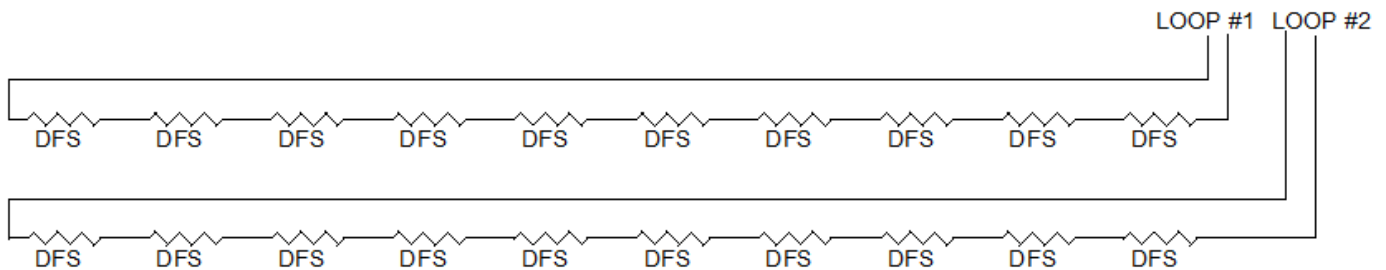
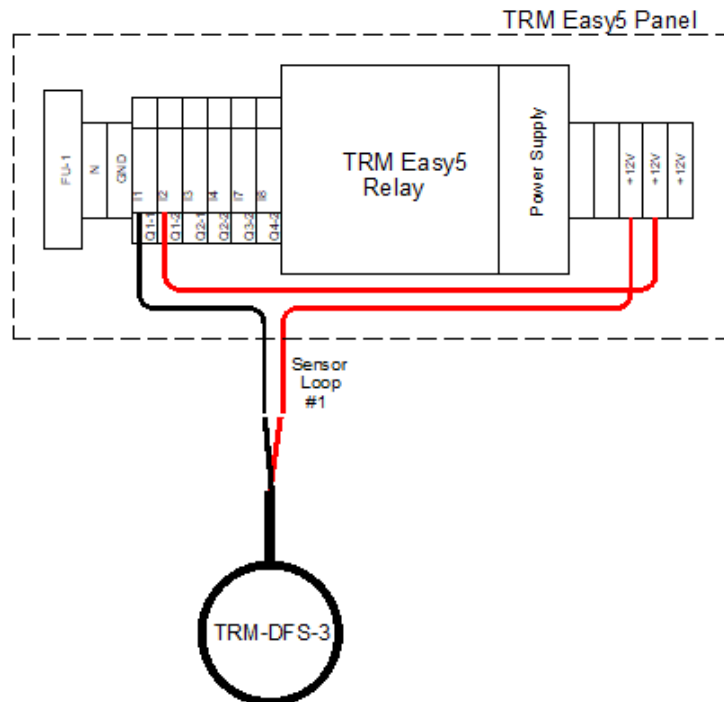


TRM-DFS-3 / TRM-Easy5-Panel Sensor Wiring Examples

Note: TRM-DFS-3 Sensors are two wire, resistors that change value in the presence of diesel, gasoline, jet fuel and similar liquid hydrocarbons. The individual sensor's resistance value is less than 100 ohms when supplied from the factory. Any sensor that is in contact with fuel has a resistance value of greater than 1 meg-ohm with 10 seconds of fuel contact. The TRM-Easy5-Relay input is monitoring the resistance of the connected sensor(s) for a resistance increase. Up to ten TRM-DFS-3 sensor may be connected in a series loop to each of two input channels. Up to 330 feet (100 m) of jumper wire can be used to form each loop. Although the sensors have red and black leader wires, there is no polarity. The sensor can be connected in any orientation as long the result is a series loop. This is the electrical schematic for the maximum 20 sensor configuration:

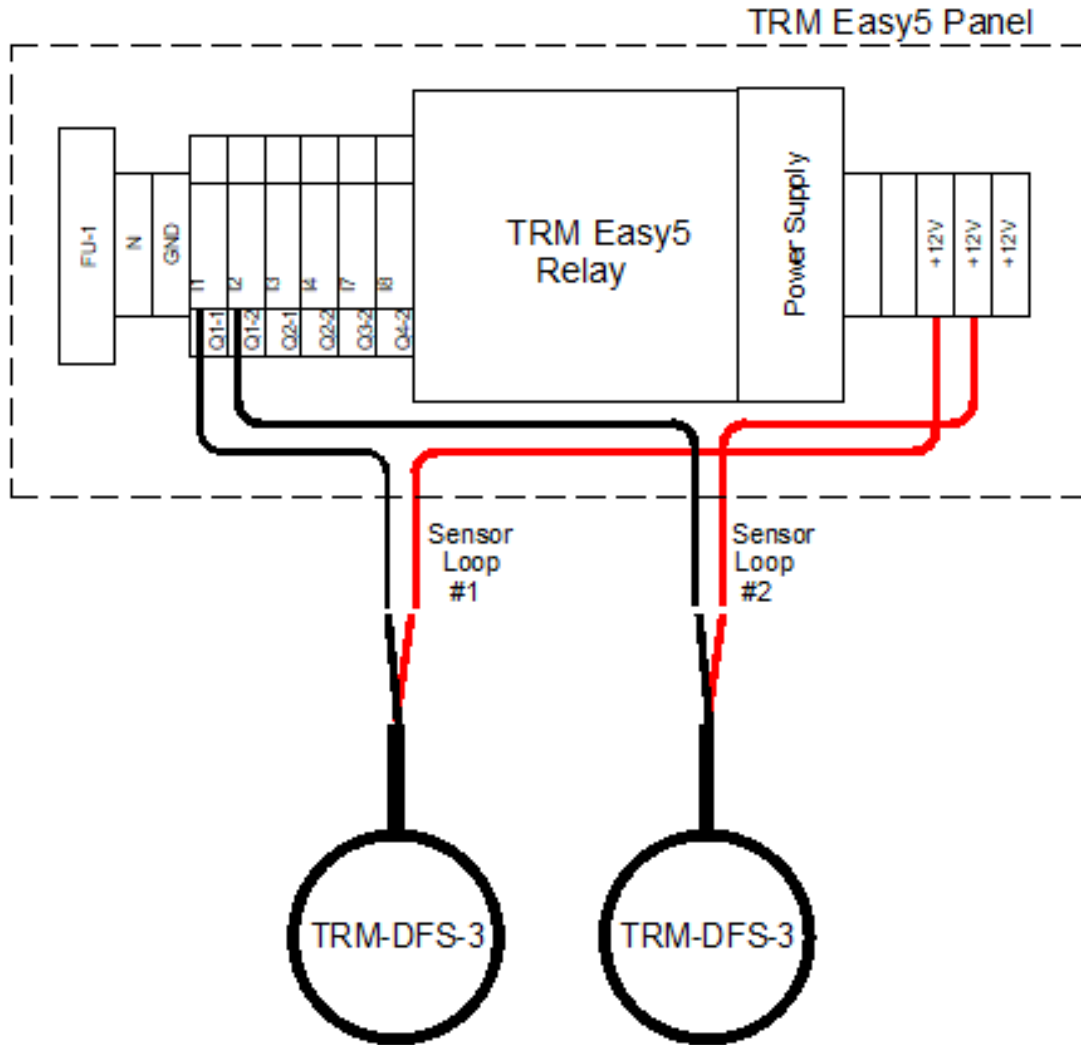


The following wiring diagrams show several representative system with various number of sensors beginning with a single sensor:

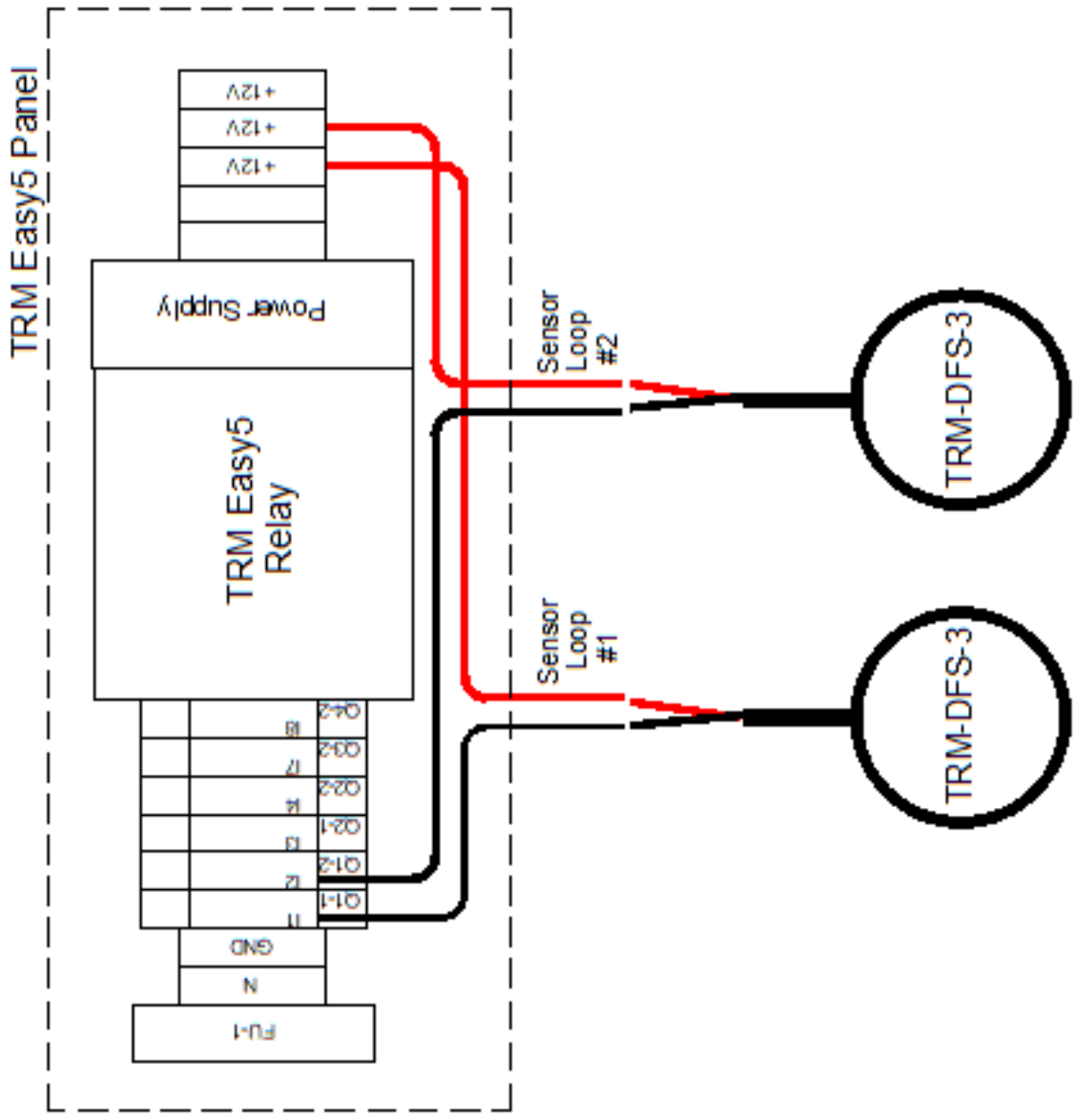


This single TRM-DFS-3 is connected to one of the +12Vdc terminals and Input I1. Because the TRM-Easy5-Panel anticipates two loops, a jumper wire has been installed between a second +12Vdc terminal and Input I2. Without this jumper, Loop 2 would be in the alarm condition.

The second example shows a system with 2 sensors. Each sensor is connected to its own input forming two loops of one sensor each.



In the third example, three sensors form a loop, connected in Input I1. Each TRM-DFS-3 is supplied with three WAGO LeverNuts. The LeverNuts are quick, convenient and re-enterable way to splice two wires. The total amount of jumper cable connecting the sensors to the panel should be 330 feet (100m) or less. Up to 10 sensors can be connected to a single input by expanding on this three sensor example. Note that since only one loop is being used, a jumper has been installed from +12Vdc to Input I2.



The final example shows 6 sensors split into two loops of three. Since there are sensors connected to both loops, the jumper from +12Vdc to I2 has been removed. Each loop could have up to 10 sensors for a total of 20 TRM-DFS-3 sensors monitored by a single TRM-Easy5-Panel. Each loop can have a maximum of 330 feet (100m) of jumper cable. If the panel is placed in the middle of the installation the total “wing span” can be up to 660 feet (200m).

