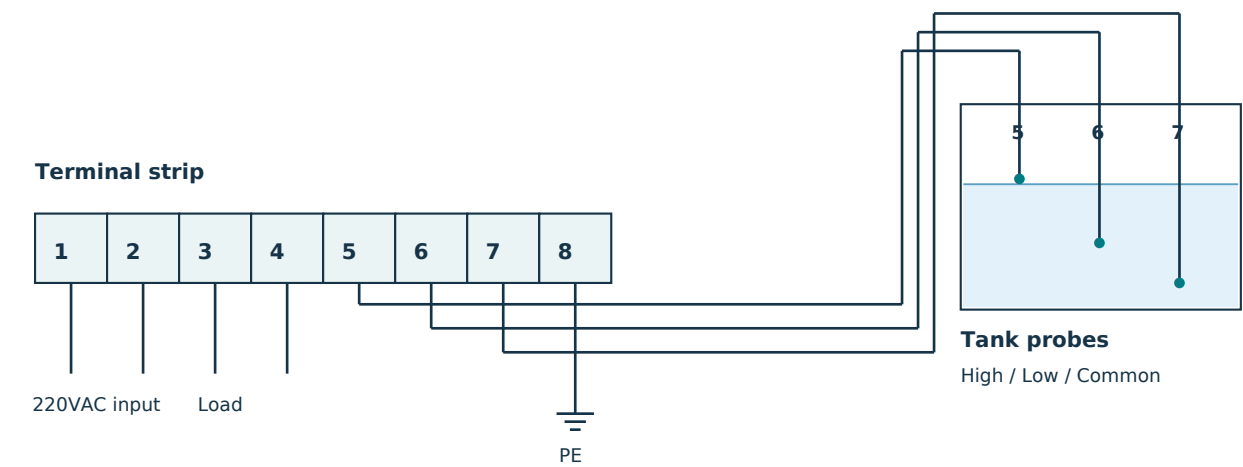


Probe control wiring

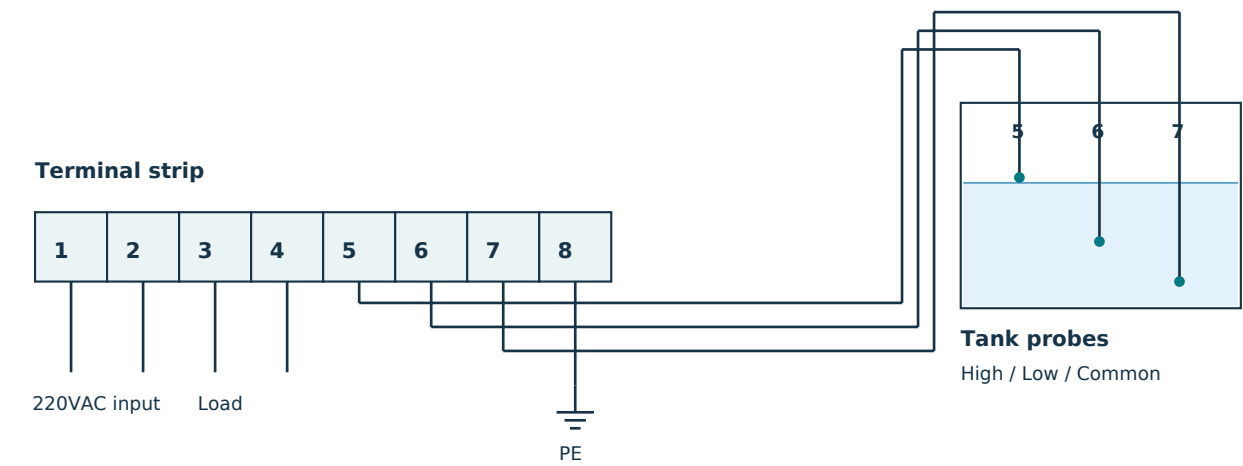
Conductive-probe configurations | Terminal numbers and operating sequences

1. Upper-tank filling - EDF-13□□S



- 5 - high level:** when water reaches this probe, the controller stops the pump.
- 6 - low level:** when water falls below this probe, the controller starts the pump to fill the tank.
- 7 - common:** place below probe 6. It need not be at the bottom of the tank. Keep it clear of metal tank walls.

2. Lower-tank drainage - EDF-13□□X



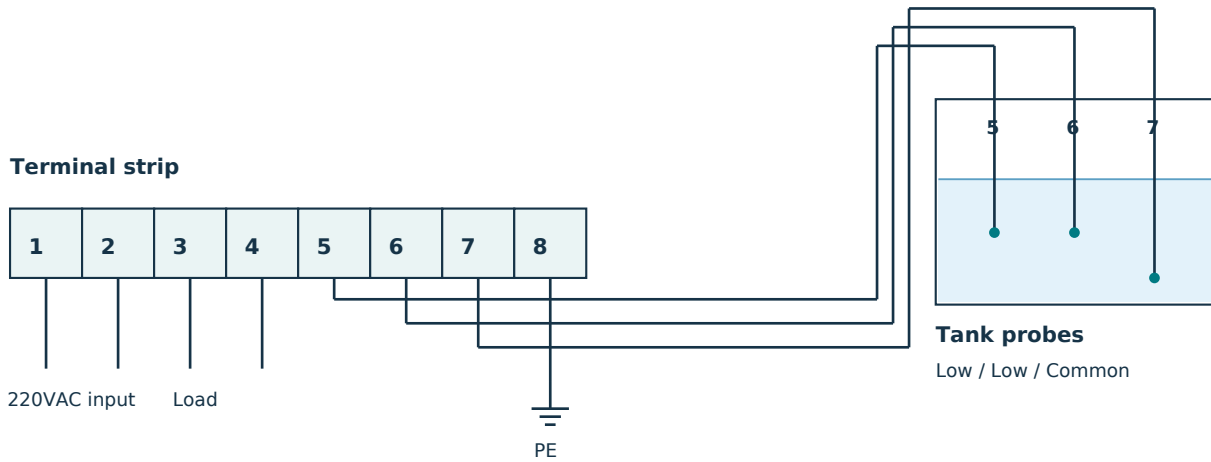
- 5 - high level:** when water reaches this probe, the controller starts the pump to drain the tank.
- 6 - low level:** when water falls below this probe, the controller stops the pump.
- 7 - common:** place below probe 6, clear of metal tank walls; it need not touch the tank bottom.

For both diagrams: terminals 1 and 2 = 220VAC input; 3 and 4 = load; 8 = protective earth (PE). Probe common and protective earth are separate connections.

Protection and linked control

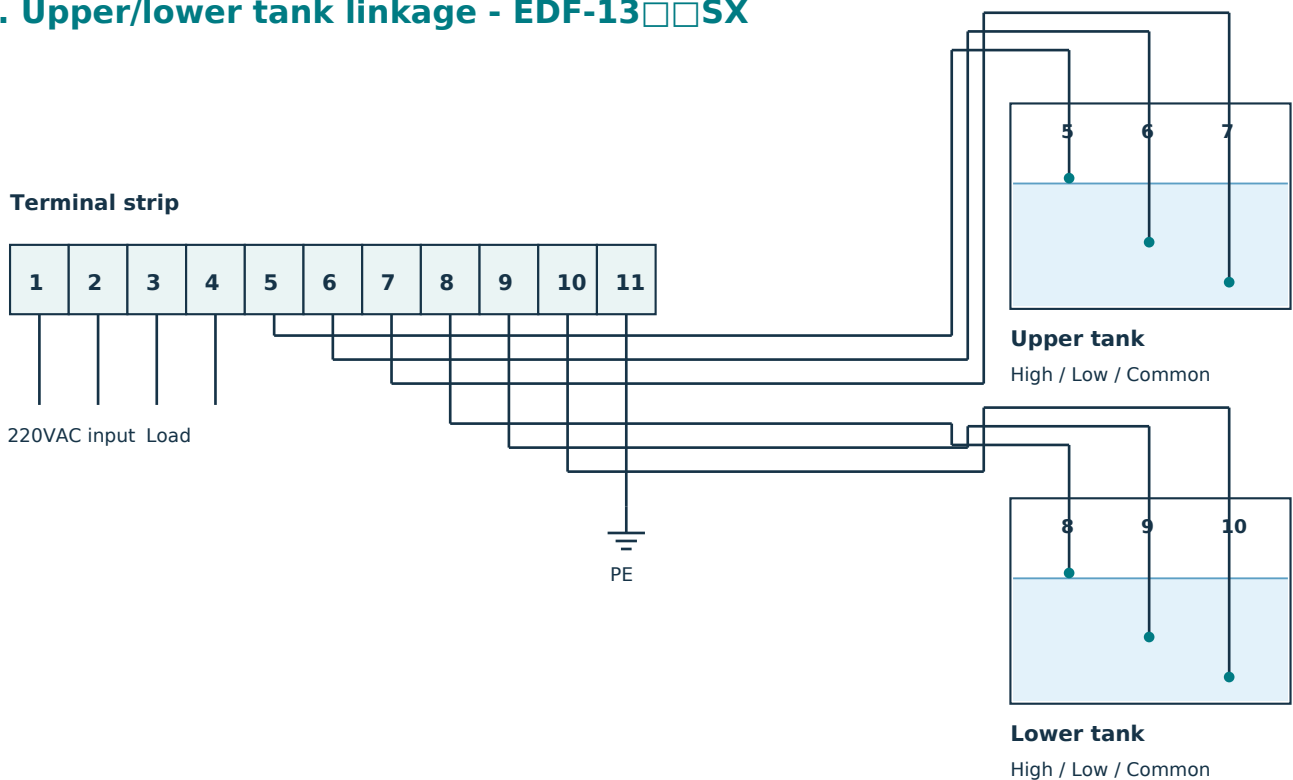
Conductive-probe configurations | Water-shortage protection and two-tank control

3. Water-shortage protection - EDF-13□□X



5 and 6 - low-level probes: when either probe loses contact with the water, the controller stops the pump. **7 - common:** position below the low-level probes. Terminal 8 is protective earth.

4. Upper/lower tank linkage - EDF-13□□SX



Upper tank: 5 = high, 6 = low, 7 = common. Stop filling when water reaches 5; restart filling when it falls below 6.

Lower tank: 8 = high, 9 = low, 10 = common. Stop water transfer when the lower tank falls below 9.

Common probes: place 7 below 6 and 10 below 9. Terminal 11 is protective earth.

The diagrams retain the source terminal assignments. Crossing conductors have no junction unless explicitly connected at a terminal. These arrangements apply to the stated S, X and SX probe variants.

Installation and troubleshooting

Translated operating instructions for the conductive-probe configurations

Installation and use

1. After installation, recheck the input, output and probe connections. Move the probes into and out of the water to simulate operation and confirm that the controller switches correctly.
2. Secure each probe so that it cannot move and cause incorrect switching. In a metal tank, suspend the probes clear of the wall to prevent unintended conduction through the metal.
3. These conductive-probe configurations are unsuitable for nonconductive or poorly conductive liquids, including distilled water.
4. After completing the wiring, check that the pump can be started and stopped using the panel switch. Then return the selector to AUTO for level-controlled operation.
5. For temporary pump operation, use the controller's manual switch.
6. Avoid installation in damp environments or atmospheres containing corrosive gases or high concentrations of metal-containing gases.
7. Use compatible dedicated liquid-level control probes.
8. Inspect and clean the level probes once or twice every two months.

Troubleshooting

The controller does not operate after power is applied

Check whether the red power indicator is on. If it is off, check the input and output terminal connections for good contact. Check the MANUAL/AUTO selector; if it is at OFF, return it to AUTO.

The pump does not switch when the water passes the probe levels

Use the AUTO/MANUAL selector to control the pump while checking the cause. Check whether probes have shifted or are installed too high or too low to contact or leave the water. Check for crossed or shorted upper-level, lower-level and common-probe wires; corrosion; detached leads; and poor connections. Confirm that the common probe is below the low-level probe.

Terminology: "common" identifies the conductive reference probe. It does not mean protective earth. The wiring figures identify the separate PE terminal.