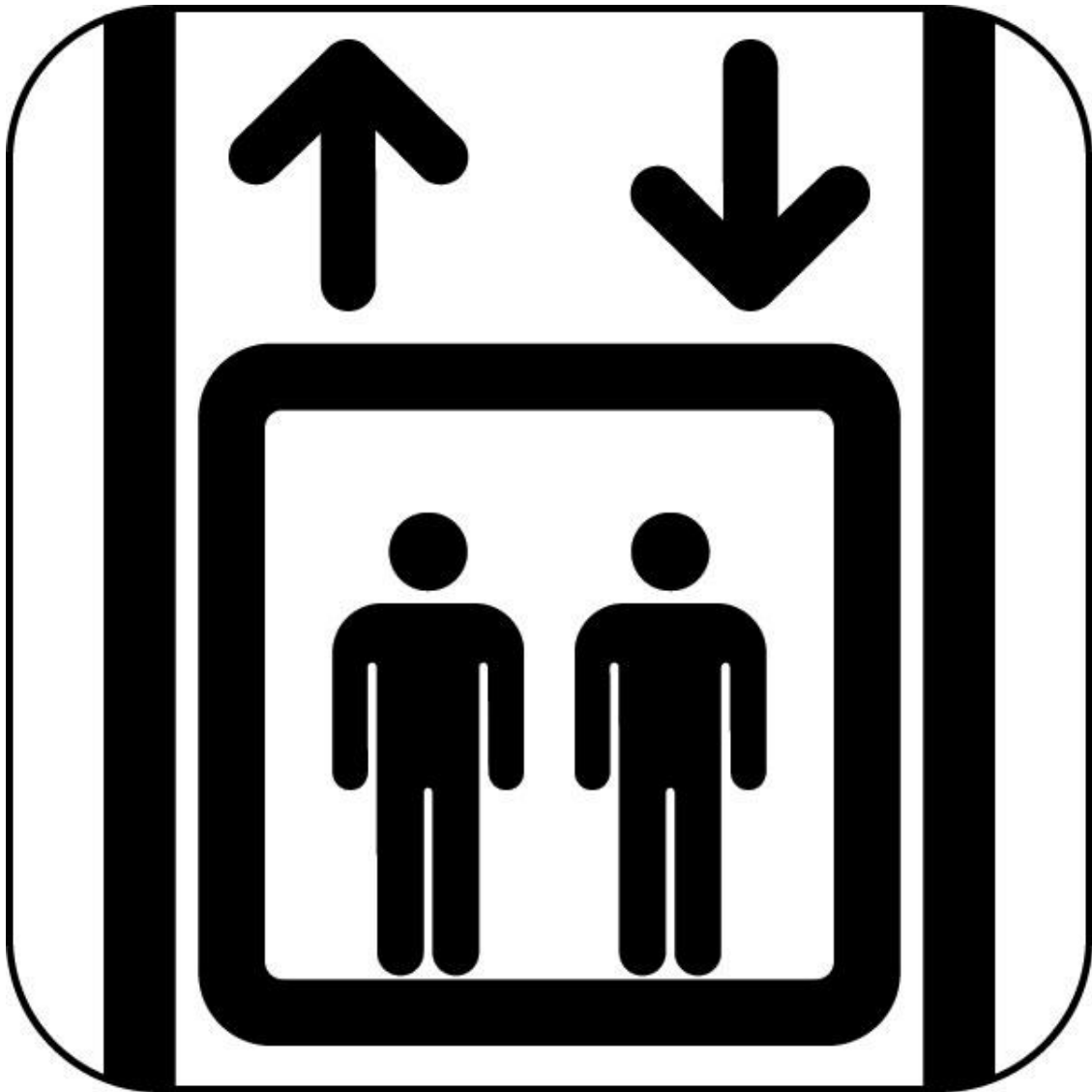


“The Lift” module

PHASE 4



Study points to be earned:

- EIPS/Mechatronics - 2 pts

Cohort 2010-2011 E.I.P.S. 92390 and Mechatronics 91080 programme

Introduction to this module

In Phase 4 of our project, we will build a complete lift circuit in small groups (maximum of 3 people).

Before you begin building, you must have a good idea of what the lift should be like from a technical perspective. We therefore have to make agreements in that regard and stick to them. Your instructor will give you these agreements.



We call these agreements “variables” or “parameters” which we enter into a “configurator”. The configurator provides you with the necessary reference base for designing and building your lift.

The configurator is an Excel file filled in by your project group that must be signed off by your supervisor (instructor) before you begin building.

Ontwerp aspecten bij de "Lift" CONFIGURATOR		
		Opmerking invullen bij eigen keuze (anders nl.)
Type sensoren	optisch	
aantal sensoren	2	
Type relais (spoelspanning)	24v DC	
Hoeveelheid relais	3	
plaats besturingskast	bovenverdieping	
vaste gegevens		
	PLC	Easy moeller 512 DC-RC
	aantal verdiepingen	2

The final result is a lift according to your own specifications.

Description of the project

The project consists of a number of modules which all concern the lift. These modules can also stand alone, but in a project you see that they are connected to each other!

The modules that together form this project are:

- Electro_14
- Project_14

The order of the modules does not matter! The guideline for the duration of this project is one phase. All parts must be completed within this phase.

Work can begin after the guidelines for the lift have been established and signed off on by the instructor for each project group. The drawings are produced during the Project_14 hours.

Explanation of the corresponding modules

Project_14 module

This module is the basis for the lift project. The module covers a number of parts of the project. The lessons in this module will all take place in the various instruction rooms. The order of the parts of the project is fixed:

- Filling in the configurator for the lift.

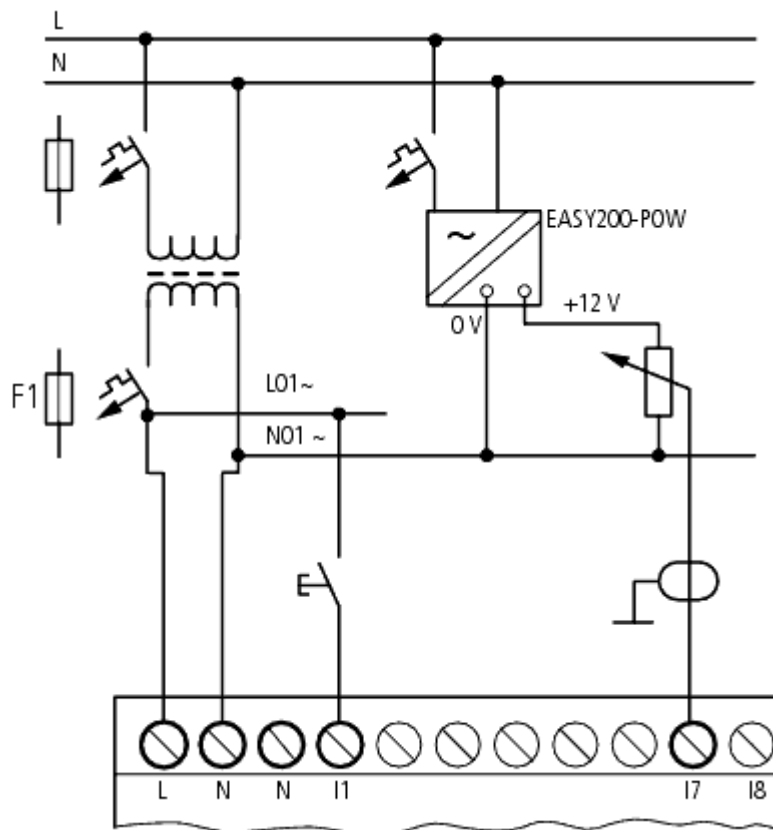
- Producing the drawings:
 - Input/Output list;
 - Wiring plan;
 - Set-up drawing;
 - Order list for materials, including prices.

- The technical construction of the lift.

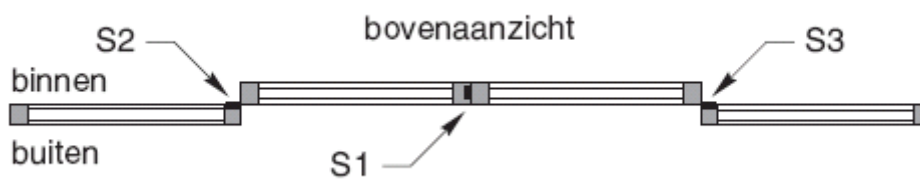
Electro_14 module

The basic assumption for operation is a lift that works properly.
Based on the knowledge you acquire in this module, the intention is therefore that you will make the following parts:

- a complete control system for your lift.



The diagram below is a fixed specification of how the lift doors must work!



The order of the modules does not matter! The guideline for the duration of the project is eight weeks. All parts must be completed within those eight weeks.

Work can begin after the guidelines for the lift have been established for each project group.

The evaluation

Work processes and competencies related to the project:

Core task / Work process

Legenda:

U1: Monteur

U2: Eerste monteur

U3: Technicus

Kerntaak		Werkproces	Uitstr
Kerntaak 1: Vervaardigt elektrotechnische (deel-)producten			U1
	1.1	Voorbereiden werkzaamheden	x
	1.2	Vervaardigen van elektrotechnische onderdelen	x
	1.3	Testen van elektrotechnische onderdelen	x
	1.4	Samenstellen van elektrotechnische producten	x
	1.5	Instellen van elektrotechnische producten	x
	1.6	Testen van elektrotechnische producten	x
	1.7	Afronden werkzaamheden	x
	1.8	Instrueren en begeleiden van minder ervaren collega's	
Kerntaak 2: Installeert elektrotechnische producten en systemen			
	2.1	Voorbereiden werkzaamheden	x
	2.2	Plaatsen en installeren van elektrotechnische producten en systemen	x
	2.3	Inregelen en instellen van elektrotechnische producten en systemen	x
	2.4	Testen elektrotechnische producten en systemen	x
	2.5	Afronden werkzaamheden	x
	2.6	Instrueren en begeleiden van minder ervaren collega's	
	2.7	Begeleiden van installatiewerkzaamheden	

Relevant Competencies

Working together and discussing

Applying expertise

Using materials and resources

Planning and organising