

SAMSUNG

# Project Report

**PSP Garwolin**

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Name : Mateusz Wielk  
Telephone : +48 600 099 250  
E-mail : m.wielk@partner.samsung.com  
Address : Samsung Electronics Polska



# 1. Total Load Profile

## 1.1 PSP

Dept	FI	Room	Area		Load per unit area		Load			Sum of capacity			Model	Qty	Nominal Capacity			Outdoor	Model	Nominal Capacity		Combi. Ratio							
			CAD	SALES	Cooling	Heating	Cooling		Heating	Cooling		Heating			Cooling		Heating												
							TC kW	SHC kW		TC kW	SHC kW				TC kW														
																TC kW				TC kW									
			m2	m2	kW/m2	kW/m2	TC kW	SHC kW	TC kW	TC kW	SHC kW	TC kW			TC kW	SHC kW	TC kW	-	-	TC kW	TC kW	%	%						
PSP	Piętro	1.09	39.054	39.05	0.18	0.04	7.20	0.00	1.56	7.2	5	8	AM036NNNDEH/E U	2	3.60	2.50	4.00	ODU_VRF Piętro	AM180JXVHGH /ET	50.40	56.70	116	116						
		1.13	20.5909	20.59	0.12	0.04	2.50	0.00	0.82	2.8	2	3.2	AM028NNNDEH/E U	1	2.80	2.00	3.20												
		1.20	21.3917	21.39	0.12	0.04	2.50	0.00	0.86	2.8	2	3.2	AM028NNNDEH/E U	1	2.80	2.00	3.20												
		1.21	21.42	21.42	0.12	0.04	2.50	0.00	0.86	2.8	2	3.2	AM028NNNDEH/E U	1	2.80	2.00	3.20												
		1.23	22.464	22.46	0.11	0.04	2.50	0.00	0.90	2.8	2	3.2	AM028NNNDEH/E U	1	2.80	2.00	3.20												
		1.24	43.878	43.88	0.1	0.04	4.50	0.00	1.76	4.5	3.1	5	AM045NNNDEH/E U	1	4.50	3.10	5.00												
		1.07	14.0436	14.04	0.14	0.04	2.00	0.00	0.56	2.2	1.5	2.5	AM022NNNDEH/E U	1	2.20	1.50	2.50												
		1.06	22.3007	22.3	0.11	0.04	2.50	0.00	0.89	2.8	2	3.2	AM028NNNDEH/E U	1	2.80	2.00	3.20												
		1.05	15.2131	15.21	0.13	0.04	2.00	0.00	0.61	2.2	1.5	2.5	AM022NNNDEH/E U	1	2.20	1.50	2.50												
		1.04	21.7128	21.71	0.12	0.04	2.50	0.00	0.87	2.8	2	3.2	AM028NNNDEH/E U	1	2.80	2.00	3.20												
		1.03	15.0504	15.05	0.13	0.04	2.00	0.00	0.60	2.2	1.5	2.5	AM022NNNDEH/E U	1	2.20	1.50	2.50												
		1.02	21.6645	21.66	0.12	0.04	2.50	0.00	0.87	2.8	2	3.2	AM028NNNDEH/E U	1	2.80	2.00	3.20												
		1.34	47.52	47.52	0.15	0.04	7.00	0.00	1.90	7.2	5	8	AM036NNNDEH/E U	2	3.60	2.50	4.00												
		1.4	23.282	23.28	0.13	0.04	3.00	0.00	0.93	3.6	2.5	4	AM036NNNDEH/E U	1	3.60	2.50	4.00												
		1.41	29.1673	29.17	0.11	0.04	3.30	0.00	1.17	3.6	2.5	4	AM036NNNDEH/E U	1	3.60	2.50	4.00												
		1.42	37.3615	37.36	0.11	0.04	4.00	0.00	1.49	4.5	3.1	5	AM045NNNDEH/E U	1	4.50	3.10	5.00												
		1.36	13.7408	13.74	0.11	0.04	1.50	0.00	0.55	1.5	1	1.7	AM015NNNDEH/E U	1	1.50	1.00	1.70												
	Parter	0.15	26.944	26.94	0.08	0.04	2.10	0.00	1.08	2.2	1.5	2.5	AM022NNNDEH/E U	1	2.20	1.50	2.50	ODU_VRF Parter	AM120JXVHGH /ET	33.60	37.80	124	123						
		0.16	13.706	13.71	0.15	0.04	2.00	0.00	0.55	2.2	1.5	2.5	AM022NNNDEH/E U	1	2.20	1.50	2.50												
		0.14	24.1074	24.11	0.08	0.04	2.00	0.00	0.96	2.2	1.5	2.5	AM022NNNDEH/E U	1	2.20	1.50	2.50												
		0.13	24.0621	24.06	0.08	0.04	2.00	0.00	0.96	2.2	1.5	2.5	AM022NNNDEH/E U	1	2.20	1.50	2.50												
		0.12	16.2531	16.25	0.12	0.04	2.00	0.00	0.65	2.2	1.5	2.5	AM022NNNDEH/E U	1	2.20	1.50	2.50												
		0.11	43.2209	43.22	0.09	0.04	4.00	0.00	1.73	4.5	3.1	5	AM045NNNDEH/E U	1	4.50	3.10	5.00												
		0.23	57.5185	57.52	0.07	0.04	4.00	0.00	2.30	4.5	3.1	5	AM045NNNDEH/E U	1	4.50	3.10	5.00												
		0.09	85.0254	85.03	0.15	0.04	12.80	0.00	3.40	14.4	10	16	AM036NNNDEH/E U	4	3.60	2.50	4.00												
		0.35	48.8868	48.89	0.11	0.04	5.60	0.00	1.96	5.6	4	6.4	AM028NNNDEH/E U	2	2.80	2.00	3.20												
		0.34	13.0918	13.09	0.11	0.04	1.50	0.00	0.52	1.5	1	1.7	AM015NNNDEH/E U	1	1.50	1.00	1.70												
		0.31 Serwerownia	18.2188	18.22	0.55	0.04	10.00	0.00	0.73	20	0	22.4	AC100RNCCKG/E U	1	10.00	0.00	11.20							ODU_Serw erownia_1	AC100RXADKG /EU	10.00	11.20	100	100
			18.2188	18.22	0.55	0.04	10.00	0.00	0.73				AC100RNCCKG/E U	1	10.00	0.00	11.20							ODU_Serw erownia_2	AC100RXADKG /EU	10.00	11.20	100	100
		0.28	6.83263	6.83	0.15	0.04	1.00	0.00	0.27	2.6	1.9	3.3	AC026RNADKG/EU	1	2.60	1.90	3.30							ODU_Rozd zielnia	AC026RXADKG /EU	2.60	3.30	100	100



	Piętro	1.49	68.03 77	68.04	0.12	0.04	8.00	0.00	2.72	9	6.2	10	AM045NNNDEH/E U	2	4.50	3.10	5.00	ODU_Sitowania	AM050NXMDER/EU	14.00	16.00	116	112
		Rezerwa	50.41 21	50.41	0.13	0	6.40	0.00	0.00	7.2	5	8	AM036NNNDEH/E U	2	3.60	2.50	4.00						
	Partier	0.29	3.795 9	3.8	1.18	0.04	4.50	0.00	0.15	5.2	3.8	6.6	AC026RNADKG/EU	1	2.60	1.90	3.30	ODU_Monitoring_1	AC026RXADKG/EU	2.60	3.30	0	0
			3.795 9	3.8	1.18	0.04	4.50	0.00	0.15				AC026RNADKG/EU	1	2.60	1.90	3.30	ODU_Monitoring_2	AC026RXADKG/EU	2.60	3.30	0	0
		0.32	5.539 76	5.54	0.81	0.04	4.50	0.00	0.22	10	6.8	12	AC052RNADKG/EU	1	5.00	3.40	6.00	ODU_POM ŁĄCZNOŚĆ I_1	AC052RXADKG/EU	5.00	6.00	100	100
			5.539 76	5.54	0.81	0.04	4.50	0.00	0.22				AC052RNADKG/EU	1	5.00	3.40	6.00	ODU_POM ŁĄCZNOŚĆ I_2	AC052RXADKG/EU	5.00	6.00	100	100
	Dach	NW1	5.048 1	5.05	2.18	0.04	11.00	0.00	0.20	20	0	22	AHU_200_APNH	1	20.00	0.00	22.00	ODU_NW1	AC200KXAPNH/EU	20.00	22.00		



## 2. Piping & Wiring

### 2.1 ODU\_VRF Piętro

#### 2.1.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P.Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity			Combination Ratio		
Dept	FI	Room	Name	Model name						Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling	Heating	Cooling	Heating	
-	-	-	-	-	ø, mm	ø, mm	ø, mm	Mod e	CMM	°C	°C	kW	kW	kW	kW	kW	%	%	
PSP	Dach		ODU_VRF Piętro	AM180JXVHGH/ET	15.88	28.58			290.00			51.51		45.17	51.51		45.17	115.7	115.7
	Piętro	1.09	1.09_1	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.20	2.26	2.69		
		1.09	1.09_2	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.20	2.26	2.69		
		1.13	1.13	AM028NNNDEH/EU	6.35	12.70		H	10.00	18	20	2.60	2.00	3.20	2.45	1.88	2.24		
		1.20	1.20	AM028NNNDEH/EU	6.35	12.70		H	10.00	18	20	2.60	2.00	3.20	2.45	1.88	2.24		
		1.21	1.21	AM028NNNDEH/EU	6.35	12.70		H	10.00	18	20	2.60	2.00	3.20	2.45	1.88	2.24		
		1.23	1.23	AM028NNNDEH/EU	6.35	12.70		H	10.00	18	20	2.60	2.00	3.20	2.45	1.88	2.24		
		1.24	1.24	AM045NNNDEH/EU	6.35	12.70		H	11.50	18	20	4.20	3.00	5.00	3.95	2.82	3.45		
		1.07	1.07	AM022NNNDEH/EU	6.35	12.70		H	9.00	18	20	2.10	1.50	2.50	1.98	1.41	1.78		
		1.06	1.06	AM028NNNDEH/EU	6.35	12.70		H	10.00	18	20	2.60	2.00	3.20	2.45	1.88	2.24		
		1.05	1.05	AM022NNNDEH/EU	6.35	12.70		H	9.00	18	20	2.10	1.50	2.50	1.98	1.41	1.78		
		1.04	1.04	AM028NNNDEH/EU	6.35	12.70		H	10.00	18	20	2.60	2.00	3.20	2.45	1.88	2.24		
		1.03	1.03	AM022NNNDEH/EU	6.35	12.70		H	9.00	18	20	2.10	1.50	2.50	1.98	1.41	1.78		
		1.02	1.02	AM028NNNDEH/EU	6.35	12.70		H	10.00	18	20	2.60	2.00	3.20	2.45	1.88	2.24		
		1.34	1.34_1	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.20	2.26	2.69		
		1.34	1.34_2	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.20	2.26	2.69		
		1.4	1.4	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.20	2.26	2.69		
		1.41	1.41	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.20	2.26	2.69		
		1.42	1.42	AM045NNNDEH/EU	6.35	12.70		H	11.50	18	20	4.20	3.00	5.00	3.95	2.82	3.45		
		1.36	1.36	AM015NNNDEH/EU	6.35	12.70		H	8.50	18	20	1.40	1.10	1.70	1.32	1.04	1.14		

#### 2.1.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_VRF Piętro	AM180JXVHGH/ET	0.75~	~	50						
	Piętro	1.09	1.09_1	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		1	2	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.09	1.09_2	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		1	3	0	0	PC4SUFMAN	PC4SUFMAN
		1.13	1.13	AM028NNNDEH/EU	0.75~1.5	1.5~2.5		1	1	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.20	1.20	AM028NNNDEH/EU	0.75~1.5	1.5~2.5		1	4	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.21	1.21	AM028NNNDEH/EU	0.75~1.5	1.5~2.5		1	5	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.23	1.23	AM028NNNDEH/EU	0.75~1.5	1.5~2.5		1	6	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.24	1.24	AM045NNNDEH/EU	0.75~1.5	1.5~2.5		1	7	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.07	1.07	AM022NNNDEH/EU	0.75~1.5	1.5~2.5		0	9	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.06	1.06	AM028NNNDEH/EU	0.75~1.5	1.5~2.5		1	0	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.05	1.05	AM022NNNDEH/EU	0.75~1.5	1.5~2.5		1	8	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.04	1.04	AM028NNNDEH/EU	0.75~1.5	1.5~2.5		0	8	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.03	1.03	AM022NNNDEH/EU	0.75~1.5	1.5~2.5		0	7	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.02	1.02	AM028NNNDEH/EU	0.75~1.5	1.5~2.5		0	4	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.34	1.34_1	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	5	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.34	1.34_2	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	6	0	0	PC4SUFMAN	PC4SUFMAN
		1.4	1.4	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	0	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.41	1.41	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	3	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.42	1.42	AM045NNNDEH/EU	0.75~1.5	1.5~2.5		0	1	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.36	1.36	AM015NNNDEH/EU	0.75~1.5	1.5~2.5		0	2	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN



## 2.1.3 Equipment list

### 1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
DVM S(NEW)		AM180JXVHGH/ET	1	Wind-Free 4Way Cassette (600x600)		AM015NNNDEH/EU	1
Wind-Free 4Way Cassette (600x600)		AM036NNNDEH/EU	6	Y-Joint		MXJ-YA2815M	1
		AM028NNNDEH/EU	7			MXJ-YA2512M	9
		AM045NNNDEH/EU	2			MXJ-YA1509M	8
		AM022NNNDEH/EU	3				

### 2) Piping length

Length as pipe diameter		6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m	79.05	52.60	3.83	13.98												
2. Gas piping	m			79.05	31.55	8.00	13.04		17.80								
3. High pressure gas piping	m																
Restriction of pipe length		Restriction (Based on installation manual)						Actual piping length				Equivalent piping length					
1. Total piping length	m					1000.00					154.86						
2. Maximum piping length	m					200.00					49.88					54.88	
3. Main pipe length	m										13.98						
4. Piping length between the first branch and the farthest indoor unit	m					45.00/90.00					35.90						
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m					40.00/110.00					1.00						
6. Level difference between indoor units	m					50.00											

### 3) Basic and additional charging ref. amount

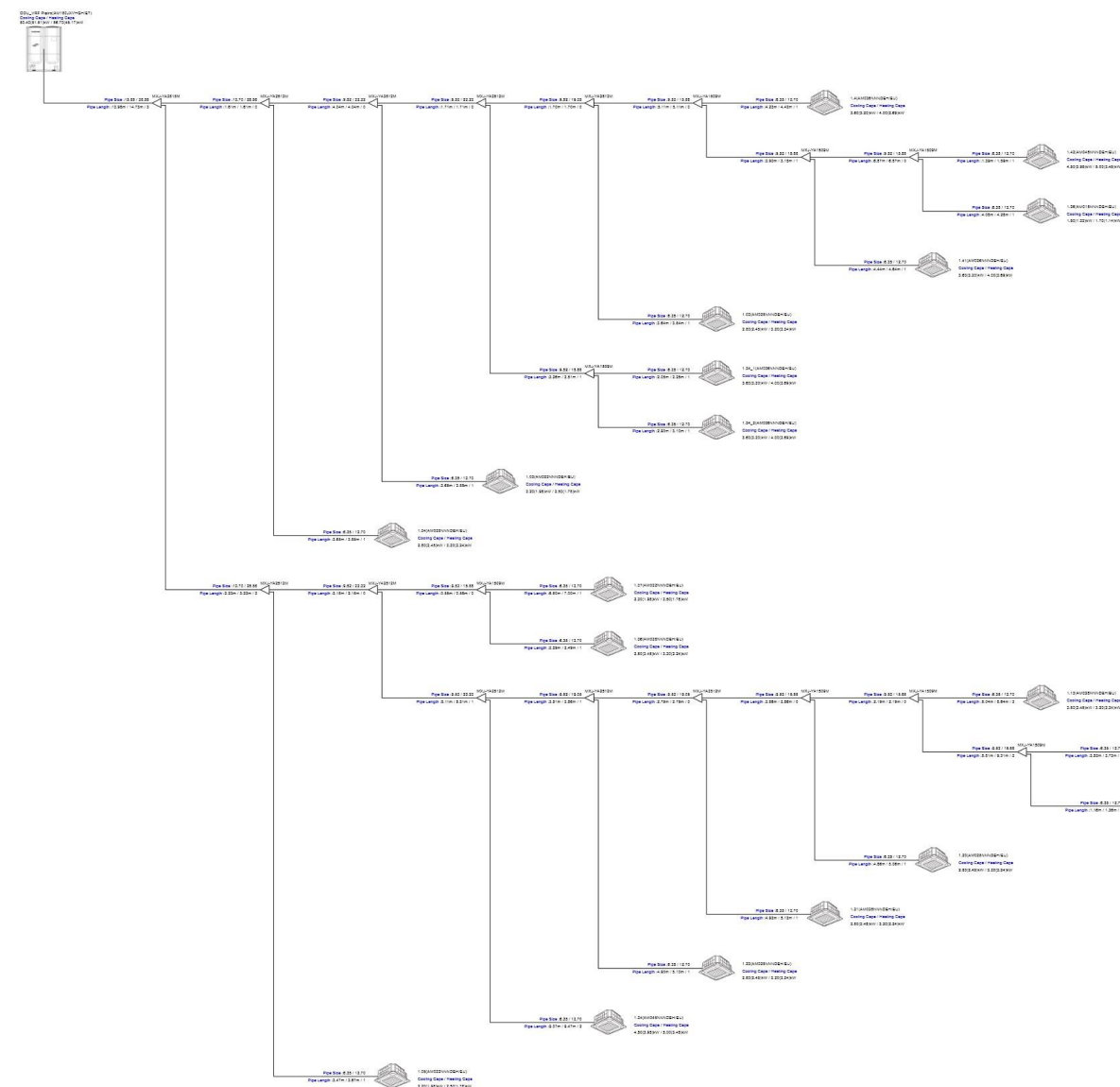
Basic (Factory) charge ref. amount : 8.400 kg

Additional Field charging ref. amount : 13.800 kg

Total number of bendings : 33



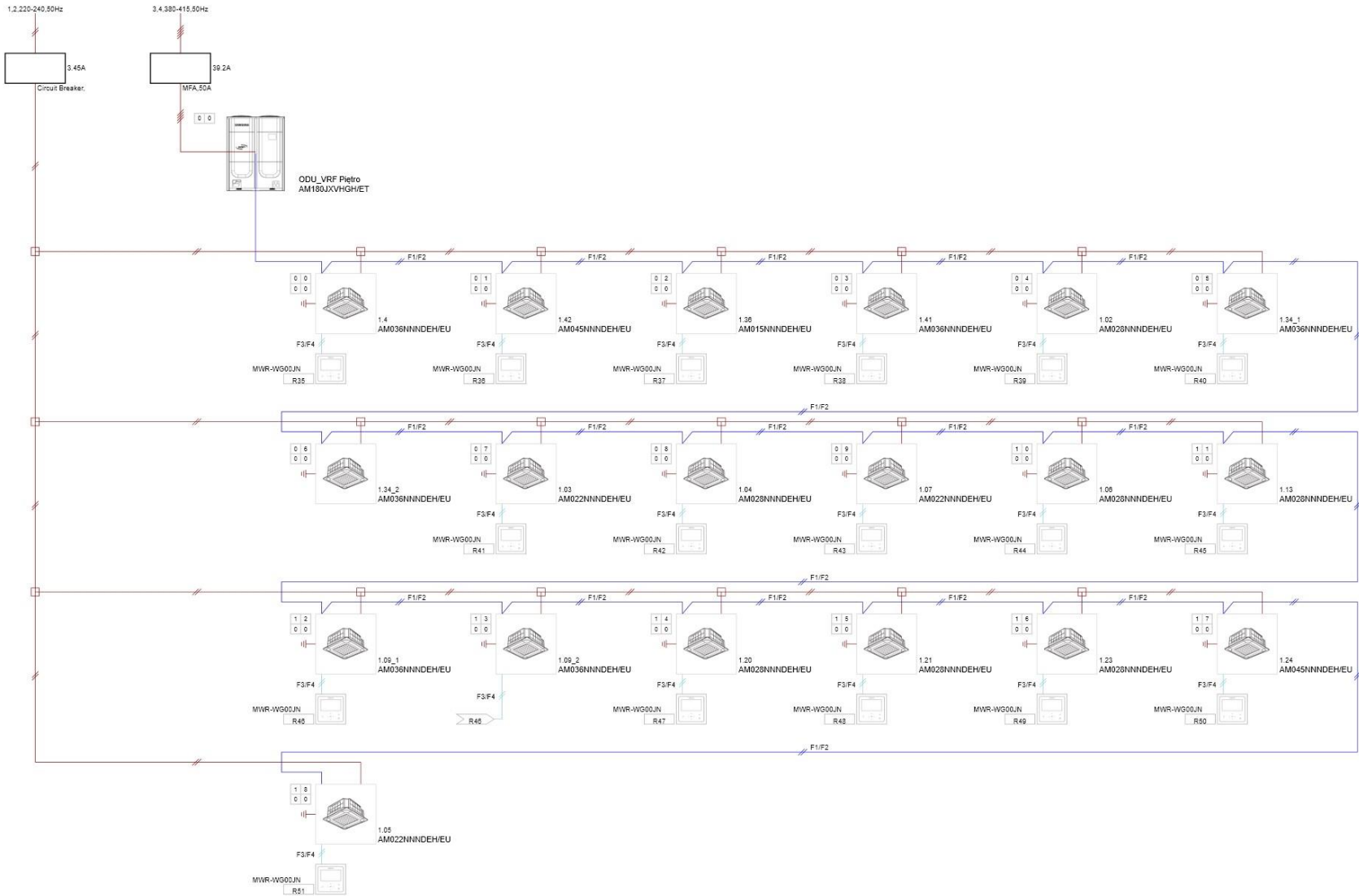
2.1.4 Piping



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



2.1.5 Wiring



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.2 ODU\_VRF Parter

### 2.2.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P. Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity		Combination Ratio	
Dept	Fl	Room	Name	Model name				Mod e	CMM	Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling		Heating
-	-	-	-	-	ø, mm	ø, mm	ø, mm			°C	°C	TC	SHC	TC	TC	SHC	TC
PSP	Dach		ODU_VRF Parter	AM120JXVHGH/ET	12.70	28.58			220.00			36.30		30.60	36.30		30.60
	Parter	0.15	0.15	AM022NNNDEH/EU	6.35	12.70		H	9.00	18	20	2.10	1.50	2.50	1.95	1.39	1.69
		0.16	0.16	AM022NNNDEH/EU	6.35	12.70		H	9.00	18	20	2.10	1.50	2.50	1.95	1.39	1.69
		0.14	0.14	AM022NNNDEH/EU	6.35	12.70		H	9.00	18	20	2.10	1.50	2.50	1.95	1.39	1.69
		0.13	0.13	AM022NNNDEH/EU	6.35	12.70		H	9.00	18	20	2.10	1.50	2.50	1.95	1.39	1.69
		0.12	0.12	AM022NNNDEH/EU	6.35	12.70		H	9.00	18	20	2.10	1.50	2.50	1.95	1.39	1.69
		0.11	0.11	AM045NNNDEH/EU	6.35	12.70		H	11.50	18	20	4.20	3.00	5.00	3.90	2.79	3.28
		0.23	0.23	AM045NNNDEH/EU	6.35	12.70		H	11.50	18	20	4.20	3.00	5.00	3.90	2.79	3.28
		0.09_1	0.09_1	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.16	2.23	2.56
		0.09_2	0.09_2	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.16	2.23	2.56
		0.09_3	0.09_3	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.16	2.23	2.56
		0.09_4	0.09_4	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.16	2.23	2.56
		0.35_1	0.35_1	AM028NNNDEH/EU	6.35	12.70		H	10.00	18	20	2.60	2.00	3.20	2.41	1.86	2.13
		0.35_2	0.35_2	AM028NNNDEH/EU	6.35	12.70		H	10.00	18	20	2.60	2.00	3.20	2.41	1.86	2.13
		0.34	0.34	AM015NNNDEH/EU	6.35	12.70		H	8.50	18	20	1.40	1.10	1.70	1.30	1.02	1.08

### 2.2.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_VRF Parter	AM120JXVHGH/ET	0.75~	~	32						
	Parter	0.15	0.15	AM022NNNDEH/EU	0.75~1.5	1.5~2.5		0	7	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		0.16	0.16	AM022NNNDEH/EU	0.75~1.5	1.5~2.5		0	8	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		0.14	0.14	AM022NNNDEH/EU	0.75~1.5	1.5~2.5		0	9	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		0.13	0.13	AM022NNNDEH/EU	0.75~1.5	1.5~2.5		1	0	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		0.12	0.12	AM022NNNDEH/EU	0.75~1.5	1.5~2.5		1	1	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		0.11	0.11	AM045NNNDEH/EU	0.75~1.5	1.5~2.5		1	3	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		0.23	0.23	AM045NNNDEH/EU	0.75~1.5	1.5~2.5		1	2	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		0.09	0.09_1	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	5	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		0.09_2	0.09_2	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	6	0	0	PC4SUFMAN	PC4SUFMAN
		0.09_3	0.09_3	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	4	0	0	PC4SUFMAN	PC4SUFMAN
		0.09_4	0.09_4	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	3	0	0	PC4SUFMAN	PC4SUFMAN
		0.35_1	0.35_1	AM028NNNDEH/EU	0.75~1.5	1.5~2.5		0	0	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		0.35_2	0.35_2	AM028NNNDEH/EU	0.75~1.5	1.5~2.5		0	1	0	0	PC4SUFMAN	PC4SUFMAN
		0.34	0.34	AM015NNNDEH/EU	0.75~1.5	1.5~2.5		0	2	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN





## 2.2.3 Equipment list

### 1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
DVM S(NEW)		AM120JXVHGH/ET	1	Wind-Free 4Way Cassette (600x600)		AM028NNNDEH/EU	2
Wind-Free 4Way Cassette (600x600)		AM022NNNDEH/EU	5			AM015NNNDEH/EU	1
		AM045NNNDEH/EU	2			MXJ-YA2512M	5
		AM036NNNDEH/EU	4	Y-Joint		MXJ-YA1509M	8

### 2) Piping length

Length as pipe diameter		6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m	52.58	43.34	17.56													
2. Gas piping	m			52.58	31.11	12.23			17.56								
3. High pressure gas piping	m																
Restriction of pipe length		Restriction (Based on installation manual)						Actual piping length				Equivalent piping length					
1. Total piping length	m	1000.00						117.38				50.17					
2. Maximum piping length	m	200.00						47.07									
3. Main pipe length	m							17.56									
4. Piping length between the first branch and the farthest indoor unit	m	45.00/90.00						29.50									
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m	40.00/110.00						4.00									
6. Level difference between indoor units	m	50.00															

### 3) Basic and additional charging ref. amount

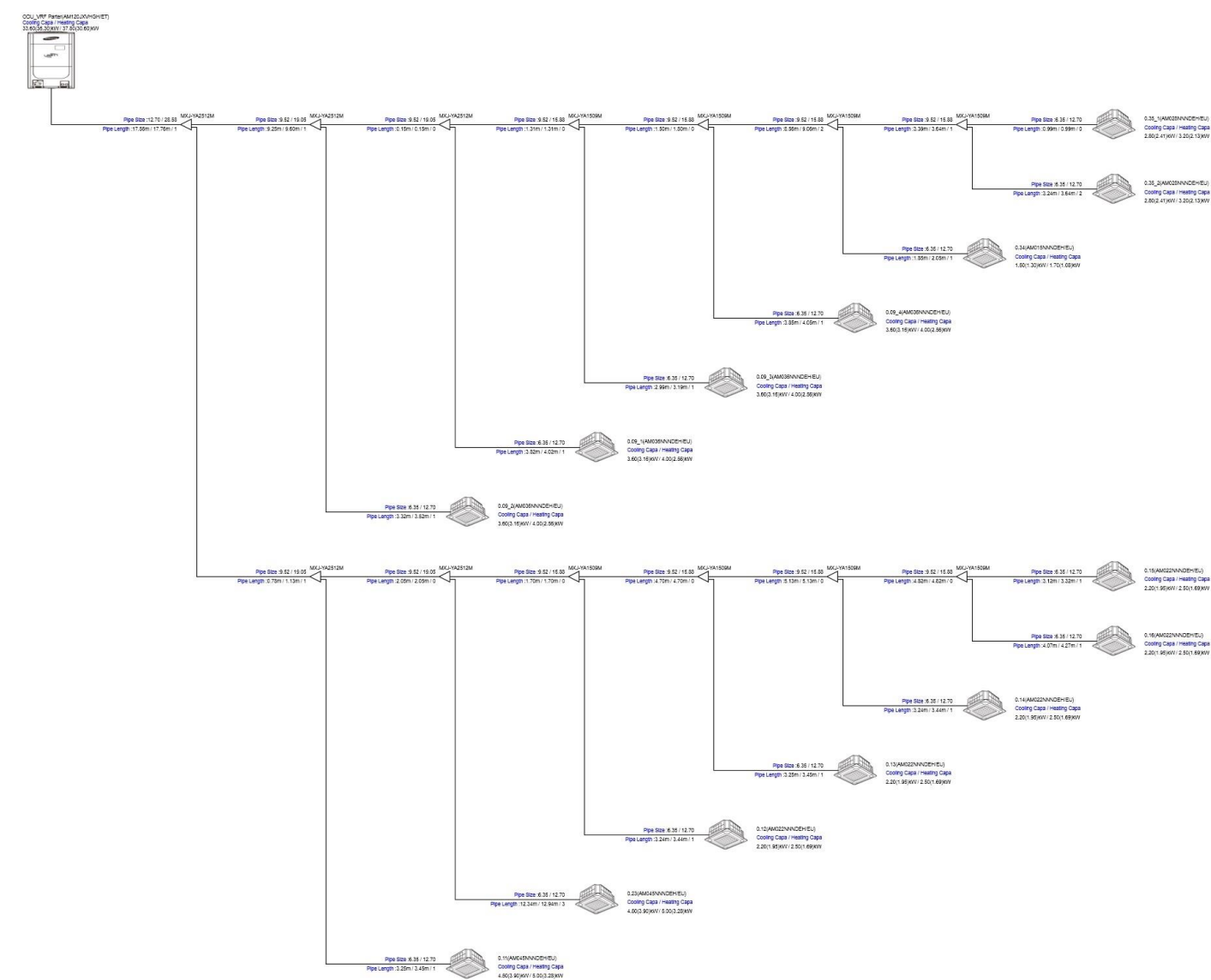
Basic (Factory) charge ref. amount : 6.500 kg

Additional Field charging ref. amount : 10.320 kg

Total number of bendings : 22



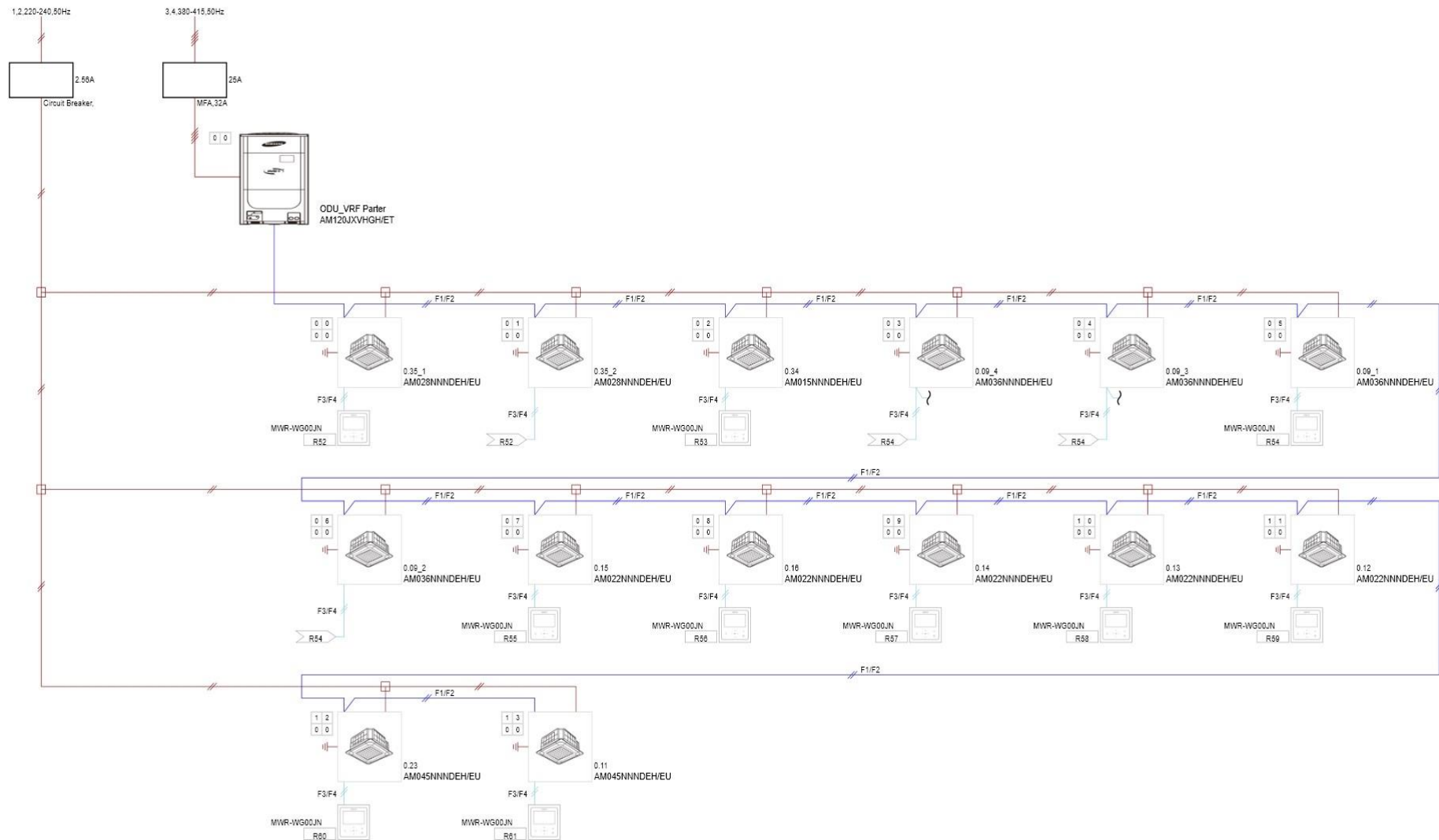
2.2.4 Piping



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.2.5 Wiring



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.3 ODU\_Serwerownia\_1

### 2.3.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P.Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity			Combination Ratio		
Dept	Fl	Room	Name	Model name						Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling		Heating	Cooling	Heating
												TC	SHC	TC	TC	SHC	TC		
-	-	-	-	-	ø, mm	ø, mm	ø, mm	Mod e	CMM	°C	°C	kW	kW	kW	kW	kW	kW	%	%
PSP	Dach		ODU_Serwerownia_1	AC100RXADKG/EU	9.52	15.88			72.00			10.00		11.20	9.17		7.89	100	100
	Parter	0.31 Serwerownia	0.31 Serwerownia_2	AC100RNCDKG/EU	9.52	15.88		H	26.00	19	20	10.00	0.00	11.20	9.17	6.78	7.89		

### 2.3.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_Serwerownia_1	AC100RXADKG/EU	0.75~	~	30						
	Parter	0.31 Serwerownia	0.31 Serwerownia_2	AC100RNCDKG/EU	0.75~	~		0	0	0	0	MIM-B14	MIM-B14

### 2.3.3 Equipment list

1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
SINGLE (NEW)	AC100RXADKG/EU		1	CEILING_R32	AC100RNCDKG/EU		1

2) Piping length

Length as pipe diameter		6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m		35.77														
2. Gas piping	m			35.77													
3. High pressure gas piping	m																
Restriction of pipe length		Restriction (Based on installation manual)					Actual piping length					Equivalent piping length					
1. Total piping length	m	50.00					35.77										
2. Maximum piping length	m	50.00					35.77					37.52					
3. Main pipe length	m																
4. Piping length between the first branch and the farthest indoor unit	m	0.00/0.00					35.77										
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m	30.00/30.00					4.00										
6. Level difference between indoor units	m																

3) Basic and additional charging ref. amount

Basic (Factory) charge ref. amount : 2.700 kg

Additional Field charging ref. amount : 0.290 kg

Total number of bendings : 7

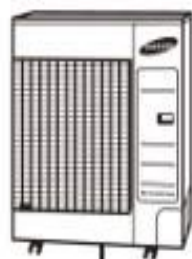


### 2.3.4 Piping

ODU\_Serwerownia\_1(AC100RXADKG/EU)

Cooling Capa / Heating Capa

10.00(9.17)kW / 11.20(7.89)kW



Pipe Size :9.52 / 15.88

Pipe Length :35.77m / 37.52m / 7



0.31 Serwerownia\_2(AC100RNCDKG/EU)

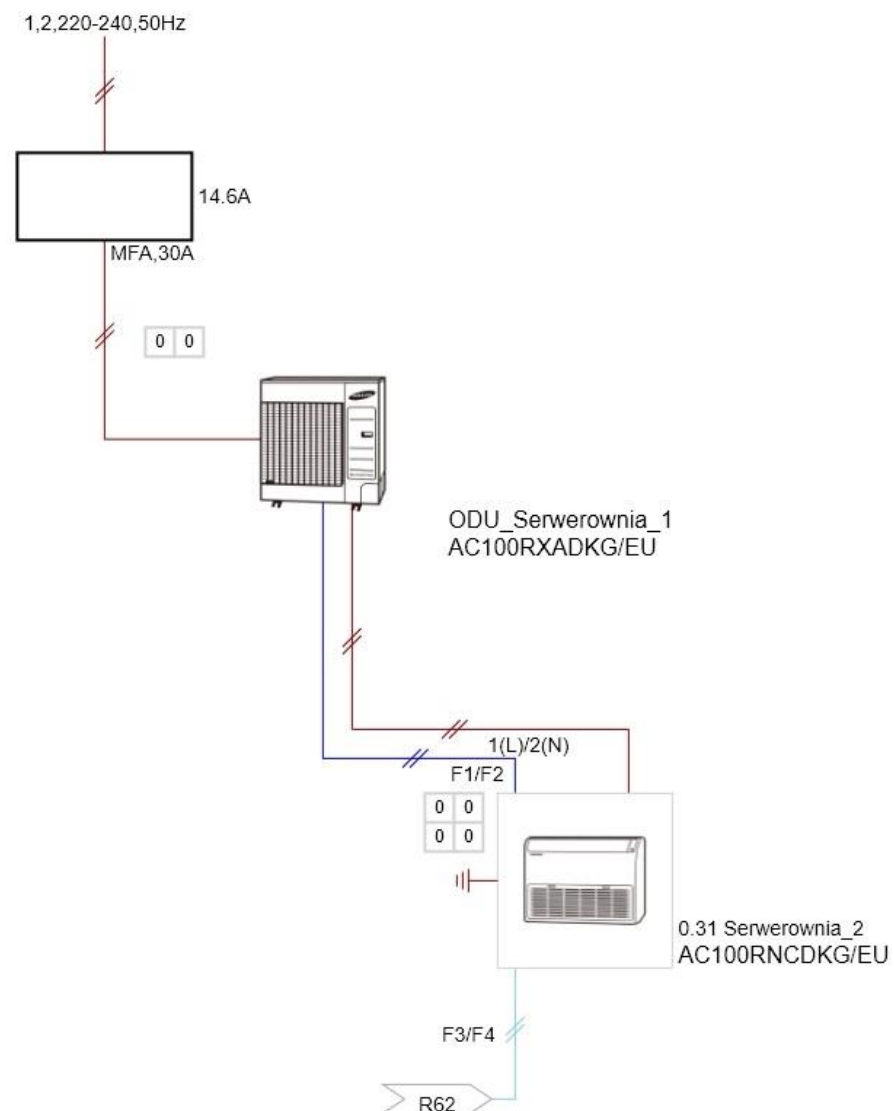
Cooling Capa / Heating Capa

10.00(9.17)kW / 11.20(7.89)kW

- The system configuration may be different from the actual installation conditions, refer to the installation manual.



### 2.3.5 Wiring



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.4 ODU\_Serwerownia\_2

### 2.4.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P.Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity			Combination Ratio		
Dept	Fl	Room	Name	Model name						Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling		Heating	Cooling	Heating
												TC	SHC	TC	TC	SHC	TC		
-	-	-	-	-	ø, mm	ø, mm	ø, mm	Mod e	CMM	°C	°C	kW	kW	kW	kW	kW	kW	%	%
PSP	Dach		ODU_Serwerownia_2	AC100RXADKG/EU	9.52	15.88			72.00			10.00		11.20	9.19		7.91	100	100
	Parter	0.31 Serwerownia	0.31 Serwerownia_1	AC100RNCDKG/EU	9.52	15.88		H	26.00	19	20	10.00	0.00	11.20	9.19	6.80	7.91		

### 2.4.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_Serwerownia_2	AC100RXADKG/EU	0.75~	~	30						
	Parter	0.31 Serwerownia	0.31 Serwerownia_1	AC100RNCDKG/EU	0.75~	~		0	0	0	0	MIM-B14,MWR-WE13N	MWR-WE13N

### 2.4.3 Equipment list

1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
SINGLE (NEW)	AC100RXADKG/EU		1	CEILING_R32	AC100RNCDKG/EU		1

2) Piping length

Length as pipe diameter		6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m		34.71														
2. Gas piping	m			34.71													
3. High pressure gas piping	m																
Restriction of pipe length		Restriction (Based on installation manual)						Actual piping length				Equivalent piping length					
1. Total piping length	m	50.00						34.71									
2. Maximum piping length	m	50.00						34.71				36.21					
3. Main pipe length	m																
4. Piping length between the first branch and the farthest indoor unit	m	0.00/0.00						34.71									
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m	30.00/30.00						4.00									
6. Level difference between indoor units	m																

3) Basic and additional charging ref. amount

Basic (Factory) charge ref. amount : 2.700 kg

Additional Field charging ref. amount : 0.240 kg

Total number of bendings : 6



#### 2.4.4 Piping

ODU\_Serwerownia\_2(AC100RXADKG/EU)

Cooling Capa / Heating Capa

10.00(9.19)kW / 11.20(7.91)kW



Pipe Size :9.52 / 15.88

Pipe Length :34.71m / 36.21m / 6



0.31 Serwerownia\_1(AC100RNCDKG/EU)

Cooling Capa / Heating Capa

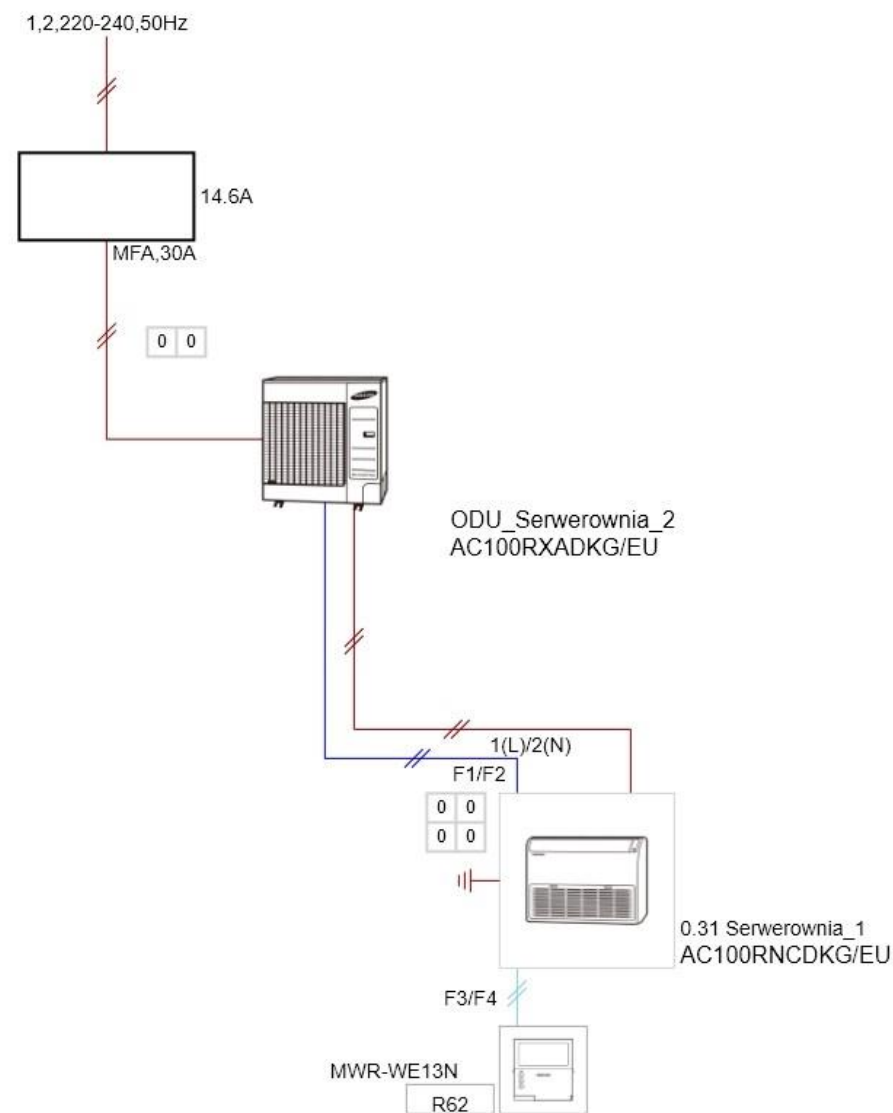
10.00(9.19)kW / 11.20(7.91)kW

- The system configuration may be different from the actual installation conditions, refer to the installation manual.





2.4.5 Wiring



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.5 ODU\_Rozdzielnia

### 2.5.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P. Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity		Combination Ratio	
Dept	Fl	Room	Name	Model name						Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling		Heating
-	-	-	-	-	ø, mm	ø, mm	ø, mm	Mod e	CMM	°C	°C	TC	SHC	TC	TC	SHC	TC
PSP	Dach		ODU_Rozdzielnia	AC026RXADKG/EU	6.35	9.52			29.00			2.60		3.30	2.50		2.50
	Parter	0.28	0.28	AC026RNADKG/EU	6.35	9.52		H	7.70	19	20	2.60	1.90	3.30	2.50	1.81	2.50

### 2.5.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_Rozdzielnia	AC026RXADKG/EU	0.75~	~	12.8						
	Parter	0.28	0.28	AC026RNADKG/EU	0.75~	~		0	0	0	0	MIM-B14,MWR-WE13N	MWR-WE13N

### 2.5.3 Equipment list

1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
SINGLE (NEW)		AC026RXADKG/EU	1	AR5000_R32		AC026RNADKG/EU	1

2) Piping length

Length as pipe diameter		6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m	7.62															
2. Gas piping	m		7.62														
3. High pressure gas piping	m																
Restriction of pipe length		Restriction (Based on installation manual)						Actual piping length				Equivalent piping length					
1. Total piping length	m	20.00						7.62				8.34					
2. Maximum piping length	m	20.00						7.62									
3. Main pipe length	m																
4. Piping length between the first branch and the farthest indoor unit	m	0.00/0.00						7.62									
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m	15.00/15.00						4.00									
6. Level difference between indoor units	m																

3) Basic and additional charging ref. amount

Basic (Factory) charge ref. amount : 0.900 kg

Additional Field charging ref. amount : kg

Total number of bendings : 4



## 2.5.4 Piping

ODU\_Rozdzielnia(AC026RXADKG/EU)

Cooling Capa / Heating Capa

2.60(2.50)kW / 3.30(2.50)kW



Pipe Size :6.35 / 9.52  
Pipe Length :7.62m / 8.34m / 4



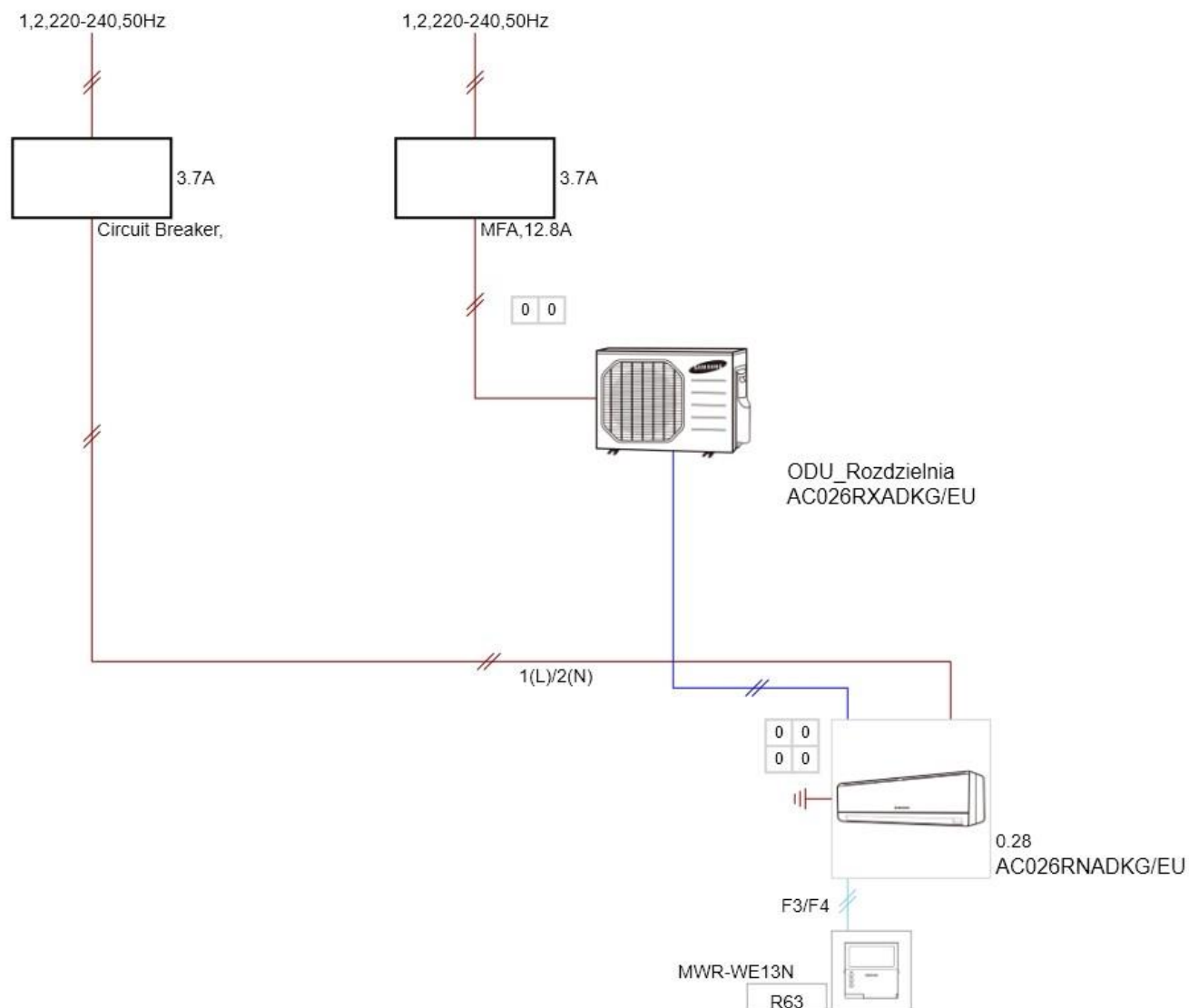
0.28(AC026RNADKG/EU)

Cooling Capa / Heating Capa

2.60(2.50)kW / 3.30(2.50)kW

- The system configuration may be different from the actual installation conditions, refer to the installation manual.

## 2.5.5 Wiring



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.6 ODU\_Siłownia

### 2.6.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P.Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity		Combination Ratio			
Dept	FI	Room	Name	Model name						Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling	Heating	Cooling	Heating	
-	-	-	-	-	Ø, mm	Ø, mm	Ø, mm	Mod e	CMM	°C	°C	kW	kW	kW	kW	kW	kW	%	%
PSP	Dach		ODU_Sitownia	AM050NXMDER/EU	9.52	15.88			100.00			15.03		11.90	15.03		11.90	115.7	112.5
	Piętro	Rezerwa	Rezerwa_1	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.36	2.37	2.61		
		Rezerwa	Rezerwa_2	AM036NNNDEH/EU	6.35	12.70		H	10.50	18	20	3.40	2.40	4.00	3.36	2.37	2.61		
		1.49	1.49_1	AM045NNNDEH/EU	6.35	12.70		H	11.50	18	20	4.20	3.00	5.00	4.15	2.97	3.34		
		1.49	1.49_2	AM045NNNDEH/EU	6.35	12.70		H	11.50	18	20	4.20	3.00	5.00	4.15	2.97	3.34		

### 2.6.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_Siłownia	AM050NXMDER/EU	0.75~	~	32						
	Piętro	Rezerwa	Rezerwa_1	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	3	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		Rezerwa	Rezerwa_2	AM036NNNDEH/EU	0.75~1.5	1.5~2.5		0	2	0	0	PC4SUFMAN	PC4SUFMAN
		1.49	1.49_1	AM045NNNDEH/EU	0.75~1.5	1.5~2.5		0	1	0	0	PC4SUFMAN,MWR-WG00KN	MWR-WG00KN
		1.49	1.49_2	AM045NNNDEH/EU	0.75~1.5	1.5~2.5		0	0	0	0	PC4SUFMAN	PC4SUFMAN



## 2.6.3 Equipment list

### 1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
DVM S Eco(NEW)		AM050NXMDER/EU	1	Wind-Free 4Way Cassette (600x600)		AM045NNNDEH/EU	2
Wind-Free 4Way Cassette (600x600)		AM036NNNDEH/EU	2	Y-Joint		MXJ-YA1509M	3

### 2) Piping length

Length as pipe diameter		6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m	15.28	6.77														
2. Gas piping	m			15.28	6.77												
3. High pressure gas piping	m																
Restriction of pipe length		Restriction (Based on installation manual)						Actual piping length				Equivalent piping length					
1. Total piping length	m	300.00						22.94				13.34					
2. Maximum piping length	m	150.00						11.93									
3. Main pipe length	m	110.00						2.54									
4. Piping length between the first branch and the farthest indoor unit	m	40.00/0.00						9.39									
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m	40.00/50.00						1.00									
6. Level difference between indoor units	m	50.00															

### 3) Basic and additional charging ref. amount

Basic (Factory) charge ref. amount : 3.200 kg

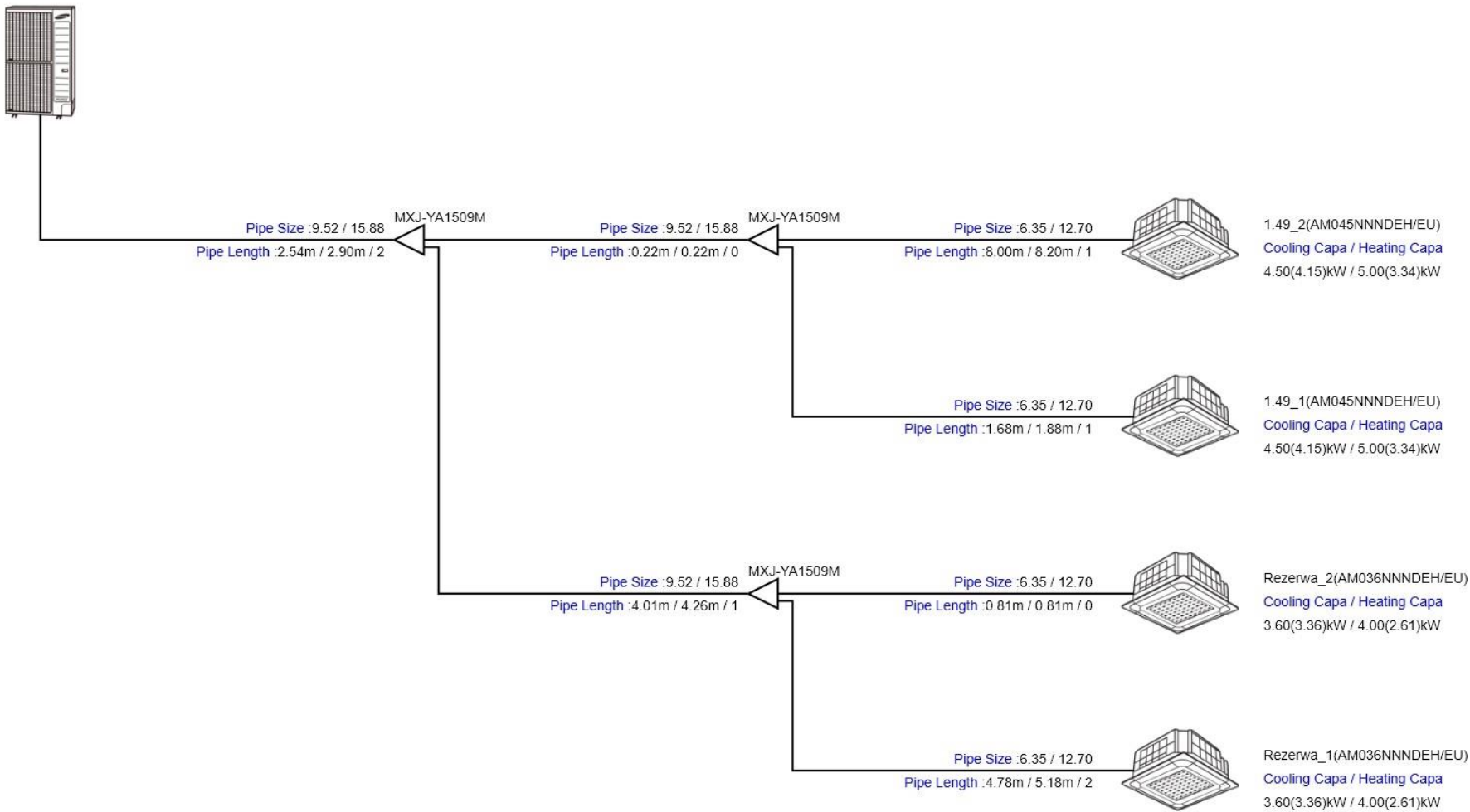
Additional Field charging ref. amount : 2.090 kg

Total number of bendings : 7



2.6.4 Piping

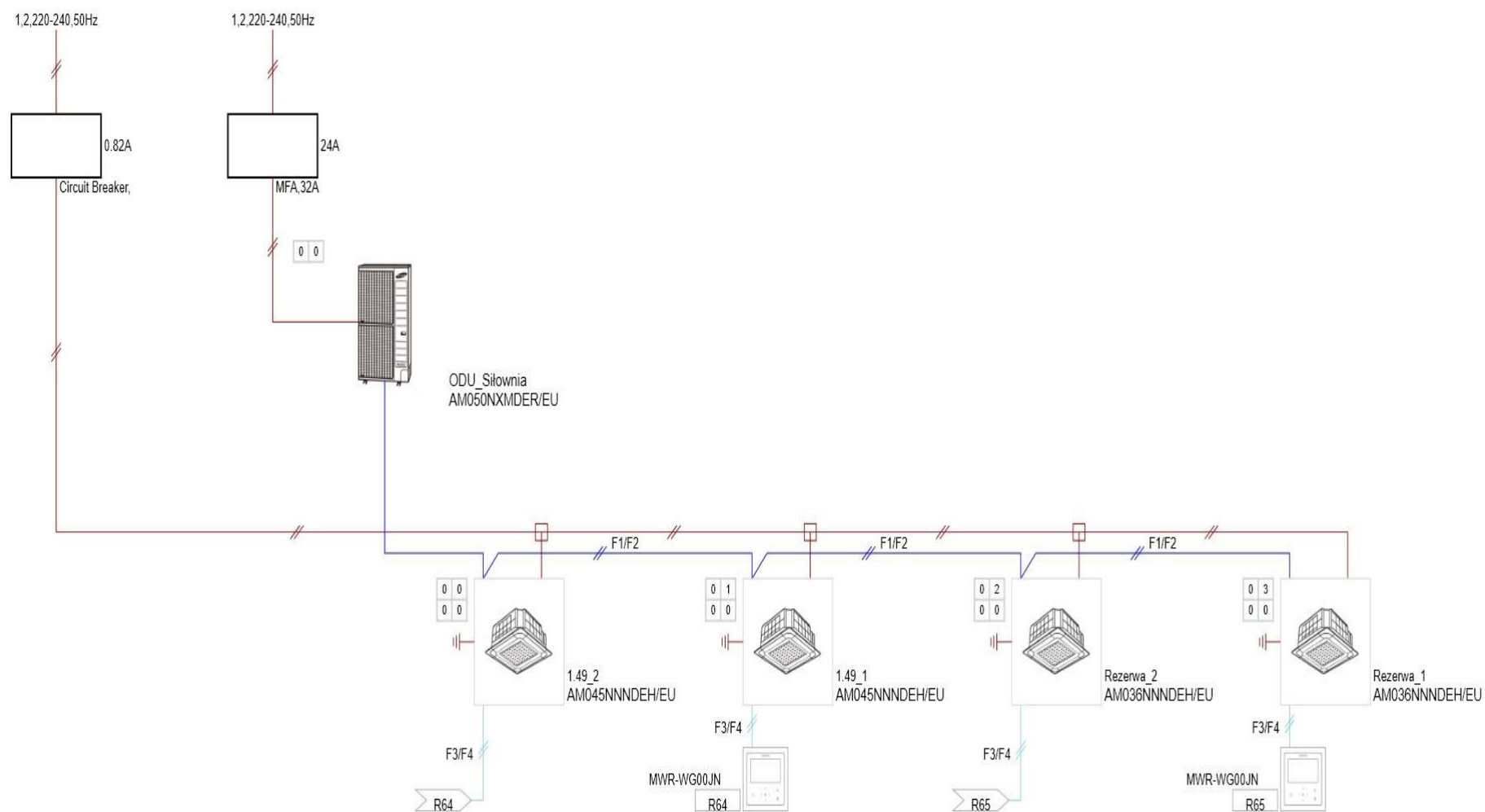
ODU\_Siłownia(AM050NXMDER/EU)  
Cooling Capa / Heating Capa  
14.00(15.03)kW / 16.00(11.90)kW



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.6.5 Wiring



- The system configuration may be different from the actual installation conditions, refer to the installation manual.





## 2.7 ODU\_Monitoring\_1

### 2.7.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P. Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity		Combination Ratio	
Dept	Fl	Room	Name	Model name						Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling		Heating
-	-	-	-	-	ø, mm	ø, mm	ø, mm	Mod e	CMM	°C	°C	TC	SHC	TC	TC	SHC	TC
PSP	Dach		ODU_Monitoring_1	AC026RXADKG/EU	6.35	9.52			29.00			2.60		3.30	2.39		2.39
	Parter	0.29	0.29_1	AC026RNADKG/EU	6.35	9.52		H	7.70	19	20	2.60	1.90	3.30	2.39	1.73	2.39

### 2.7.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_Monitoring_1	AC026RXADKG/EU	0.75~	~	12.8						
	Parter	0.29	0.29_1	AC026RNADKG/EU	0.75~	~		0	0	0	0	MIM-B14,MWR-WE13N	MWR-WE13N

### 2.7.3 Equipment list

1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
SINGLE (NEW)		AC026RXADKG/EU	1	AR5000_R32		AC026RNADKG/EU	1

2) Piping length

Length as pipe diameter		6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m	16.22															
2. Gas piping	m		16.22														
3. High pressure gas piping	m																
Restriction of pipe length		Restriction (Based on installation manual)						Actual piping length				Equivalent piping length					
1. Total piping length	m	20.00						16.22				16.94					
2. Maximum piping length	m	20.00						16.22									
3. Main pipe length	m																
4. Piping length between the first branch and the farthest indoor unit	m	0.00/0.00						16.22									
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m	15.00/15.00						4.00									
6. Level difference between indoor units	m																

3) Basic and additional charging ref. amount

Basic (Factory) charge ref. amount : 0.900 kg

Additional Field charging ref. amount : kg

Total number of bendings : 4

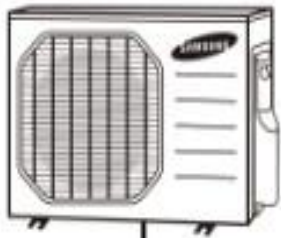


## 2.7.4 Piping

ODU\_Monitoring\_1(AC026RXADKG/EU)

Cooling Capa / Heating Capa

2.60(2.39)kW / 3.30(2.39)kW



Pipe Size :6.35 / 9.52

Pipe Length :16.22m / 16.94m / 4



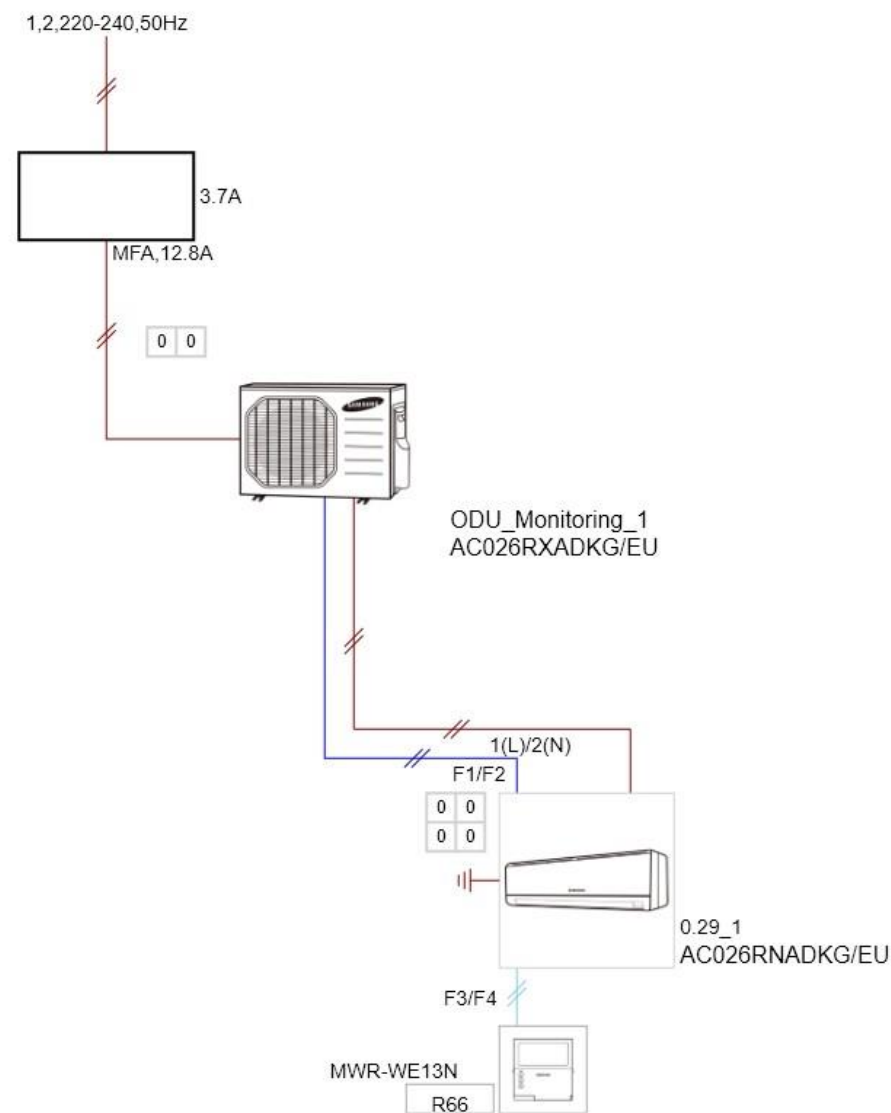
0.29\_1(AC026RNADKG/EU)

Cooling Capa / Heating Capa

2.60(2.39)kW / 3.30(2.39)kW

- The system configuration may be different from the actual installation conditions, refer to the installation manual.

2.7.5 Wiring



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.8 ODU\_Monitoring\_2

### 2.8.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P. Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity		Combination Ratio	
Dept	Fl	Room	Name	Model name						Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling		Heating
-	-	-	-	-	ø, mm	ø, mm	ø, mm	Mod e	CMM	°C	°C	TC	SHC	TC	TC	SHC	TC
PSP	Dach		ODU_Monitoring_2	AC026RXADKG/EU	6.35	9.52			29.00			2.60		3.30	2.41		2.41
	Parter	0.29	0.29_2	AC026RNADKG/EU	6.35	9.52		H	7.70	19	20	2.60	1.90	3.30	2.41	1.74	2.41

### 2.8.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_Monitoring_2	AC026RXADKG/EU	0.75~	~	12.8						
	Parter	0.29	0.29_2	AC026RNADKG/EU	0.75~	~		0	0	0	0	MIM-B14	MIM-B14

### 2.8.3 Equipment list

1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
SINGLE (NEW)		AC026RXADKG/EU	1	AR5000_R32		AC026RNADKG/EU	1

2) Piping length

Length as pipe diameter		6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m	15.12															
2. Gas piping	m		15.12														
3. High pressure gas piping	m																
Restriction of pipe length		Restriction (Based on installation manual)						Actual piping length				Equivalent piping length					
1. Total piping length	m	20.00						15.12				16.02					
2. Maximum piping length	m	20.00						15.12									
3. Main pipe length	m																
4. Piping length between the first branch and the farthest indoor unit	m	0.00/0.00						15.12									
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m	15.00/15.00						4.00									
6. Level difference between indoor units	m																

3) Basic and additional charging ref. amount

Basic (Factory) charge ref. amount : 0.900 kg

Additional Field charging ref. amount : kg

Total number of bendings : 5



## 2.8.4 Piping

ODU\_Monitoring\_2(AC026RXADKG/EU)

Cooling Capa / Heating Capa

2.60(2.41)kW / 3.30(2.41)kW



Pipe Size :6.35 / 9.52

Pipe Length :15.12m / 16.02m / 5



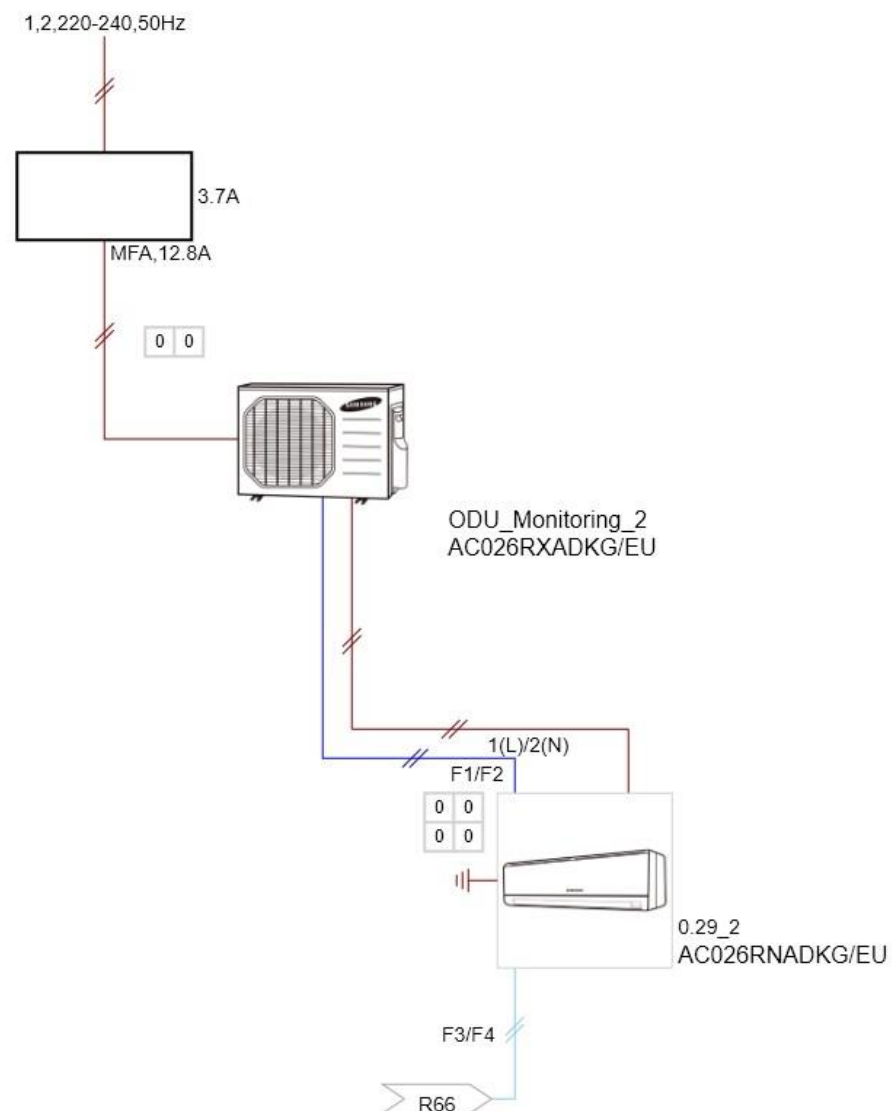
0.29\_2(AC026RNADKG/EU)

Cooling Capa / Heating Capa

2.60(2.41)kW / 3.30(2.41)kW

- The system configuration may be different from the actual installation conditions, refer to the installation manual.

### 2.8.5 Wiring



**- The system configuration may be different from the actual installation conditions, refer to the installation manual.**



## 2.9 ODU\_POM. ŁĄCZNOŚCI\_1

### 2.9.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P.Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity		Combination Ratio	
Dept	Fl	Room	Name	Model name						Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling		Heating
-	-	-	-	-	Ø, mm	Ø, mm	Ø, mm	Mod e	CMM	°C	°C	TC	SHC	TC	TC	SHC	TC
												kW	kW	kW	kW	kW	kW
PSP	Dach		ODU_POM. ŁĄCZNOŚCI_1	AC052RXADKG/EU	6.35	12.70			40.00			5.00		6.00	4.57		4.18
	Parter	0.32	0.32_1	AC052RNADKG/EU	6.35	12.70		H	10.70	19	20	5.00	3.40	6.00	4.57	3.10	4.18

### 2.9.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_POM. ŁĄCZNOŚCI_1	AC052RXADKG/EU	0.75~	~	20.6						
	Parter	0.32	0.32_1	AC052RNADKG/EU	0.75~	~		0	0	0	0	MIM-B14,MWR-WE13N	MWR-WE13N

### 2.9.3 Equipment list

1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
SINGLE (NEW)		AC052RXADKG/EU	1	AR5000_R32		AC052RNADKG/EU	1

2) Piping length

Length as pipe diameter				6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m			25.05															
2. Gas piping	m					25.05													
3. High pressure gas piping	m																		
Restriction of pipe length				Restriction (Based on installation manual)						Actual piping length				Equivalent piping length					
1. Total piping length	m			30.00						25.05				25.05					
2. Maximum piping length	m			30.00										26.45					
3. Main pipe length	m																		
4. Piping length between the first branch and the farthest indoor unit	m			0.00/0.00						25.05									
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m			20.00/20.00						4.00									
6. Level difference between indoor units	m																		

3) Basic and additional charging ref. amount

Basic (Factory) charge ref. amount : 1.200 kg

Additional Field charging ref. amount : 0.230 kg

Total number of bendings : 7



## 2.9.4 Piping

ODU\_POM. ŁĄCZNOŚCI\_1(AC052RXADKG/EU)

Cooling Capa / Heating Capa

5.00(4.57)kW / 6.00(4.18)kW



Pipe Size :6.35 / 12.70

Pipe Length :25.05m / 26.45m / 7



0.32\_1(AC052RNADKG/EU)

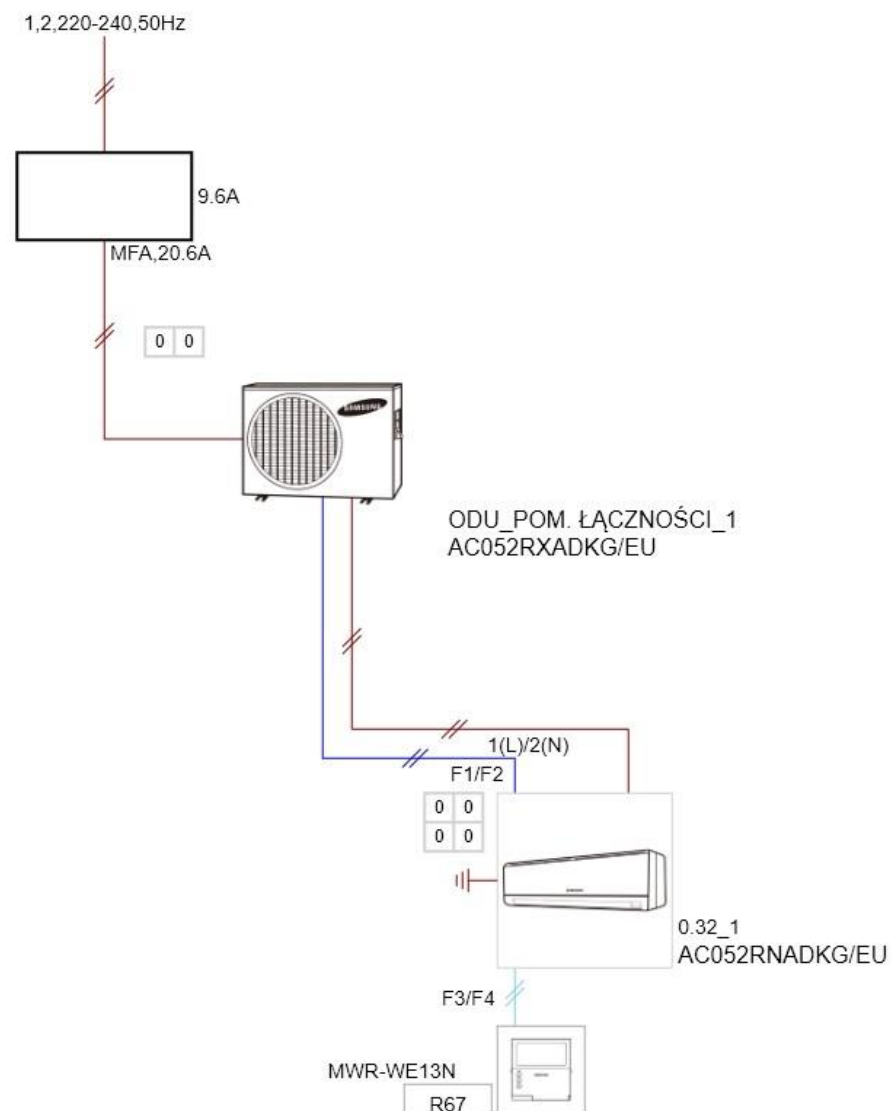
Cooling Capa / Heating Capa

5.00(4.57)kW / 6.00(4.18)kW

- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.9.5 Wiring



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.10 ODU\_POM. ŁĄCZNOŚCI\_2

### 2.10.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe	H.P.Gas Pipe	Airflow		Design condition : Indoor		Max. Capacity @design condition		Simultaneous Operation Capacity		Combination Ratio	
Dept	Fl	Room	Name	Model name						Cooling WB.Temp	Heating DB.Temp	Cooling		Heating	Cooling		Heating
-	-	-	-	-	Ø, mm	Ø, mm	Ø, mm	Mod e	CMM	°C	°C	TC	SHC	TC	TC	SHC	TC
-	-	-	-	-	Ø, mm	Ø, mm	Ø, mm	Mod e	CMM	°C	°C	kW	kW	kW	kW	kW	kW
PSP	Dach		ODU_POM. ŁĄCZNOŚCI_2	AC052RXADKG/EU	6.35	12.70			40.00			5.00		6.00	4.63		4.23
	Parter	0.32	0.32_2	AC052RNADKG/EU	6.35	12.70		H	10.70	19	20	5.00	3.40	6.00	4.63	3.14	4.23

### 2.10.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach		ODU_POM. ŁĄCZNOŚCI_2	AC052RXADKG/EU	0.75~	~	20.6						
	Parter	0.32	0.32_2	AC052RNADKG/EU	0.75~	~		0	0	0	0	MIM-B14	MIM-B14

### 2.10.3 Equipment list

1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
SINGLE (NEW)	AC052RXADKG/EU		1	AR5000_R32	AC052RNADKG/EU		1

2) Piping length

Length as pipe diameter				6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m		22.13																
2. Gas piping	m			22.13															
3. High pressure gas piping	m																		
Restriction of pipe length				Restriction (Based on installation manual)					Actual piping length					Equivalent piping length					
1. Total piping length	m			30.00					22.13					23.13					
2. Maximum piping length	m			30.00					22.13										
3. Main pipe length	m																		
4. Piping length between the first branch and the farthest indoor unit	m			0.00/0.00					22.13										
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m			20.00/20.00					4.00										
6. Level difference between indoor units	m																		

3) Basic and additional charging ref. amount

Basic (Factory) charge ref. amount : 1.200 kg

Additional Field charging ref. amount : 0.180 kg

Total number of bendings : 5



## 2.10.4 Piping

ODU\_POM. ŁĄCZNOŚCI\_2(AC052RXADKG/EU)

Cooling Capa / Heating Capa

5.00(4.63)kW / 6.00(4.23)kW



Pipe Size :6.35 / 12.70

Pipe Length :22.13m / 23.13m / 5



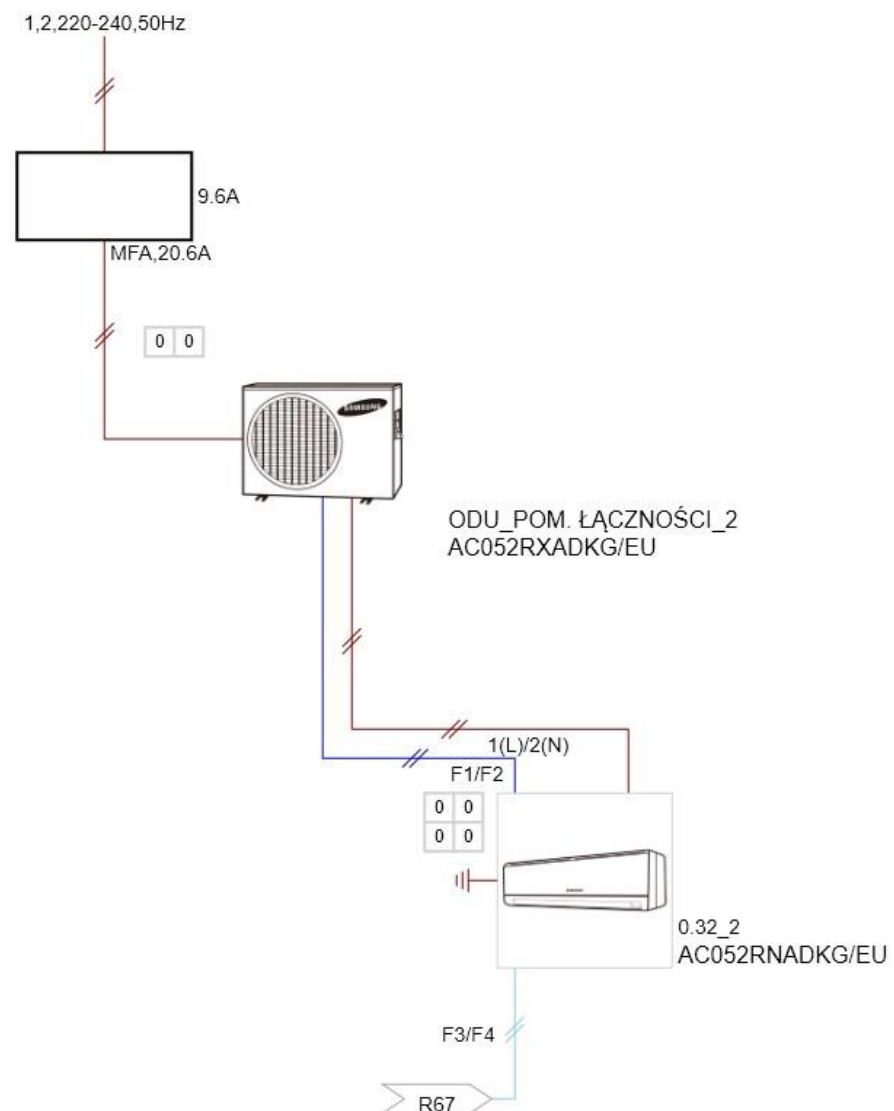
0.32\_2(AC052RNADKG/EU)

Cooling Capa / Heating Capa

5.00(4.63)kW / 6.00(4.23)kW

- The system configuration may be different from the actual installation conditions, refer to the installation manual.

## 2.10.5 Wiring



- The system configuration may be different from the actual installation conditions, refer to the installation manual.



## 2.11 ODU\_NW1

### 2.11.1 Detail Load Profile

1) Design condition: Poland, GARWOLIN, Cooling 30, Heating -18

2) Load profile

Building			Unit		Liquid Pipe	Gas Pipe
Dept	Fl	Room	Name	Model name		
-	-	-	-	-	Ø, mm	Ø, mm
PSP	Dach	NW1	ODU_NW1 AHUKIT_NW1	AC200KXAPNH/EU AHU_200_APNH	9.52	19.05

### 2.11.2 Control

1) This data is for reference only. Verify local, state, and national electric codes. Samsung does not guarantee this data.

2) Configuration

Building			Unit		Communication wires	Power wires	Breaker Fuse	Main Address		RMC Address		Accessories	
Dept	Fl	Room	Name	Model name								Optional accessories	Basic accessories
-	-	-	-	-	mm2	mm2	A						
PSP	Dach	NW1	ODU_NW1 AHUKIT_NW1	AC200JXAPNH/EU AHU_200_APNH	0.75~1.5 0.75~1.5	1.5~ ~	31.25					MXD-K100XN,MWR-WE13N	MWR-WE13N

### 2.11.3 Equipment list

1) Equipment list

Categories	Model name		Qty	Categories	Model name		Qty
SINGLE (NEW)		AC200JXAPNH/EU	1	AHU Kit		AHU_200_APNH	1

2) Piping length

Length as pipe diameter			6.35	9.52	12.70	15.88	19.05	22.22	25.40	28.58	31.75	34.92	38.10	41.28	44.45	47.63	50.80	53.98
1. Liquid piping	m			1.00														
2. Gas piping	m						1.00											
3. High pressure gas piping	m																	
Restriction of pipe length			Restriction (Based on installation manual)					Actual piping length					Equivalent piping length					
1. Total piping length	m		75.00					1.00					1.00					
2. Maximum piping length	m		75.00					1.00					1.00					
3. Main pipe length	m																	
4. Piping length between the first branch and the farthest indoor unit	m		0.00/0.00					1.00										
5. Level difference between outdoor and indoor unit(Max) (OD above ID unit / OD below ID unit)	m		30.00/30.00															
6. Level difference between indoor units	m																	

3) Basic and additional charging ref. amount

Basic (Factory) charge ref. amount : 8.000 kg

Additional Field charging ref. amount : kg

Total number of bendings : 0



## 3. Specification

### 3.1 DVM

#### 3.1.1 Outdoor units

Model name				AM050NXMDER/EU	AM120JXVHGH/ET	AM180JXVHGH/ET
Power supply		Ø, #, V, Hz		1,2,220-240,50Hz	3,4,380-415,50Hz	3,4,380-415,50Hz
Mode		-		HEAT PUMP	HEAT PUMP	HEAT PUMP
Performance	HP/TON		HP/TON	5/3.98	12/9.55	18/14.33
	Capacity(Nominal)	Cooling	kW	14	33.6	50.4
			Kcal/h	12040	28900	43340
		Cooling 46°C	kW	-	-	-
			Kcal/h	N/A	N/A	N/A
		Heating	kW	16	37.8	56.7
			Kcal/h	13760	32510	48760
	-20 °C	Heating(Low ambient temp.)	kW	-	-	-
Power	Power Input(Nominal)	Cooling	kW	3.41	7.57	12.32
		Heating	kW	3.6	8.05	12.01
	Power Input (at specific)		kW	N/A	N/A	N/A
	Current Input(Nominal)	Cooling	A	15.6	12.1	19.8
		Heating	A	16.5	12.9	19.3
	Max. Current Input		A	24	25	39.2
	Circuit Breaker		A	32	32	50
COP	Cooling		-	4.11	4.44	4.09
	Heating		W/W	4.44	4.70	4.72
Compressor	Type		-	Twin BLDC Rotaryx1	SSC Scrollx1	SSC Scrollx2
	Output		kW × n	4.04x1	6.39x1	6.39x2
Fan	Type		-	Propeller / BLDC	Propeller	Propeller
	Output		W	125x2	830	620x2
	Number of Units		EA	2	1	2
	Air Flow Rate		CMM	100.00	220.00	290.00
	External Static Pressure	Max.	mmAq	0	8	8
Piping Connections	Liquid Pipe		Ø,mm(in)	9.52(3/8")	12.7(1/2")	15.88(5/8")
	Gas Pipe		Ø,mm(in)	15.88(5/8")	28.58(1 1/8")	28.58(1 1/8")
	Discharge Gas Pipe		Ø,mm(in)	-(-)	-(-)	-(-)
	Oil Equalizing Pipe		Ø,mm(in)	N/A(N/A)	N/A(N/A)	N/A(N/A)
Field Wiring	Power Source Wire		mm2	-	-	-
	Transmission Cable		mm2	0.75/	0.75/	0.75/
Refrigerant	Type		-	R410A	R410A	R410A
	Factory Charging		kg	3.200	6.500	8.400
Sound	Sound pressure		dB(A)	50	62	63
External Dimension	Net Weight		kg	97.000	196.000	293.000
	Shipping Weight		kg	107.000	212.000	312.000
	Net Dimensions (WxHxD)		mm	940.00x1210.00x330.00	880.00x1695.00x765.00	1295.00x1695.00x765.00
	Shipping Dimensions (WxHxD)		mm	995.00x1388.00x426.00	948.00x1887.00x832.00	1363.00x1887.00x832.00
Operating Temp. Range	Cooling		°C	-5.00~48.00	-5.00~48.00	-5.00~48.00
	Heating		°C	-25.00~26.00	-25.00~24.00	-25.00~24.00



### 3.1.2 Indoor units

Model				AM015NNNDEH/EU	AM022NNNDEH/EU	AM028NNNDEH/EU	AM036NNNDEH/EU	AM045NNNDEH/EU
Power supply			Ø, #, V, Hz	1,2,220-240,50Hz	1,2,220-240,50Hz	1,2,220-240,50Hz	1,2,220-240,50Hz	1,2,220-240,50Hz
Performance	Capacity(Nominal)	Cooling	kW	1.5	2.2	2.8	3.6	4.5
			Kcal/h	1290	1890	2410	3100	3870
		Cooling (SHC)	kW	1	1.5	2	2.5	3.1
			Kcal/h	860	1290	1720	2150	2670
		Heating	kW	1.7	2.5	3.2	4	5
			Kcal/h	1460	2150	2750	3440	4300
Power	Power Input(Nominal)	Cooling	W	18	18	18	20	23
		Heating		18	18	18	20	23
	Current Input	Cooling	A	0.17	0.17	0.17	0.19	0.22
		Heating		0.17	0.17	0.17	0.19	0.22
Fan	Motor	Type	-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
		Output	W	65	65	65	65	65
		Number of unit	EA	1	1	1	1	1
	Air Flow Rate	H/M/L (UL)	CMM	8.50/7.20/6.50	9.00/7.70/6.50	10.00/8.50/7.50	10.50/9.00/7.50	11.50/10.20/9.00
	External Pressure	Min / Std / Max	mmAq	-	-	-	-	-
Piping Connections	Liquid Pipe		Ø,mm(in)	6.35(1/4")	6.35(1/4")	6.35(1/4")	6.35(1/4")	6.35(1/4")
	Gas Pipe		Ø,mm(in)	12.7(1/2")	12.7(1/2")	12.7(1/2")	12.7(1/2")	12.7(1/2")
	Drain Pipe		Ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field Wiring	Power Source Wire		mm2	1.5~2.5	1.5~2.5	1.5~2.5	1.5~2.5	1.5~2.5
	Transmission Cable		mm2	0.75/1.5	0.75/1.5	0.75/1.5	0.75/1.5	0.75/1.5
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure	High / Low	dBA	30/23	32/25	33/26	34/26	36/32
Dimensions	Net Weight		kg	11.700	12.000	12.000	12.000	12.000
	Shipping Weight		kg	13.700	14.000	14.000	14.000	14.000
	Net Dimensions (WxHxD)		mm	575.00x250.00x575.00	575.00x250.00x575.00	575.00x250.00x575.00	575.00x250.00x575.00	575.00x250.00x575.00
	Shipping Dimensions (WxHxD)		mm	623.00x298.00x653.00	623.00x298.00x653.00	623.00x298.00x653.00	623.00x298.00x653.00	623.00x298.00x653.00
Panel Size	Panel model		-	PC4SUFMAN	PC4SUFMAN	PC4SUFMAN	PC4SUFMAN	PC4SUFMAN
	Panel Net Weight		kg	2.700	2.700	2.700	2.700	2.700
	Shipping Weight		kg	4.000	4.000	4.000	4.000	4.000
	Net Dimensions (WxHxD)		mm	620.00x57.00x620.00	620.00x57.00x620.00	620.00x57.00x620.00	620.00x57.00x620.00	620.00x57.00x620.00
	Shipping Dimensions (WxHxD)		mm	670.00x120.00x670.00	670.00x120.00x670.00	670.00x120.00x670.00	670.00x120.00x670.00	670.00x120.00x670.00



## 3.2 CAC

### 3.2.1 Outdoor units & Indoor units

Model name				AC026RXADKG/EU	AC026RNADKG/EU	AC052RXADKG/EU	AC052RNADKG/EU	AC100RXADKG/EU	AC100RNCDKG/EU
Power supply				Ø, #, V, Hz	1,2,220-240,50Hz	1,2,220-240,50Hz	1,2,220-240,50Hz	1,2,220-240,50Hz	1,2,220-240,50Hz
Mode				-	HEAT PUMP	HEAT PUMP	HEAT PUMP	HEAT PUMP	HEAT PUMP
Performance	HP			HP					
	Capacity(Nominal)	Cooling (Min. / Std. / Max.)	kW	0.96/2.6/3.6		1.3/5/6.5		3.001/9.9996/12.0159	
			Kcal/h	830/2240/3100		1120/4300/5590		2580/8600/10330	
		Cooling 46°C	kW	-		-		-	
			Kcal/h	-		-		-	
		Heating (Min./Std./Max.)	kW	1/3.3/4		1.5/6/6.25		2.198/11.1983/15.5035	
		Heating (Min./Std./Max.)	Kcal/h	860/2840/3440		1290/5160/5380		1890/9630/13330	
		Heating (Low ambient temp.)	kW	-		-		-	
	Kcal/h		-		-		-		
Energy Grade (C) / Energy Grade (H)			-	6.6 (A++)/4.0 (A+)		6.2 (A++)/3.9 (A)		6.1 (A++)/4.0 (A+)	
Power	Power Input(Nominal)	Cooling (Min. / Std. / Max.)	kW	0.18/0.74/1.2		0.4/2.2/2.3		0.6/3.28/4.7	
		Heating (Min./Std./Max.)	kW	0.21/1.1/1.45		0.34/2.15/3.15		0.46/3.25/5.4	
	Power Input		kW	-		-		-	
	Current Input	Cooling (Min. / Std. / Max.)	A	1.4/3.7/5.5		2.6/9.6/10.1		3/14.6/20.4	
		Heating (Min./Std./Max.)		1.3/5.1/7		2.3/9.4/14		2.5/14.2/23	
	Current Input(Specific)			11.6		18.1		26.5	
	Circuit Breaker (MCCB+ELB / ELCB)		A	12.8		20.6		30	
COP	Nominal Cooling / Nominal Heating		- / W/W	3.51/3.00		2.27/2.79		3.05/3.45	
Compressor	Type		-	Single BLDC Rotaryx1		Twin BLDC Rotaryx1		Twin BLDC Rotaryx1	
	Output		kW × n	0.865x1		1.51x1		2.82x1	
Fan	Type		-	Propeller/BLDC		Propeller/BLDC		Propeller	
	Output		W	40	27	125	27	125	244
	Number of Units		EA	1	1	1	1	1	1
	Air Flow Rate		CMM	29.00	7.70	40.00	10.70	72.00	26.00
	External Static Pressure	Min. / Std. / Max.	mmAq	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-
Piping Connections	Liquid Pipe		Ø,mm(in)	6.35(1/4")x1	6.35(1/4")x1	6.35(1/4")x1	6.35(1/4")x1	9.52(3/8")x1	9.52(3/8")x1
	Gas Pipe		Ø,mm(in)	9.52(3/8")x1	9.52(3/8")x1	12.7(1/2")x1	12.7(1/2")x1	15.88(5/8")x1	15.88(5/8")x1
	Drain Pipe		Ø,mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
	Installation Limitation	Max. Length and height	m	24.9997/20.001	24.9997/20.001	35.0002/30.0015	35.0002/30.0015	55.0012/49.9994	55.0012/49.9994
Field Wiring	Power Source Wire		mm2						
	Transmission Cable		mm2	0.75/	0.75/	0.75/	0.75/	0.75/	0.75/
Refrigerant	Type / Factory charging		-	R32/0.900		R32/1.200		R32/2.700	
Sound	Sound pressure	OD: Max, ID: High / Low	dB(A)	46		48		52	
External Dimension	Net Weight		kg	32.500	7.600	43.500	10.800	75.000	42.000
	Shipping Weight		kg	35.500	9.000	46.500	12.600	80.000	48.000
	Net Dimensions (WxHxD)		mm	790.00x548.00x285.0	750.00x249.00x246	880.00x638.00x310.0	896.00x261.00x261	940.00x998.00x330.0	1650.00x235.00x675
	Shipping Dimensions (WxHxD)		mm	913.00x622.00x371.0	800.00x298.00x302.0	1023.00x742.00x413.0	956.00x317.00x335.0	995.00x1096.00x426.0	1739.00x321.00x758.0
Panel Size	Panel model		-						
	Panel Net Weight		kg						
	Shipping Weight		kg						
Operating Temp. Range	Cooling		°C	-15.00~46.00		-15.00~50.00		-15.00~50.00	
	Heating		°C	-20.00~24.00		-20.00~24.00		-20.00~24.00	





Model name			AC200KXAPNH/EU		AHU_200_APNH				
Power supply			ø, #, V, Hz	3,4,380-415,50Hz	1,2,220-240,50Hz				
Mode			-	HEAT PUMP	HEAT PUMP				
Performance	HP		HP						
	Capacity(Nominal)	Cooling (Min. / Std. / Max.)	kW	-/20/-					
			Kcal/h	-/17200/-					
		Cooling 46°C	kW	-					
			Kcal/h	-					
		Heating (Min./Std./Max.)	kW	-/22/-					
		Heating (Min./Std./Max.)	Kcal/h	-/18920/-					
		Heating (Low ambient temp.)	kW	-					
		Kcal/h	-						
Energy Grade (C) / Energy Grade (H)			-	-/-					
Power	Power Input(Nominal)	Cooling (Min. / Std. / Max.)	kW	-/6.45/-					
		Heating (Min./Std./Max.)	kW	-/6.54/-					
	Power Input		kW	-					
	Current Input	Cooling (Min. / Std. / Max.)	A	-/-/-					
		Heating (Min./Std./Max.)		-/-/-					
	Current Input(Specific)			25					
Circuit Breaker (MCCB+ELB / ELCB)		A	31.25						
COP	Nominal Cooling / Nominal Heating		- / W/W	-/-					
Compressor	Type		-	BLDC Scrollx1					
	Output		kW × n	x1					
Fan	Type		-	Propeller					
	Output		W						
	Number of Units		EA	1	0				
	Air Flow Rate		CMM	176.00					
	External Static Pressure	Min. / Std. / Max.	mmAq	-/-/-	-/-/-				
Piping Connections	Liquid Pipe		ø,mm(in)	9.52(3/8")x1	9.52(3/8")x1				
	Gas Pipe		ø,mm(in)	19.05(3/4")x1	19.05(3/4")x1				
	Drain Pipe		ø,mm						
	Installation Limitation	Max. Length and height	m	74.9991/74.9991	74.9991/74.9991				
Field Wiring	Power Source Wire		mm2						
	Transmission Cable		mm2	0.75/1.5	0.75/1.5				
Refrigerant	Type / Factory charging		-	R410A/8.000					
Sound	Sound pressure	OD: Max, ID: High / Low	dB(A)	57					
External Dimension	Net Weight		kg	155	160.000				
	Shipping Weight		kg		-				
	Net Dimensions (WxHxD)		mm		2800.00x760.00x100				
	Shipping Dimensions (WxHxD)		mm		-x-x-				
Panel Size	Panel model		-						
	Panel Net Weight		kg						
	Shipping Weight		kg						
Operating Temp. Range	Cooling		°C		-15.00~50.00				
	Heating		°C		-20.00~24.00				



## 4. Total Equipment List

Category	Model Name	Qty	Note	Unit Cost	Amount
Outdoor Unit	AM120JXVHGH/ET	1	DVM S(NEW) (Premium 2017 Erp)	0	0
	AM180JXVHGH/ET	1	DVM S(NEW) (Premium 2017 Erp)	0	0
	AM050NXMDER/EU	1	DVM S Eco(NEW) (Standard 2018)	0	0
	AC026RXADKG/EU	3	SINGLE (NEW) (Heat Pump)	0	0
	AC052RXADKG/EU	2	SINGLE (NEW) (Heat Pump)	0	0
	AC100RXADKG/EU	2	SINGLE (NEW) (Heat Pump)	0	0
	AC200KXAPNH/EU	1	SINGLE (NEW) (Heat Pump)	0	0
	AC100RNCDKG/EU	2	CEILING_R32	0	0
Indoor Unit	AHU_200_APNH	1	AHU Kit	0	0
	AM015NNNDEH/EU	2	Wind-Free 4Way Cassette (600x600)	0	0
	AM022NNNDEH/EU	8	Wind-Free 4Way Cassette (600x600)	0	0
	AM028NNNDEH/EU	9	Wind-Free 4Way Cassette (600x600)	0	0
	AM036NNNDEH/EU	12	Wind-Free 4Way Cassette (600x600)	0	0
	AM045NNNDEH/EU	6	Wind-Free 4Way Cassette (600x600)	0	0
	AC026RNADKG/EU	3	AR5000_R32	0	0
	AC052RNADKG/EU	2	AR5000_R32	0	0
	MXJ-YA1509M	1	the first refnet joint	0	0
	MXJ-YA2512M	1	the first refnet joint	0	0
Piping	MXJ-YA2815M	1	the first refnet joint	0	0
	MXJ-YA1509M	18	refnet joint	0	0
	MXJ-YA2512M	13	refnet joint	0	0
	MIM-B14	7	EXTERNAL CONTACT CONTROLLER	0	0
Optional Accessories	PC4SUFMAN	37	4Way CASSETTE (600x600) PANEL	0	0
	MXD-K100XN	1	AHU KIT	0	0
	MWR-WE13N	4	WIRED REMOTE CONTROLLER	0	0
	MWR-WG00KN	29	WIRED REMOTE CONTROLLER	0	0
Ref. Pipe	6,35	233,05	m	0	0
	9,52	233,7	m	0	0
	12,7	215,48	m	0	0
	15,88	153,89	m	0	0
	19,05	41,78	m	0	0
	22,22	13,04	m	0	0
	28,58	35,36	m	0	0
Additional Ref. Amount	R32	0,94	kg	0	0
	R410A	26,21	kg	0	0

