

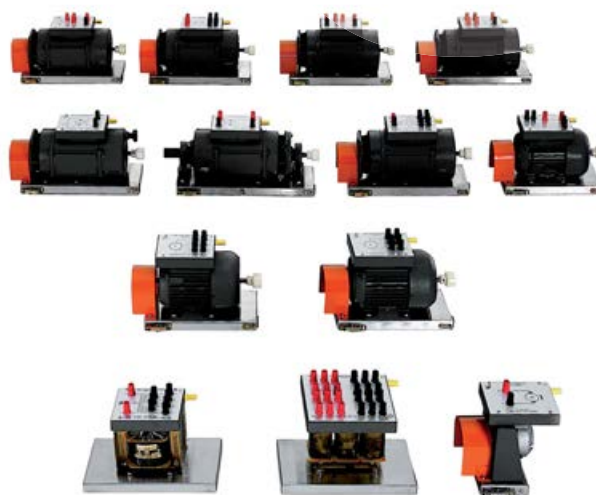
"SECURITY" ELECTRIC MACHINES

INTRODUCTION

These machines are included in a set of motors and transformers of reduced power; these machines, together with starting and control rheostats and with power supply units enable to determine all the typical operating lines, by the use of reduced voltages to ensure the highest safety against electric contacts. 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 machines can easily be handled in the laboratory as they are provided with a base and with a quick coupling system for the connection with machines of the same line; furthermore the rotating machines are also equipped with male-female coupling joints on shaft prongs.

The rating plate is printed directly on the schematic diagram, for immediate reference.



DIRECT-CURRENT MOTOR / GENERATOR WITH SEPARATE / COMPOUND EXCITATION Mod. M-1B/EV

- Power: 200 W
- Armature voltage: 42 Vdc
- Excitation voltage: 42 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: 440 x 160 x 250 mm
- Weight: 15 kg

(*) other RPM values are available on demand

DIRECT-CURRENT MOTOR WITH SERIES EXCITATION Mod. M-2B/EV

- Power: 200 W
- Armature voltage: 42 Vc
- R.p.m.: 3000 (*)
- It also operates as DC generator
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 440 x 160 x 250 mm
- Weight: 15 kg

(*) other RPM values are available on demand

THREE-PHASE SYNCHRONOUS GENERATOR WITH ASYNCHRONOUS STARTING Mod. M-3B/EV

- Power: 200 VA
- Voltage: 24/42 V 50 Hz (*)
- R.p.m.: 3000 (*) (2 poles)
- Excitation voltage: 42 Vdc
- It also runs as induction start synchronous motor
- Delta-star connection
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 440 x 160 x 250 mm
- Weight: 17 kg

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

THREE-PHASE ASYNCHRONOUS CAGE MOTOR Mod. M-4B/EV

- Power: 200 W
- Voltage: 24/42 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: 440 x 160 x 250 mm
- Weight: 11 kg

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

THREE-PHASE ASYNCHRONOUS WOUND-ROTOR MOTOR Mod. M-5B/EV

- Power: 200 W
- Voltage: 24/42 V 50 Hz (*)
- R.p.m.: 2900 (*) (2 poles)
- Rotor voltage: 42 V
- Delta-star connection
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 440 x 160 x 250 mm
- Weight: 17 kg

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

ASYNCHRONOUS SINGLE-PHASE MOTOR WITH STARTING CAPACITOR Mod. M-8B/EV

- Power: 200 W
- Voltage: 42 V 50 Hz (*)
- R.p.m.: 2900 (*) (2 poles)
- Form of construction: IM B3
- Protection: IP 44
- This unit also includes thermal protector
- Dimensions: 440 x 160 x 250 mm
- Weight: 11 kg

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

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



- Power: 280/150 W
- Voltage: 42 V 50 Hz (*)
- R.p.m.: 2900/1450 (*) (2/4 poles)
- Form of construction: IM B3
- Protection: IP 44
- This unit also includes thermal protector
- Dimensions: 440 x 160 x 250 mm
- Weight: 12 kg

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

REPULSION START INDUCTION SINGLE-PHASE MOTOR Mod. M-10B/EV



- Power: 200 W
- Voltage: 42 V 50 Hz (*)
- R.p.m.: 0-3000 (*)
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 440 x 160 x 250 mm
- Weight: 16 kg

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

UNIVERSAL AC/DC MOTOR Mod. M-11B/EV

- Power: 100 W
- Voltage: 42 Vac 50 Hz (*) / 42 Vdc
- R.p.m.: 3000 (*)
- Form of construction: IM B3
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 440 x 160 x 250 mm
- Weight: 15 kg

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

ELECTRODYNAMOMETER – DC DYNAMOMETER Mod. M-12B/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: 250 W
- Armature voltage: 42 Vdc
- Excitation voltage: 42 Vdc
- R.p.m.: 3000 (*)
- Braking torque: 1 - 0 - 1 Nm
- It also operates 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: 440 x 160 x 250 mm
- Weight: 21 kg

(*) other RPM values are available on demand

THREE-PHASE TRANSFORMER Mod. M-14B/EV

- Power: 200 VA
- Voltage of primary winding: 24/42/36V 50-60 Hz
- Delta/star/zigzag connection
- Voltage of secondary winding: 24/42/36V (*)
- Delta/star/zigzag connection
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 360 x 160 x 250 mm
- Weight: 8 kg

SINGLE-PHASE TRANSFORMER Mod. M-13B/EV

- Power: 200 VA
- Voltage of primary winding: 42 V 50-60 Hz
- Voltage of secondary winding 1: 0-6,3-21-42 V
- Voltage of secondary winding 2: 0-12-24 V
- Protection: IP 22
- This unit also includes thermal protector
- Dimensions: 360 x 160 x 250 mm
- Weight: 10 kg

TACHOGENERATOR Mod. M-16/EV

This tachogenerator is used to measure the speed of rotation of "M" and "M-B" electric machines. The output signal can be converted into r.p.m. by tachometer voltmeter mod. AZ-73. It can also be connected with digital unit mod. UM-G1/EV to plot the characteristic curves with an X-Y recorder (not included in the equipment).

- 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
- This unit also includes thermal protector
- Dimensions: 160 x 160 x 250 mm
- Weight: 5 kg