini Sub Pump Decoder available.

Operation

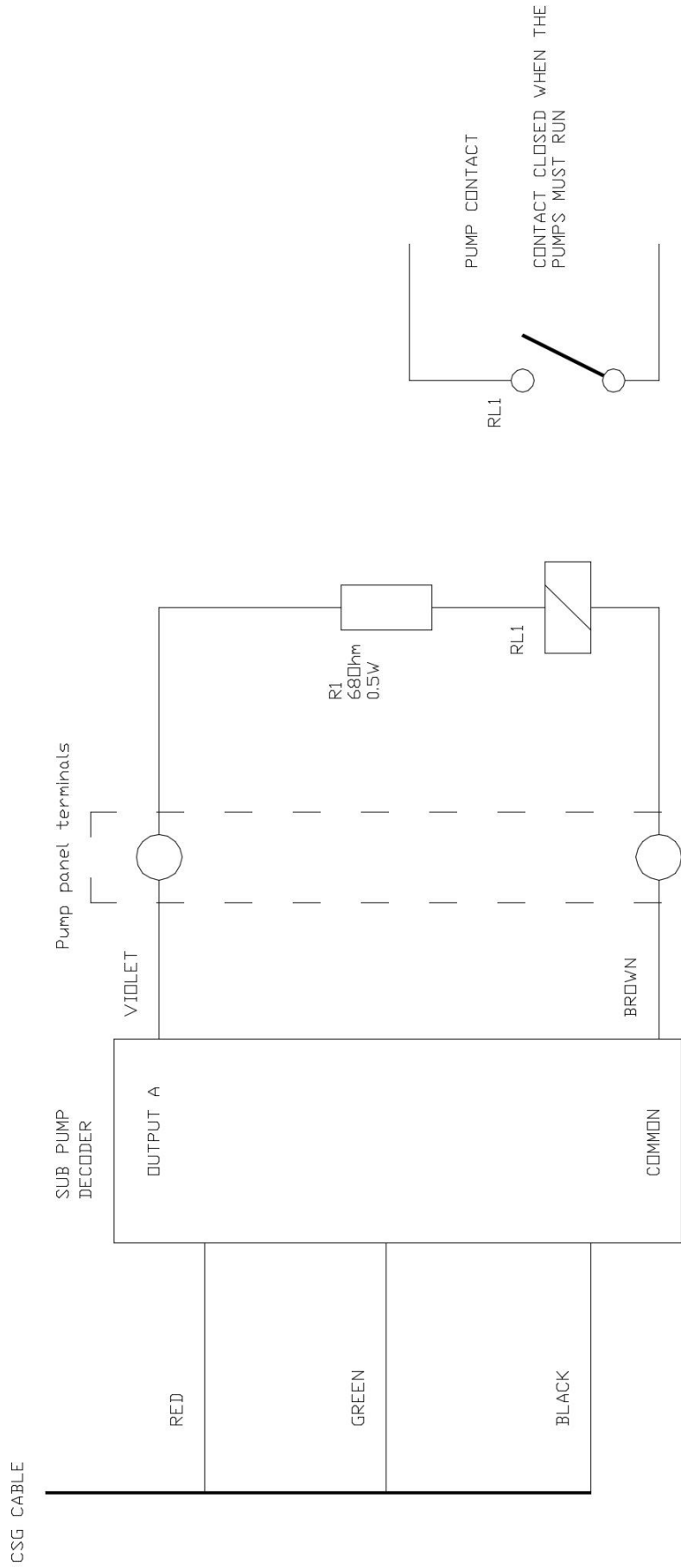
The output of the TRI-SPD is switched on while one or more stations connected to the same CSG are irrigating.

Implementation

It is important to obtain the correct relay for the SPD:

- The coil must be 24V_{AC}.
- The relay coil must be a low power type (500 to 600Ω). Failure to select a power efficient relay may cause problems during operation of the Trident system
- The coil remains energised for the duration the pump must run. The decoder output voltage is approximately 27V_{AC}. For this reason, a series resistor of 68Ω/0.5W must be connected in series to prevent the coil from overheating.

The circuit diagram for the implementation is as follows



RL1 must have a 24Vac coil (Coil resistance 500 to 600 Ohm)

Value of R1 is approximately 10% of the relay coil resistance. Only required if relay cannot operate at 26.8Vac

