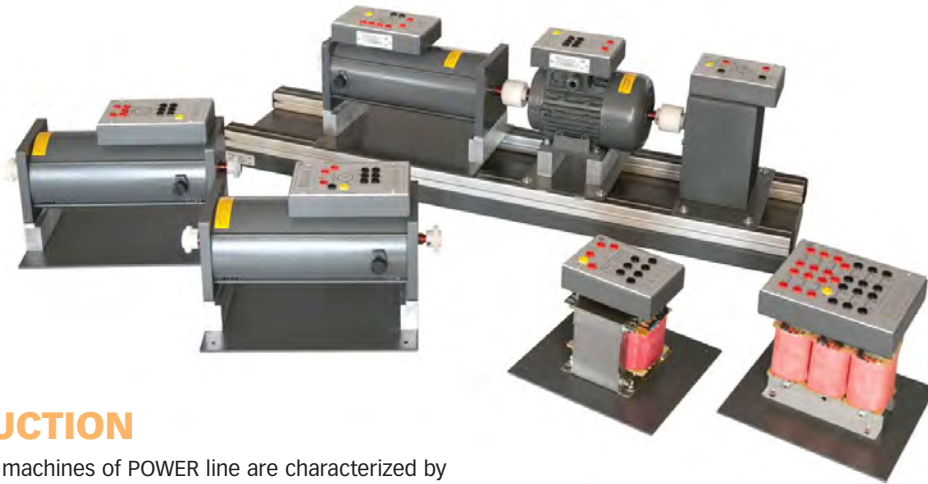


# "POWER" ELECTRIC MACHINES



## INTRODUCTION

Electric rotating machines of POWER line are characterized by the same height and by the same diameter of shaft sticking out of both ends.

Shafts are provided with joint for the coupling of a machine to any other machine of the same series without any mechanical tool. The feet of the machine of standardized measure enable to assemble the group of machines having to be tested, on the proper base.

These machines of solid industrial construction also include a panel with silk-screen-printed schematic diagram showing the wiring diagram and the names of windings on standardized safety terminals. The rating plate is printed directly on the schematic diagram, for immediate reference.

## BASE FOR SUPPORTING AND COUPLING "POWER" ELECTRIC MACHINES Mod. BP/EV



This base is common for all the rotating machines of POWER line and it enables to couple the machines to each other and fastens them very quickly.

This base is also provided with safety covers that can be applied over the coupling joints to prevent any access to moving parts. Another accessory of this base locks the shaft of the machine for the tests with locked rotor (short-circuit).

**Dimensions:** 1200 x 260 x 80 mm

## DIRECT-CURRENT MOTOR /GENERATOR WITH SEPARATE/ COMPOUND EXCITATION Mod. P-1/EV



- Power: 1000 W
- Armature voltage: 220 Vdc
- Excitation voltage: 220 Vdc
- R.p.m.: 3000 (\*)
- It also operates as DC motor
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 500 x 200 x 300 mm
- Weight: 48 kg

(\*) other RPM values are available on demand

## DIRECT-CURRENT MOTOR / GENERATOR WITH SEPARATE / COMPOUND / SERIES EXCITATION Mod. P-2/EV

- Power: 1000 W
- Armature voltage: 220 Vdc
- Separate excitation voltage 220 Vdc
- R.p.m.: 3000 (\*)
- It also operates as DC motor
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 500 x 200 x 300 mm
- Weight: 50 kg

(\*) other RPM values are available on demand

## THREE-PHASE ASYNCHRONOUS CAGE MOTOR Mod. P-4/EV



- Power: 1000 W
- Voltage: 230/400 V 50 Hz (\*)
- R.p.m.: 2900 (\*) (2 poles)
- Delta-star connection
- Form of construction: IM B3
- Protection: IP 44
- This unit also includes thermal protector
- Dimensions: 400 x 200 x 300 mm
- Weight: 22 kg

(\*) other values of voltage, frequency and r.p.m. are available on demand

## THREE-PHASE ASYNCHRONOUS TWO-POLE (DAHLANDER) CAGE MOTOR Mod. P-6/EV

- Power: 1000/700 W
- Voltage: 400 V 50 Hz (\*)
- R.p.m.: 2850/1400 (\*) (2/4 poles)
- Form of construction: IM B3
- Protection: IP 44
- This unit also includes thermal protector
- Dimensions: 400 x 200 x 300 mm
- Weight: 22 kg

(\*) other values of voltage, frequency and r.p.m. are available on demand

## THREE-PHASE SYNCHRONOUS MOTOR / GENERATOR WITH ASYNCHRONOUS STARTING Mod. P-3/EV



- Power: 1000 VA
- Voltage: 230/400 V 50 Hz (\*)
- R.p.m.: 3000 (\*) (2 poles)
- Excitation voltage: 220 Vdc
- It also runs as synchronous motor with induction starting
- Delta-star connection
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 450 x 200 x 300 mm
- Weight: 40 kg

(\*) other values of voltage, frequency and r.p.m. are available on demand

## THREE-PHASE ASYNCHRONOUS WOUND-ROTOR MOTOR Mod. P-5/EV

- Power: 1000 W
- Voltage: 230/400 V 50 Hz (\*)
- R.p.m.: 2850 (\*) (2 poles)
- Rotor voltage 400 V
- Delta-star connection
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 500 x 200 x 300 mm
- Weight: 32 kg

(\*) other values of voltage, frequency and r.p.m. are available on demand

## THREE-PHASE ASYNCHRONOUS TWO-POLE TWO-WINDING CAGE MOTOR Mod. P-7/EV

- Power: 1000/500 W
- Voltage: 400 V 50 Hz (\*)
- R.p.m.: 2850/900 (\*) (2/6 poles)
- Form of construction: IM B3
- Protection: IP 44
- This unit also includes thermal protector
- Dimensions: 400 x 200 x 300 mm
- Weight: 22 kg

(\*) other values of voltage, frequency and r.p.m. are available on demand

## SINGLE-PHASE ASYNCHRONOUS MOTOR WITH STARTING CAPACITOR Mod. P-8/EV

- Power: 1000 W
- Voltage: 230 V 50 Hz (\*)
- R.p.m.: 2800 (\*) (2 poles)
- Form of construction: IM B3
- Protection: IP 44
- This unit also includes thermal protector
- Dimensions: 400 x 200 x 300 mm
- Weight: 2 kg

(\*) other values of voltage, frequency and r.p.m. are available on demand

## ELECTRODYNAMOMETER – DC DYNAMOMETER Mod. P-12/EV

Besides being a typical DC motor/generator, this machine also includes some devices making it particularly suitable to carry out the function of electro-dynamometer for measuring the torque output by the motors coupled to it.

- Power: 1000 W
- Armature voltage: 220 Vdc
- Excitation voltage: 220 Vdc
- R.p.m.: 3000 (\*)
- Braking torque: 4 - 0 - 4 Nm
- It also runs as DC motor
- Mechanical device of torque measurement
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- It is also prearranged to be connected with digital torque meter mod. UM-G1/EV
- Dimensions: 550 x 200 x 300 mm
- Weight: 55 kg

(\*) other RPM values are available on demand

## THREE-PHASE TRANSFORMER Mod. P-14/EV

- Power: 1000 VA
- Voltage of primary winding: 230/400/346V 50 Hz (\*)
- Delta/star/zigzag connection
- Voltage of secondary winding: 230/400/346V (\*)
- Delta/star/zigzag connection
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 360 x 200 x 300 mm
- Weight: 27 kg

(\*) other values of supply voltage and frequency are available on demand

## TACHOGENERATOR Mod. P-16/EV

This tachogenerator is used to measure the speed of rotation of "P" electric machines. The output signal can be converted into r.p.m. by tachometer voltmeter mod. AZ-73. It is used for DC motor drive mod. CV-2/EV in closed-loop configuration.

- Output voltage: 0,06 V per revolution
- R.p.m.: 5000 max.
- Output voltage 1: 300 Vdc at 5000 r.p.m.
- Output voltage 2: 10 Vdc at 5000 r.p.m.
- Protection: IP 44
- Dimensions: 260 x 260 x 300 mm
- Weight: 10 kg

## SINGLE-PHASE ASYNCHRONOUS MOTOR WITH STARTING CAPACITOR AND CENTRIFUGAL CIRCUIT BREAKER Mod. P-9/EV

- Power: 1000 W
- Voltage: 230 V 50 Hz (\*)
- R.p.m.: 2800 (\*) (2 poles)
- Form of construction: IM B3
- Protection: IP 44
- This unit also includes thermal protector
- Dimensions: 400 x 200 x 300 mm
- Weight: 22 kg

(\*) other values of voltage, frequency and r.p.m. are available on demand

## SINGLE-PHASE TRANSFORMER Mod. P-13/EV



- Power: 1000 VA
- Voltage of primary winding: 230 V 50 Hz (\*)
- Voltage of secondary winding 1: 0-53-200-400V (\*)
- Voltage of secondary winding 2: 0-115-230 V
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 360 x 200 x 300 mm
- Weight: 21 kg

(\*) other values of supply voltage and frequency are available on demand

## EDDY CURRENT BRAKE Mod. P-15/EV

- Braking power: 1000 W
- Supply voltage: 0-220 Vdc
- R.p.m.: 3000 - 1500
- Braking torque: 4-0-4 Nm - 8-0-8 Nm
- Bidirectional operation
- Mechanical device of torque measurement
- Cooling by fan
- Auxiliary power supply: 230 V 50-60 Hz
- Protection: IP 22
- This unit also includes thermal protector
- It is also prearranged to be connected with digital torque meter mod. UM-G1/EV
- Dimensions: 400 x 250 x 300 mm
- Weight: 45 kg

## THEORETICAL-EXPERIMENTAL HANDBOOKS

Application handbook with exercises.