

### MOD.3090

#### Technical specifications

Provided with silk screened front panel and with 4mm CE safety sockets.

Nominal voltage:  
220V / 50Hz

Nominal current:  
3,37A

Nominal speed:  
2800 rpm

Power:  
370W (Other power on request)

Cos  $\varphi$ :  
0,92

Dimensions (LxWxH):  
35x18x25 cm

Weight:  
9,5 kg



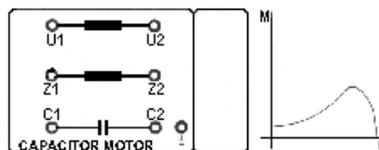
#### General

The capacitor run induction motor is the typical cheaper motor that can be used for various applications, for the start-up as well as for the normal operating of electric apparatus, refrigerator compressors, washing machine drives, power tools, aspirators, fans, water pumps, etc. In order to decrease the current at the displacement of the load current but also to increase the starting couple of a single-phase asynchronous motor the auxiliary phase is supplied by a capacitor.

Essentially, the auxiliary winding and the displacing capacitor must be designed differently and according to the motor torque value required at the start and during the normal operation. The capacitor, put in series with the auxiliary phase, remains permanently connected.



- Imprinted terminal boards with the synoptic.
- Base plate with four rubber feet.
- With coupling cog for easy engagement with other machines.
- Protection against thermal overload.
- All connections on 4 mm safety sockets included thermal contact.
- Manual explaining theory and practice for laboratory experiment.



#### Didactical purpose

- Motor connection
- Typical machine data evaluation
- Reversing the rotation direction
- Direct test for mechanical characteristic (torque as function of the speed)
- Direct test for electro-mechanical characteristic (torque, speed, input current, efficiency and power factor as function of the output power)

#### Options

Depending on the specific requirements of the application the machine can be provided with two shaft ends, with other power values and can be designed with the appropriate number of poles in order to have the required nominal speed. (MOD.3090-4: 4 poles single phase motor 1500 rpm).

#### Accessories:

A full range of accessories and options are available like electromagnetic brakes, powder brakes, measuring modules such as voltmeter, ammeter, power meter, connections cables and power supplies.