

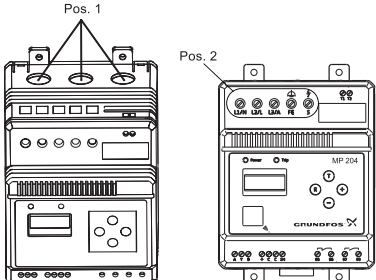
The Grundfos MP204 is a state of art electronic motor protector for asynchronous motors and can be used with both single and three phase motors. The unit consists of an enclosure incorporating instrument transformers and electronics and a control panel with operating buttons and display for reading data. It offers motor protection against current and voltage irregularities, dry running, earth leakage, high internal motor temperature and power factor. It also monitors harmonic distortion, starting and running capacitances if used with a single phase motor and can be connected to an external PTC thermal cutout switch.

Particular features include:

- Tripping if a condition of overload, underload (dry run), high temperature, missing phase, wrong phase sequence, overvoltage, undervoltage, low power factor or current unbalance is detected.
- Warning against overload, underload, high temperature, overvoltage, undervoltage, low power factor, low capacitance (single phase), and harmonic distortion.
- A learning function that enables the unit to measure and store the phase sequence for three phase motors and the capacity of the start and running capacitors for single phase motors.
- Accurate measurement of current and voltage by true RMS measurement sampling each cycle 256 times.
- Use of R100 remote control which allows adjustment of various factory settings, carry out service and trouble shooting and read out data stored in the unit.

The Grundfos MP204 is a high specification unit that provides comprehensive protection and allows monitoring and user interaction. It is easy to install and set up and mounting is done by means of four screws or by sliding the unit onto a DIN mounting rail. It handles currents up to 1000A, though at currents above 120A, current transformers must be used.

CONNECTION

	<table><tr><th>Pos</th><th>Designation</th><th>Three Phase Connection</th><th>Single Phase Connection</th><th>Cable</th></tr><tr><td rowspan="3">1</td><td>L1</td><td>Entry for phase L1 to motor</td><td>Entry for neutral</td><td rowspan="3">Max. Ø 16mm</td></tr><tr><td>L2</td><td>Entry for phase L2 to motor</td><td>Entry for phase</td></tr><tr><td>L3</td><td>Entry for phase L3 to motor</td><td>Entry for auxiliary winding</td></tr><tr><td rowspan="5">2</td><td>L1/N</td><td>Supply: L1</td><td>Supply: Neutral</td><td rowspan="5">Max. 6mm² though 10mm² with cable terminal</td></tr><tr><td>L2/N</td><td>Supply: L2</td><td>Supply: Phase</td></tr><tr><td>L3/A</td><td>Supply: L3</td><td>Auxiliary winding</td></tr><tr><td>FE</td><td colspan="2">Functional earth</td></tr><tr><td>5</td><td colspan="2">Insulation measurement</td></tr></table>	Pos	Designation	Three Phase Connection	Single Phase Connection	Cable	1	L1	Entry for phase L1 to motor	Entry for neutral	Max. Ø 16mm	L2	Entry for phase L2 to motor	Entry for phase	L3	Entry for phase L3 to motor	Entry for auxiliary winding	2	L1/N	Supply: L1	Supply: Neutral	Max. 6mm ² though 10mm ² with cable terminal	L2/N	Supply: L2	Supply: Phase	L3/A	Supply: L3	Auxiliary winding	FE	Functional earth		5	Insulation measurement	
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TECHNICAL DATA

Ambient Temperature	During Operation: -20°C to + 60°C (must not be exposed to direct sunlight)
	In stock: -25°C to + 85°C
	During Transportation: -25°C to + 85°C
Relative Humidity	From 5% to 95%
Materials	Enclosure Class: IP20
	Plastic type: Black PC/ABS
Supply Voltage	100-480 VAC, 50/60Hz
Current Consumption	Max 5W
Short-circuit rating	Suitable for use in a circuit capable of delivering not more than 15000RMS symmetrical amperes, 480V maximum