

WIRING DIAGRAMS

Address:

Owner:

Contractor:

Designer:

Director:

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SPECIFICATIONS

introductory cable

U1000R2V 4G35 RM

Ground

TN-C-S

Voltage

230/400 Y+N

Power

55 KW

Main fuse

3x80A

BUILDING PLANT 1 FLOOR

Veranda

Kitchen

Stairs

WC

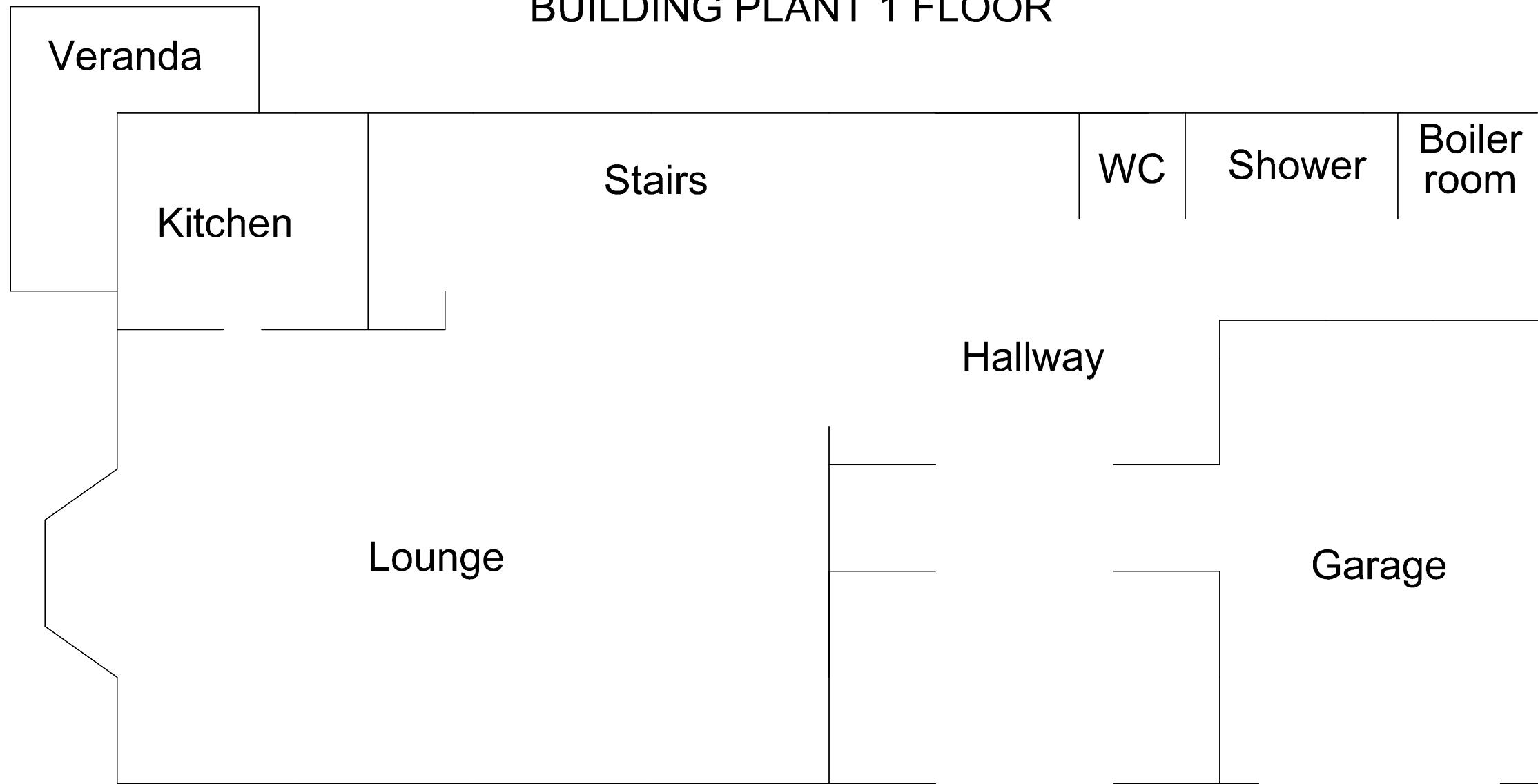
Shower

Boiler
room

Hallway

Lounge

Garage



BUILDING PLANT 2 FLOOR

Room 1

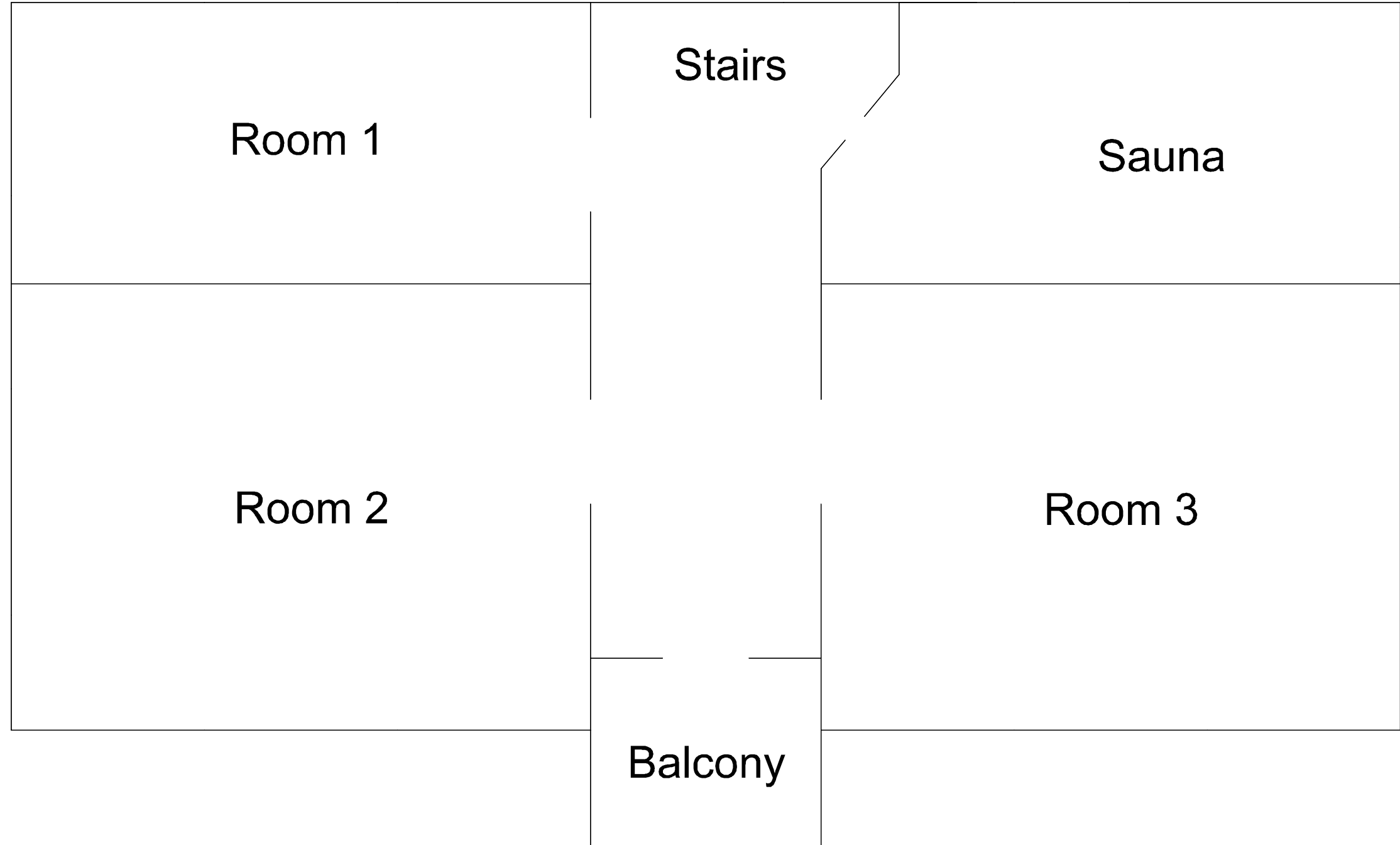
Stairs

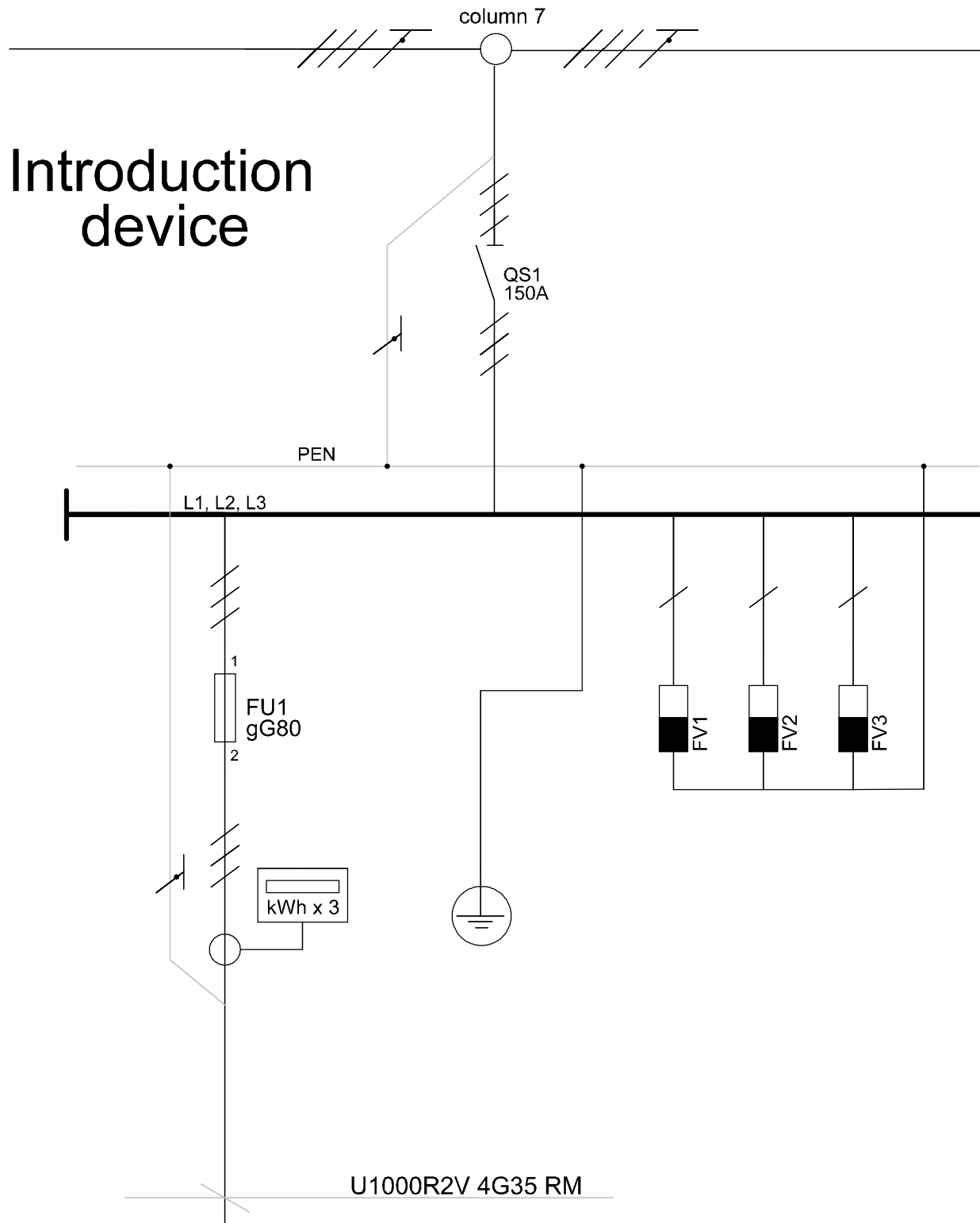
Sauna

Room 2

Room 3

Balcony





Introduction device

column 7

QS1
150A

PEN

L1, L2, L3

1
FU1
gG80
2

kWh x 3

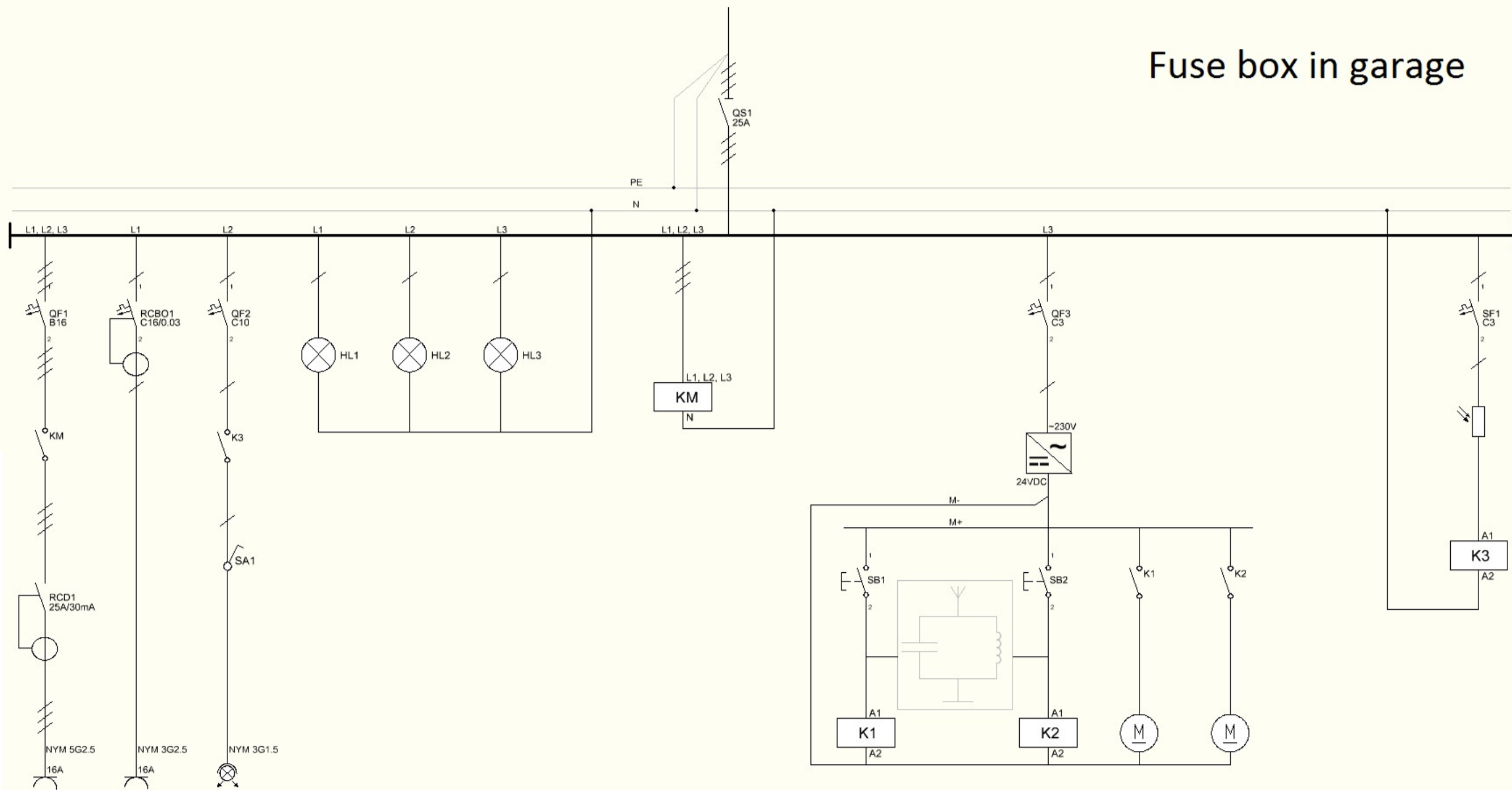
FV1

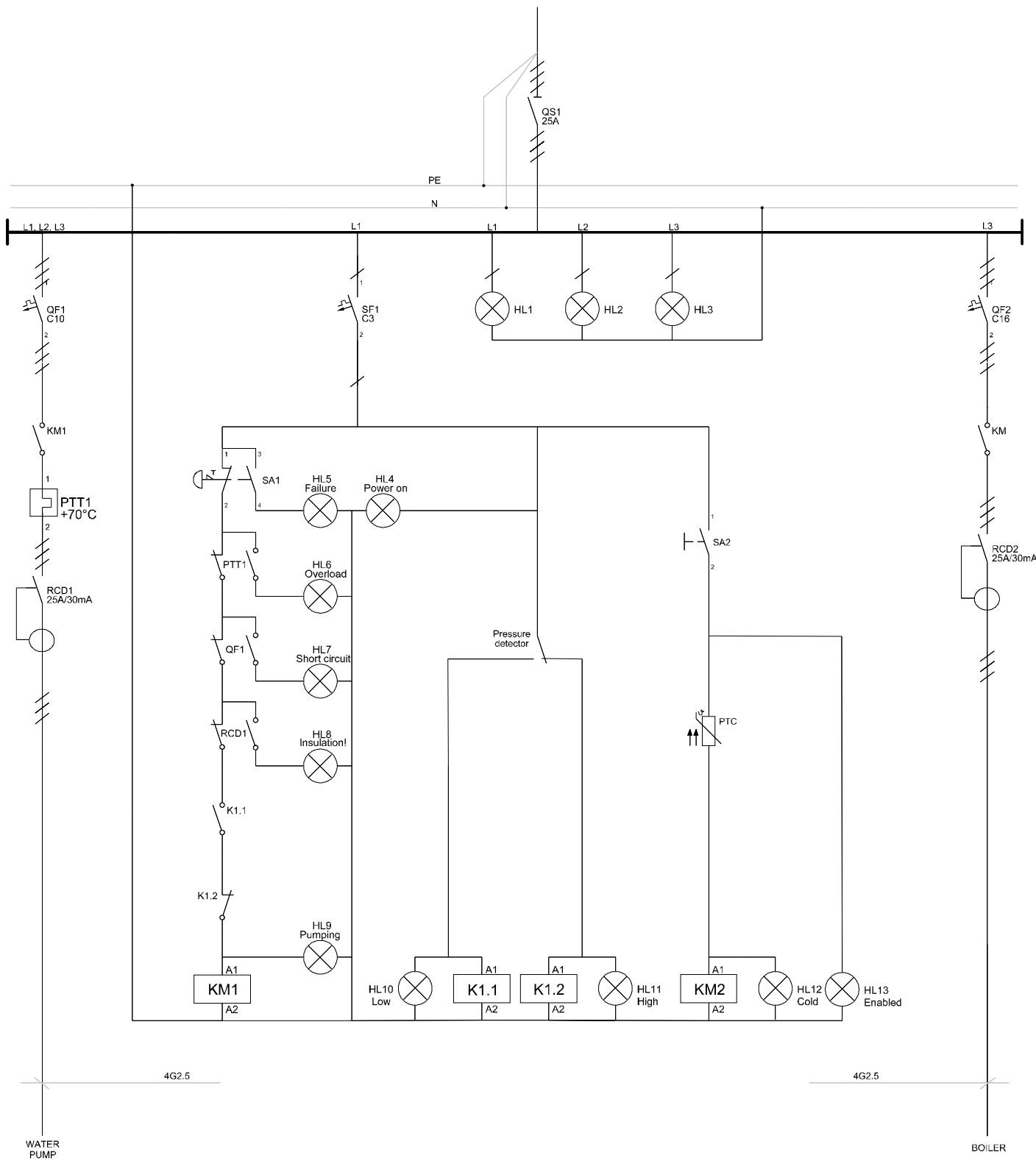
FV2

FV3

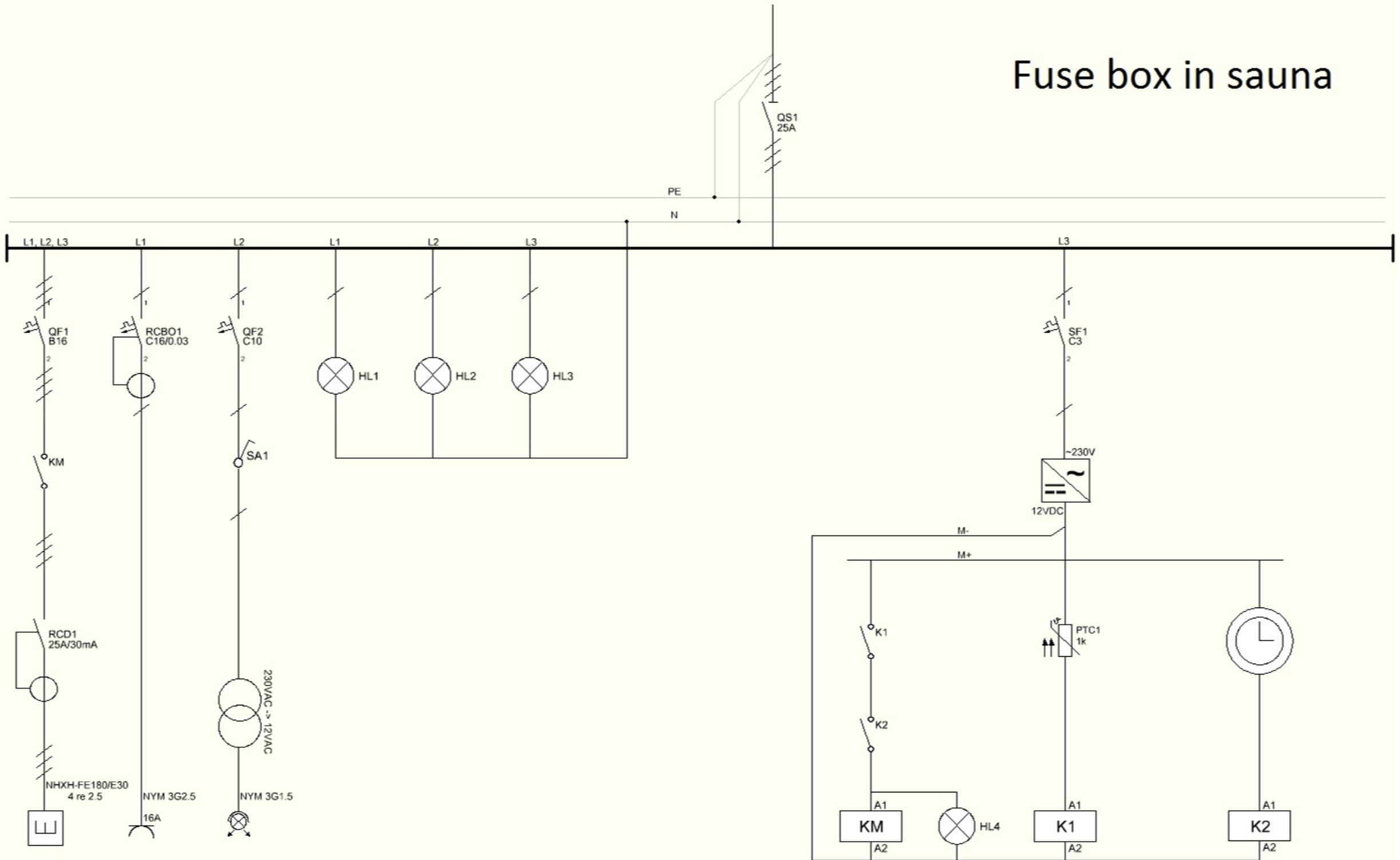
U1000R2V 4G35 RM

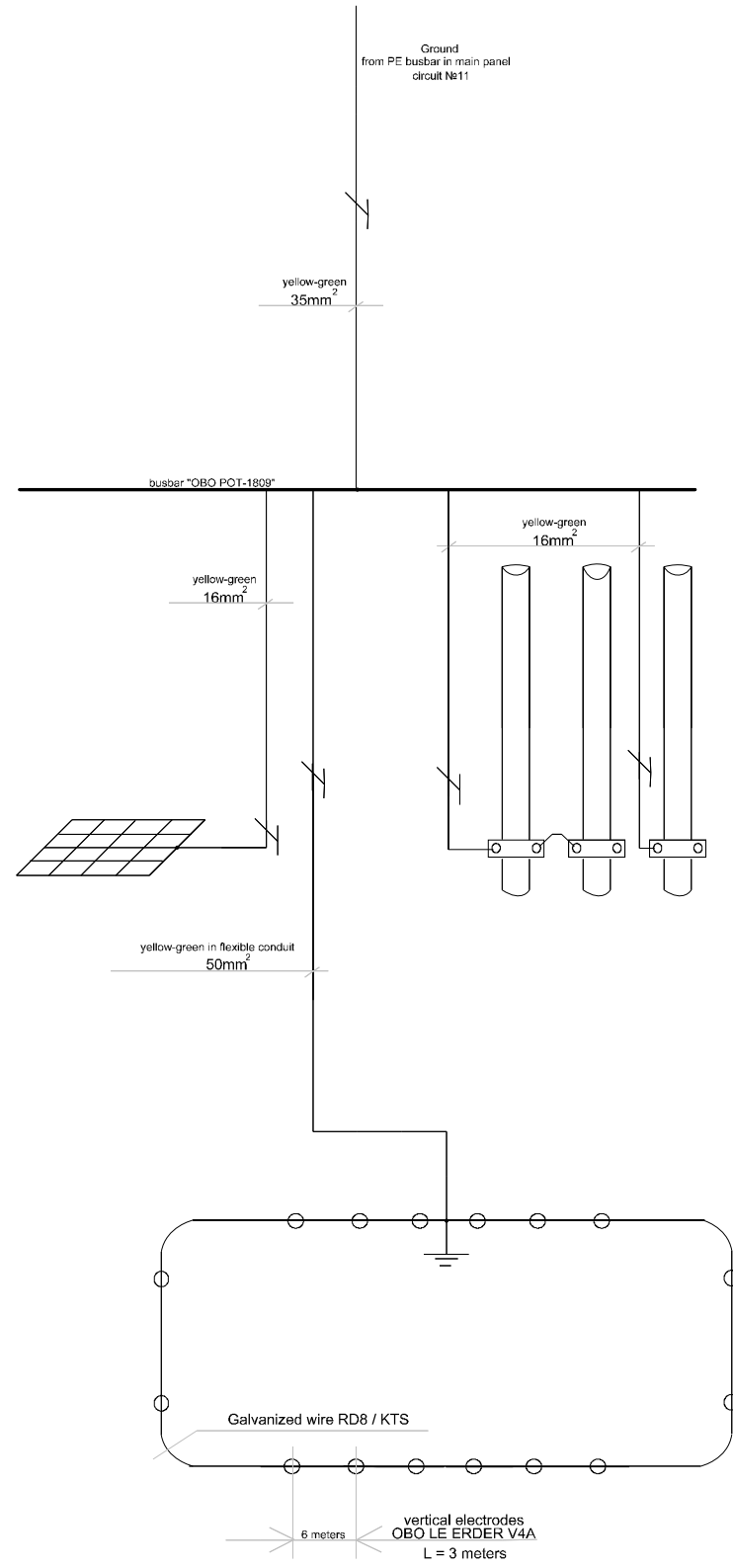
Fuse box in garage

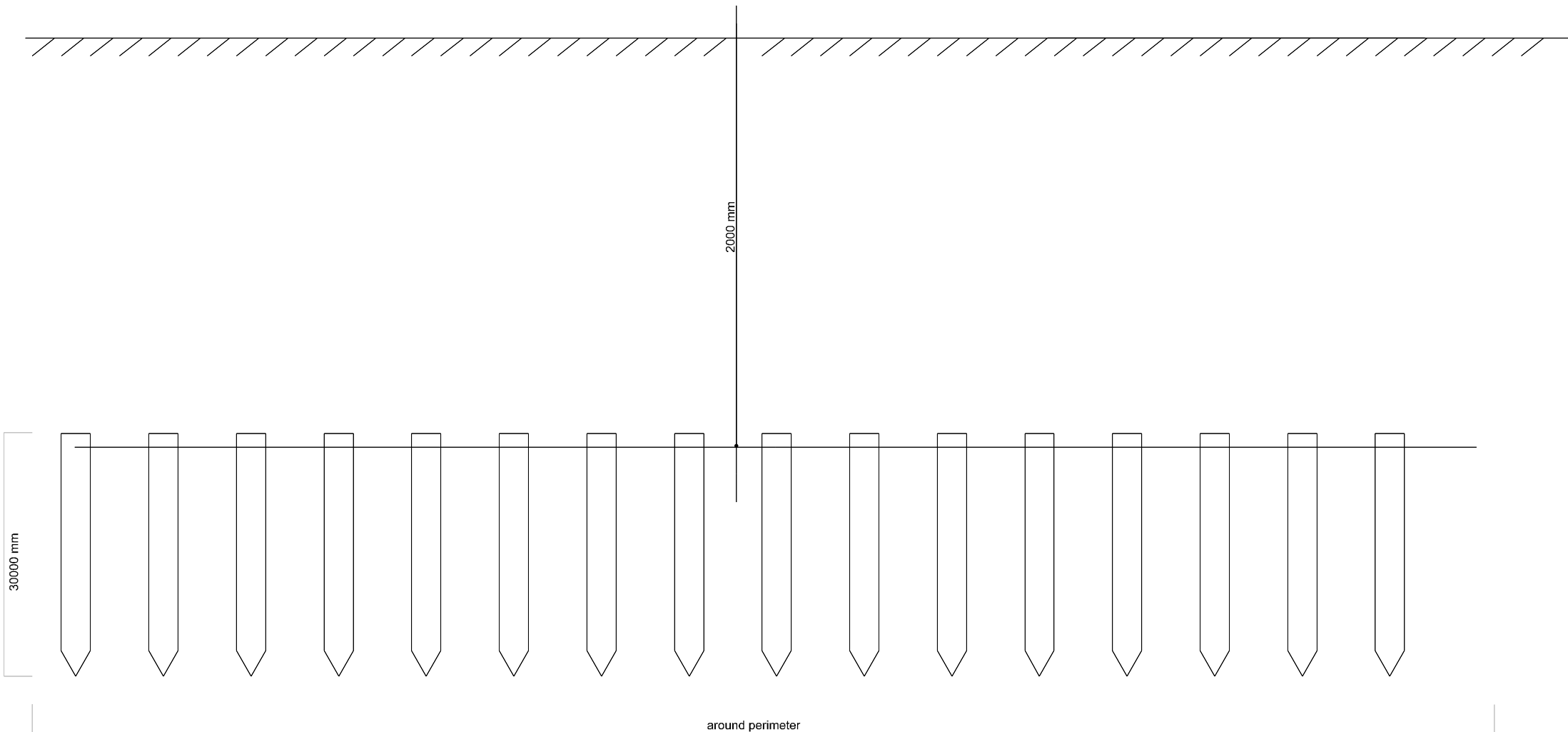




Fuse box in sauna







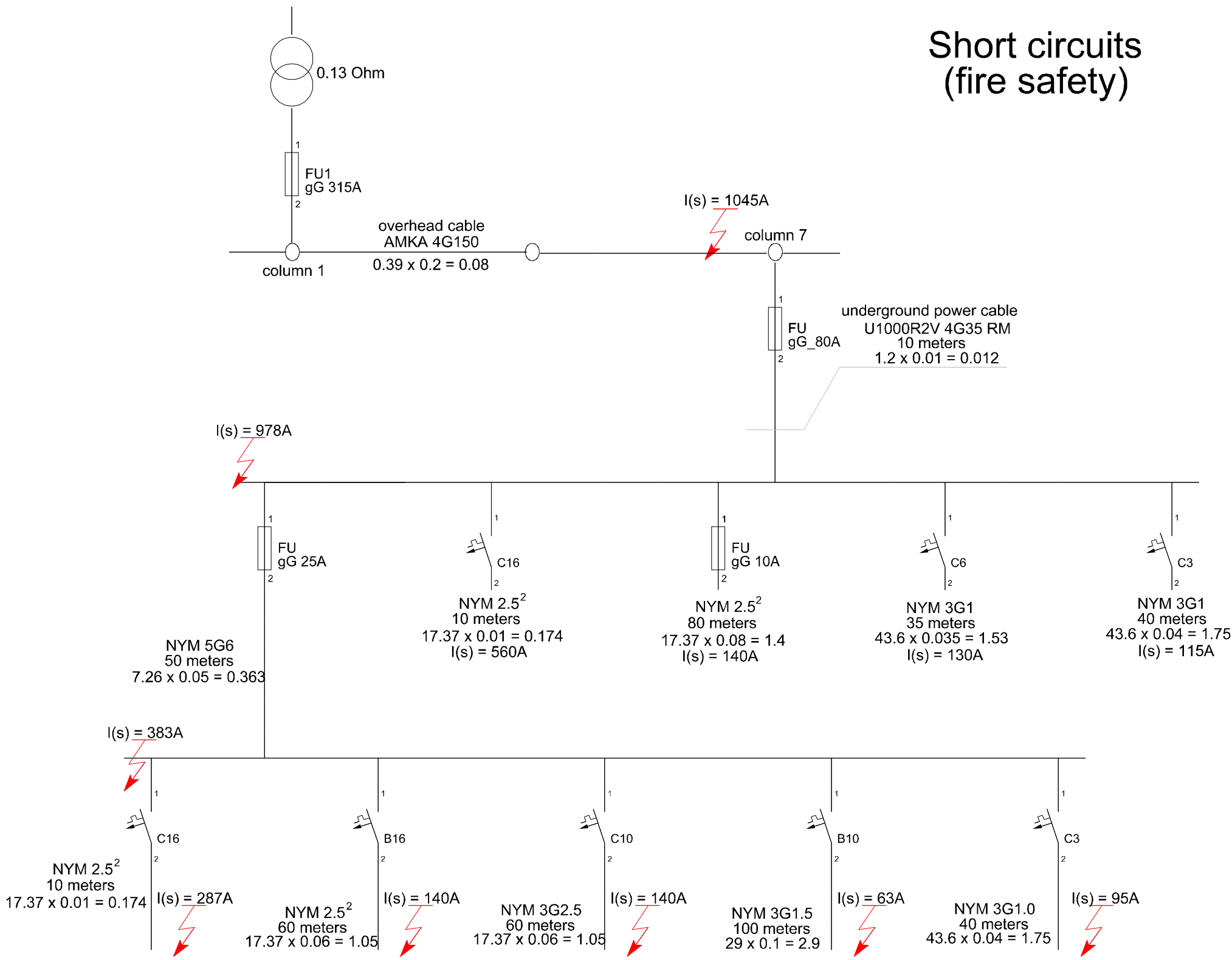
Ground impedance:

Vertical:

$$R(1 \text{ electrode}) = \frac{0.366 \times \rho}{L} \times \left(\lg \frac{2L}{D} + 0.5 \lg \frac{4T + L}{4T - L} \right) = 90 \times (2.5 + 0.135) = 237,2$$

$$R(16 \text{ electrodes}) = \frac{R(1 \text{ el})}{K_p + N} = 15$$

Short circuits (fire safety)



MATERIALS

Fuse box HE 4/27, metal	1
Fuse box HEV 3042, metal	5
Load switch 3x80A 415V	1
Load switch 3x25A 415V	5
Fuse disconnecter	
<40A 3-phase for DIN rail	6
MCB 3xC16	6
MCB 3xB16	6
MCB 3xC10	1
MCB 1xC10	7
MCB 1xB10	10
MCB 1xC3	10
RCBO C16/30mA	2
RCBO B16/30mA	13
RCD 25A/30mA	4
Thermorelay +70C 10A	1
Contactora 3x20A + auxiliary NO/NC	5
Relay 10A 2NO/2NC	1
Photorelay 10A	4
Digital time relay 10A	1
Memory relay 10A	2
Transformer 230VAC to 12VAC, DIN rail	1
Control lamps 2W neon for DIN rail	20
Busbar PEN to PE and N 5*35 + 24x6	1
Busbar PE and N 38x6	1
Busbar FORK 16mm	54M
Busbar OBO POT-1809	1
Emergency STOP button	1
Cable U1000R2V 4G35 RM	15 Meters
Cable NYM 5G6	250 Meters
Cable NYM 5G2.5	150 Meters
Cable NHXH-FE180/E30 4re2.5	10 Meters
Cable NYM 3G2.5	720 Meters
Cable NYM 5G1.5	10 Meters
Cable NYM 3G1.5	700 Meters
Cable NYM 3G1.0	200 Meters
Copper wire yellow green 50mm	25 Meters
Copper wire yellow green 35mm	10 Meters
Copper wire yellow green 16mm	300 Meters
Earthing rods 1.5M	32
Copupling for earthing rods 1.5M	16
Earthing wire RD8/KTS	100 Meters
Contacts for earthing rods	16
Conduit flexible	* by installation process
Socket 3-phase 16A	3
Socket 1-phase 16A IP20	40
Socket 1-phase 16A IP44	5
Light switch IP20	12
Light switch IP44	5
Push light switches	6
Outlet box	60
Lamps and light fixtures	*according to consumer's wishes
Other (nails, contacts)	1