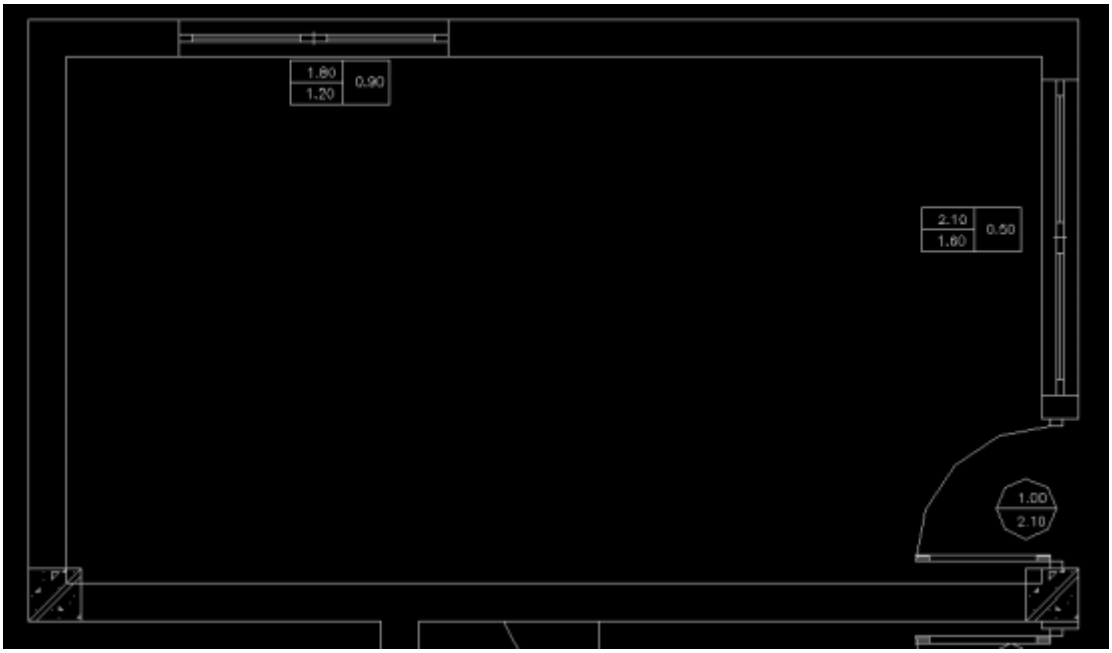
The project is to make the electrical design for the following electrical appliances using 4M FINE_ELEC software.

The room:



The electrical appliances

Single phase electric cooker

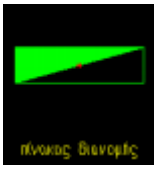
Air condition

Two lights 2x18 W

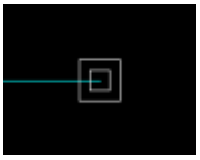
Two simple switches for the lights

Three schuko sockets

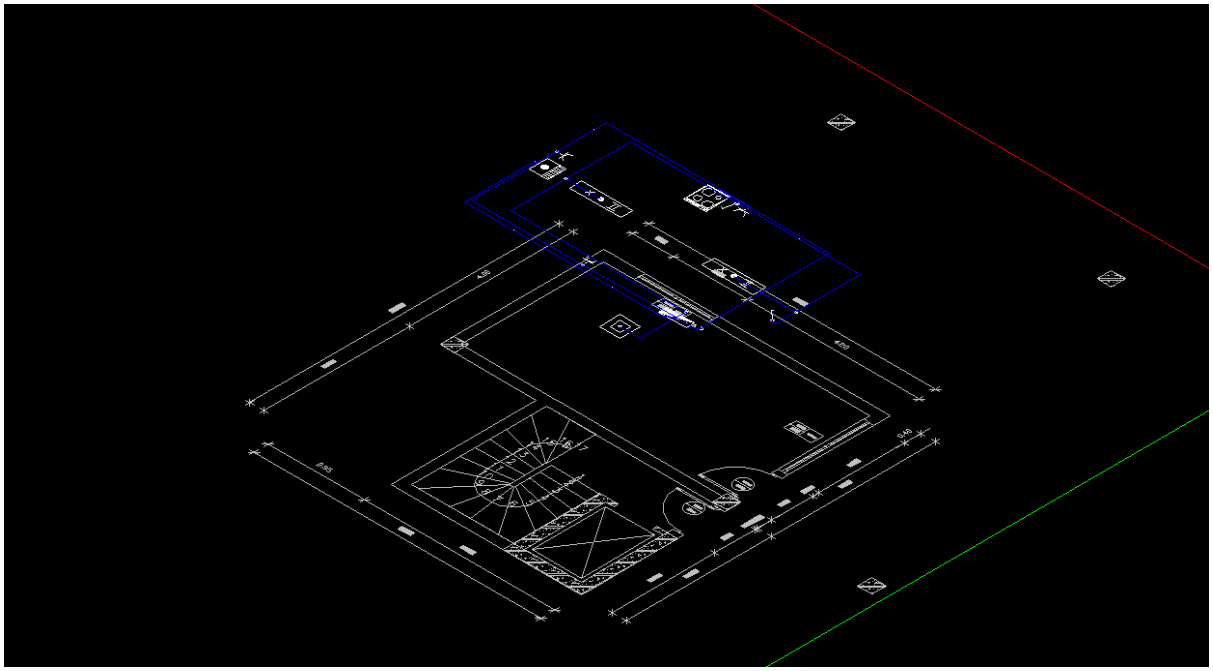
A distribution board, which fills the above devices

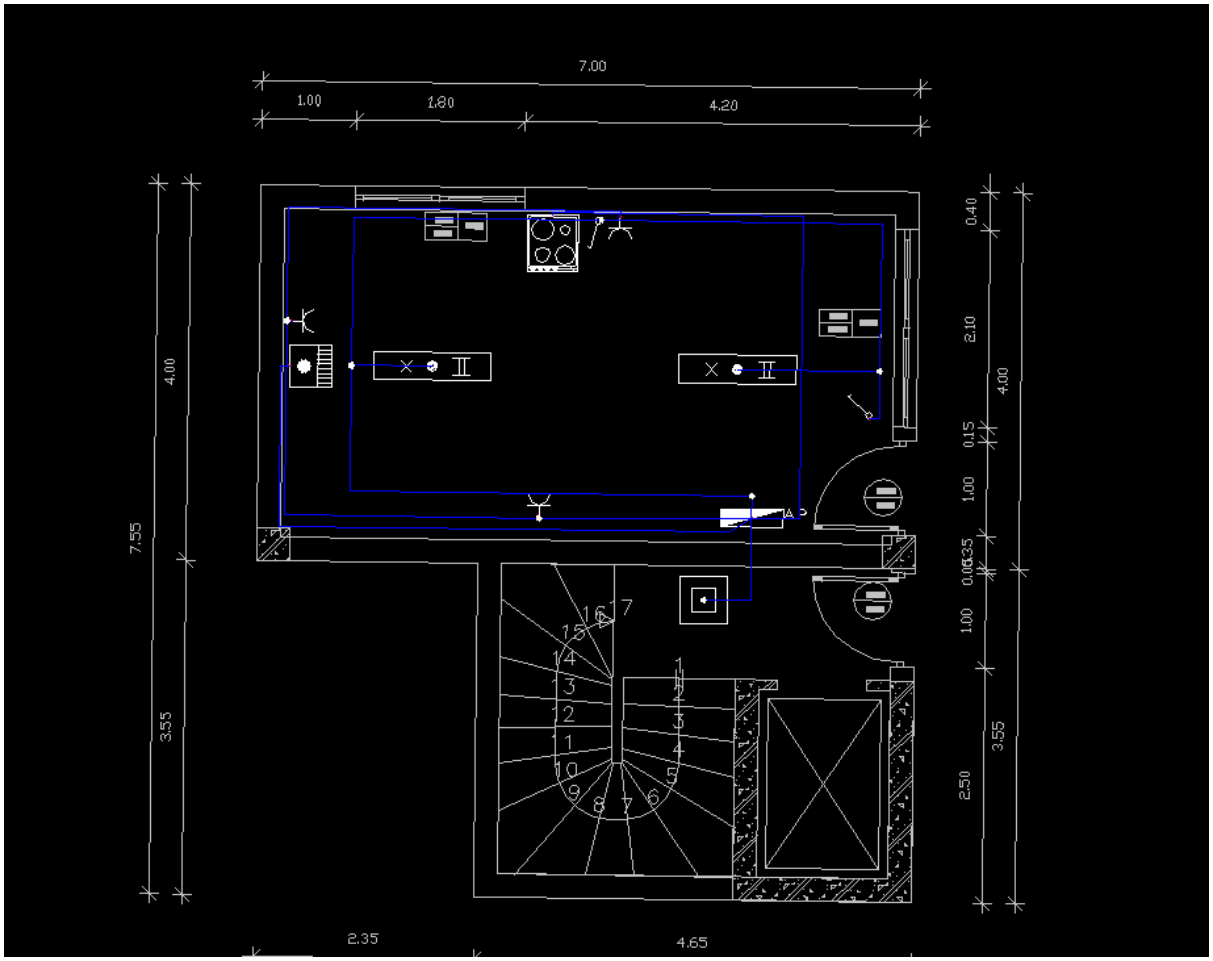


A power point connected to the distribution panel



After we plug in and connect all home appliances, we select Autonet -> Network Recognition and the following image is displayed:





Then select Autonet -> Calculations and in the spreadsheet that will open select Files -> Update from Drawing. Then select Project Data -> Network from the installation parameters. Finally, select Windows -> Calculation Sheet.

In the Electrical Installation Calculations window:

Calculation Sheet

	Network Segment	Line Length (m)	Load of the Line (KW)	Load Type	Power Factor	Type of Cable	N° of Parallel Cables	Cr.Sect. Calc. (mm²)	Des. Cr.Sect. (mm²)	Current-Carrying Capacity No Cond.	Corr. Factor	Current-Carrying Capacity (A)	Max Fuse Size (A)	Line Current (A)
1	A.P		5.180	Electrical Panel	0.998	J1VV-R		6		29.00	0.964	27.96	25	7.522
2	A.1	6.9	0.500	Split - units	0.84	I07V-U (U		2.5		18.00	0.964	17.35	16	0.863
3	A.2	6.4	4.000	Single-Phase Cooker	1	I07V-U (U		6		31.00	0.964	29.88	25	5.797
4	A.3	7.0	0.600	Sockets	1	I07V-U (U		2.5		18.00	0.964	17.35	16	0.870
5	A.4	11.0	0.080	Lighting	1	I07V-U (U		1.5		13.50	0.964	13.01	10	0.116
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In the Electrical Installation Network:

Calculation Sheet

	Network Segment	Line Length (m)	Load of the Line (KW)	Load Type	Load Type	Power Factor	Des. Phase	Phase	Max Volt.Drop (%)	Voltage Drop V	Line Type	Des. Cr.Sect. (mm²)	Cr.Sect. Calc. (mm²)	Max Fuse Size (A)
1	A.P		5.180	6	Electrical Panel	0.998		123	2.500		3		6	25
2	A.1	6.9	0.500	41	Split - units	0.84		123	2.500	0.062	3		2.5	16
3	A.2	6.4	4.000	4	Single-Phase Cooker	1		123	2.500	0.191	3		6	25
4	A.3	7.0	0.600	2	Sockets	1		123	2.500	0.075	3		2.5	16
5	A.4	11.0	0.080	1	Lighting	1		123	2.500	0.026	3		1.5	10
6														
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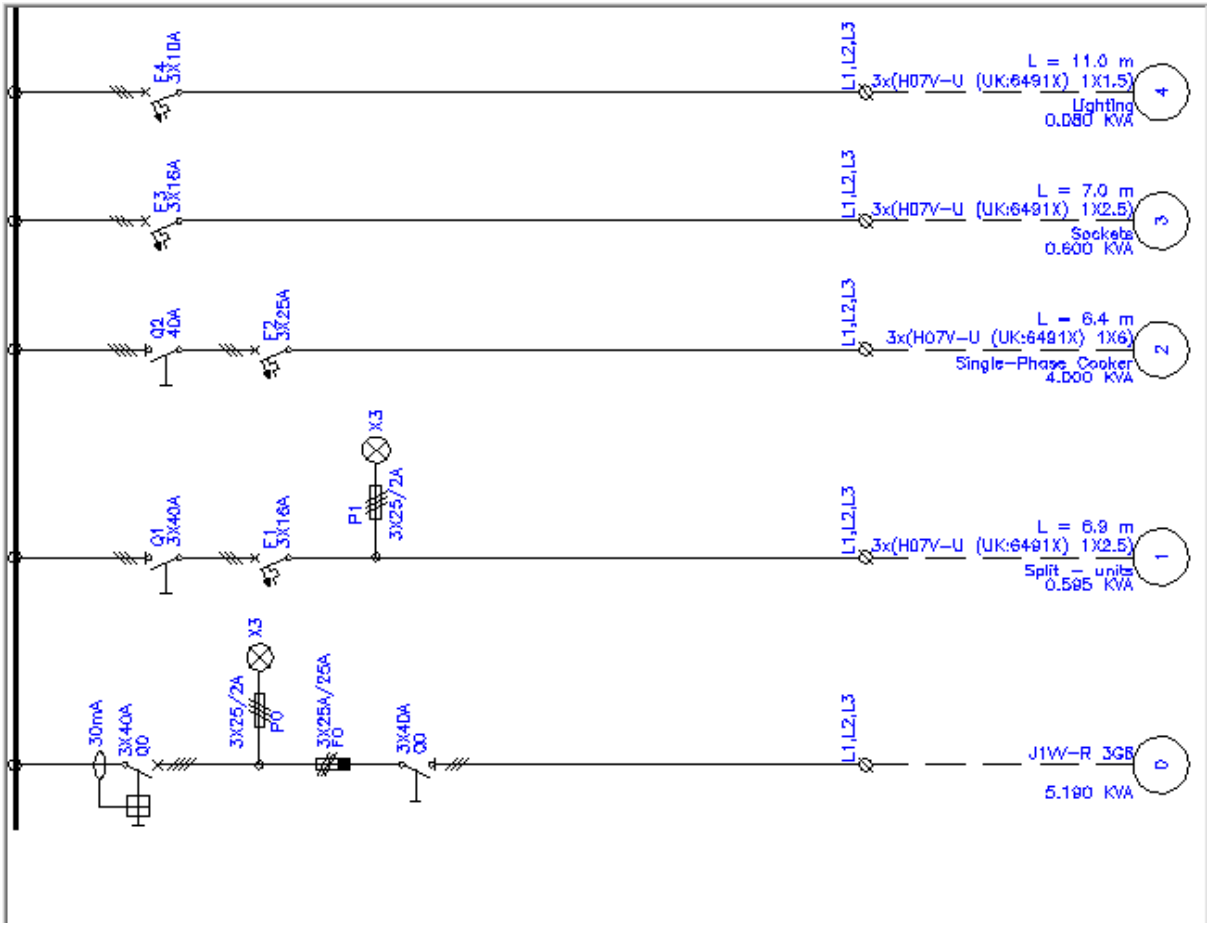
From the combination of these two we have all the features of the electrical lines. We see there are 5 lines. By selecting the A.P. line, which is the table and pressing the Panel Single-Line Diagram, we have the single-line table:



Finally, we export the single-line design of the table and the distribution diagram to the project folder that is already the project.