

Installation of NTC Resistors for inrush current limitation

Membrane dosing pumps or other devices with 230V~ operation and **high inrush current** connected to a PoolManager® or Analyt controller may significantly shorten the life of the relay contacts or - in worst case - even result in sticky relay contacts and devices unable to switch off. A 60 Ohms NTC resistor can be used to limit the inrush current and guarantee a longer lifespan of the relays.

The NTC is suitable for most of the membrane dosing pumps, which are run in 230V~ on/off operation. Most of them draw very high inrush current, which can be limited by the NTC.

In addition to that, the NTC can be used for all devices with a 230V~ switch mode power supply. Typically such devices can be identified by their wide specified voltage input range, e.g. from 100V~ to 240V~. These switch mode power supplies are used in dosing pumps and many other devices. They are very energy efficient, but often draw a high inrush current.

The NTC is not suitable for circulation pumps, because they draw higher currents and usually do not have switch mode power supplies.



Never use the NTC resistors for devices with a nominal (permanent) current of more than 0,5A.



Check the device to be connected with the 60 Ohms NTC series resistor if it is compatible and will still function.

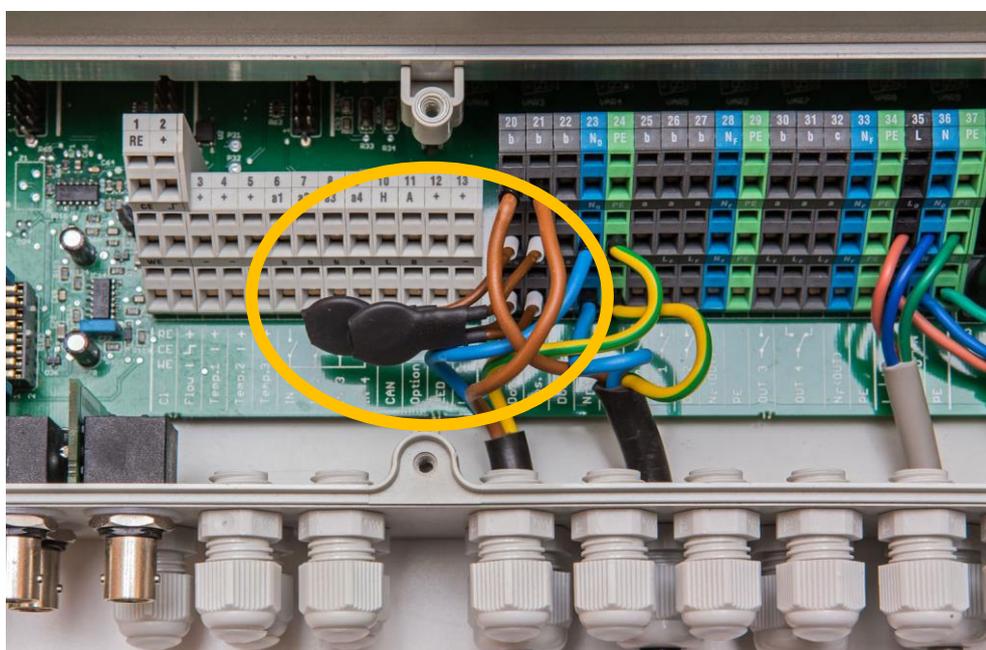


Risk of electrical shock

The NTC resistor and the connection terminals are at 230V~ mains potential. Always unplug mains supply first, before you open the connection box.

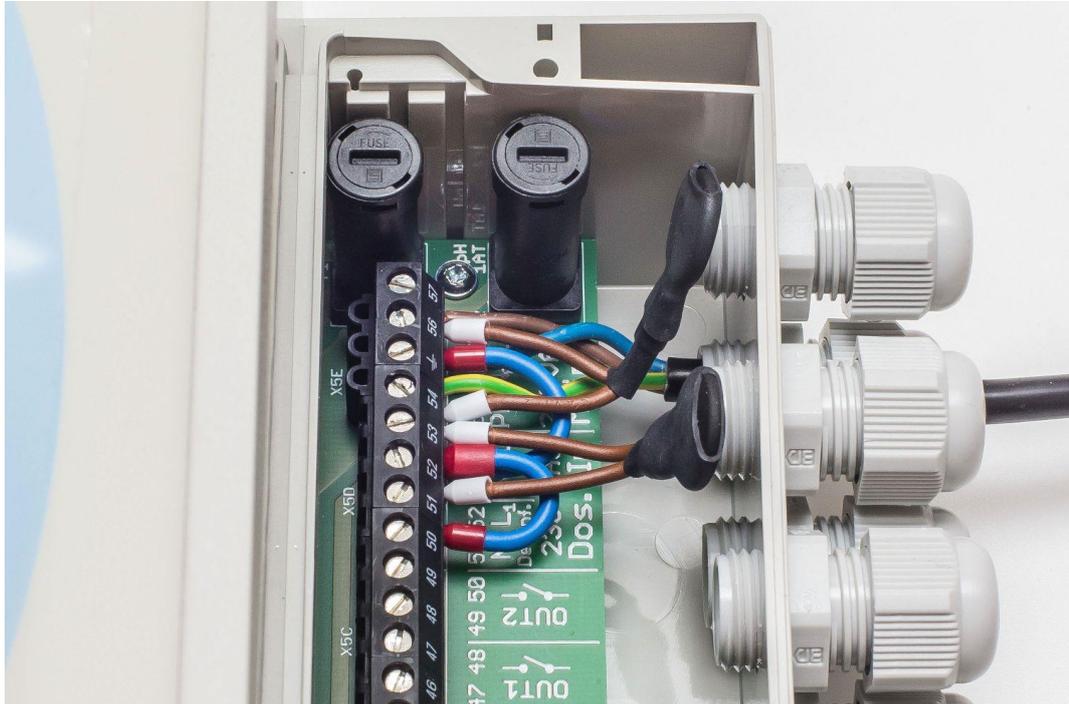
Installation in PoolManager® and Analyt controllers

The NTC resistors can be connected to the pH and disinfection dosing outputs of a PoolManager® or Analyt controller as shown on the following picture:

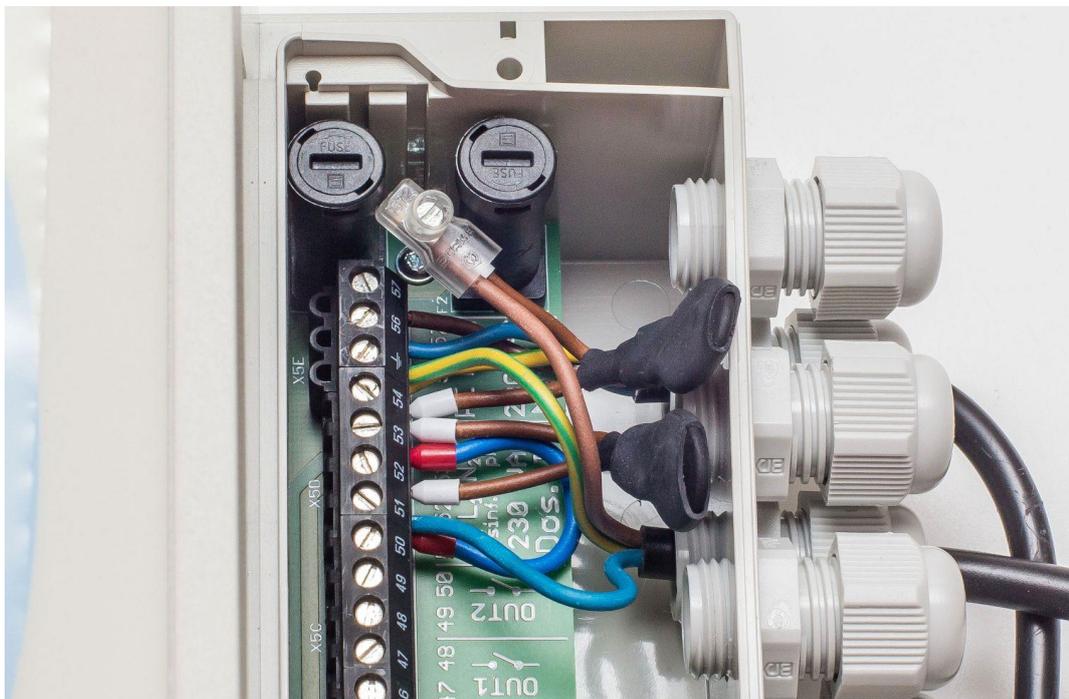


Installation in Compact controllers or 4th generation PoolManager® and Analyt controllers (PM4)

The NTC resistors can be connected in series with the pH and disinfection dosing outputs of a Compact Controller or 4th generation PoolManager® or Analyt controller (PM4) as shown on the following pictures:



Version 1: One common mains supply cable for the controller and the dosing pumps



Version 2: Two separate mains supply cables for the controller and the dosing pumps