

## 11.1 - EM CONTROL AND REGULATION SYSTEMS

### Mod.3230

#### DC Speed Regulator Module

For open and closed loop regulation with Dc motors used as actuators in automation.

A current limiter with adjustable gain is included, for speed control and variable torque control.

- Input: 230Vac



### Mod.3240

#### 3Ph AC Speed Regulator Module

To execute experiment on regulation of Ac motors and as actuators for automation, robotics etc.

Frequency converter for all controls and regulations on three-phase source.

- Input : 208/380/415V 50/60Hz
- Output: 400V, 0÷400Hz

### Mod.3301-B

#### Soft-Starter

Soft starter for motors slip-ring and squirrel cage

Star-delta starter

Motor protection adjustable current

Direct-starting



### Mod.3301-A

#### Starter

Starter for motors slip-ring and squirrel cage

Star-delta starter

Motor protection adjustable current 1÷1,6A

Direct-starting

### MOD.3183S

#### Starting and Synchronizing module

for synchronous motor

- With dc power supply 0-220volt up to 2A
- Input/Outputs: 4 mm CE safety sockets



### 11.2 - EM CONTROL AND REGULATION SYSTEMS

#### Protection for electrical machines:

- Motor protection with adjustable max current
- Option: Motor thermal protection
- Compact table top version or for vertical frame
- also available for : 1kW, 3kW, 6Kw

#### MOD.3302-01

With Star/Delta starter



#### MOD.3302-02

With MT and Y/D



#### MOD.3302-03

With Fuses and Y/D



#### MOD.3302-04

With soft starter and Y/D



#### MOD.3302-05

With MT



#### MOD.3302-06

With Fuses



#### MOD.3184-S Synchronizing indicator

for synchronous generator

It includes three indicator lamps, three line fuses, a three polar switch and 6 security sockets, dual voltmeter, dual frequency meter

- Operative voltage: 208/380/415V

#### MOD.3210 Tacho generator

Generator for r.p.m. detection, complete with base plate.

- Output: 60mV/rpm

#### MOD.3210.C

To read the speed of tachogenerator.

