

PROJECT SIMULATION DESCRIPTION

The moisture sensor subcircuit is used to simulate the soil. The variable resistor RV1 is used to vary the moisture content of the soil. The water availability indicator is used to indicate whether water is available in the tank or not. When the water availability toggle is switched on, it indicates the availability of water for pumping, otherwise, there is no water available for pumping. The DHT11 subcircuit is used to measure ambient temperature and humidity conditions. The relay circuitry helps in automatically switching the pump when water is readily available and the soil is dry.

Attached is a file named SoilMoistureSensorTEP.HEX. This file path for this file must be inserted into the moisture sensor's HEX file entry field on the Edit Component dialog box for the simulation to run.