

Electronic **motor protection** for pumps





The MP 204. Watching your pumps. Very, very carefully.

For those who are serious about motor protection

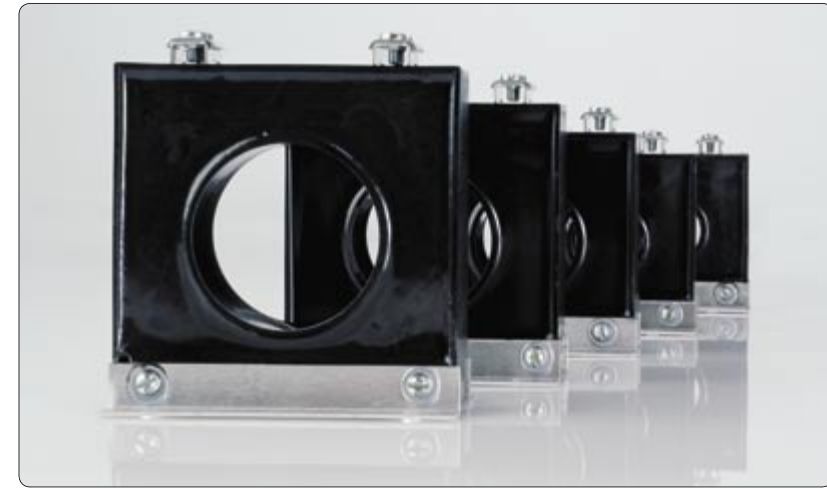
The new MP 204 motor protection unit was developed to bring you pump protection that is as simple to use as it is efficient.

Pump specialists crammed it full of all the protection features you need – but kept it easy to install, set, and use. So when you want prevention rather than a cure, remember the MP 204.

It's electronic pump protection made simple.



Technical data and options



External current transformers



R 100 remote control

External current transformers

When fitted with external current transformers, the MP 204 unit can handle currents from 120 to 999A. Grundfos can deliver approved current transformers from stock (200/5A, 300/5A, 500/5A, 750/5A, 1000/5A).

Remote control R 100

The R 100 remote control from Grundfos allows for wireless infrared remote control of your MP 204 unit. With the R 100, you get access to a full range of options such as factory setting adjustment, service, and troubleshooting.

Ready for bus communication

The MP 204 allows for monitoring and communication via GENIBus – a Grundfos-designed bus for

exchange of pump data, alarms, status information, and setpoints. This enables users to connect the MP 204 to e.g. SCADA systems.

Technical data – MP 204

- Enclosure class: IP 20
- Ambient temperature: ± 20 to 60°C
- Relative humidity: 99 %
- Voltage range: 80-610 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: $\pm 25/\pm 15$ % of nominal voltage
- Approvals: EN 60947, EN 60335, UL/CSA 508
- Marking: CE, cUL, C-tick

	Measuring range	Accuracy	Resolution
Current without external current transformers	3-120 A	$\pm 1\%$	0.1 A
Current with external current transformers	120-999 A	$\pm 1\%$	1 A
Phase-to-phase voltage	80-610 VAC	$\pm 1\%$	1 V
Frequency	47-63 Hz	$\pm 1\%$	0.5 Hz
Power	0-1 MW	$\pm 2\%$	1 W
Power factor	0-0.99	$\pm 2\%$	0.01
Energy consumption	0-4x10 ⁹ kWh	$\pm 5\%$	1 kWh



Flexible. Reliable. And really, really easy to install.

Made for pumps by pump specialists.

The new MP 204 motor protection unit was developed especially for pumps by Grundfos pump specialists. Their objective was to bring 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 never loses sight of user-friendliness.

Monitoring power consumption

So how does the MP 204 protect pump motors? By monitoring its power consumption, that's how. It is a well-known fact that reduced power consumption is a strong indication that the pump is about to run dry. So to prevent dry-running, the MP 204 constantly checks the pump's power consumption, and if it drops below 60 %, it stops the pump to prevent damage. Simple, yet very effective.

Some users like to combine power consumption monitoring with temperature monitoring, and

Grundfos is happy to oblige: the PT 100/1000 temperature monitoring units are perfectly compatible with the MP 204 unit.

Suitable for a wide range of pumps

The MP 204 is designed for use with the Grundfos SP, CR, NB/NK, TP, and BM ranges. These high-quality pumps cover a wide span of pump application options, from groundwater supply to wastewater handling. For more information about these pumps, visit www.grundfos.com.



Easy installation

Installing the MP 204 is perfectly simple. It can be mounted by means of four screws onto any wall or back plate, or simply slid into place on a mounting rail. Wiring is equally straightforward, so installers will soon find themselves ready to set up the unit for operation.

Simple set-up in just 2 minutes

The set-up function is where the MP 204 really shines. The simple menu lets you complete the whole thing in just 2 minutes. The process comprises just four easy steps: once you have gained access to the menu by holding down the \oplus and \ominus buttons at the same time, you set the rated motor amps, the nominal voltage, the trip class, and the number of motor phases (1 or 3).

All by pressing just a few buttons. That's it. After 2 minutes, the unit is set to go.

Trouble-free operation

After setting, there's not much more to say: The MP 204 will protect the pump motor night and day without any fuss. End-users won't have to worry about dry-running. Ever. And they can even rest assured that their motor protection unit is ready for future system requirements due to its GENIBus compatibility.

Making life simpler for you

The MP 204 protection unit reflects how we at Grundfos are always striving to make life easier for those who use our products. First of all, we wanted to create a motor protection unit that was made specifically for pumps – that is the only way to ensure a perfect match between the technologies involved. And as Grundfos already develops its own motors to optimise its pump technology, all the necessary know-how was readily available in-house.

Simply having motor protection dedicated to pumps was not, however, enough for Grundfos. Once the pump

experts had completed that part of the project, we devoted the same amount of energy to making the units simple to install and set-up for use. Because we believe that Grundfos quality should be felt by all who handle it.

Now, Grundfos is the only pump manufacturer who can supply the full package: pumps, pump motors, and motor protection designed for full compatibility and ease of use. The MP 204. It really is pump protection made simple.

Electronic motor protection made simple

Grundfos is well known for its high-quality, innovative pump technology. To complement the pump range itself, Grundfos also offers state-of-the-art electronics and sensors to bring you the best possible protection and system integration.

The MP 204 motor protection unit was developed to be as simple to use as it is efficient. It was designed specially for pumps by pump specialists and combines the protection features you need with remarkable user-friendliness: The MP 204 is very easy to install, set, and use.

The MP 204 motor protection unit is available with the Grundfos SP, CR, NB/NK, TP, and BM ranges.