

Project Name: Městský úřad Sokolov – klimatizace

Created Date: 08.07.2024

Client Name: Město Sokolov

Prepared By:

Ing. Milan Snopek

Project Ref No:

Project Ref Text:

Project Revision:



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Project Name:	Městský úřad Sokolov – klimatizace
Quote No:	0
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Revision:	0

Site Name:	
Contact:	
Tel:	
Email:	
Address:	

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Comment:	
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**Městský úřad Sokolov – klimatizace**

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**Project:** Městský úřad Sokolov – klimatizace

**Notes:** Equivalent length is calculated by coefficients:  
1,0:1.S  
The user is responsible for ensuring that all data entered is correct.  
Equipment selections have been based on the Design Guidelines stated within the Toshiba SHRM-A/SMMS-u/SMMS-e/SHRM-e/MiNi-SMMS-e/Side Blow VRF Installation Manual.  
It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.  
Please note that in the event of future system expansion being allowed for in the system design or a change in cooling/heating requirements, a re-evaluation of the air conditioning system must be made prior to final installation.

**1.S:**

Městský úřad Sokolov – klimatizaceOutdoor Units

Model	Quantity	Description
MCY-MHP1006HS8-E	1	MiNi Super Modular Multi System (MiNi-SMMS-e)(8,10HP)

Indoor Units

Model	Quantity	Description
MMK-AP0057HP-E	5	0,6HP High Wall Compact
MMK-AP0077HP-E	2	0,8HP High Wall Compact
MMK-AP0127HP-E	5	1,25HP High Wall Compact

Y Joints

Model	Quantity	Description
RBM-BY55E	10	Y-Joint
RBM-BY105E	1	Y-Joint

Piping Length

Pipe Diameter	Total Length	Gas Side	Discharge Side	Liquid Side
6,4mm	34,45 m	0,00 m	0,00 m	34,45 m
9,5mm	112,94 m	34,45 m	0,00 m	78,49 m
12,7mm	32,85 m	32,85 m	0,00 m	0,00 m
15,9mm	25,64 m	25,64 m	0,00 m	0,00 m
22,2mm	20,00 m	20,00 m	0,00 m	0,00 m

Total Refrigerant Charge Amount

Refrigerant (R410A)	Amount	Description
Outdoor Unit	4,400 kg	Refrigerant amount charged in factory
Additional Refrigerant	7,778 kg	Amount needed for the pipes at the site
<b>TOTAL:</b>	<b>12,178 kg</b>	

Outdoor Design Temperature

System	Mode	Description	Temperature
1.S	Cooling	Dry Bulb temperature	30,0 °C
	Heating	Wet Bulb temperature	6,0 °C

## Městský úřad Sokolov – klimatizace Compliance

## 1.S

Rules	Specification	Design	Ok
Outdoor Units	-	1 Unit	✓
Indoor Units (Control Boards)	12 Unit	12 Unit	✓
Outdoor Combined Rated HP	-	10,0 HP	✓
Outdoor Combined Rated Cooling	-	28,00 kW	✓
Outdoor Combined Rated Heating	-	28,00 kW	✓
Indoor Combined Rated Cooling	-	30,90 kW	✓
Indoor Combined Corrected Cooling	-	27,08 kW	✓
Indoor Combined Rated Heating	-	34,50 kW	✓
Indoor Combined Corrected Heating	-	27,09 kW	✓
Indoor Units Combined Capacity Code	-	10,85	✓
Outdoor Combined Capacity Code	-	10,0	✓
Outdoor DB (Cooling) temperature range	-5,0°C - 46,0°C	30,0°C	✓
Outdoor WB (Heating) temperature range	-20,0°C - 15,5°C	6,0°C	✓
Indoor DB (Cooling) temperature range	18,0°C - 32,0°C	24,0°C	✓
Indoor WB (Cooling) temperature range	15,0°C - 24,0°C	19,0°C	✓
Indoor RH (Cooling) range	20% - 80%	62%	✓
Indoor DB (Heating) temperature range	15,0°C - 28,0°C	20,0°C	✓
Capacity Ratio	80 - 130%	108,5 %	✓
Total Pipe Length	300,00 m	112,94 m	✓
Farthest Piping Real Length	150,00 m	47,47 m	✓
Farthest Piping Equivalent Length	180,00 m	47,47 m	✓
Farthest Piping From 1st Indoor Branching Equivalent Length	40,00 m	27,47 m	✓
Main Piping Equivalent Length(L1e)	80,00 m	20,00 m	✓
Greatest Indoor Unit Connecting Piping Real Length	15,00 m	8,60 m	✓
Highest Indoor Unit	30,00 m	3,00 m	✓
Lowest Indoor Unit	50,00 m	3,00 m	✓
Greatest Height Between Indoor and Outdoor Units(H1)	-	3,00 m	✓
Greatest Height Difference Between Indoor Units(H2)	15,00 m	0,00 m	✓
Limit Density	0,390 kg/m³	0,362 kg/m³	✓
Additional Charge	-	7,778 kg	✓
Total Charge	-	12,178 kg	✓
Central Control			✓

Overall

✓

## 1.S

**Outdoor Units**

Model	Quantity	Description
MCY-MHP1006HS8-E	1	MiNi Super Modular Multi System (MiNi-SMMS-e)(8,10HP)

**Indoor Units**

Model	Quantity	Description
MMK-AP0057HP-E	5	0,6HP High Wall Compact
MMK-AP0077HP-E	2	0,8HP High Wall Compact
MMK-AP0127HP-E	5	1,25HP High Wall Compact

**Y Joints**

Model	Quantity	Description
RBM-BY55E	10	Y-Joint
RBM-BY105E	1	Y-Joint

**Piping Length**

Pipe Diameter	Total Length	Gas Side	Discharge Side	Liquid Side
6,4mm	34,45 m	0,00 m	0,00 m	34,45 m
9,5mm	112,94 m	34,45 m	0,00 m	78,49 m
12,7mm	32,85 m	32,85 m	0,00 m	0,00 m
15,9mm	25,64 m	25,64 m	0,00 m	0,00 m
22,2mm	20,00 m	20,00 m	0,00 m	0,00 m

**Total Refrigerant Charge Amount**

Refrigerant (R410A)	Amount	Description
Outdoor Unit	4,400 kg	Refrigerant amount charged in factory
Additional Refrigerant	7,778 kg	Amount needed for the pipes at the site
<b>TOTAL:</b>	<b>12,178 kg</b>	

**Outdoor Design Temperature**

Mode	Description	Temperature
Cooling	Dry Bulb temperature	30,0 °C
Heating	Wet Bulb temperature	6,0 °C

**Electrical Information(OutdoorUnits)**

Property	Value	Description
MOCP(A)	25	Maximum Overcurrent Protection
MCA(A)	20	Minimum Circuit Amps
Protection Device Size(A)		Follow applicable local standard as needed
Wire(cable size)(mm <sup>2</sup> ) or AWG(#)		Follow applicable local standard as needed

**Electrical Information(IndoorUnits)**

Property	Value	Description
Total MCA(A)	2,67	
Protection Device Size(A)		Follow applicable local standard as needed
Wire(cable size)(mm <sup>2</sup> ) or AWG(#)		Follow applicable local standard as needed

1.S

Outdoor Unit

Model Name	Cooling (kW)		Heating (kW)		Diversity	
	Rated	Corrected	Rated	Corrected	System	Building
MCY-MHP1006HS8-E	28,00	27,08	28,00	27,09	108,5%	0%

Outdoor Unit Combination

Header	Follower1	Follower2	Follower3	Follower4
MCY-MHP1006HS8-E				

Indoor Units

Model Name	UnitName &Room	Capacity Code	Fan Speed Air flow (m³/h)	Capacity (Total/Sensible) [kW]			
				Mode	Rated	Corrected	Required
MMK-AP0057HP-E	S017-2	0,6	High 455	Cooling	1,70/1,50	1,49/1,25	0,94/0,00
				Heating	1,90	1,49	0,00
MMK-AP0057HP-E	S018	0,6	High 455	Cooling	1,70/1,50	1,49/1,25	0,62/0,00
				Heating	1,90	1,49	0,00
MMK-AP0057HP-E	S028	0,6	High 455	Cooling	1,70/1,50	1,49/1,25	2,10/0,00
				Heating	1,90	1,49	0,00
MMK-AP0057HP-E	S028	0,6	High 455	Cooling	1,70/1,50	1,49/1,25	2,10/0,00
				Heating	1,90	1,49	0,00
MMK-AP0127HP-E	S041	1,25	High 540	Cooling	3,60/2,50	3,16/2,08	5,37/0,00
				Heating	4,00	3,14	0,00
MMK-AP0127HP-E	S037	1,25	High 540	Cooling	3,60/2,50	3,16/2,08	6,31/0,00
				Heating	4,00	3,14	0,00
MMK-AP0127HP-E	S037	1,25	High 540	Cooling	3,60/2,50	3,16/2,08	6,31/0,00
				Heating	4,00	3,14	0,00
MMK-AP0127HP-E	S041	1,25	High 540	Cooling	3,60/2,50	3,16/2,08	5,37/0,00
				Heating	4,00	3,14	0,00
MMK-AP0127HP-E	S033	1,25	High 540	Cooling	3,60/2,50	3,16/2,08	2,63/0,00
				Heating	4,00	3,14	0,00
MMK-AP0057HP-E	S031	0,6	High 455	Cooling	1,70/1,50	1,49/1,25	1,46/0,00
				Heating	1,90	1,49	0,00
MMK-AP0077HP-E	S045	0,8	High 480	Cooling	2,20/1,70	1,93/1,41	3,68/0,00
				Heating	2,50	1,96	0,00
MMK-AP0077HP-E	S045	0,8	High 480	Cooling	2,20/1,70	1,93/1,41	3,68/0,00
				Heating	2,50	1,96	0,00

Floor Information

Floors	Room Name	Indoor Units			Design Conditions		
		Name	Model	Mode	DB[°C]	WB[°C]	RH[%]
1.S	S017-2		MMK-AP0057HP-E	Cooling	24,0	19,0	62,00
				Heating	20,0		
	S018		MMK-AP0057HP-E	Cooling	24,0	19,0	62,00
				Heating	20,0		
	S028		MMK-AP0057HP-E	Cooling	24,0	19,0	62,00
				Heating	20,0		
	S031		MMK-AP0057HP-E	Cooling	24,0	19,0	62,00
				Heating	20,0		
	S033		MMK-AP0127HP-E	Cooling	24,0	19,0	62,00
				Heating	20,0		
	S037		MMK-AP0127HP-E	Cooling	24,0	19,0	62,00
				Heating	20,0		



Floor Information

Floors	Room Name	Indoor Units		Mode	Design Conditions		
		Name	Model		DB[°C]	WB[°C]	RH[%]
	S041		MMK-AP0127HP-E	Cooling	24,0	19,0	62,00
			MMK-AP0127HP-E	Heating	20,0		
	S045		MMK-AP0077HP-E	Cooling	24,0	19,0	62,00
			MMK-AP0077HP-E	Heating	20,0		

### 1.S

Floor: 7.NP

Elevation: Above Outdoor Unit 28,15m

System information	
Indoor Units	12 of 12
Capacity Ratio	108,5%
Total Pipe Length	112,94 m
Indoor Cap. Tot./Sen.	27,08 kW/19,46 kW
Indoor Cap. Heat.	27,09 kW
Building diversity	0%



Outdoor/Indoor Legend	
Unit Name	
Model Name	
Room Name	
⊖ Corrected capacity	Tot./Sens./ Heat.

Piping Legend	
Actual Length	
Liquid / Suction Gas diameters	
Note: It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.	

Branches Legend		
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)

### 1.S

Floor: 6.NP

Elevation: Above Outdoor Unit 24,40m

System information	
Indoor Units	12 of 12
Capacity Ratio	108,5%
Total Pipe Length	112,94 m
Indoor Cap. Tot./Sen.	27,08 kW/19,46 kW
Indoor Cap. Heat.	27,09 kW
Building diversity	0%



Outdoor/Indoor Legend	
Unit Name	
Model Name	
Room Name	
⊖ Corrected capacity	Tot./Sens./ Heat.

Piping Legend	
Actual Length	
Liquid / Suction Gas diameters	
Note: It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.	

Branches Legend		
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)

### 1.S

Floor: 5.NP

Elevation: Above Outdoor Unit 21,10m

System information	
Indoor Units	12 of 12
Capacity Ratio	108,5%
Total Pipe Length	112,94 m
Indoor Cap. Tot./Sen.	27,08 kW/19,46 kW
Indoor Cap. Heat.	27,09 kW
Building diversity	0%



Outdoor/Indoor Legend	
Unit Name	
Model Name	
Room Name	
⊖ Corrected capacity	Tot./Sens./ Heat.

Piping Legend	
Actual Length	
Liquid / Suction Gas diameters	
Note: It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.	

Branches Legend		
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)

### 1.S

Floor: 4.NP

Elevation: Above Outdoor Unit 17,80m

System information	
Indoor Units	12 of 12
Capacity Ratio	108,5%
Total Pipe Length	112,94 m
Indoor Cap. Tot./Sen.	27,08 kW/19,46 kW
Indoor Cap. Heat.	27,09 kW
Building diversity	0%



Outdoor/Indoor Legend	
Unit Name	
Model Name	
Room Name	
⊖ Corrected capacity	Tot./Sens./ Heat.

Piping Legend	
Actual Length	
Liquid / Suction Gas diameters	
Note: It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.	

Branches Legend		
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)

### 1.S

Floor: 3.NP

Elevation: Above Outdoor Unit 14,50m

System information	
Indoor Units	12 of 12
Capacity Ratio	108,5%
Total Pipe Length	112,94 m
Indoor Cap. Tot./Sen.	27,08 kW/19,46 kW
Indoor Cap. Heat.	27,09 kW
Building diversity	0%



Outdoor/Indoor Legend	
Unit Name	
Model Name	
Room Name	
⊖ Corrected capacity	Tot./Sens./ Heat.

Piping Legend	
Actual Length	
Liquid / Suction Gas diameters	
Note: It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.	

Branches Legend		
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)

### 1.S

Floor: 2.NP

Elevation: Above Outdoor Unit 11,20m

System information	
Indoor Units	12 of 12
Capacity Ratio	108,5%
Total Pipe Length	112,94 m
Indoor Cap. Tot./Sen.	27,08 kW/19,46 kW
Indoor Cap. Heat.	27,09 kW
Building diversity	0%



Outdoor/Indoor Legend	
Unit Name	
Model Name	
Room Name	
⊖ Corrected capacity	Tot./Sens./ Heat.

Piping Legend	
Actual Length	
Liquid / Suction Gas diameters	
Note: It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.	

Branches Legend		
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)

### 1.S

Floor: 1.NP

Elevation: Above Outdoor Unit 7,60m

System information	
Indoor Units	12 of 12
Capacity Ratio	108,5%
Total Pipe Length	112,94 m
Indoor Cap. Tot./Sen.	27,08 kW/19,46 kW
Indoor Cap. Heat.	27,09 kW
Building diversity	0%



Outdoor/Indoor Legend	
Unit Name	
Model Name	
Room Name	
⊖ Corrected capacity	Tot./Sens./ Heat.

Piping Legend	
Actual Length	
Liquid / Suction Gas diameters	
Note: It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.	

Branches Legend		
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)



### 1.S

Floor: 1.PP

Elevation: Above Outdoor Unit 3,90m

System information	
Indoor Units	12 of 12
Capacity Ratio	108,5%
Total Pipe Length	112,94 m
Indoor Cap. Tot./Sen.	27,08 kW/19,46 kW
Indoor Cap. Heat.	27,09 kW
Building diversity	0%



Outdoor/Indoor Legend	
Unit Name	
Model Name	
Room Name	
⊖ Corrected capacity	Tot./Sens./ Heat.

Piping Legend	
Actual Length	
Liquid / Suction Gas diameters	
Note: It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.	

Branches Legend		
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)

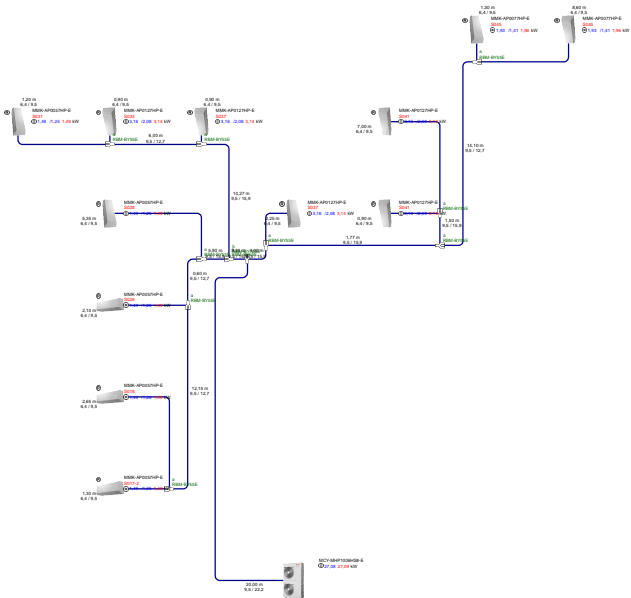
1.S  
Floor: 1.S      Elevation: 0,00m

System information	
Indoor Units	12 of 12
Capacity Ratio	108,5%
Total Pipe Length	112,94 m
Indoor Cap. Tot./Sen.	27,08 kW/19,46 kW
Indoor Cap. Heat.	27,09 kW
Building diversity	0%

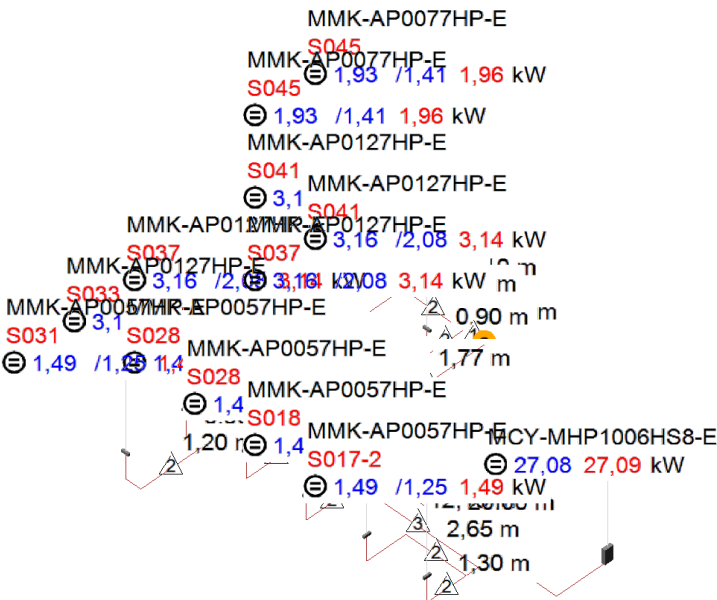
Outdoor/Indoor Legend	
Unit Name	
Model Name	
Room Name	
⊖ Corrected capacity	Tot./Sens./ Heat.

Piping Legend	
Actual Length	
Liquid / Suction Gas diameters	
Note: It is the responsibility of the consultant or contractor, to verify and confirm that the equipment selection and system design is correct before installation.	

Branches Legend		
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)



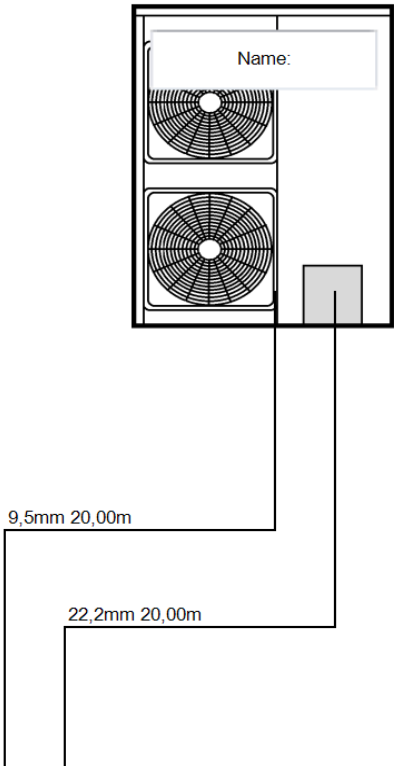
a	RBM-BY55E	(x10)
b	RBM-BY105E	(x1)
1	9,5mm 15,9mm	
2	6,4mm 9,5mm	
3	9,5mm 12,7mm	
4	9,5mm 22,2mm	



Customer:	Město Sokolov
Project:	Městský úřad Sokolov – klimati zace
System:	1.S
Date:	08.07.2024
Scale:	None

1.S

MCY-MHP1006HS8-E



**Accessories**  
**Header**

**Follower1**

**Follower2**

**Follower3**

**Follower4**

**Electrical Information**

Summary: 3N AC+Earth 380/400/415V 50Hz

- Slot 1
- Slot 2
- Slot 3
- Slot 4
- Slot 5

**1.S**

Floor: 7.NP

Elevation: Above Outdoor Unit 28,15m



**1.S**

Floor: 6.NP

Elevation: Above Outdoor Unit 24,40m



**1.S**

Floor: 5.NP

Elevation: Above Outdoor Unit 21,10m



**1.S**

Floor: 4.NP

Elevation: Above Outdoor Unit 17,80m





**1.S**

Floor: 3.NP

Elevation: Above Outdoor Unit 14,50m



**1.S**

Floor: 2.NP

Elevation: Above Outdoor Unit 11,20m



**1.S**

Floor: 1.NP

Elevation: Above Outdoor Unit 7,60m

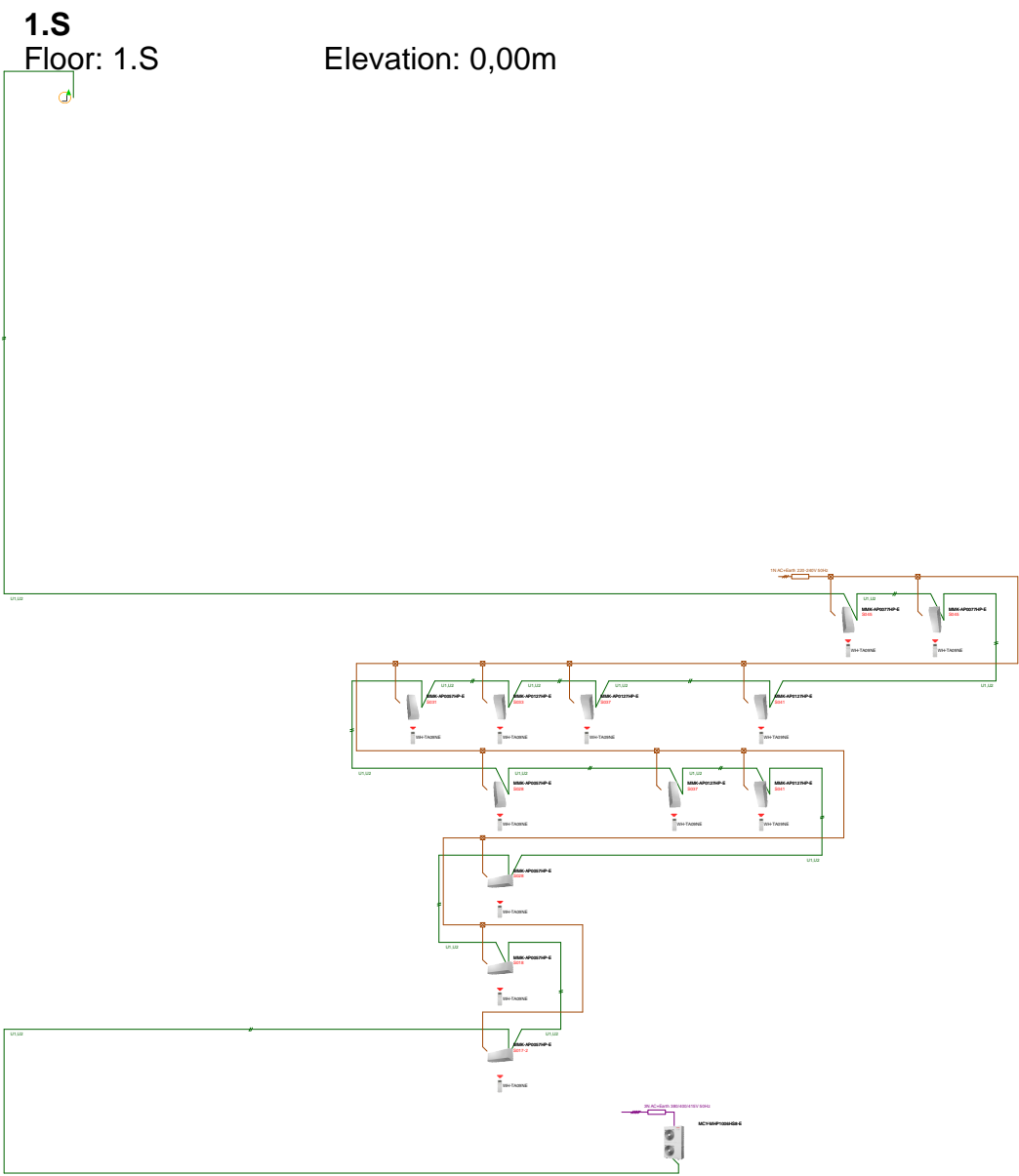


**1.S**






Floor: 1.PP

Elevation: Above Outdoor Unit 3,90m





Control Wiring Legend	Label	Wiring Size and Length
Outdoor - Indoor Control Wiring*	U1,U2	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring*	U3,U4	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring*	U5,U6	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring*	A,B	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m
* 2 core, no polarity, shielded		
Note: Power Wiring should comply with Local, National and International Regulation.		

Symbol Legend		
Control		
Power		
Remote Control		
Signal		
Piping*		
*Note: Pipe diameters in mm		
Branches Legend		
RBM-BY55E	a	(x10)
RBM-BY105E	b	(x1)

1.S

Floor: 7.NP

Elevation: Above Outdoor Unit 28,15m



Control Wiring Legend	Label	Wiring Size and Length
Outdoor - Indoor Control Wiring*	U1,U2	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring*	U3,U4	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring*	U5,U6	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring*	A,B	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m
* 2 core, no polarity, shielded		
Note: Power Wiring should comply with Local, National and International Regulation.		

1.S  
Floor: 6.NP

Elevation: Above Outdoor Unit 24,40m



Control Wiring Legend	Label	Wiring Size and Length
Outdoor - Indoor Control Wiring*	U1,U2	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring*	U3,U4	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring*	U5,U6	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring*	A,B	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m
* 2 core, no polarity, shielded		
Note: Power Wiring should comply with Local, National and International Regulation.		

1.S  
Floor: 5.NP

Elevation: Above Outdoor Unit 21,10m





Control Wiring Legend	Label	Wiring Size and Length
Outdoor - Indoor Control Wiring*	U1,U2	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring*	U3,U4	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring*	U5,U6	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring*	A,B	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m
* 2 core, no polarity, shielded		
Note: Power Wiring should comply with Local, National and International Regulation.		

1.S  
Floor: 4.NP

Elevation: Above Outdoor Unit 17,80m



Control Wiring Legend	Label	Wiring Size and Length
Outdoor - Indoor Control Wiring*	U1,U2	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring*	U3,U4	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring*	U5,U6	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring*	A,B	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m
* 2 core, no polarity, shielded		
Note: Power Wiring should comply with Local, National and International Regulation.		

1.S  
Floor: 3.NP

Elevation: Above Outdoor Unit 14,50m



Control Wiring Legend	Label	Wiring Size and Length
Outdoor - Indoor Control Wiring*	U1,U2	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring*	U3,U4	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring*	U5,U6	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring*	A,B	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m
* 2 core, no polarity, shielded		
Note: Power Wiring should comply with Local, National and International Regulation.		

1.S  
Floor: 2.NP

Elevation: Above Outdoor Unit 11,20m



Control Wiring Legend	Label	Wiring Size and Length
Outdoor - Indoor Control Wiring*	U1,U2	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring*	U3,U4	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring*	U5,U6	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring*	A,B	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m
* 2 core, no polarity, shielded		
Note: Power Wiring should comply with Local, National and International Regulation.		

1.S  
Floor: 1.NP

Elevation: Above Outdoor Unit 7,60m



Control Wiring Legend	Label	Wiring Size and Length
Outdoor - Indoor Control Wiring*	U1,U2	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring*	U3,U4	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring*	U5,U6	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring*	A,B	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m
* 2 core, no polarity, shielded		
Note: Power Wiring should comply with Local, National and International Regulation.		

1.S  
Floor: 1.PP

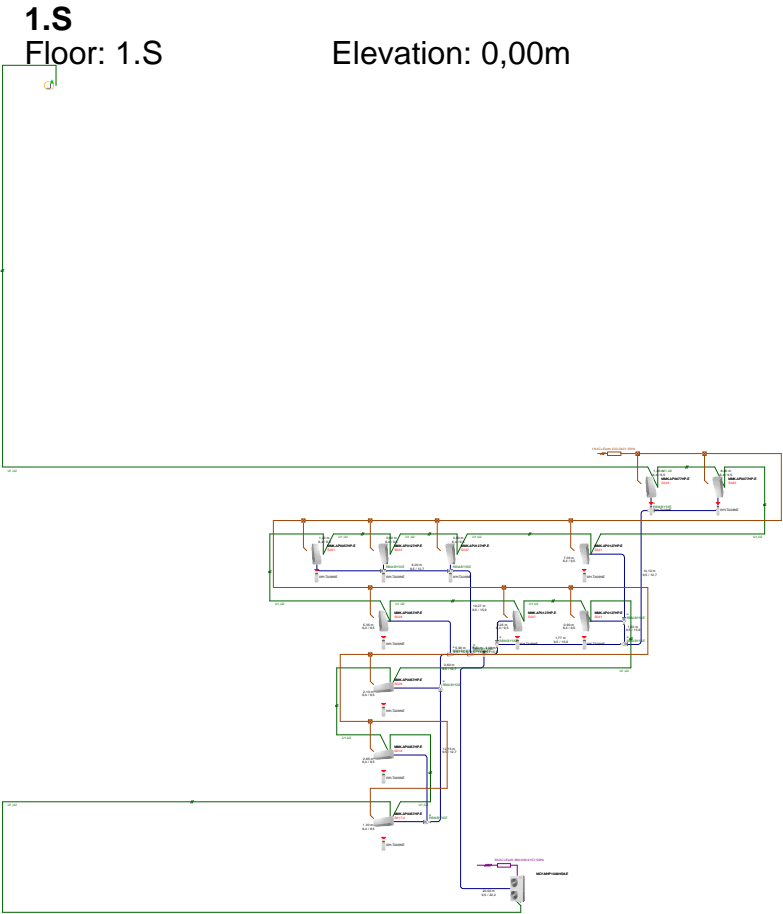
Elevation: Above Outdoor Unit 3,90m



Control Wiring Legend	Label	Wiring Size and Length
Outdoor - Indoor Control Wiring*	U1,U2	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring*	U3,U4	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring*	U5,U6	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring*	A,B	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

\* 2 core, no polarity, shielded

Note: Power Wiring should comply with Local, National and International Regulation.



**1.S**

Floor: 7.NP

Elevation: Above Outdoor Unit 28,15m



**1.S**

Floor: 6.NP

Elevation: Above Outdoor Unit 24,40m





**1.S**

Floor: 5.NP

Elevation: Above Outdoor Unit 21,10m



**1.S**

Floor: 4.NP

Elevation: Above Outdoor Unit 17,80m



**1.S**

Floor: 3.NP

Elevation: Above Outdoor Unit 14,50m



1.S  
Floor: 2.NP                      Elevation: Above Outdoor Unit 11,20m



**1.S**

Floor: 1.NP

Elevation: Above Outdoor Unit 7,60m

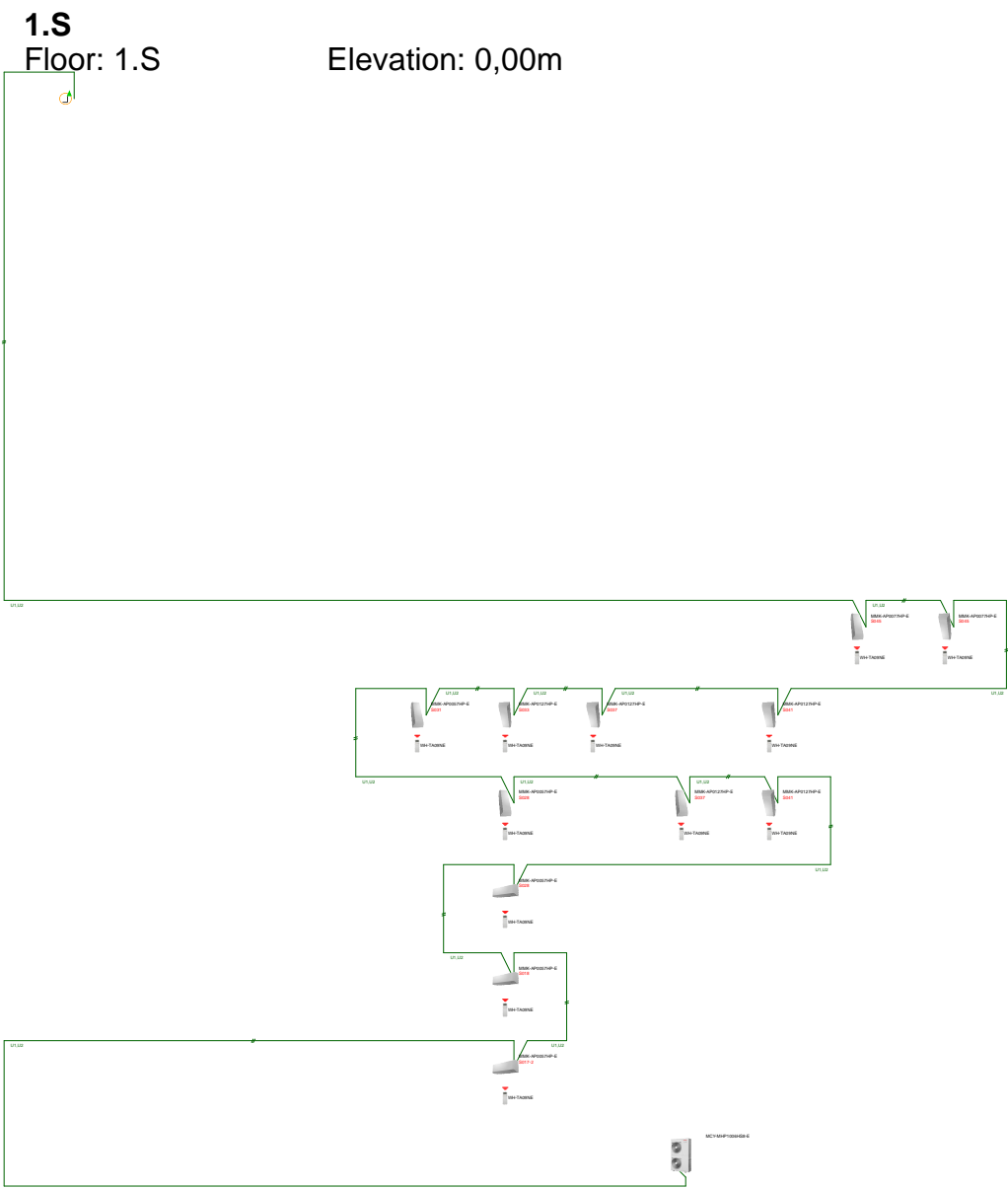


**1.S**

Floor: 1.PP

Elevation: Above Outdoor Unit 3,90m





**1.S**

Floor: 7.NP

Elevation: Above Outdoor Unit 28,15m





**1.S**

Floor: 6.NP

Elevation: Above Outdoor Unit 24,40m



**1.S**

Floor: 5.NP

Elevation: Above Outdoor Unit 21,10m



**1.S**

Floor: 4.NP

Elevation: Above Outdoor Unit 17,80m



**1.S**

Floor: 3.NP

Elevation: Above Outdoor Unit 14,50m



**1.S**

Floor: 2.NP

Elevation: Above Outdoor Unit 11,20m



**1.S**

Floor: 1.NP

Elevation: Above Outdoor Unit 7,60m



**1.S**

Floor: 1.PP

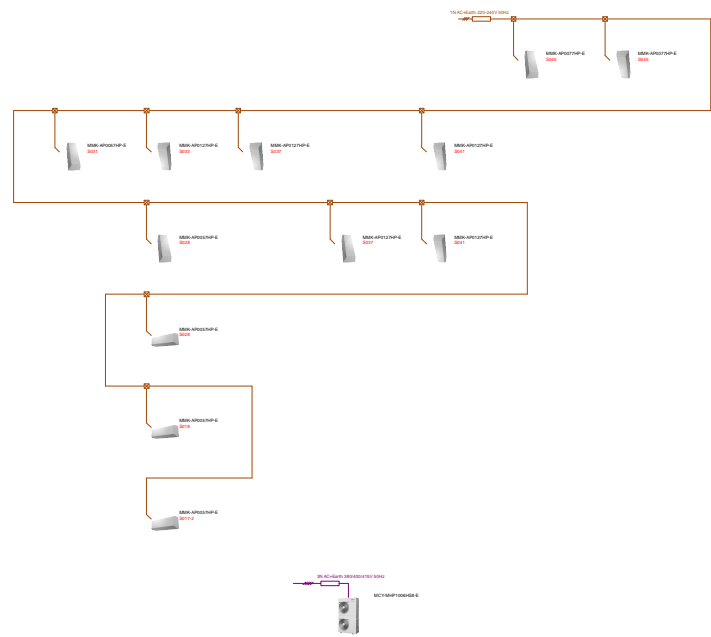
Elevation: Above Outdoor Unit 3,90m



1.S

Floor: 1.S

Elevation: 0,00m





### MCY-MHP1006HS8-E (10HP, 28,00kW system)

Cooling		Compressor + Outdoor Fan Power consumption (kW)															
Outdoor Unit (°C)	Outdoor Unit 100% Capacity (kW)	100%		90%		80%		70%		60%		50%		40%		30%	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)
40,0 °C	25,2	25,2	10,0	22,7	8,20	20,2	6,58	17,6	5,15	15,1	3,93	12,6	2,90	10,1	2,07	7,56	1,44
39,0 °C	25,9	25,9	9,89	23,3	8,09	20,7	5,49	18,1	5,08	15,5	3,87	13,0	2,86	10,4	2,04	7,77	1,42
37,0 °C	27,0	27,0	9,61	24,3	7,86	21,6	5,31	18,9	4,94	16,2	3,76	13,5	2,78	10,8	1,98	8,10	1,38
35,0 °C	28,0	28,0	9,34	25,2	7,64	22,4	5,13	19,6	4,80	16,8	3,66	14,0	2,70	11,2	1,93	8,40	1,34
33,0 °C	28,0	28,0	8,90	25,2	7,28	22,4	5,84	19,6	4,57	16,8	3,48	14,0	2,57	11,2	1,84	8,40	1,28
31,0 °C	28,0	28,0	8,46	25,2	6,92	22,4	5,55	19,6	4,35	16,8	3,31	14,0	2,45	11,2	1,75	8,40	1,21
30,0 °C	28,0	28,0	8,24	25,2	6,74	22,4	5,41	19,6	4,24	16,8	3,23	14,0	2,38	11,2	1,70	8,40	1,18
29,0 °C	28,0	28,0	8,02	25,2	6,56	22,4	5,27	19,6	4,12	16,8	3,14	14,0	2,32	11,2	1,66	8,40	1,15
27,0 °C	28,0	28,0	7,59	25,2	6,21	22,4	4,98	19,6	3,90	16,8	2,97	14,0	2,19	11,2	1,57	8,40	1,09
25,0 °C	28,0	28,0	7,15	25,2	5,85	22,4	4,69	19,6	3,67	16,8	2,80	14,0	2,07	11,2	1,47	8,40	1,02
23,0 °C	28,0	28,0	6,71	25,2	5,49	22,4	4,40	19,6	3,45	16,8	2,63	14,0	1,94	11,2	1,38	8,40	0,96
21,0 °C	28,0	28,0	6,27	25,2	5,13	22,4	4,12	19,6	3,22	16,8	2,46	14,0	1,81	11,2	1,29	8,40	0,90
20,0 °C	28,0	28,0	6,06	25,2	4,95	22,4	3,97	19,6	3,11	16,8	2,37	14,0	1,75	11,2	1,25	8,40	0,87
19,0 °C	28,0	28,0	5,84	25,2	4,78	22,4	3,83	19,6	3,00	16,8	2,29	14,0	1,69	11,2	1,20	8,40	0,84
17,0 °C	28,0	28,0	5,40	25,2	4,42	22,4	3,54	19,6	2,78	16,8	2,11	14,0	1,56	11,2	1,11	8,40	0,77
15,0 °C	28,0	28,0	4,96	25,2	4,06	22,4	3,26	19,6	2,55	16,8	1,94	14,0	1,43	11,2	1,02	8,40	0,71

TC : Total Capacity

PI : Power Input

Indoor air temperature conditions : 27,0°C dry-bulb / 19,0°C wet bulb





Heating			Compressor + Outdoor Fan Power consumption (kW)															
Outdoor Unit		Outdoor Unit 100% Heating Capacity (kW)	100% Capacity		90% Capacity		80% Capacity		70% Capacity		60% Capacity		50% Capacity		40% Capacity		30% Capacity	
Dry-Bulb (°C)	Wet-Bulb (°C)		TC (kW)	PI (kW)	TC (kW)	PI (kW)	TC (kW)	PI (kW)	TC (kW)	PI (kW)	TC (kW)	PI (kW)	TC (kW)	PI (kW)	TC (kW)	PI (kW)	TC (kW)	PI (kW)
15,0	13,7	28,0	28,0	5,50	25,2	4,65	22,4	3,87	19,6	3,16	16,8	2,52	14,0	1,95	11,2	1,45	8,40	1,02
13,0	11,8	28,0	28,0	5,87	25,2	4,97	22,4	4,14	19,6	3,38	16,8	2,70	14,0	2,09	11,2	1,55	8,40	1,09
11,0	9,80	28,0	28,0	6,25	25,2	5,29	22,4	4,40	19,6	3,60	16,8	2,87	14,0	2,22	11,2	1,65	8,40	1,16
9,00	7,90	28,0	28,0	6,62	25,2	5,60	22,4	4,67	19,6	3,81	16,8	3,04	14,0	2,35	11,2	1,75	8,40	1,22
7,00	6,00	28,0	28,0	7,00	25,2	5,92	22,4	4,93	19,6	4,03	16,8	3,21	14,0	2,49	11,2	1,85	8,40	1,26
5,00	4,10	26,9	26,9	6,89	24,2	5,83	21,5	4,85	18,8	3,96	16,1	3,16	13,4	2,45	10,8	1,82	8,07	1,27
3,00	2,20	25,8	25,8	6,77	23,2	5,73	20,6	4,77	18,1	3,90	15,5	3,11	12,9	2,41	10,3	1,79	7,74	1,25
0,00	-0,70	24,2	24,2	6,60	21,8	5,58	19,4	4,65	16,9	3,80	14,5	3,03	12,1	2,34	9,68	1,74	7,26	1,22
-3,00	-0,30	22,5	22,5	6,43	20,2	5,44	18,0	4,53	15,8	3,70	13,5	2,95	11,2	2,28	9,00	1,70	6,75	1,19
-5,00	-5,60	21,4	21,4	6,32	19,3	5,34	17,1	4,45	15,0	3,64	12,8	2,90	10,7	2,24	8,56	1,67	6,42	1,17
-7,00	-7,60	20,3	20,3	6,20	18,3	5,25	16,2	4,37	14,2	3,57	12,2	2,85	10,2	2,20	8,12	1,64	6,09	1,15
-10,0	-10,5	18,7	18,7	6,03	16,8	5,10	15,0	4,25	13,1	3,47	11,2	2,77	9,35	2,14	7,48	1,59	5,61	1,11
-14,5	-15,0	16,2	16,2	5,77	14,6	4,88	13,0	4,07	11,3	3,32	9,72	2,65	8,10	2,05	6,48	1,52	4,86	1,07

TC : Total Capacity

PI : Power Input

Indoor air temperature conditions : 20,0°C dry-bulb

Control Wiring Legend	Label	Wiring	Wiring Size and Length
Outdoor - Indoor Control Wiring	U1,U2	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring	U3,U4	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring	U5,U6	2 core, no polarity, shielded	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring	A,B	2 core, no polarity, shielded	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

Symbol Legend	
	Multi Flow Selector
	Flow Selector
	PMV kit
	Electrical isolator





Note: Power Wiring should comply with Local, National and International Regulation.

1.S  
Floor: 7.NP

Elevation: Above Outdoor Unit 28,15m



Control Wiring Legend	Label	Wiring	Wiring Size and Length
Outdoor - Indoor Control Wiring	U1,U2	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring	U3,U4	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring	U5,U6	2 core, no polarity, shielded	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring	A,B	2 core, no polarity, shielded	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

Symbol Legend	
	Multi Flow Selector
	Flow Selector
	PMV kit
	Electrical isolator





Note: Power Wiring should comply with Local, National and International Regulation.

1.S  
Floor: 6.NP

Elevation: Above Outdoor Unit 24,40m



Control Wiring Legend	Label	Wiring	Wiring Size and Length
Outdoor - Indoor Control Wiring	U1,U2	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring	U3,U4	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring	U5,U6	2 core, no polarity, shielded	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring	A,B	2 core, no polarity, shielded	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

Symbol Legend	
	Multi Flow Selector
	Flow Selector
	PMV kit
	Electrical isolator

Note: Power Wiring should comply with Local, National and International Regulation.





1.S  
Floor: 5.NP

Elevation: Above Outdoor Unit 21,10m



Control Wiring Legend	Label	Wiring	Wiring Size and Length
Outdoor - Indoor Control Wiring	U1,U2	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring	U3,U4	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring	U5,U6	2 core, no polarity, shielded	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring	A,B	2 core, no polarity, shielded	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

Note: Power Wiring should comply with Local, National and International Regulation.





Symbol Legend	
	Multi Flow Selector
	Flow Selector
	PMV kit
	Electrical isolator

1.S  
Floor: 4.NP

Elevation: Above Outdoor Unit 17,80m



Control Wiring Legend	Label	Wiring	Wiring Size and Length
Outdoor - Indoor Control Wiring	U1,U2	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring	U3,U4	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring	U5,U6	2 core, no polarity, shielded	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring	A,B	2 core, no polarity, shielded	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

Symbol Legend	
	Multi Flow Selector
	Flow Selector
	PMV kit
	Electrical isolator





Note: Power Wiring should comply with Local, National and International Regulation.

1.S  
Floor: 3.NP

Elevation: Above Outdoor Unit 14,50m



Control Wiring Legend	Label	Wiring	Wiring Size and Length
Outdoor - Indoor Control Wiring	U1,U2	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring	U3,U4	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring	U5,U6	2 core, no polarity, shielded	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring	A,B	2 core, no polarity, shielded	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

Symbol Legend	
	Multi Flow Selector
	Flow Selector
	PMV kit
	Electrical isolator





Note: Power Wiring should comply with Local, National and International Regulation.

1.S  
Floor: 2.NP

Elevation: Above Outdoor Unit 11,20m



Control Wiring Legend	Label	Wiring	Wiring Size and Length
Outdoor - Indoor Control Wiring	U1,U2	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring	U3,U4	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring	U5,U6	2 core, no polarity, shielded	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring	A,B	2 core, no polarity, shielded	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

Symbol Legend	
	Multi Flow Selector
	Flow Selector
	PMV kit
	Electrical isolator

Note: Power Wiring should comply with Local, National and International Regulation.





1.S  
Floor: 1.NP

Elevation: Above Outdoor Unit 7,60m





Control Wiring Legend	Label	Wiring	Wiring Size and Length
Outdoor - Indoor Control Wiring	U1,U2	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Central Control Wiring	U3,U4	2 core, no polarity, shielded	1,25mm² up to 1000m & 2,0mm² up to 2000m
Outdoor Units Control Wiring	U5,U6	2 core, no polarity, shielded	1,25mm² to 2,0mm² up to 100m
Remote Controller Wiring	A,B	2 core, no polarity, shielded	0,5mm² to 2,0mm² up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

Symbol Legend	
	Multi Flow Selector
	Flow Selector
	PMV kit
	Electrical isolator





Note: Power Wiring should comply with Local, National and International Regulation.

1.S  
Floor: 1.PP

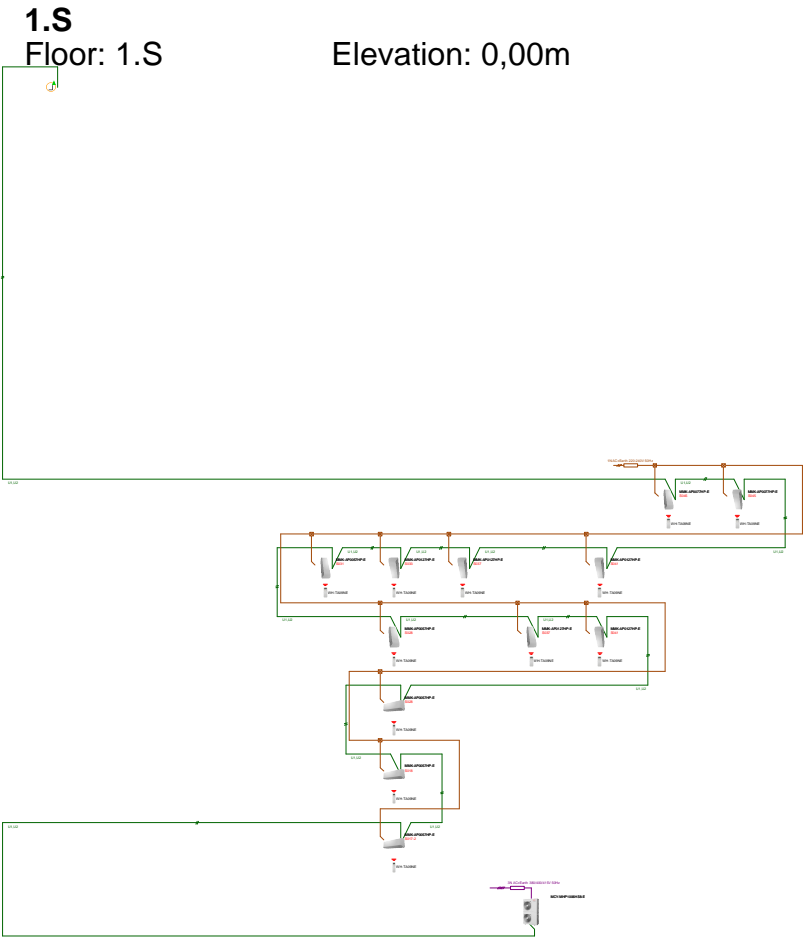
Elevation: Above Outdoor Unit 3,90m



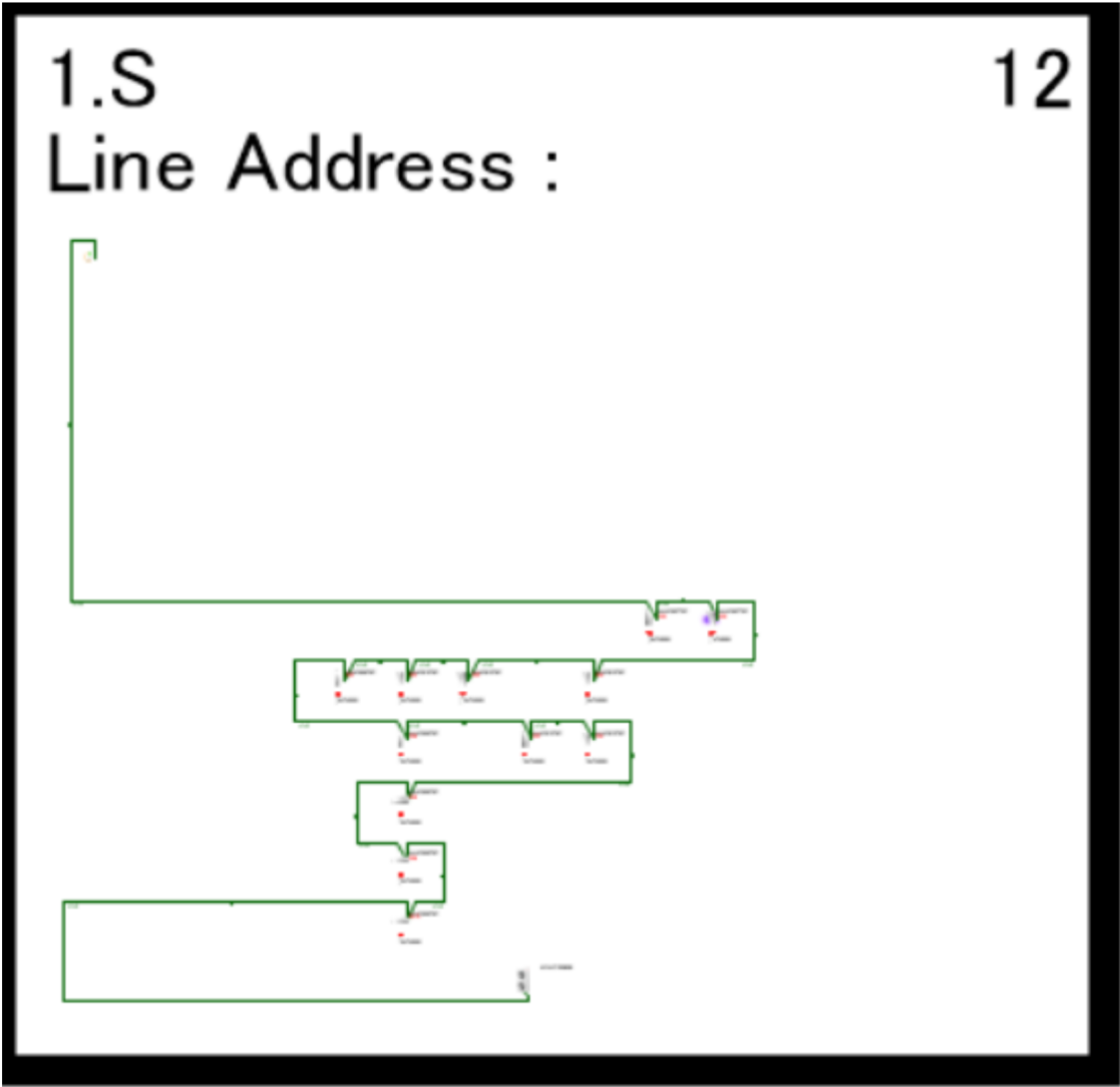
Control Wiring Legend	Label	Wiring	Wiring Size and Length
Outdoor - Indoor Control Wiring	U1,U2	2 core, no polarity, shielded	1,25mm <sup>2</sup> up to 1000m & 2,0mm <sup>2</sup> up to 2000m
Central Control Wiring	U3,U4	2 core, no polarity, shielded	1,25mm <sup>2</sup> up to 1000m & 2,0mm <sup>2</sup> up to 2000m
Outdoor Units Control Wiring	U5,U6	2 core, no polarity, shielded	1,25mm <sup>2</sup> to 2,0mm <sup>2</sup> up to 100m
Remote Controller Wiring	A,B	2 core, no polarity, shielded	0,5mm <sup>2</sup> to 2,0mm <sup>2</sup> up to 500m (Wireless Remote Controller up to 400m). Group Control wiring is up to 200m

Symbol Legend
 Multi Flow Selector
 Flow Selector
 PMV kit
 Electrical isolator

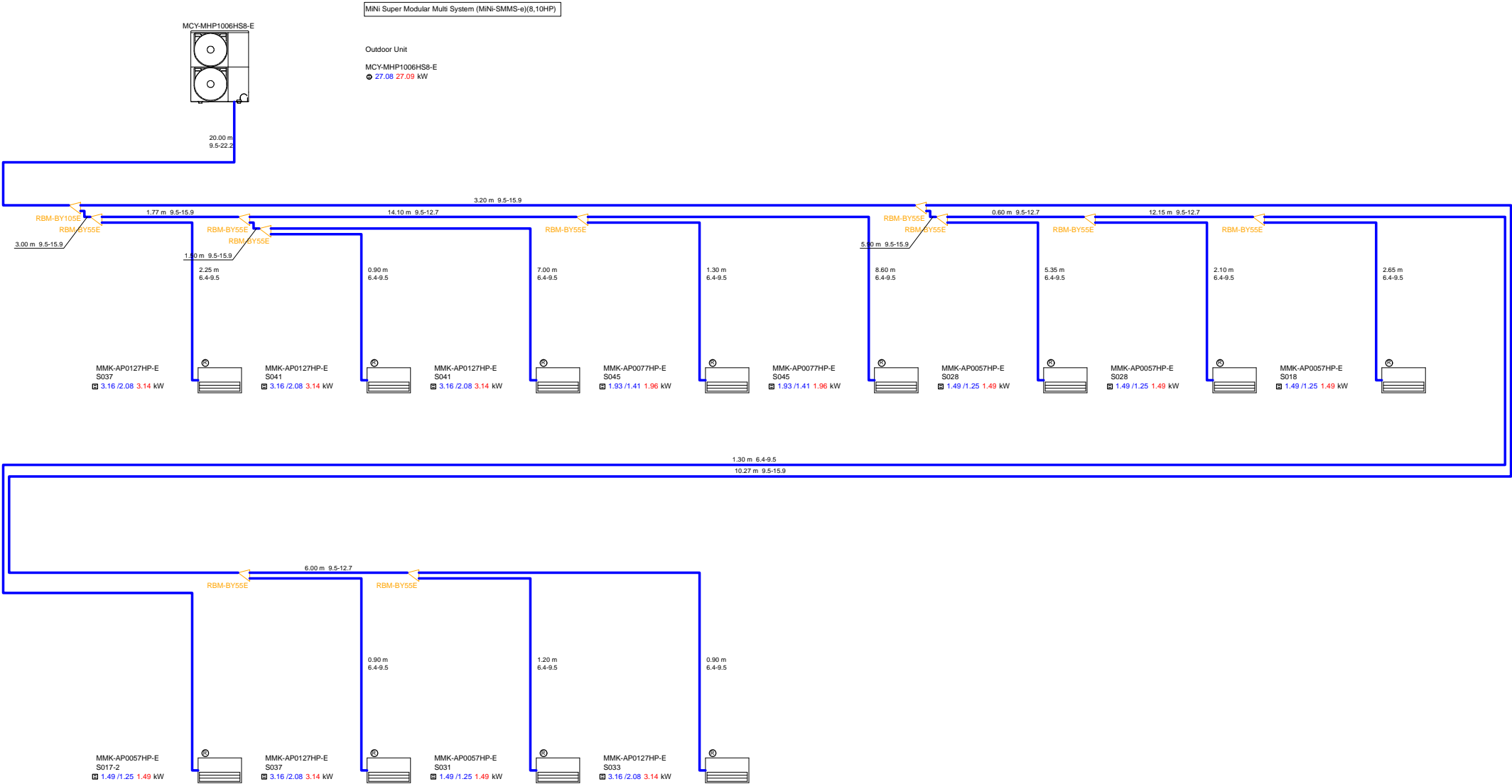
Note: Power Wiring should comply with Local, National and International Regulation.



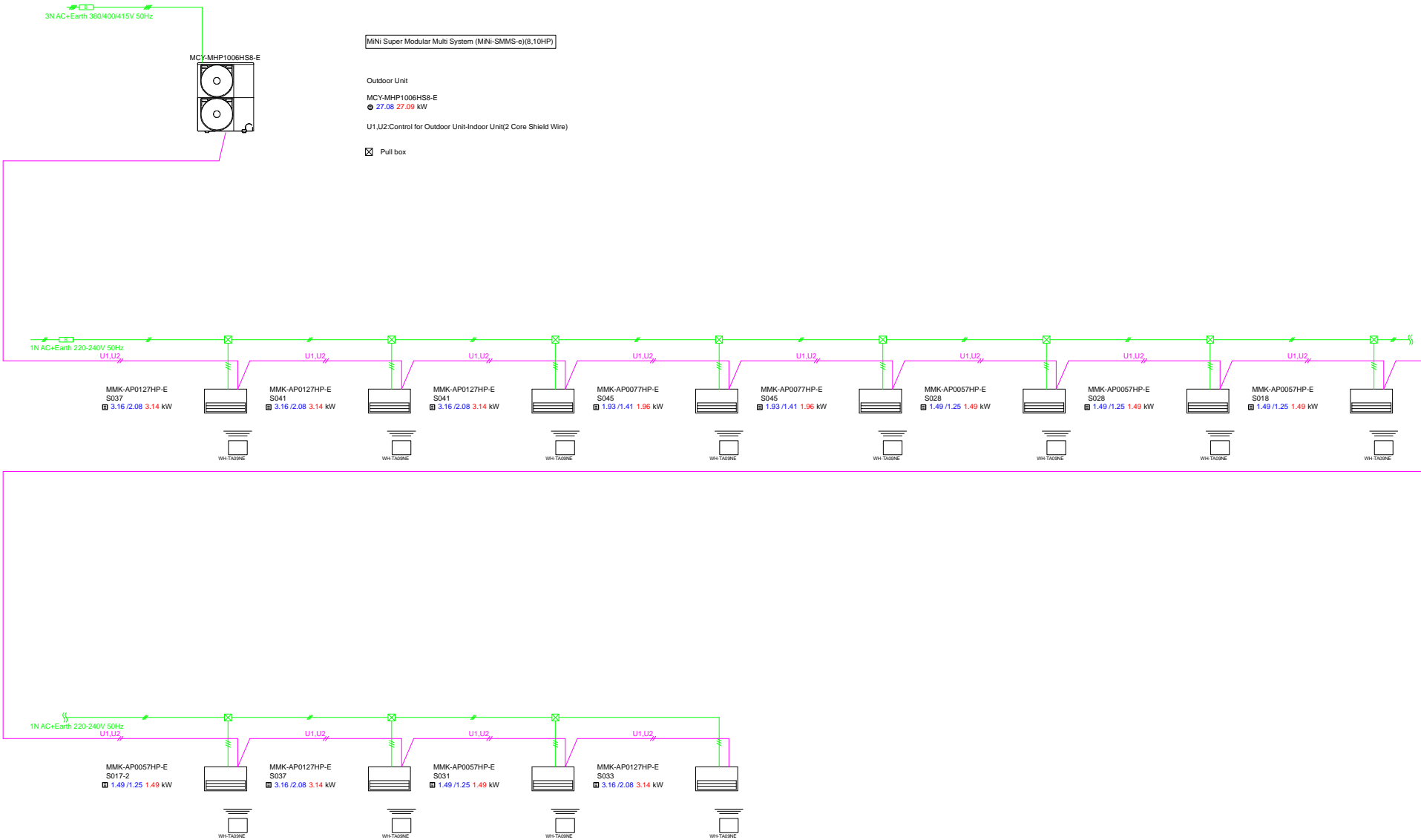
Městský úřad Sokolov – klimatizace



1.S



1.S



### 1.S

