

# How to avoid blocking pumps

## How to avoid blocked pumps.


### **End User: Keep main power on the pump.**

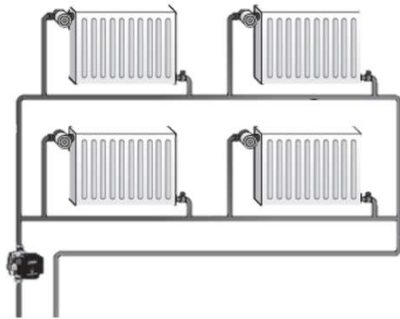
- Do not remove the main power. Let the pump run.
- A typical UPM3 consumption in the heating season would be in average off pLav < 16W.
- HYBRID or AUTO Pump. Set in PPA or CPA will go down to 5W during summer period.

### **Manufacturer: Controller change.**

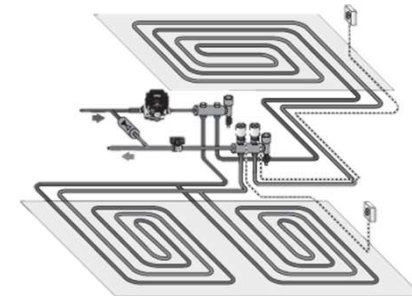
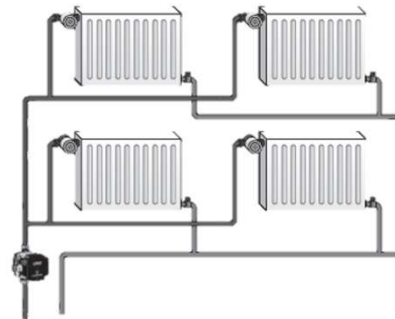
- Include the UPM3 Quick guide together with the appliance instruction manual.
- There would be a clear Improvement if the manufactures changed their control.
  - Keep the pump running with the main power on. No possibility to remove the power to the pump.
  - Set the pump in stand-by via PWM and cycle the pump each 24hours like in Combi Boilers.

## UPM3 Install and Commissioning the pump.

- Grundfos recommend to have the pumps operating constantly after installation. This ensure elimination of lime precipitation in the bearings for the whole lifetime of the pump.
- Pumps installed in newly constructed or refurbished houses and apartments, for later commissioning. It's recommended that the pump are allowed to runs for more than an hour when installed. This are to secure that air is proper vented from the heating system and pump.
- Recommendation when commissioning. Start the system. If the pump shows fault message on the front  Use the de-block screw. If that doesn't solve the problem. Switch off the main power, Remove then the pump head and loosen the Impeller by hand. Mount the pump head and start the pump.
- Recommendation for UFH heating and two pipe systems: Install a HYBRID or a AUTO variant set in CPA or one of the CP curves. Leave the pump powered on.
- Recommendation for Radiator systems: Install a HYBRID or a AUTO Variant set in PPA or one of the PP curves. Leave the pump powered on.
- For both systems also ALPHA 1-2-3 are recommended. All ALPHA has CPA and PPA with corresponding curves. Leave the pump powered on.



Radiator One pipe system PPA or PP curves are recommended



Radiator and UFH Two pipe system CPA or CP curves are recommended

## De-block feature in UPM3

### UPM3 features a double safety de-blocking system:

- Deblocking software
  - Continuously restarting after 1.33 seconds with max. torque of 24.8 Ncm
- Deblocking device
  - Manual deblocking device, access from front side without demounting the control box.

- You Tube: Fault Finding video.

[https://www.youtube.com/watch?v=\\_s](https://www.youtube.com/watch?v=_s)

