

### MOD.3120

#### Technical specifications

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

Nominal voltage:  
230Vac/ 50Hz

Nominal power:  
0,3kW (Other power on request)

Nominal speed:  
2800 rpm

Cos  $\varphi$ :  
0,94

Dimensions (LxWxH):  
35x18x25 cm

Weight:  
8,5 kg



The CAPACITOR START MOTOR is the typical motor to use for onerous applications, for the starting 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 reduce the starting current but also to increase the starting couple of a single phase asynchronous motor the auxiliary phase is supplied by a capacitor. The auxiliary phase, which is supply at the starting by a capacitor with a great capacity of electrolytic type, for alternating current, it has to operate only for short time (and which has been studied and proportioned for the starting in particular), is excluded by an automatic switch when the rotor reaches the 3/4 of the synchronous speed. The motor, in normal gear, rotates like a real single-phase machine. The induction motor with starting capacitor is the most expensive of the motor with capacitor, as it needs a higher copper quantity, the automatic switch and the capacitor.

#### Didactical purpose

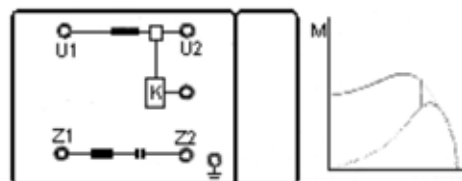
- Motor connection
- Typical machine data evaluation
- Reversing the rotation direction
- Direct test for mechanical characteristic (torque as function of the speed)
- Direct test for electro-mechanical characteristic (torque, speed, input current, efficiency and power factor as function of the output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

Depending on requirements 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.3120-4: 4 poles capacitor start motor 1500 rpm).



- 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 experiments.



#### Accessories

There are also available electromagnetic brakes, powder brakes, measuring instruments, connections cables and power supplies.