



## Lab 3 - ELECTRICAL INSTALLATIONS WIRING LAB



This laboratory has the objective of teaching the techniques for correct, professional implementation of residential and industrial electrical circuits. The circuits are assembled on panels by using electrical component kits and electrical wiring kits.

A work bench is also available on which the panels can be placed for use and more students can be trained at same time. The laboratory provides a comprehensive course based on industrial type components and the student acquires sufficient knowledge to be able to confront himself with almost any kind of real-life electrical installation requirement.

Two instruction manuals, one for residential and one for industrial installations, describe some of the feasible experiments in detail. Many more can be designed by the instructor and students to cover other aspects.

### TRAINING STATIONS LIST

3.1	RESIDENTIAL ELECTRICAL WIRING
3.2	INDUSTRIAL ELECTRICAL WIRING
3.3	COMPUTER NETWORKS INSTALLATION AND MAINTENANCE
3.R	ENERGIE RINNOVABILI: SOLARE ED EOLICO

# Equipment List

LAB N°	Item N°	TITLE	CODE	Total Qty	Stud WS 1	Stud WS 2	Stud WS 3	Stud WS 4	Stud WS 5	Stud WS 6	Stud WS 7	Stud WS 8	Teach WS	LAB
<b>3</b>		<b>ELECTRICAL WIRING LABORATORY</b>												
		For 16 to 32 students working at the same time. See complete catalogue to see product description and other details.												
<b>3</b>		<b>ELECTRICAL INSTALLATIONS WIRING</b>												
<b>2</b>	<b>1</b>	<b>RESIDENTIAL INSTALLATIONS WIRING (BASIC SYSTEM)</b>	<b>A24RB</b>											
<b>3</b>	<b>1</b>	<b>ELECTRICAL INSTALLATIONS TRAINING BENCH FOR 4 STUDENTS</b>	<b>A2410-4</b>	<b>3</b>	<i>1</i>	<i>1</i>	<i>1</i>							
<b>3</b>	<b>1</b>	<b>UNIVERSAL PANEL FOR RESIDENTIAL &amp; INDUSTRIAL INSTALLATIONS</b>	<b>A2425</b>	<b>12</b>	<i>4</i>	<i>4</i>	<i>4</i>							
<b>3</b>	<b>1</b>	<b>RESIDENTIAL INSTALLATIONS KIT</b>	<b>A2421</b>	<b>12</b>	<i>4</i>	<i>4</i>	<i>4</i>							
<b>3</b>	<b>1</b>	<b>PANEL STORAGE CUPBOARD</b>	<b>A2440</b>	<b>3</b>	<i>1</i>	<i>1</i>	<i>1</i>							
<b>3</b>		<b>INDUSTRIAL INSTALLATIONS WIRING (BASIC SYSTEM)</b>												
<b>3</b>	<b>2</b>	<b>ELECTRICAL INSTALLATIONS TRAINING BENCH FOR 4 STUDENTS</b>	<b>A2410-4</b>	<b>3</b>					<i>1</i>	<i>1</i>	<i>1</i>			
<b>3</b>	<b>2</b>	<b>UNIVERSAL PANEL FOR RESIDENTIAL &amp; INDUSTRIAL INSTALLATIONS</b>	<b>A2425</b>	<b>12</b>				<i>4</i>	<i>4</i>	<i>4</i>				
<b>3</b>	<b>2</b>	<b>INDUSTRIAL INSTALLATIONS KIT</b>	<b>A2431</b>	<b>12</b>				<i>4</i>	<i>4</i>	<i>4</i>				
<b>3</b>	<b>2</b>	<b>TWO SPEED MOTOR</b>	<b>A4224S</b>	<b>3</b>				<i>1</i>	<i>1</i>	<i>1</i>				
<b>3</b>	<b>2</b>	<b>PANEL STORAGE CUPBOARD</b>	<b>A2440</b>	<b>3</b>				<i>1</i>	<i>1</i>	<i>1</i>				
<b>3</b>		<b>RESIDENTIAL INSTALLATIONS WIRING (EXPANSION CONFIGURATION)</b>												
<b>3</b>	<b>3</b>	<b>RESIDENTIAL WIRING TRAINER</b>	<b>A2421D</b>	<b>2</b>										<i>2</i>
<b>3</b>	<b>3</b>	<b>INDUSTRIAL INSTALLATIONS FAULT SIMULATOR</b>	<b>A21</b>	<b>M200FS</b>	<b>2</b>									<i>2</i>
<b>3</b>	<b>3</b>	<b>PLC TRAINER (OMRON or CROUZET)</b>		<b>C3729 AA</b>	<b>2</b>									<i>2</i>
<b>3</b>	<b>3</b>	<b>UNIVERSAL PLC SIMULATOR</b>		<b>C3730</b>	<b>2</b>									<i>2</i>
<b>3</b>		<b>WIRING TRAINER BASIC</b>												
<b>3</b>	<b>4</b>	<b>SURFACE WIRING INSTALLATION KIT</b>	<b>A2460S</b>	<b>1</b>										<i>1</i>
<b>3</b>	<b>4</b>	<b>CONDUIT WIRING INSTALLATION KIT</b>	<b>A2460C</b>	<b>1</b>										<i>1</i>
<b>3</b>	<b>4</b>	<b>LIGHTING WIRING INSTALLATION KIT</b>	<b>A2460L</b>	<b>1</b>										<i>1</i>
<b>3</b>	<b>4</b>	<b>1 PHASE MOTOR WIRING KIT</b>	<b>A2460M1</b>	<b>1</b>										<i>1</i>
<b>3</b>	<b>4</b>	<b>3 PHASE MOTOR WIRING KIT</b>	<b>A2460M3</b>	<b>1</b>										<i>1</i>
<b>3</b>	<b>4</b>	<b>WIRING ASSEMBLY FRAME</b>	<b>A2460F</b>	<b>1</b>										<i>1</i>
		<b>FURNITURE, METERS, POWER SUPPLIES &amp; ACCESSORIES</b>												
		<b>FURNITURE</b>												
<b>FM</b>	<b>1</b>	<b>1</b>	<b>WORK TABLE</b>	<b>F1110A</b>	<b>2</b>									<i>2</i>
<b>FM</b>	<b>1</b>	<b>2</b>	<b>MOBILE LOWER CABINET</b>	<b>F11 4146</b>	<b>2</b>									<i>2</i>
<b>FM</b>	<b>1</b>	<b>3</b>	<b>STUDENT STOOL</b>	<b>F11 1718</b>	<b>30</b>	<i>4</i>	<i>4</i>	<i>4</i>		<i>4</i>	<i>4</i>	<i>4</i>		<i>6</i>
<b>FM</b>	<b>1</b>	<b>4</b>	<b>TEACHER'S DESK</b>	<b>F11 2126</b>	<b>1</b>								<i>1</i>	
<b>FM</b>	<b>1</b>	<b>5</b>	<b>TEACHER'S CHAIR</b>	<b>F11 5000</b>	<b>1</b>								<i>1</i>	
<b>FM</b>	<b>1</b>	<b>6</b>	<b>CABINET FOR TOOLS &amp; INSTRUMENTS</b>	<b>F11 3310</b>	<b>4</b>									<i>4</i>
<b>FM</b>	<b>1</b>	<b>7</b>	<b>TROLLEY</b>	<b>F1151 R1</b>	<b>4</b>									<i>4</i>
		<b>GENERAL USE MEASURING INSTRUMENTS, POWER SUPPLIES &amp; ACCESSORIES</b>												
<b>FM</b>	<b>2</b>	<b>1</b>	<b>ANALOGUE MULTIMETER</b>	<b>AM 7080</b>	<b>4</b>									<i>4</i>
<b>FM</b>	<b>2</b>	<b>2</b>	<b>DIGITAL MULTIMETER</b>	<b>DM Y68</b>	<b>4</b>									<i>4</i>
<b>FM</b>	<b>2</b>	<b>3</b>	<b>ANALOGUE ELECTRICAL METERS SET</b>	<b>A11 AM</b>	<b>1</b>									<i>1</i>
<b>FM</b>	<b>2</b>	<b>4</b>	<b>DIGITAL ELECTRIC POWER MEASURING MODULE</b>	<b>A4750D</b>	<b>1</b>									<i>1</i>
<b>FM</b>	<b>2</b>	<b>5</b>	<b>CABLES SET</b>	<b>A4890</b>	<b>2</b>									<i>2</i>
<b>A24</b>	<b>2</b>	<b>7</b>	<b>DIGITAL CLAMP METER</b>	<b>DCM EM201</b>	<b>1</b>									<i>4</i>
<b>A24</b>	<b>2</b>	<b>8</b>	<b>DIGITAL INSULATION TESTER</b>	<b>DIT VC60B</b>	<b>1</b>									<i>2</i>
<b>FM</b>	<b>2</b>	<b>9</b>	<b>UNIVERSAL POWER SUPPLY</b>	<b>A0245</b>	<b>1</b>									<i>1</i>
<b>FM</b>	<b>2</b>	<b>10</b>	<b>AC DC POWER SUPPLY</b>	<b>C12 PS</b>	<b>2</b>									<i>2</i>
<b>FM</b>	<b>2</b>	<b>10</b>	<b>TOOL BAG FOR ELECTRICAL LABORATORY</b>	<b>A2470 986GE/6</b>	<b>1</b>									<i>1</i>
<b>FM</b>	<b>2</b>	<b>10</b>	<b>TOOL BAG FOR ELECTRICIAN</b>	<b>A2471 985GL</b>	<b>8</b>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>

