ELECTRONIC MOTOR PROTECTION FOR PUMPS

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

BE › THINK › INNOVATE ›

GRUNDFOS

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

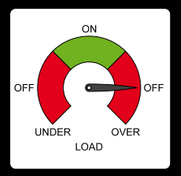
Installing the MP 204 is extremely easy. It can be mounted by means of four screws onto any wall or back plate, or simply slid into place on a mounting rail.
With just one product for all situations, you do not need to worry about choosing the right motor protection unit for your pump or motor. The MP 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

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.

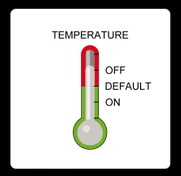
In addition to the reliability offered by motor protection, MP 204 also acts as a monitoring device for energy consumption, meaning you can take measures for optimisation.

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



E48 E56 A48 A56

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.

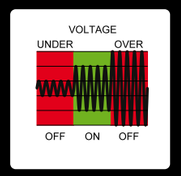


E64 E71 A64 A71

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.

E21

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.

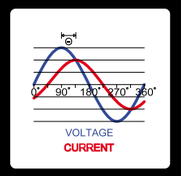


E32 E40 A32 A40

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.

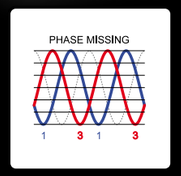
E20 A20

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.



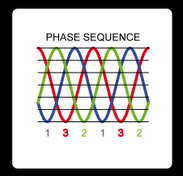
E112 E113 A112 A113

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 that the intake is clogging or that the impeller is warn. Preventive maintenance may be required.



A2

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.



A9

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

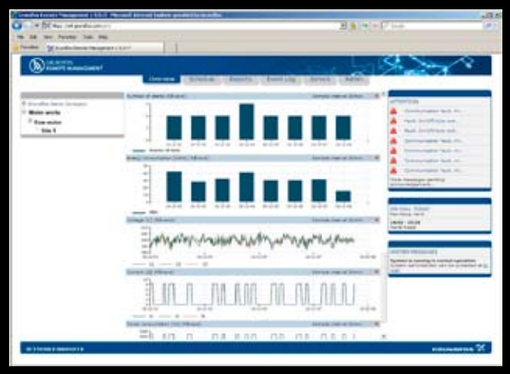
ONE CONTROL PANEL FOR YOUR CONVENIENCE

Grundfos has put everything together in one straightforward control panel. The main switch and the LED panel showing power consumption are all you see on the front. Inside you find the MP 204 unit and optional communication interface units, ready to go.

Stay in touch from a distance

We believe in open protocols. That is why your MP 204 solution can be connected to 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, alarms and operation data. Grundfos solutions can communicate with almost all of the communication standards available on the market.

Connections can be created either via wired networks or wireless technology such as GPRS/GSM networks. 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. One Grundfos GPRS modem/data logger is capable of monitoring up to 10 pumps protected by MP204.



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

BE > THINK > INNOVATE >

Being responsible is our foundation
Thinking ahead makes it possible
Innovation is the essence

SEE THE BIGGER PICTURE

Grundfos is a global leader within water handling technology. Our passion is to bring you all the products you require to create and operate pump systems that combine reliability, cost-efficiency – and innovation. Our products are for use in water supply and wastewater infrastructure on any scale.

Grundfos has a full line of products and systems for the intake, treatment and distribution of drinking water and for the transport and treatment of wastewater. We also offer expertise and industry insight that can increase reliability and reduce lifecycle costs for water utilities.

Key product areas include:


Submersible pumps


Surface pumps


Sewage pumps


Mixers, flowmakers & recirculation pumps


Pumping stations


Monitoring & controls


Dosing & disinfection


Aeration equipment

Our products are the result of decades of engineering expertise. Supported by a worldwide service network. Visit grundfos.com/water-utility for more.

GRUNDFOS A/S
Poul Due Jensens Vej 7
DK-8850 Bjerringbro
Tel: +45 87 50 14 00

www.grundfos.com

GRUNDFOS

96 59 24 39 - 12 10 \ 10132 \ Corporate Branding \