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 ↳ PRODUCTS
 ↳ 40.- ELECTRICITY

INTRODUCTION

As the technology develops, it is usually to tend forward more efficient devices and more energy saving. In case of lightning, they have appeared a lot of technologies much more efficient at consumption level or construction materials level, but it is also important the automation of the luminosity to decrease the consumption of energy, this is the case of the automatic lightning, a technology which use some kinds of sensors to detect values like ambient light or motion detection.



ISO 9001: Quality Management (for Design, Manufacturing, Commercialization and After-sales service)



European Union Certificate (total safety)



Certificates ISO 14001 and ECO-Management and Audit Scheme (environmental management)



Certificate and Worlddidac Member

GENERAL DESCRIPTION

The Luminosity Control Application, "AEL-AD6A" is an application designed to study how a luminosity control application works. This unit consists of different modules such as switches with lights, fluorescent lamps, halogen lamps, presence and movement sensor, etc. These modules allow the students to acquire experience wiring of lighting automation circuits and circuit-switched.

This application has a motion sensor that can be connected to the lighting circuit to realize different automations. Besides, through this unit, the student can study different cabling made in these installations.

The AEL-AD6A includes the following modules:

- N-ALI02. Domestic Main Power Supply.
- N-INT18. 1-pole Switch + 1-pole Switch Light.
- N-COM14. 2 Commutators.
- N-REG06. Voltage Electronic Regulator (Switch) 40 to 300 W / 230 VAC.
- N-LAM08. 2 Lamps-holders + Incandescent Lamps 40 W.
- N- LAM09. Fluorescent lamp.
- N- LAM10. 2 Halogen Lamp.
- N-SEN26. Presence and Movement Sensor (Wall).

Expansion learning software:

In addition, Edibon provides expansion learning software (AEL-AD6A/ICAI) to reinforce knowledge about this field.

This software is formed by:

- ECM-SOF. EDIBON Classroom Manager (Instructor Software).
- ESL-SOF. EDIBON Student Labsoft (Student Software).

The application AEL-AD6A can be mounted on rack (option A) or on rail (option B):

Option A:

This application needs the following rack:

- N-RACK-A.

Optionally the AEL-WBR. Electrical Workbench (Rack) can be supplied to place the rack/s.

Option B:

This application can be mounted on rail.

Optionally the AEL-WBC. Electrical Workbench (Rail) can be supplied to mount the modules.

SPECIFICATIONS

The application includes the following modules:

- **N-ALI02. Domestic Main Power Supply.**

Supply voltage (Single-Phase): 230 VAC, PH+N+G.

ON-OFF removable key.

Output Voltage Connections:

Two Single-Phase: 230 VAC.

Single-Phase supply hose connecting plug.

Differential magnetothermal, 2 poles, 25 A, 30 mA AC 6 KA.



N-ALI02

- **N-INT18. 1-pole Switch + 1-pole Switch Light.**

Nominal voltage: 230 VAC (PH+N).

Two switches ON/OFF.

Two Normally Open Contacts.



N-INT18

- **N-COM14. Two commutators.**

Nominal voltage: 230 VAC (PH+N).

Two commutators.

Contacts:

Two Normally Open Contact (NO).

Two Normally Close Contact (NC).

Common point of normally close/open contacts.



N-COM14

- **N-REG06. Voltage Electronic Regulator (Switch) 40 to 300 W / 230 VAC.**

It works with incandescent lamps and with halogens, but it does not work with fluorescents.

Nominal voltage: 230 VAC (PH+N).

Two terminals:

Red (L).

Green one.

Potentiometer.

ON/OFF switch (pressing).

Maximum turn: 270° (regulate the voltage level).



N-REG06

Specifications

- N-LAM08. **2 Lamps-holders + Incandescent Lamps 40 W.**

Nominal voltage: 230 VAC (PH+N).

Two bulbs.

40W each one.

2 terminals each one.



N-LAM08

- N-LAM09. **Fluorescent lamp.**

Nominal voltage: 230 VAC (PH+N).

Switch on/off.

Fluorescent lamp.

Nominal Power: 8 W.

Supply terminals (LN).

Ground terminal.



N-LAM09

- N-LAM10. **Two halogen lamps.**

Two halogen lamps.

Nominal voltage: 12 VAC.

20 W each one.

Two transformers 230/12 VAC.

Terminals:

2 terminals (PH+N) each lamp.

Nominal voltage 230 VAC.



N-LAM10

- N-SEN26. **Presence and Movement Sensor (Wall).**

Supply voltage: 230 VAC (PH+N+G).

Output terminal: Green terminal. It supplies when the motion sensor detects any movement.

Three knobs to be configured:

Meter: to set the detection distance up to about 8 M.

Time: to set the ON time from about 6 seconds to a 12 minutes maximum. This period starts after body movement within detection area is sensed.

Lux: to set the light level required for operation to start at the required light level.



N-SEN26

- **All necessary cables to realize the practical exercises are included.**

Cables and Accessories, for normal operation.

Manuals:

This unit is **supplied with the following manuals**: Required Services, Assembly and Installation, Starting-up, Safety, Maintenance & Practices Manuals.

EXERCISES AND PRACTICAL POSSIBILITIES

- | | |
|--|---|
| 1.- Checking the domestic main power supply. | 5.- Study the control of the luminosity of a halogen lamp. |
| 2.- Light control from a switch. | 6.- Study the control of the luminosity of an incandescent lamp through a voltage electronic regulator. |
| 3.- Light control from two devices | 7.- Variation of the luminous intensity. |
| 4.- Control of fluorescent tube with different control circuits. | 8.- Switching control of the lamp using a movement sensor. |

REQUIRED SERVICES

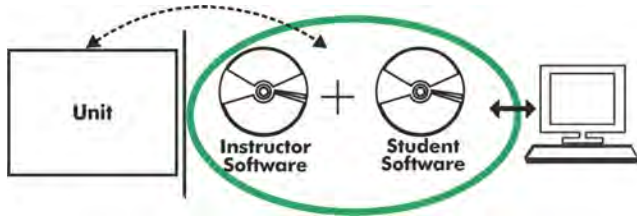
- | |
|--|
| - Electrical supply: three-phase, 380V/50 Hz or 208V/60 Hz, 20 Kw. |
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DIMENSIONS AND WEIGHTS

- | |
|--|
| AEL-AD6A: |
| -Dimensions: 640 x 320 x 920 mm. approx.
(25.19 x 12.59 x 36.22 inches approx.) |
| -Weight: 35 Kg. approx.
(77 pounds approx.) |

Optional

AEL-AD6A/ICAI. Interactive Computer Aided Instruction Software System:



With no physical connection between unit and computer (PC), this complete software package consists of an Instructor Software (EDIBON Classroom Manager -ECM-SOF) totally integrated with the Student Software (EDIBON Student Labsoft -ESL-SOF). Both are interconnected so that the teacher knows at any moment what is the theoretical and practical knowledge of the students.

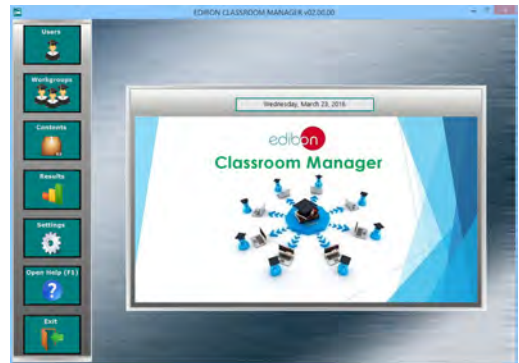
Instructor Software

- ECM-SOF. EDIBON Classroom Manager (Instructor Software).

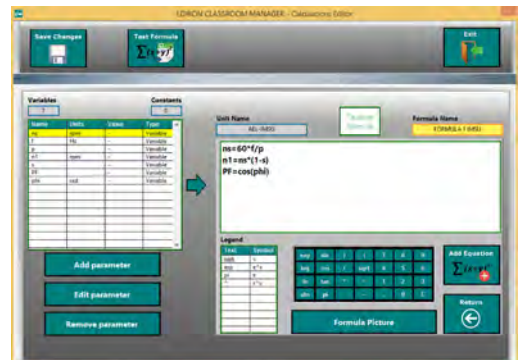
ECM-SOF is the application that allows the Instructor to register students, manage and assign tasks for workgroups, create own content to carry out Practical Exercises, choose one of the evaluation methods to check the Student knowledge and monitor the progression related to the planned tasks for individual students, workgroups, units, etc... so the teacher can know in real time the level of understanding of any student in the classroom.

Innovative features:

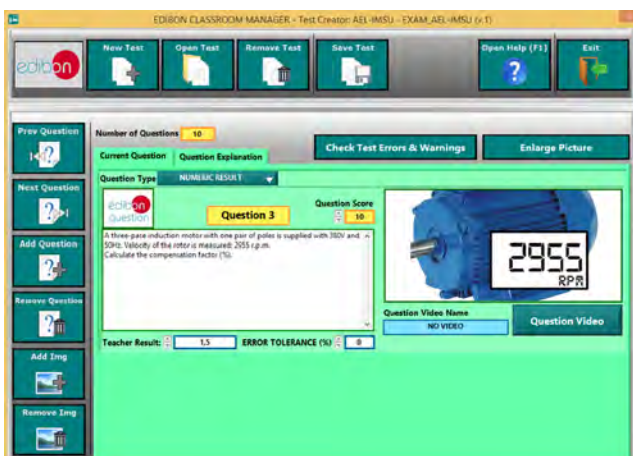
- User Data Base Management.
- Administration and assignment of Workgroup, Task and Training sessions.
- Creation and Integration of Practical Exercises and Multimedia Resources.
- Custom Design of Evaluation Methods.
- Creation and assignment of Formulas & Equations.
- Equation System Solver Engine.
- Updatable Contents.
- Report generation, User Progression Monitoring and Statistics.



ECM-SOF. EDIBON Classroom Manager (Instructor Software) Application Main Screen



ECAL. EDIBON Calculations Program Package - Formula Editor Screen



ETTE. EDIBON Training Test & Exam Program Package - Main Screen with Numeric Result Question



ERS. EDIBON Results & Statistics Program Package - Student Scores Histogram

Optional
Student Software

- ESL-SOF. **EDIBON Student Labsoft (Student Software)**.

ESL-SOF is the application addressed to the Students that helps them to understand theoretical concepts by means of practical exercises and to prove their knowledge and progression by performing tests and calculations in addition to Multimedia Resources. Default planned tasks and an Open workgroup are provided by EDIBON to allow the students start working from the first session. Reports and statistics are available to know their progression at any time, as well as explanations for every exercise to reinforce the theoretically acquired technical knowledge.

Innovative features:

- **Student Log-In & Self-Registration.**
- **Existing Tasks checking & Monitoring.**
- **Default contents & scheduled tasks available to be used from the first session.**
- **Practical Exercises accomplishment by following the Manual provided by EDIBON.**
- **Evaluation Methods to prove your knowledge and progression.**
- **Test self-correction.**
- **Calculations computing and plotting.**
- **Equation System Solver Engine.**
- **User Monitoring Learning & Printable Reports.**
- **Multimedia-Supported auxiliary resources.**

For more information see **ICAI** catalogue. Click on the following link:

www.edibon.com/en/files/expansion/ICAI/catalog



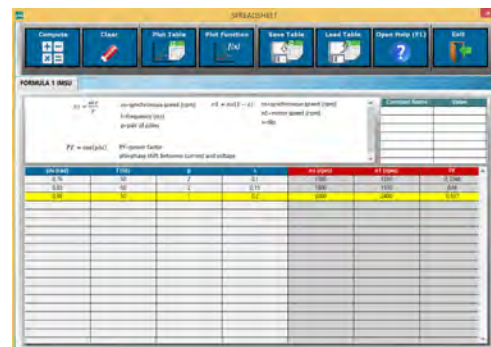
ESL-SOF. EDIBON Student LabSoft (Student Software)
Application Main Screen



EPE. EDIBON Practical Exercise Program Package Main Screen



ERS. EDIBON Results & Statistics Program Package - Question Explanation



ECAL. EDIBON Calculations Program Package Main Screen

* Specifications subject to change without previous notice, due to the convenience of improvement of the product.



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REPRESENTATIVE:

