ELECTRONIC MOTOR PROTECTION FOR PUMPS

ONE UNIT FOR ALL ELECTRICAL MOTORS, FROM 3 – 999 A

ONE MOTOR PROTECTION UNIT FOR TOTAL SYSTEM RELIABILITY

Developed especially for pumps by Grundfos pump specialists, the MP 204 motor protection unit brings you motor protection that is as reliable as it is simple to use. In effect, we did all the hard bits for you. The result is a unit that protects your pump 24 hours a day and in addition lets you monitor your energy consumption – and never loses sight of user-friendliness.

Easy installation
Installing the MP 204 is extremely easy. It can be mounted by means of four screws onto any wall or back plate, or simply slid into place on a mounting rail.

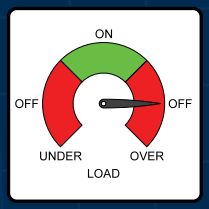
With just one product for all situations, you do not need to worry about choosing the right motor protection unit for your pump or motor. The MP 204 covers the range from 3 to 999 amps as well as voltages from 100 to 480 VAC and is easily set up in under two minutes.

Additionally the MP 204 is configurable via Grundfos GO. To be functional it is required to have a MI cradle suitable for your smartphone. Check out our website for more information on Grundfos GO.

Ensure system reliability
The MP 204 protects pump motors against under-voltage, over-voltage and other variations in power supply, ensuring your pump continues its steady performance. Your pump motors will also be protected against the overheating that accompanies such variations and reduces pump lifetime.

In addition to the reliability offered by motor protection, MP 204 also acts as a monitoring device for energy consumption, meaning you can take measures for optimization.

SEE HOW THE MANY MONITORING OPTIONS LET MP 204 PROTECT YOUR SYSTEM:



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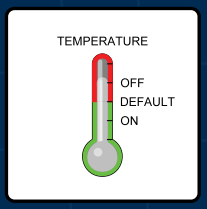
If the motor current is outside the required values, the motor will stop. Protecting against overload/underload lengthens the lifetime and improves overall system reliability.



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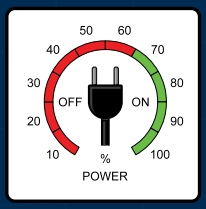
Monitoring temperature means the motor shuts down before it overheats and gives you an early warning for servicing. The TempCon temperature transmitter works with SP pumps, and the Pt sensor or PTC/thermal switch with other pump ranges.



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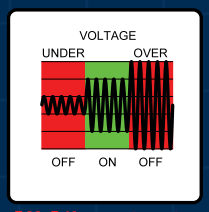
Continually checks the motor's power consumption and stops the pump if the power falls below a certain level. This could indicate a problem and prevents the total motor damage that would otherwise occur if the pump runs dry.



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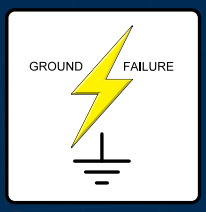
Overvoltage/undervoltage is monitored and if there are variations in supply, possibly caused by long cables or a transformer, these can result in pump damage. Early warning gives you an opportunity to improve operating conditions.



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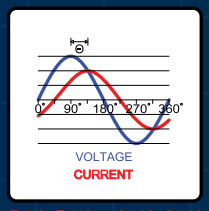
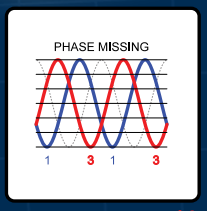
Measuring voltage leakage to the ground on start-up protects against ground failure/insulation resistance before start-up. The pump won't start, averting potential damage.



E 112 E 113 A 112 A 113

The power factor is an indicator that the pump is running under optimal conditions. If MP 204 measures a fall in the power factor, this can be an indication of issues within the pump motor itself. A failing power factor is an indicator of pump motor health and is used as a predictive maintenance indicator.



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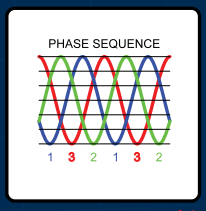
Phase missing is often caused by wear or possibly a mains cable fault or blown fuse. The MP 204 checks that all phases are present, ensuring the pump is correctly installed, avoiding overheating and possible motor damage.



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Ensuring the correct phase sequence delivers maximum performance. Incorrectly connected phases cause rotation in the wrong direction which reduces performance and leads to excessive wear.

Other monitoring parameters include: • Harmonic distortion • Run and start capacitor (single-phase) • Operating hours and number of starts

PUT THE POWER OF MONITORING IN THE PALM OF YOUR HAND WITH THE GRUNDFOS GO APP AND REMOTE

Connect directly to the MP204 to:

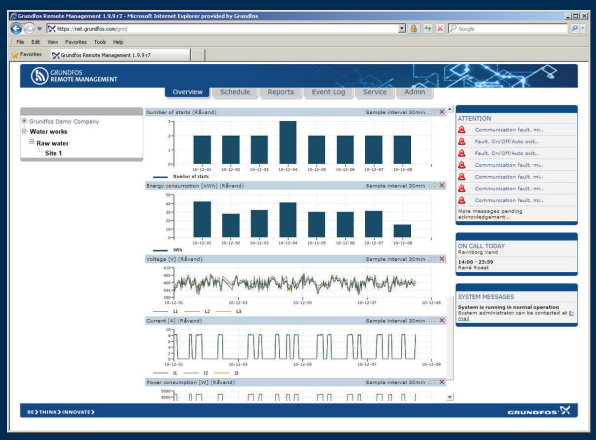
- Configure limits, trip points, delays, and more...
- See Detailed alarm and warning information
- View pump run times and starts
- Copy and save settings from one MP204 to another
- Read, print, and/or email full performance reports with the MP204 report function
- Full I&O manual available on Grundfos GO for MP204

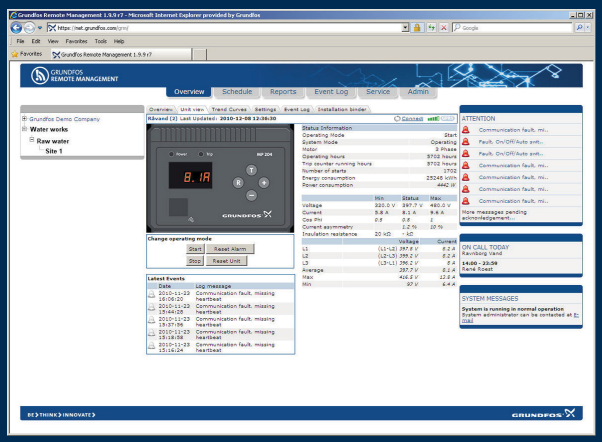
(MI301 Grundfos GO Dongle Shown)

Stay in touch from a distance

We believe in open protocols. That is why your MP 204 solution can be connected to virtually any SCADA system, allowing you remote access to your pump data anywhere. You can control the pump, change the settings, and access information such as energy consumption, detailed single and three-phase voltage and current conditions, alarms and operation data. Grundfos iSolutions can communicate with almost all of the communication standards available on the market. Connections can be created either via wired networks or wireless technology. If you choose WebAccess via the Grundfos Remote Management system (GRM), you can communicate via your computer, the Internet, or via mobile phones as you choose.

Grundfos Cloud Hosted Solutions (GRM Shown Below)





TECHNICAL DATA – MP 204:

- Enclosure class: IP 20
- Ambient temperature: ÷20 to 60C
- Relative humidity: 99 %
- Voltage range: 100-480 VAC
- Current range: 3-999 A
- Frequency: 47-63 Hz
- IEC trip class: 1-45
- Special Grundfos trip class: 0.1-30 s
- Voltage variations: ÷25/+15 % of nominal voltage
- Approvals: EN 60947, EN 60335, UL/CSA 508
- Marking: CE, cUL, C-tick

MP 204

The MP 204 is a Grundfos developed motor protection unit for use with the Grundfos SP, CR, NB/NK, TP, and BM ranges. These high-quality pumps cover a wide range of pump application options, from groundwater supply to wastewater handling.

Additionally since the Grundfos motor protection unit is a standard motor protection unit it will be working as a great protection solution for any motor that needs protection.