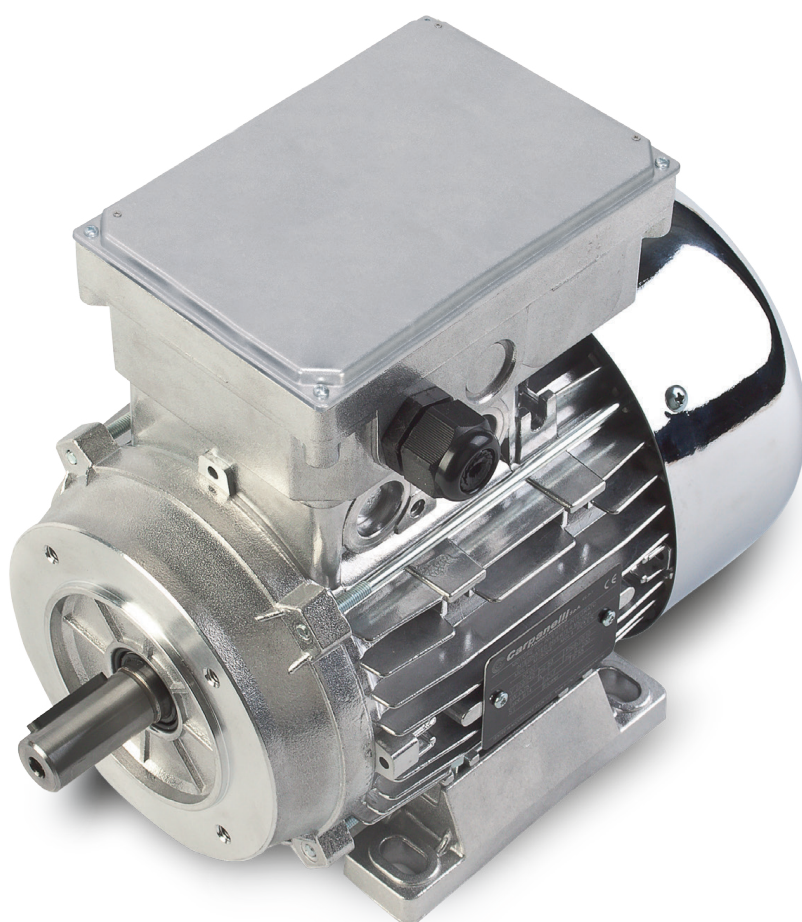
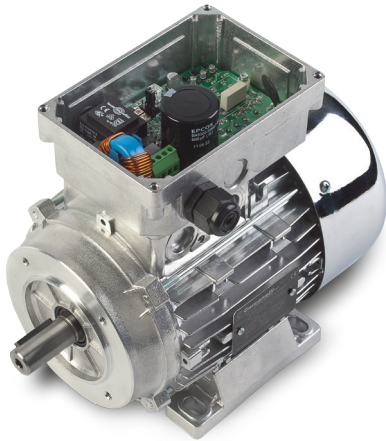


# **SINGLE PHASE MOTOR WITH DEDICATED INVERTER TYPE MBC**





# MBC

*A simple and economic solution that revolutionises the performance of single phase motors*

Suitable for all applications that require the presence of a single phase motor with following features :

- 1. High breakaway torque**
- 2. Low noise level**
- 3. Low vibration level**
- 4. Low heating**
- 5. High efficiency**

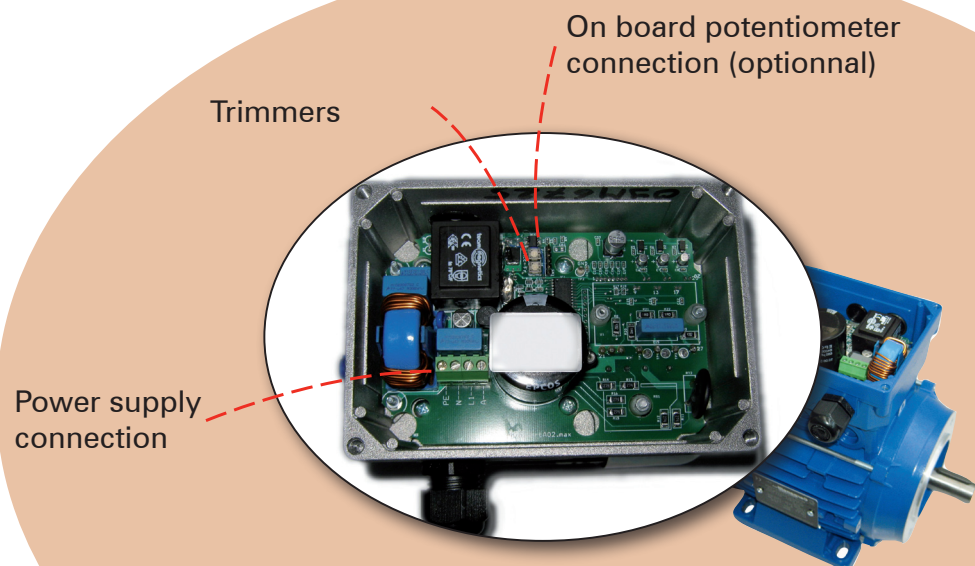
## Technical specifications

It is a dedicated inverter installed inside a terminal box to be able to use asynchronous three phase motors instead of single phase motors or simple application.

- Power supply 230V + 15% - 10%.
- Power from 0.09 kW to 0.75 kW
- Motor Sizes : 56,63,71,80.
- Possibility to adjust acceleration and deceleration via trimmer
- Possibility to adjust output frequency via trimmer
- Possibility to establish the running direction in the same way as the single phase motor
- 1 indicator LED
- Load bearing/switching frequency:4880 Hz
- Protection against:
  - Over current
  - Over-Under voltage
  - Drive temperature
- Input for thermal pad of motor
- EC approved EMI filter (for conducted emissions)/ EC approved immunity

## Sizes and power

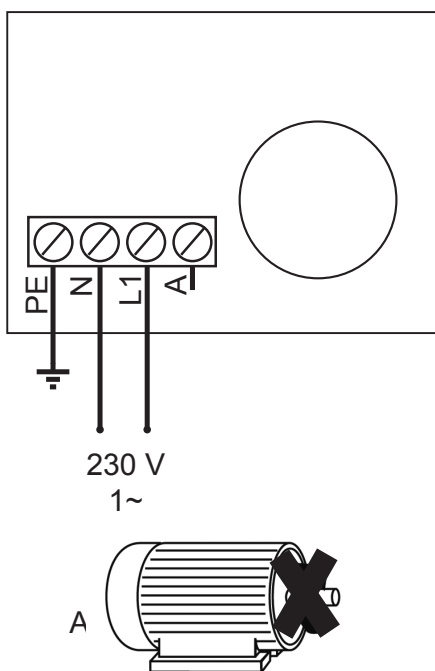
MBC56b4	0,09 kW
MBC63b4	0,18 kW
MBC71b4	0,37 kW
MBC80b4	0,75 kW



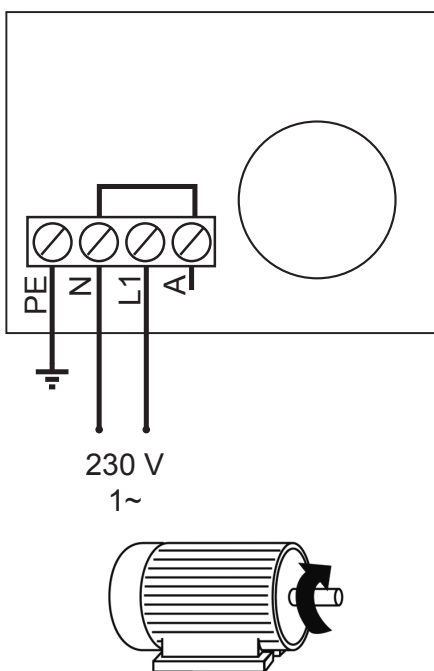
## Terminals

- PE** Connect to the earthing system
- L1, N** Connect to the single phase 230V power supply
- A** If connected to N, the motor runs clockwise  
If connected to L1, the motor runs anticlockwise  
If disconnected, the motor stops

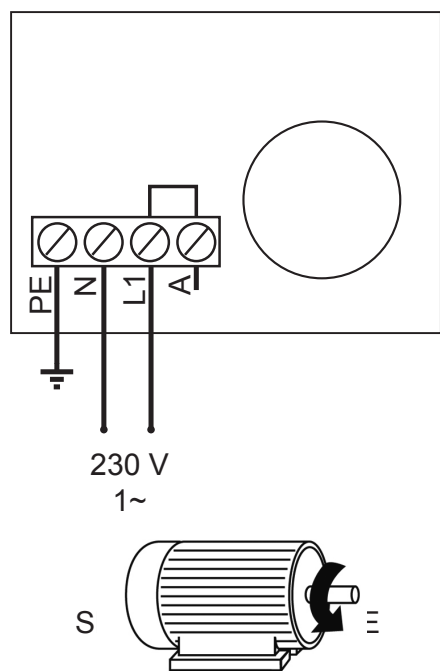
BOITE A BORNE DU MOTEUR



BOITE A BORNE DU MOTEUR

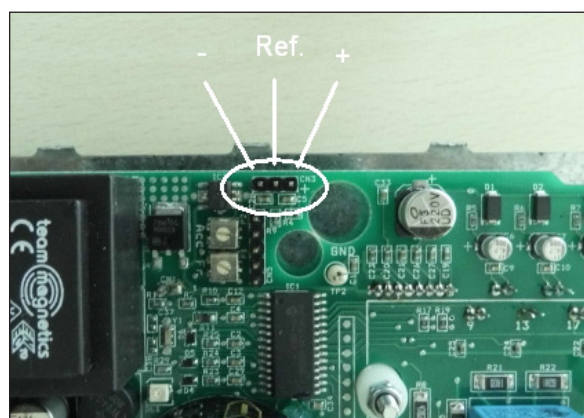


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## LED Indicator

- Off : equipment not powered or serious failure
- On : regular operation
- 2 blinks : internal protection tripped, due to overheating or activation of thermal pad.
- 3 blinks : overload protection tripped or power supply voltage too low
- 4 blinks : circuit breaker tripped due to over voltage (regenerative load)



*An optionnal potentiometer of 1kΩ can be connect on board using terminals shown on picture*

## Trimmers

The adjustment trimmer marked <Acc> is used to adjust the acceleration and deceleration between 1Hz/s and 200 Hz/s.

Acceleration and deceleration values are identical but maximum deceleration is limited to 50 Hz/s.

The adjustment trimmer marked <Fr> is used to adjust the output frequency between 10 and 70 Hz.

Obviously, if lower frequencies are used, below 30 Hz, the fan may not be able to cool sufficiently, especially in the case of prolonged operation.