

### MOD.3040

#### Technical specifications

Industrial, complete with base plate, provided with silk screened terminal board and with 4mm safety sockets.

Nominal voltage:  
230 / 400Vac 50Hz (delta / star)

Nominal current:  
2,42 / 1,4A (delta / star)

Nominal power:  
370W (other power on request)

Power factor ( $\cos\phi$ ):  
0,69

Nominal speed:  
2800 rpm

Dimensions: (LxDxH)  
35x18x25cm

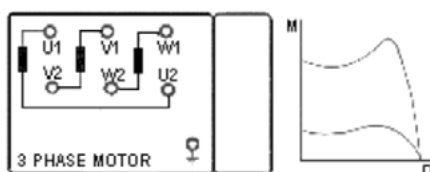
Weight:  
7 kg



#### General

The squirrel cage asynchronous motor is the most used. It is also called rotating field motor, and it doesn't keep its speed rigorously constant, but it allows small speed variations in comparison with the synchronous one in the range from 1 up to 8%. If the stator winding is divided into three coils, the rotating field makes a complete turn for each period and the motor is called "2 pole type". If either the winding is divided in three contiguous triplets along the stator periphery, the magnetic field makes half of a turn for each period, and the motor is called "4 pole type". We can have either 6, 8, 10 or 12 poles motors.

- Imprinted terminal boards with the synoptic.



#### 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)
- Measure of the ohmic windings resistance
- No-load test of the motor
- Short-circuit test of the motor
- Direct test of the motor
- Measurement of the slip [s]

#### Accessories:

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



Inside the stator you can find the rotor, which is the rotating part, along the same rotation axis as the stator. The rotor is short circuit type. The motor can be started connecting it directly to the main power both in star or delta (Y-D) configuration.

- 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.

#### 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.3040-4: 4 poles 3PH squirrel cage motor 1500 rpm).



3PH motor speed regulator MOD.3240



Starting reverser switch MOD.3303



Direct starter MOD.3302



STAR / DELTA switch MOD.3308