

# Pump Power: Range of Motors



**MI 4/MI 4-E**



Double insulation in keeping with type of protection class II, splash water protected in keeping with IP 24, double-pole ON/OFF switch and single-pole thermal overcurrent release. 5-m connection cable with plug. Not explosionproof.

- ✓ Light and convenient
- ✓ Powerful
- ✓ Good price/performance ratio
- ✓ Optionally available with speed controller

Undemanding universal motor designed for industrial applications and suitable for pumping thin-bodied, slightly viscous, neutral, aggressive and non-inflammable fluids. It demonstrates its power even when handling acids and alkalis.

We recommend the use of the MA II 5-S motor for extremely aggressive environments. More information see below.

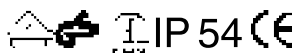
## Everything under control: MI 4-E

The MI 4-E motor is additionally equipped with a speed controller. This ensures controlled filling and refilling of fluids at any time.

| Typ        | Voltage V | Frequency Hz | Output W | Weight kg | Order No. (with Low-voltage release) | Order No. (without low-voltages-release) |
|------------|-----------|--------------|----------|-----------|--------------------------------------|--|
| MI-4-230   | 220-230   | 50           | 450-500  | 2.8       | -                                    | 0030-000                                 |
| MI-4-230 E | 220-230   | 50           | 450-500  | 2.8       | -                                    | 0030-001                                 |
| MI-4-230   | 230       | 60           | 400      | 2.8       | -                                    | 0030-015                                 |
| MI-4-230 E | 230       | 60           | 400      | 2.8       | -                                    | 0030-016                                 |
| MI-4-120   | 110-120   | 50-60        | 550-640  | 2.8       | -                                    | 0030-003                                 |
| MI-4-120 E | 110-120   | 50-60        | 550-640  | 2.8       | -                                    | 0030-006                                 |
| MI-4-100 E | 100       | 50-60        | 520-550  | 2.8       | -                                    | 0030-008                                 |



**MA II**



Double-pole ON/OFF switch, splash water protected in keeping with IP 54, single-pole thermal overcurrent release. 5-m connection cable with shock-proof plug. Not explosionproof

- ✓ Robust, rigid design
- ✓ Double insulation with protective conductor connection
- ✓ Integrated low voltage release (option)
- ✓ Optimised cooling air conduction
- ✓ Externally cooled
- ✓ Double wall housing
- ✓ Available in three power ratings

The convenient and powerful MA II universal motors are ideal for pumping thin-bodied to slightly viscous, aggressive and non-inflammable fluids.

## Double protection is even better

Robust and durable: The inner part of the double wall housing is made of aluminium, the outer part is made of special acid-proof plastic. Aggressive and corrosive vapours cannot intrude into the inner part of the motor. The air flow for cooling the motor is conducted between the two walls of the housing.

## Safety and protection

A low voltage release prevents uncontrolled starting of the motor. There is double insulation between the live parts and the outer surface of the motor and the pump tube that can be touched.

## Acid-proof version: The indestructible

The acid-proof motor version MA II 5-S is armed against all types of "aggression". The motors feature a metal housing with a special anti-acid coating, a plastic shell and additional sealing of the inner part of the motor.

| Typ       | Voltage V | Frequency Hz | Output W | Weight kg | Order No. (with Low-voltage release) | Order No. (without low-voltages-release) |
|-----------|-----------|--------------|----------|-----------|--------------------------------------|--|
| MA II 3   | 220-230   | 50           | 430-460  | 4.6       | 0060-008                             | 0060-000                                 |
|           | 100-120   | 50-60        | 430      | 4.6       | 0060-016                             | 0060-044                                 |
| MA II 5   | 220-230   | 50           | 540-575  | 5.4       | 0060-009                             | 0060-001                                 |
|           | 220-230   | 60           | 450-490  | 5.4       | 0060-043                             | 0060-042                                 |
|           | 100-120   | 50-60        | 510      | 5.4       | 0060-017                             | 0060-045                                 |
|           | 42        | 50           | 520      | 5.4       | 0060-014                             | 0060-006                                 |
|           | 24        | =            | 400      | 5.4       | 0060-015                             | 0060-007                                 |
| MA II 5 S | 220-230   | 50           | 540-575  | 5.4       | -                                    | 0060-091                                 |
|           | 100-120   | 50-60        | 510      | 5.4       | -                                    | 0060-094                                 |
| MA II 7   | 220-230   | 50           | 790-795  | 6.6       | 0060-010                             | 0060-002                                 |
|           | 100-120   | 50-60        | 700      | 6.6       | 0060-018                             | 0060-046                                 |