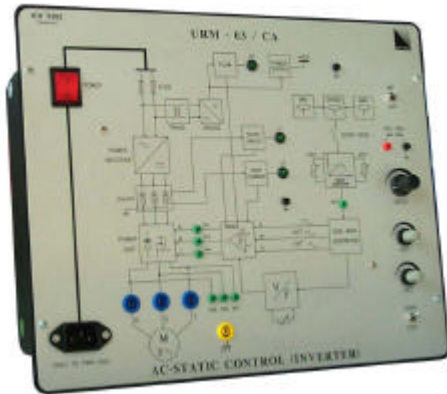


**TRAINING MODULE FOR LEARNING AND EXPERIMENTING OF
AC THREE-PHASE MOTOR DRIVE AND CONTROL**



URM-03/CA experimental module has been especially designed to provide a comprehensive, hands-on and complete instruction in the principles and operations of AC motor control circuits (drives) most widely used in industry nowadays.

The module is completely self-sufficient and doesn't require any external devices or special equipment other than the standard laboratory measuring instruments .

A special computerised device known as "**URM-SMC**" enables automatic measurements, data acquisition and graphic monitoring of the signals using any PC. Full technical bibliography complete of theory of the control circuits and hands-on experiments are provided with the module ensuring a fast and effective learning on the subject. The module can be used as easily either resting on a bench top surface or fitted on a special vertical anodised aluminium frame. **URM-03/CA** training unit can be easy managed by external devices like PC or PLC (see our model **URM-07/PLC** and its related dedicated managing software) .

MECHANICAL FEATURES

- Silk screened anodised aluminium panel reproducing the various internal electronic circuits
- Easy mechanical mounting/removal system on vertical frame or use
- Execution according to international safety rules
- Electronic circuits plastic protection
- Highly reliable bushes for safe connections
- Side ventilation holes

GENERAL FEATURES

- Rubber feet
- Dimensions: mm 375 x 303 x 110h
- Industrial electronic drives (low power) with built-in latest technology
- Main test points and controls available on panel
- Operating modes LEDs indicators
- Short circuit electrical and electronic protection
- Test points on standard safety bushes (Ø 4 mm)
- Supplied complete of three-phase motor
- External speed regulation either via any PC or PLC
- Insulating safety transformer included
- Possibility of drive managing by means of a PLC module (mod. **URM-07/PLC**) with PLC software

ELECTRONIC AND FUNCTIONAL FEATURES

- Power supply: 220/240 Vac single-phase
- Acceleration/deceleration to/from 0 to rated speed in 5 seconds
- Drive output voltage: 220V three-phase on safety bushes (Ø 4 mm)
- Max power: 0.187KW
- Sinusoidal wave form
- MOSFET power stage
- Frequency generated from 2.5Hz to 100 Hz
- Frequency stability better than 1.5%
- Electronic short-circuit protection
- 220V/170W asynchronous three-phase motor mounted on base and with shaft protection

URM-SMC
**COMPUTERIZED MEASURING SYSTEM FOR DATA
ACQUISITION AND GRAPHIC MONITORING**

- PC printer port connection
- Resolution: 12 bits 0.025%, Linearity: 10 bits
- Sampling frequency: 100KHz
- Software for Windows 95/98/NT environments
- Conversion time: 10 µS , Accuracy: 0.25% ± 1 LSB
- Two separate input channels (Z=1Mohm/20pF)
- Measuring Instruments: oscilloscope, storage oscilloscope, true RMS voltmeter, spectrum analyser and transient recorder