

Report

Project

Customer: GMS
Project Name: 30A Highate Road
Location: United Kingdom, LONDON/HEATHROW
Date: 2023-11-22

Designer

Name: SEACE
Phone: Julius Rillera
Email: j.rillera@samsung.com
Address:

Software

Version: 2.0.0.99
DB version: 20231117-144500

Table of Abbreviations

Abbreviation	Description
Add. Ref.	Additional Refrigerant
AM	Airflow Mode
Block Load	Block Load
CM	Cooling Operation Mode
Corr. Capa	Correction Capacity
Corr. PI	Correction Power Input
CR	Combination Ratio
DB	Dry Bulb Temperature
Des Temp	Design Temperature
Dis. Temp.	Discharge Temperature
Equip. Name	Equipment Name
EWT	Entering Water Temperature
FR	Flow Rate
HM	Heating Operation Mode
IDU	Indoor Unit
LWT	Leaving Water Temperature
Max. Capa	Maximum Capacity
Min. HOR	Minimum Heating Operation Ratio
ODU	Outdoor Unit
Op. WF Range	Operating Water Flow Range
Op. WT Range	Operating Water Temperature Range
Operating Temp. Range	Operating Temperature Range
PHE	Plate Heat Exchanger
Pipe Mat.	Piping Material
PL	Pressure Loss
PWL	Sound Power level
Ref. Pipe	Refrigerant Pipe
Rq. Vent. Vol.	Required Ventilation Volume
SHC	Sensible Heat Capacity
SPL	Sound Pressure Level
TC	Total Capacity
WB	Wet Bulb Temperature
47/43, 120	DB / WB, LWT (for DVM Chiller Heating capacity)

Equipment List

Type	Model Code	Description			Unit	Qty.
ODU	AM060BXMDER/EU	DVM S Eco Heat Recovery			EA	1
	AM040BXMDEH/EU	DVM S Eco Heat Pump			EA	1
	AM080BXMWGH/EU	DVM S Eco Heat Pump			EA	1
	AC026BXAPKG/EU	CAC Universal Heat Pump			EA	1
IDU	AM056KN4DEH/EU	360			EA	8
	AM015TNVDKH/EU	Wall Mounted			EA	3
	AC026BNAPKG/EU	GEO			EA	1
Pipe Mat.	MXJ-YA1509M	Y-joint			EA	5
	MXJ-YA2512M	Y-joint			EA	3
Controller	MWR-WG00JN	Wired remote controller			EA	6
	MCM-A300N	Touch centralized controller			EA	1
Accessory	PC4NUNMAN	Panel, 360, Circle, White			EA	8
Add. Ref.	R32	Refrigerant			kg	-
	R410A	Refrigerant			kg	6.32
Type	Size	Length [m] / Quantity [EA]				
		Liquid Pipe	Gas Pipe	H.P. Gas	Total	
Ref. Pipe	6.35(1/4")	36.00	0.00	0.00	36.00	
	9.52(3/8")	24.00	3.00	0.00	27.00	
	12.7(1/2")	0.00	33.00	0.00	33.00	
	15.88(5/8")	0.00	15.00	0.00	15.00	
	19.05(3/4")	0.00	9.00	0.00	9.00	

Piping

System (01. Unit 1)

Design Condition

Design Condition (Air)	Outdoor		Indoor	
	CM	HM	CM	HM
Temperature (DB/WB) [°C]	28.3 / 18.7	-3.1 / -5.6	27.0 / 19.0	20.0 / 15.0
Altitude Correction	-			

Installation

Type	Floor	Room Name	Equip. Name	Model Code
ODU	1F	-	01. Unit 1	AM040BXMDEH/EU
IDU	1F	-	FCU1	AM056KN4DEH/EU
		-	FCU2	AM056KN4DEH/EU

Outdoor Unit

Equip. Name	Model Code	CR [%]	Max. Capa. [kW]		Corr. Capa. [kW]	
			CM	HM	CM	HM
01. Unit 1	AM040BXMDEH/EU	92.56	11.21	11.61	11.20	11.61

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°C]		Max. Capa. [kW]			Corr. Capa. [kW]		
			CM	HM	CM		HM	CM		HM
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
FCU1	AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.60	3.90	5.80
FCU2	AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.60	3.90	5.80

Accessory

Equip. Name	Model Code	Address				Accessory
		Main		RMC		
01. Unit 1	AM040BXMDEH/EU	-	-	-	-	
FCU1	AM056KN4DEH/EU	-	-	-	-	PC4NUNMAN
FCU2	AM056KN4DEH/EU	-	-	-	-	PC4NUNMAN

Piping (Continued)

System (01. Unit 1) (Continued)

Combination Ratio

Model Code	CR [%]	Operation Mode	Min. HOR [%]	Block Load [kW]		Max. Capacity [kW]	
				CM	HM	CM	HM
AM040BXMDEH/EU	92.56	HP	-	-	-	11.20	11.61

System Check Result

Checklist	Restriction Value	Design Result
Long pipe length is 6.30 m (Restriction: 50.00 m).	50.00 m	6.30 m
Total pipe length is 9.30 m (Restriction: 150.00 m).	150.00 m	9.30 m
Main pipe length is 3.00 m (Restriction: 40.00 m).	40.00 m	3.00 m
Pipe length from first Y-Joint to the farthest IDU is 3.30 m (Restriction: 40.00 m).	40.00 m	3.30 m
Height difference between ODU and IDU is 0.00 m (restriction: 30.00 m) (ODU higher than IDUs).	30.00 m	0.00 m
Height difference between ODU and IDU is 2.00 m (restriction: 25.00 m) (ODU lower than IDUs).	25.00 m	2.00 m
Height difference between IDUs when there is no wall mounts with EEV is 0.00 m (restriction: 15.00 m).	15.00 m	0.00 m

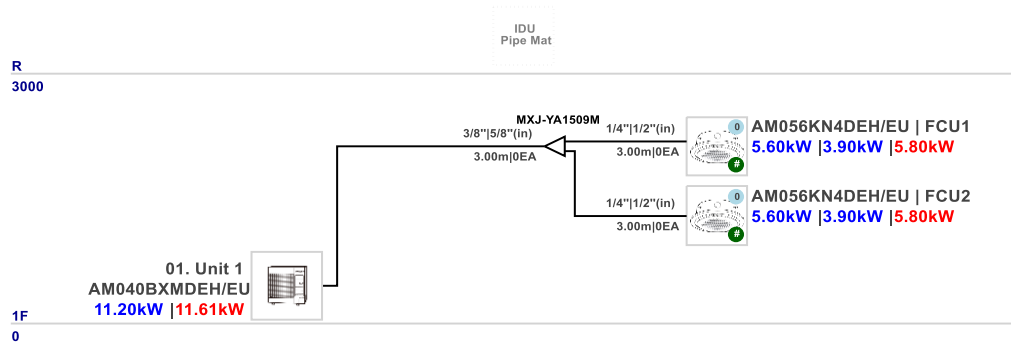
Refrigerant

Factory Charging and Additional Refrigerant Amount	Refrigerant Amount [kg]
Factory Charging Refrigerant Amount	2.00
Additional Refrigerant Amount	1.22
Total	3.22

Piping (Continued)

System (01. Unit 1) (Continued)

Piping Diagram



-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Piping (Continued)

System (02. Unit 2)

Design Condition

Design Condition (Air)	Outdoor		Indoor	
	CM	HM	CM	HM
Temperature (DB/WB) [°C]	28.3 / 18.7	-3.1 / -5.6	27.0 / 19.0	20.0 / 15.0
Altitude Correction	-			

Installation

Type	Floor	Room Name	Equip. Name	Model Code
ODU	1F	-	02. Unit 2	AM080BXMWGH/EU
IDU	1F	-	FCU3	AM056KN4DEH/EU
		-	FCU4	AM056KN4DEH/EU
		-	FCU5	AM056KN4DEH/EU
		-	FCU6	AM056KN4DEH/EU

Outdoor Unit

Equip. Name	Model Code	CR [%]	Max. Capa. [kW]		Corr. Capa. [kW]	
			CM	HM	CM	HM
02. Unit 2	AM080BXMWGH/EU	100.00	22.27	24.75	22.27	24.75

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°C]		Max. Capa. [kW]			Corr. Capa. [kW]		
			CM	HM	CM		HM	CM		HM
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
FCU3	AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.57	3.88	6.19
FCU4	AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.57	3.88	6.19
FCU5	AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.57	3.88	6.19
FCU6	AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.57	3.88	6.19

Accessory

Equip. Name	Model Code	Address				Accessory
		Main		RMC		
02. Unit 2	AM080BXMWGH/EU	-	-	-	-	
FCU3	AM056KN4DEH/EU	-	-	-	-	PC4NUNMAN
FCU4	AM056KN4DEH/EU	-	-	-	-	PC4NUNMAN
FCU5	AM056KN4DEH/EU	-	-	-	-	PC4NUNMAN

Piping (Continued)

System (02. Unit 2) (Continued)

Accessory

Equip. Name	Model Code	Address				Accessory
		Main		RMC		
FCU6	AM056KN4DEH/EU	-	-	-	-	PC4NUNMAN

Combination Ratio

Model Code	CR [%]	Operation Mode	Min. HOR [%]	Block Load [kW]		Max. Capacity [kW]	
				CM	HM	CM	HM
AM080BXMWGH/EU	100.00	HP	-	-	-	22.27	24.75

System Check Result

Checklist	Restriction Value	Design Result
Long pipe length is 12.90 m (Restriction: 130.00 m).	130.00 m	12.90 m
Total pipe length is 21.90 m (Restriction: 300.00 m).	300.00 m	21.90 m
Main pipe length is 3.00 m (Restriction: 80.00 m).	80.00 m	3.00 m
Pipe length from first Y-Joint to the farthest IDU is 9.90 m (Restriction: 40.00 m).	40.00 m	9.90 m
Height difference between ODU and IDU is 0.00 m (restriction: 30.00 m) (ODU higher than IDUs).	30.00 m	0.00 m
Height difference between ODU and IDU is 2.00 m (restriction: 30.00 m) (ODU lower than IDUs).	30.00 m	2.00 m
Height difference between IDUs when there is no wall mounts with EEV is 0.00 m (restriction: 30.00 m).	30.00 m	0.00 m

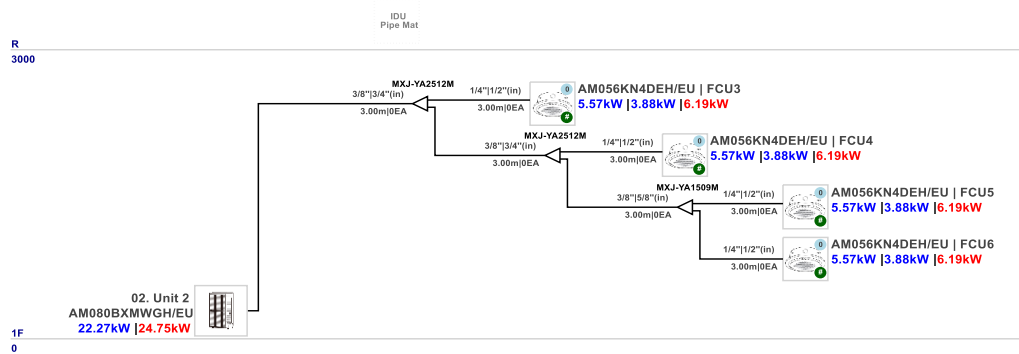
Refrigerant

Factory Charging and Additional Refrigerant Amount	Refrigerant Amount [kg]
Factory Charging Refrigerant Amount	3.70
Additional Refrigerant Amount	2.63
Total	6.33

Piping (Continued)

System (02. Unit 2) (Continued)

Piping Diagram



-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Piping (Continued)

System (04. Unit 2)

Design Condition

Design Condition (Air)	Outdoor		Indoor	
	CM	HM	CM	HM
Temperature (DB/WB) [°C]	28.3 / 18.7	-3.1 / -5.6	27.0 / 19.0	20.0 / 15.0
Altitude Correction	-			

Installation

Type	Floor	Room Name	Equip. Name	Model Code
ODU	1F	-	04. Unit 2	AC026BXAPKG/EU
IDU	1F	-	FCU7	AC026BNAPKG/EU

Outdoor Unit

Equip. Name	Model Code	CR [%]	Max. Capa. [kW]		Corr. Capa. [kW]	
			CM	HM	CM	HM
04. Unit 2	AC026BXAPKG/EU	-	-	-	3.19	4.19

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°C]		Max. Capa. [kW]			Corr. Capa. [kW]		
			CM	HM	CM		HM	CM		HM
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
FCU7	AC026BNAPKG/EU	-	19.0	20.0	-	-	-	3.19	2.41	4.19

Accessory

Equip. Name	Model Code	Address				Accessory
		Main	RMC			
04. Unit 2	AC026BXAPKG/EU	-	-	-	-	

System Check Result

Checklist	Restriction Value	Design Result
Long pipe length is 3.00 m (Restriction: 30.00 m).	30.00 m	3.00 m
Total pipe length is 3.00 m (Restriction: 30.00 m).	30.00 m	3.00 m
Height difference between ODU and IDU is 0.00 m (restriction: 20.00 m) (ODU higher than IDUs).	20.00 m	0.00 m

Piping (Continued)

System (04. Unit 2) (Continued)

System Check Result

Checklist	Restriction Value	Design Result
Height difference between ODU and IDU is 2.00 m (restriction: 20.00 m) (ODU lower than IDUs).	20.00 m	2.00 m

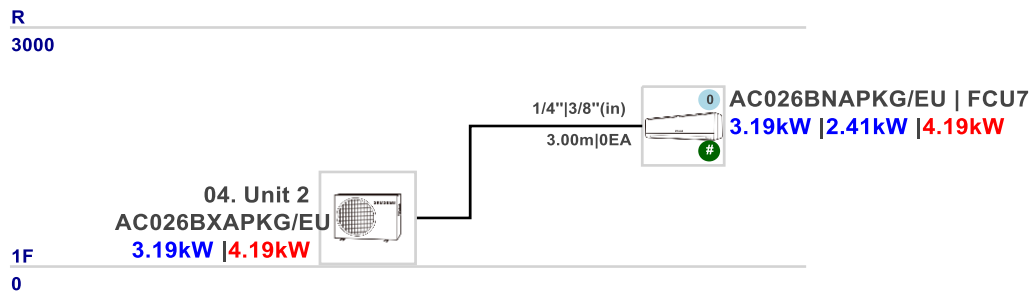
Refrigerant

Factory Charging and Additional Refrigerant Amount	Refrigerant Amount [kg]
Factory Charging Refrigerant Amount	1.20
Additional Refrigerant Amount	-
Total	1.20

Piping (Continued)

System (04. Unit 2) (Continued)

Piping Diagram



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Please refer to The installation manual for full details.

Piping (Continued)

System (03. Unit 3)

Design Condition

Design Condition (Air)	Outdoor		Indoor	
	CM	HM	CM	HM
Temperature (DB/WB) [°C]	28.3 / 18.7	-3.1 / -5.6	27.0 / 19.0	20.0 / 15.0
Altitude Correction	-			

Installation

Type	Floor	Room Name	Equip. Name	Model Code
ODU	1F	-	03. Unit 3	AM060BXMDER/EU
IDU	1F	-	FCU9	AM056KN4DEH/EU
		-	FCU10	AM056KN4DEH/EU
		-	FCU15	AM015TNVDKH/EU
		-	FCU8	AM015TNVDKH/EU
		-	FCU16	AM015TNVDKH/EU

Outdoor Unit

Equip. Name	Model Code	CR [%]	Max. Capa. [kW]		Corr. Capa. [kW]	
			CM	HM	CM	HM
03. Unit 3	AM060BXMDER/EU	101.29	15.57	17.00	15.57	17.00

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°C]		Max. Capa. [kW]			Corr. Capa. [kW]		
			CM	HM	CM		HM	CM		HM
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
FCU9	AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.55	3.87	6.05
FCU10	AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.55	3.87	6.05
FCU15	AM015TNVDKH/EU	H	19.0	20.0	1.50	1.00	1.70	1.49	0.99	1.63
FCU8	AM015TNVDKH/EU	H	19.0	20.0	1.50	1.00	1.70	1.49	0.99	1.63
FCU16	AM015TNVDKH/EU	H	19.0	20.0	1.50	1.00	1.70	1.49	0.99	1.63

Accessory

Equip. Name	Model Code	Address				Accessory
		Main		RMC		
03. Unit 3	AM060BXMDER/EU	-	-	-	-	
FCU9	AM056KN4DEH/EU	-	-	-	-	PC4NUNMAN

Piping (Continued)

System (03. Unit 3) (Continued)

Accessory

Equip. Name	Model Code	Address				Accessory
		Main		RMC		
FCU10	AM056KN4DEH/EU	-	-	-	-	PC4NUNMAN
FCU15	AM015TNVDKH/EU	-	-	-	-	
FCU8	AM015TNVDKH/EU	-	-	-	-	
FCU16	AM015TNVDKH/EU	-	-	-	-	

Combination Ratio

Model Code	CR [%]	Operation Mode	Min. HOR [%]	Block Load [kW]		Max. Capacity [kW]	
				CM	HM	CM	HM
AM060BXMDER/EU	101.29	HP/HR	-	-	-	15.57	17.00

System Check Result

Checklist	Restriction Value	Design Result
Long pipe length is 12.90 m (Restriction: 150.00 m).	150.00 m	12.90 m
Total pipe length is 28.20 m (Restriction: 300.00 m).	300.00 m	28.20 m
Main pipe length is 3.00 m (Restriction: 110.00 m).	110.00 m	3.00 m
Pipe length from first Y-Joint to the farthest IDU is 9.90 m (Restriction: 40.00 m).	40.00 m	9.90 m
Height difference between ODU and IDU is 0.00 m (restriction: 50.00 m) (ODU higher than IDUs).	50.00 m	0.00 m
Height difference between ODU and IDU is 2.00 m (restriction: 40.00 m) (ODU lower than IDUs).	40.00 m	2.00 m
Height difference between IDUs when there is no wall mounts with EEV is 0.00 m (restriction: 25.00 m).	25.00 m	0.00 m
Height difference between IDUs when there are wall mounts with EEV is 0.00 m (restriction: 25.00 m).	25.00 m	0.00 m
Height difference between the lowest IDU and the highest wall mount with EEV is 0.00 m (restriction: 15.00 m).	15.00 m	0.00 m
Height difference between MCUs is 0.00 m (restriction: 20.00 m).	20.00 m	0.00 m

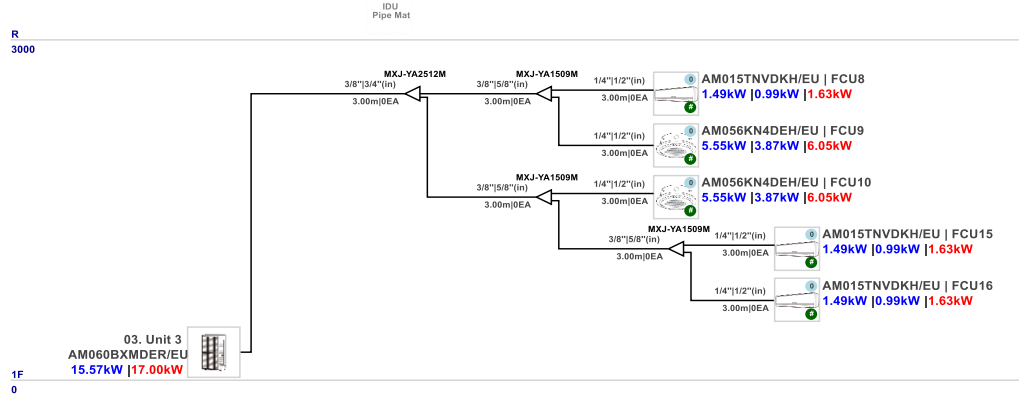
Piping (Continued)**System (03. Unit 3) (Continued)****Refrigerant**

Factory Charging and Additional Refrigerant Amount	Refrigerant Amount [kg]
Factory Charging Refrigerant Amount	3.30
Additional Refrigerant Amount	2.47
Total	5.77

Piping (Continued)

System (03. Unit 3) (Continued)

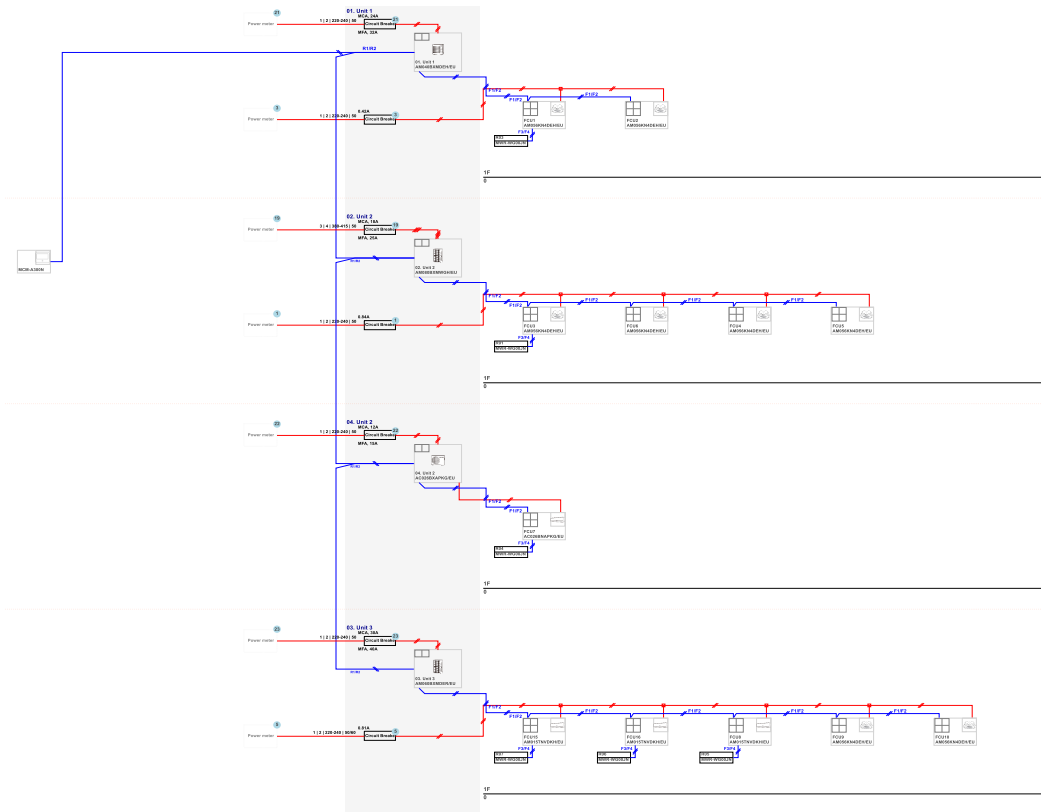
Piping Diagram



-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Wiring and Controller

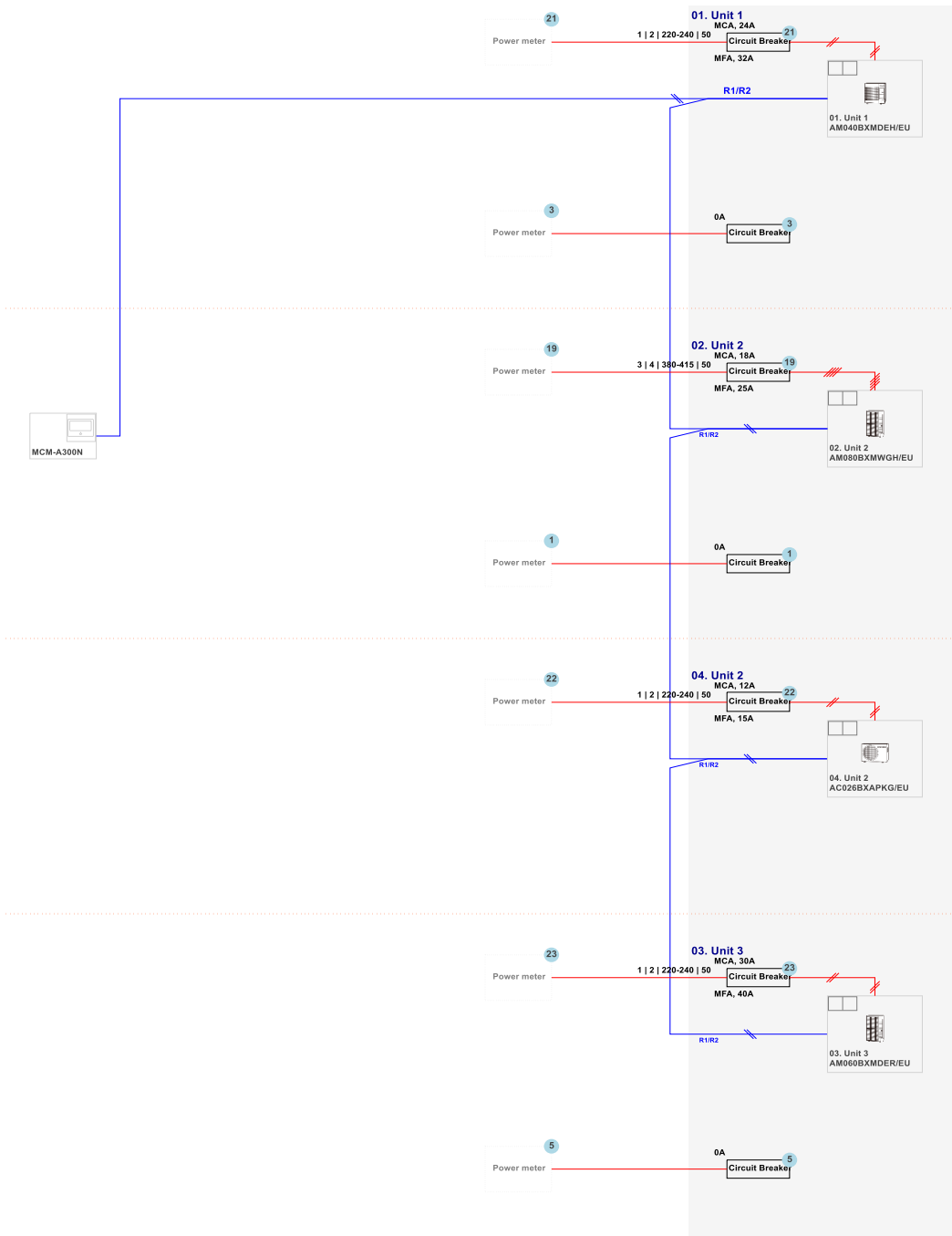
Wiring and Controller Diagram



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Controller

Controller Diagram

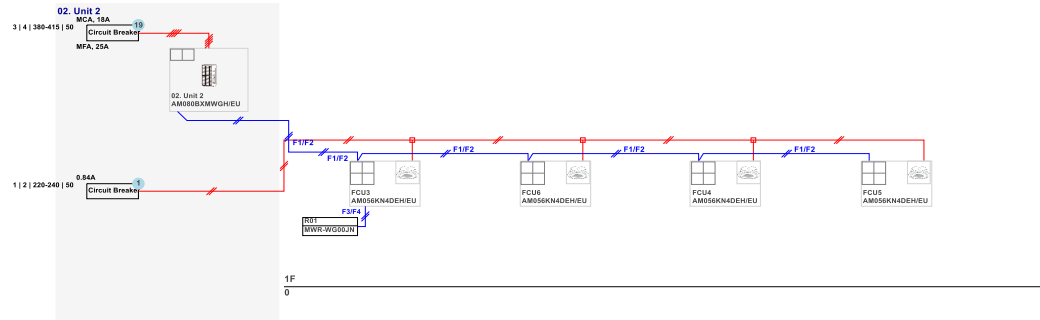


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Wiring

System (02. Unit 2)

Wiring Diagram

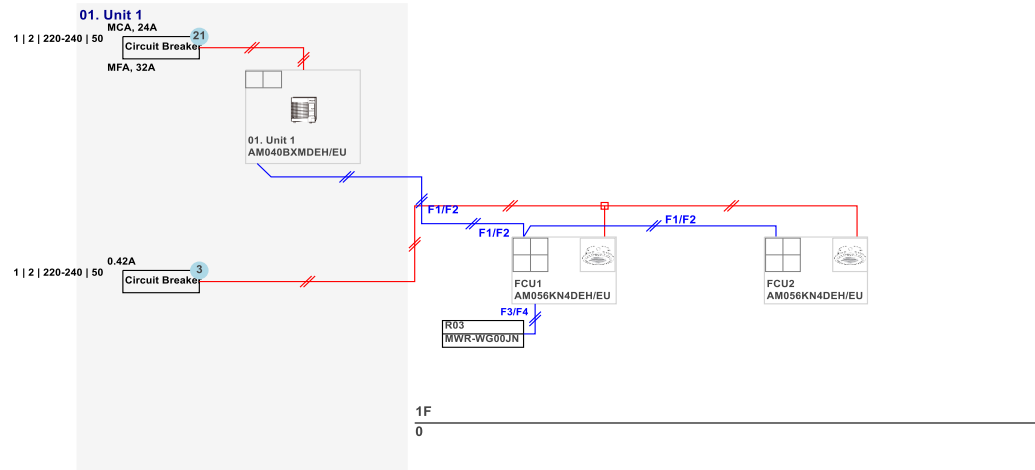


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Wiring

System (01. Unit 1)

Wiring Diagram

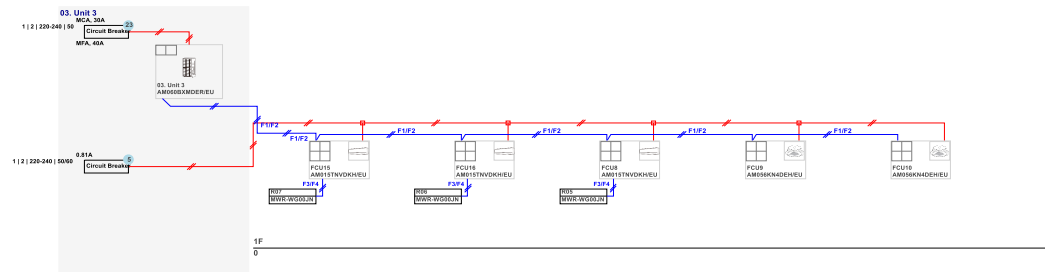


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Wiring

System (03. Unit 3)

Wiring Diagram

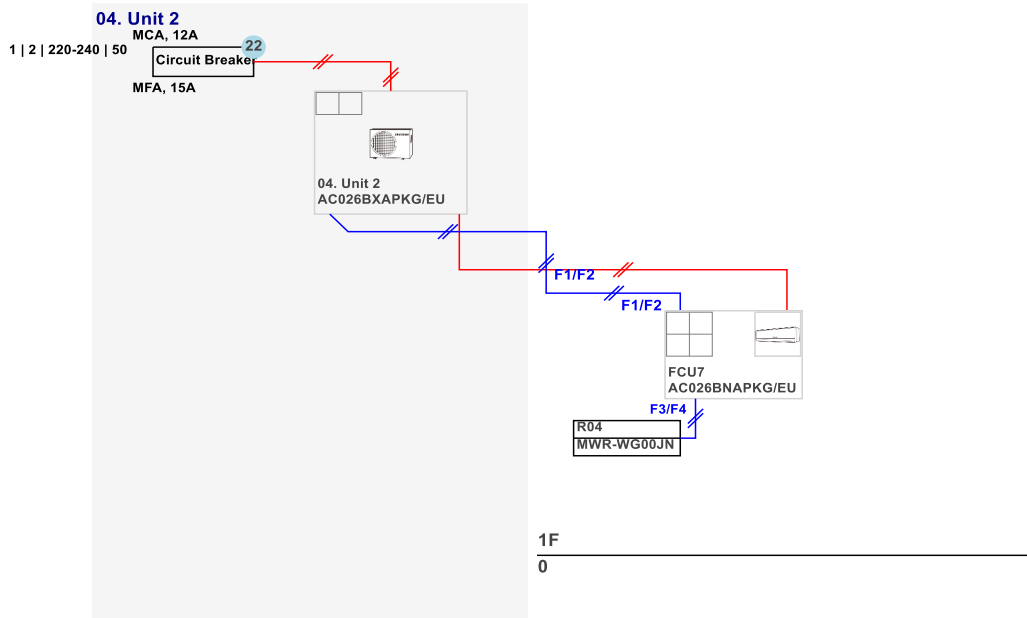


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Wiring

System (04. Unit 2)

Wiring Diagram



-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Product Specification

01. Unit 1

Outdoor Unit

Model Name					AM040BXMDEH/EU
Power Supply				Ø, #, V, Hz	1 2 220-240 50
Mode					HP
Performance	HP				4
	Capacity	Cooling	Rated	kW	12.10
		Heating	Rated	kW	12.10
			Max	kW	12.50
Power	Power Input	Cooling	Rated	kW	3.900
		Heating	Rated	kW	3.230
			Max	kW	3.420
	Current Input	Cooling	Rated	A	17.80
		Heating	Rated	A	14.80
			Max	A	15.70
	Current	MCA		A	24.00
		MFA		A	32.00
Efficiency	Cooling	EER		W/W	3.100
	Heating	COP		W/W	3.750
		COP(Max)		W/W	3.650
Casing	Material	Body			GI Steel Plate
		Base			GI Steel Plate
Heat Exchanger	Type				Fin & Tube
	Material	Fin			Al
		Tube			Cu
	Fin Treatment				Anti-corrosion
Compressor	Quantity			EA	1
Fan	Type				Propeller
	Discharge direction				Horizontal
	Air Flow Rate	High		l/s	1066.67
	External Static Pressure	Max		Pa	29.42
Fan Motor	Type				BLDC
	Quantity			EA	1
	Output			W	125
Piping Connections	Liquid Pipe	Type			Welding
		Diameter		in	3/8"
	Gas Pipe	Type			Welding

Product Specification

01. Unit 1 (Continued)

Outdoor Unit

Piping Connections	Gas Pipe	Diameter	in	5/8"
Wiring connections	Communication	Min.	mm ²	0.75
		Comm.Layer		F1, F2
Refrigerant	Type			R410A
	Factory Charging		kg	2.00
	CO2 emission		tCO2e	4.18
Sound	Sound Pressure Level	Cooling	dB(A)	53
		Heating	dB(A)	56
	Sound Power Level	Cooling	dB(A)	70
External Dimension	Net Weight		kg	79.00
	Shipping Weight		kg	85.00
	Net Dimensions	W	mm	940
		H	mm	998
		D	mm	330
	Shipping Dimensions	W	mm	1009
		H	mm	1124
		D	mm	419
Operating Temp. Range	Cooling	Min.	°C	-5.0
		Max.	°C	48.0
	Heating	Min.	°C	-20.0
		Max.	°C	24.0

Product Specification

01. Unit 1 (Continued)

Indoor Unit

Model Name				AM056KN4DEH/EU
Power Supply			Ø, #, V, Hz	1 2 220-240 50
Mode				HP/HR
Performance	kW			5.6
Heat Exchanger	Type			Fin & Tube
	Material	Fin		Al
		Tube		Cu
Fan	Type			Turbo Fan
	Air Flow Rate	High	l/s	266.67
		Mid	l/s	241.67
		Low	l/s	225.00
Fan Motor	Type			BLDC
	Quantity		EA	1
	Output		W	65
Piping Connections	Liquid Pipe	Type		Flaring
		Diameter	in	1/4"
	Gas Pipe	Type		Flaring
		Diameter	in	1/2"
	Drain Pipe	Diameter		VP25 (OD 32,ID 25)
Wiring connections	Communication	Min.	mm ²	0.75
		Comm.Layer		F1, F2
Refrigerant	Type			R410A
	Control Type			EEV included
Sound	Sound Pressure Level	High	dB(A)	29
		Mid	dB(A)	27
		Low	dB(A)	24
	Sound Power Level	Cooling	dB(A)	53
External Dimension	Net Weight		kg	24.00
	Shipping Weight		kg	29.00
	Net Dimensions	W	mm	947
		H	mm	281
		D	mm	947
	Shipping Dimensions	W	mm	990
		H	mm	330
		D	mm	990

Product Specification

02. Unit 2

Outdoor Unit

Model Name					AM080BXMWGH/EU
Power Supply				Ø, #, V, Hz	3 4 380-415 50
Mode					HP
Performance	HP				8
	Capacity	Cooling	Rated	kW	22.40
		Heating	Rated	kW	22.40
			Max	kW	25.00
Power	Power Input	Cooling	Rated	kW	9.960
		Heating	Rated	kW	5.890
			Max	kW	7.180
	Current Input	Cooling	Rated	A	15.60
		Heating	Rated	A	9.20
			Max	A	11.30
	Current	Minimum Ssc		MVA	3.40
		MCA		A	18.00
		MFA		A	25.00
Efficiency	Cooling	EER		W/W	2.250
	Heating	COP		W/W	3.800
		COP(Max)		W/W	3.480
Casing	Material	Body			GI Steel Plate
		Base			GI Steel Plate
Heat Exchanger	Type				Fin & Tube
	Material	Fin			Al
		Tube			Cu
Fin Treatment					Anti-corrosion
Compressor	Quantity			EA	1
Fan	Type				Propeller
	Discharge direction				Horizontal
	Air Flow Rate	High		l/s	2250.00
	External Static Pressure	Max		Pa	29.42
Fan Motor	Type				BLDC
	Quantity			EA	2
	Output			W	139
Piping Connections	Liquid Pipe	Type			Welding
		Diameter		in	3/8"

Product Specification

02. Unit 2 (Continued)

Outdoor Unit

Piping Connections	Gas Pipe	Type		Welding
		Diameter	in	3/4"
Wiring connections	Communication	Min.	mm ²	0.75
		Comm.Layer		F1, F2
Refrigerant	Type			R410A
	Factory Charging		kg	3.70
	CO2 emission		tCO2e	7.73
Sound	Sound Pressure Level	Cooling	dB(A)	58
		Heating	dB(A)	59
	Sound Power Level	Cooling	dB(A)	73
External Dimension	Net Weight		kg	135.00
	Shipping Weight		kg	145.00
	Net Dimensions	W	mm	940
		H	mm	1420
		D	mm	330
	Shipping Dimensions	W	mm	995
		H	mm	1578
		D	mm	426
Operating Temp. Range	Cooling	Min.	°C	-5.0
		Max.	°C	48.0
	Heating	Min.	°C	-20.0
		Max.	°C	24.0

Product Specification

02. Unit 2 (Continued)

Indoor Unit

Model Name				AM056KN4DEH/EU
Power Supply			Ø, #, V, Hz	1 2 220-240 50
Mode				HP/HR
Performance	kW			5.6
Heat Exchanger	Type			Fin & Tube
	Material	Fin		Al
		Tube		Cu
Fan	Type			Turbo Fan
	Air Flow Rate	High	l/s	266.67
		Mid	l/s	241.67
		Low	l/s	225.00
Fan Motor	Type			BLDC
	Quantity		EA	1
	Output		W	65
Piping Connections	Liquid Pipe	Type		Flaring
		Diameter	in	1/4"
	Gas Pipe	Type		Flaring
		Diameter	in	1/2"
	Drain Pipe	Diameter		VP25 (OD 32,ID 25)
Wiring connections	Communication	Min.	mm ²	0.75
		Comm.Layer		F1, F2
Refrigerant	Type			R410A
	Control Type			EEV included
Sound	Sound Pressure Level	High	dB(A)	29
		Mid	dB(A)	27
		Low	dB(A)	24
	Sound Power Level	Cooling	dB(A)	53
External Dimension	Net Weight		kg	24.00
	Shipping Weight		kg	29.00
	Net Dimensions	W	mm	947
		H	mm	281
		D	mm	947
	Shipping Dimensions	W	mm	990
		H	mm	330
		D	mm	990

Product Specification

04. Unit 2

System

Model Name					AC026BXAPKG/EU+AC026BNAPKG/EU
Mode					HP
Performance	kW				2.6
	Capacity	Cooling	Standard	kW	2.60
			Max	kW	4.20
			Min	kW	0.98
		Heating	Standard	kW	3.30
			Max	kW	4.50
			Min	kW	0.91
Power	Power Input	Cooling	Standard	kW	0.650
			Max	kW	1.410
			Min	kW	0.210
		Heating	Standard	kW	0.870
			Max	kW	2.450
			Min	kW	0.190
	Current Input	Cooling	Standard	A	3.20
			Max	A	6.20
			Min	A	1.40
		Heating	Standard	A	4.10
			Max	A	10.80
			Min	A	1.30
Current	MCA		A	12.00	
	MFA		A	15.00	
Efficiency	Cooling	EER		-	4
		SEER		-	7.2
	Heating	COP		-	3.79
		SCOP		-	4.3
		Pdesignh		-	2.1
Piping Connections	Liquid Pipe	Type			Flaring
		Diameter		in	1/4"
	Gas Pipe	Type			Flaring
		Diameter		in	3/8"
Wiring connections	Communication	Min.		mm ²	0.75
		Comm.Layer			F1, F2
Refrigerant	Type				R32

Product Specification

04. Unit 2 (Continued)

System

Refrigerant	Factory Charging		kg	1.20
	CO2 emission		tCO2e	0.81
Operating Temp. Range	Cooling	Min.	°C	-20.0
		Max.	°C	52.0
	Heating	Min.	°C	-25.0
		Max.	°C	24.0

Product Specification

04. Unit 2 (Continued)

Outdoor Unit

Model Name					AC026BXAPKG/EU
Power Supply				Ø, #, V, Hz	1 2 220-240 50
Performance	Capacity	Cooling	Standard	kW	2.60
		Heating	Standard	kW	3.40
Casing	Material	Body			EGI Steel
Heat Exchanger	Type				Fin & Tube
	Material	Fin			Al
		Tube			Cu
	Fin Treatment				Green Hydrophile
Compressor	Quantity			EA	1
Fan	Type				Propeller
	Discharge direction				Horizontal
	Air Flow Rate	High		l/s	666.67
Fan Motor	Type				BLDC
	Quantity			EA	1
	Output			W	125
Refrigerant	Type				R32
Sound	Sound Pressure Level	Cooling		dB(A)	45
		Heating		dB(A)	45
	Sound Power Level	Cooling		dB(A)	59
External Dimension	Net Weight			kg	43.00
	Shipping Weight			kg	46.50
	Net Dimensions	W		mm	880
		H		mm	638
		D		mm	310
	Shipping Dimensions	W		mm	1023
		H		mm	742
		D		mm	413

Product Specification

04. Unit 2 (Continued)

Indoor Unit

Model Name					AC026BNAPKG/EU
Power Supply				Ø, #, V, Hz	1 2 220-240 50
Performance	Capacity	Cooling	Standard	kW	2.60
		Cooling (SH)		kW	2.00
		Heating	Standard	kW	3.30
Heat Exchanger	Type				F&T
	Material	Fin			Al
		Tube			Cu
	Fin Treatment				Green Hydrophile
Fan	Type				Cross Flow
	Air Flow Rate	High		l/s	176.67
		Mid		l/s	141.67
		Low		l/s	115.00
Fan Motor	Type				BLDC
	Quantity			EA	1
	Output			W	27
Piping Connections	Drain Pipe	Diameter			ID18 HOSE
Refrigerant	Type				R32
Sound	Sound Pressure Level	High		dB(A)	37
		Mid		dB(A)	31
		Low		dB(A)	25
		Silent		dB(A)	21
	Sound Power Level	Cooling		dB(A)	56
External Dimension	Net Weight			kg	10.60
	Shipping Weight			kg	12.00
	Net Dimensions	W		mm	889
		H		mm	215
		D		mm	299
	Shipping Dimensions	W		mm	950
		H		mm	290
		D		mm	375

Product Specification

03. Unit 3

Outdoor Unit

Model Name					AM060BXMDER/EU
Power Supply				Ø, #, V, Hz	1 2 220-240 50
Mode					HP/HR
Performance	HP				6
	Capacity	Cooling	Rated	kW	15.50
		Heating	Rated	kW	15.50
			Max	kW	18.00
Power	Power Input	Cooling	Rated	kW	5.740
		Heating	Rated	kW	4.430
			Max	kW	5.790
	Current Input	Cooling	Rated	A	26.30
		Heating	Rated	A	20.30
			Max	A	26.50
	Current	MCA		A	30.00
		MFA		A	40.00
Efficiency	Cooling	EER		W/W	2.700
	Heating	COP		W/W	3.500
		COP(Max)		W/W	3.110
Casing	Material	Body			GI Steel Plate
		Base			GI Steel Plate
Heat Exchanger	Type				Fin & Tube
	Material	Fin			Al
		Tube			Cu
	Fin Treatment				Anti-corrosion
Compressor	Quantity			EA	1
Fan	Type				Propeller
	Discharge direction				Horizontal
	Air Flow Rate	High		l/s	1666.67
	External Static Pressure	Max		Pa	29.42
Fan Motor	Type				BLDC
	Quantity			EA	2
	Output			W	125
Piping Connections	Liquid Pipe	Type			Welding
		Diameter		in	3/8"
	Gas Pipe	Type			Welding

Product Specification

03. Unit 3 (Continued)

Outdoor Unit

Piping Connections	Gas Pipe	Diameter	in	3/4"
	High Pressure Gas Pipe	Type		Welding
		Diameter	in	5/8"
Wiring connections	Communication	Min.	mm	0.75
		Comm.Layer		F1, F2
Refrigerant	Type			R410A
	Factory Charging		kg	3.30
	CO2 emission		tCO2e	6.89
Sound	Sound Pressure Level	Cooling	dB(A)	53
		Heating	dB(A)	55
	Sound Power Level	Cooling	dB(A)	70
External Dimension	Net Weight		kg	100.00
	Shipping Weight		kg	110.00
	Net Dimensions	W	mm	940
		H	mm	1210
		D	mm	330
	Shipping Dimensions	W	mm	995
		H	mm	1388
		D	mm	426
Operating Temp. Range	Cooling	Min.	°C	-5.0
		Max.	°C	48.0
	Heating	Min.	°C	-25.0
		Max.	°C	26.0

Product Specification

03. Unit 3 (Continued)

Indoor Unit

Model Name				AM056KN4DEH/EU
Power Supply			Ø, #, V, Hz	1 2 220-240 50
Mode				HP/HR
Performance	kW			5.6
Heat Exchanger	Type			Fin & Tube
	Material	Fin		Al
		Tube		Cu
Fan	Type			Turbo Fan
	Air Flow Rate	High	l/s	266.67
		Mid	l/s	241.67
		Low	l/s	225.00
Fan Motor	Type			BLDC
	Quantity		EA	1
	Output		W	65
Piping Connections	Liquid Pipe	Type		Flaring
		Diameter	in	1/4"
	Gas Pipe	Type		Flaring
		Diameter	in	1/2"
	Drain Pipe	Diameter		VP25 (OD 32,ID 25)
Wiring connections	Communication	Min.	mm ²	0.75
		Comm.Layer		F1, F2
Refrigerant	Type			R410A
	Control Type			EEV included
Sound	Sound Pressure Level	High	dB(A)	29
		Mid	dB(A)	27
		Low	dB(A)	24
	Sound Power Level	Cooling	dB(A)	53
External Dimension	Net Weight		kg	24.00
	Shipping Weight		kg	29.00
	Net Dimensions	W	mm	947
		H	mm	281
		D	mm	947
	Shipping Dimensions	W	mm	990
		H	mm	330
		D	mm	990

Product Specification

03. Unit 3 (Continued)

Indoor Unit

Model Name				AM015TNVDKH/EU
Power Supply			Ø, #, V, Hz	1 2 220-240 50/60
Mode				HP/HR
Performance	kW			1.5
Power	Current	MCA	A	0.16
		MFA	A	15.00
Heat Exchanger	Type			Fin & Tube
	Material	Fin		Al
		Tube		Cu
	Fin Treatment			Green Hydrophile
Fan	Type			Crossflow Fan
	Air Flow Rate	High	l/s	81.67
		Mid	l/s	75.00
		Low	l/s	68.33
Fan Motor	Type			BLDC
	Quantity		EA	1
	Output		W	27
Piping Connections	Liquid Pipe	Type		Flaring
		Diameter	in	1/4"
	Gas Pipe	Type		Flaring
		Diameter	in	1/2"
	Drain Pipe	Diameter		ID18 HOSE
Wiring connections	Communication	Min.	mm ²	0.75
		Comm.Layer		F1, F2
Refrigerant	Type			R410A
	Control Type			EEV included
Sound	Sound Pressure Level	High	dB(A)	31
		Mid	dB(A)	30
		Low	dB(A)	27
	Sound Power Level	Cooling	dB(A)	50
External Dimension	Net Weight		kg	9.00
	Shipping Weight		kg	10.50
	Net Dimensions	W	mm	820
		H	mm	299
		D	mm	215

Product Specification

03. Unit 3 (Continued)

Indoor Unit

External Dimension	Shipping Dimensions	W	mm	880
		H	mm	290
		D	mm	375

■All System

Equipment Name	Manufacturer	Model Code	Product Description	Refrigerant	Airflow	
					Low	Mid.
					(l/s)	(l/s)
FCU7	Samsung	AC026BNAPKG/EU	GEO	R32	115.00	141.67

Air to Air Single Product (CAC) Sc									
Indoor Unit									
	ESP	Electricity Characteristic			Noise	Weight	Dimension (W x H x D)	Panel	
High		Power	Phase	Frequency				Model Code	Dimension(mm)
(l/s)	(mmAq/m)	(V)		(Hz)	(dB(A))	(kg)	(mm)		(W x H x D)
176.67	-	220-240	1	50	37	11.00	889x215x299	-	-

Schedule.										
Outdoor Unit										
Equipment Name	Model Code	Airflow	Noise	Weight	Dimension (W x H x D)	Cooling Capacity		Heating Capacity		Power
		(l/s)	(dB(A))	(kg)	(mm)	Rated	Range	Rated	Range	
04. Unit 2	AC026BXAPKG/EU	666.67	45	43.00	880x638x310	2.60	-	3.40	-	220-240

Electricity Characteristic						Refrigerant Pipe		Note
Phase	Frequency	MCA	MFA	wer Consumption(k		Liquid	Gas	
	(Hz)	(A)	(A)	Cooling	Heating	(in)	(in)	
1	50	12.00	15.00	0.650	0.870	1/4"	3/8"	-

■All System

Equipment Name	Manufacturer	Model Code	Connect Equipment		Product Description	Refrigerant
			Outdoor Unit	MCU		
FCU3	Samsung	AM056KN4DEH/EU	02. Unit 2	-	360	R410A
FCU4	Samsung	AM056KN4DEH/EU	02. Unit 2	-	360	R410A
FCU5	Samsung	AM056KN4DEH/EU	02. Unit 2	-	360	R410A
FCU6	Samsung	AM056KN4DEH/EU	02. Unit 2	-	360	R410A
FCU1	Samsung	AM056KN4DEH/EU	01. Unit 1	-	360	R410A
FCU2	Samsung	AM056KN4DEH/EU	01. Unit 1	-	360	R410A
FCU9	Samsung	AM056KN4DEH/EU	03. Unit 3	-	360	R410A
FCU10	Samsung	AM056KN4DEH/EU	03. Unit 3	-	360	R410A
FCU15	Samsung	AM015TNVDKH/EU	03. Unit 3	-	Wall Mounted	R410A
FCU8	Samsung	AM015TNVDKH/EU	03. Unit 3	-	Wall Mounted	R410A
FCU16	Samsung	AM015TNVDKH/EU	03. Unit 3	-	Wall Mounted	R410A

Rated Performance			Corrected Capacity						Fan				ESP
kW	Cooling	Heating	Cooling				Heating		Type	Airflow			
			TC	SHC	IN DB	IN WB	TC	IN DB		Low	Mid.	High	
	(kW)	(kW)	(kW)	(kW)	(kW)	(°C)	(°C)	(kW)		(°C)	(l/s)	(l/s)	
5.6	5.60	6.30	5.57	3.88	27.0	19.0	6.19	20.0	Turbo Fan	225.00	241.67	266.67	-
5.6	5.60	6.30	5.57	3.88	27.0	19.0	6.19	20.0	Turbo Fan	225.00	241.67	266.67	-
5.6	5.60	6.30	5.57	3.88	27.0	19.0	6.19	20.0	Turbo Fan	225.00	241.67	266.67	-
5.6	5.60	6.30	5.57	3.88	27.0	19.0	6.19	20.0	Turbo Fan	225.00	241.67	266.67	-
5.6	5.60	6.30	5.60	3.90	27.0	19.0	5.80	20.0	Turbo Fan	225.00	241.67	266.67	-
5.6	5.60	6.30	5.60	3.90	27.0	19.0	5.80	20.0	Turbo Fan	225.00	241.67	266.67	-
5.6	5.60	6.30	5.55	3.87	27.0	19.0	6.05	20.0	Turbo Fan	225.00	241.67	266.67	-
5.6	5.60	6.30	5.55	3.87	27.0	19.0	6.05	20.0	Turbo Fan	225.00	241.67	266.67	-
1.5	1.50	1.70	1.49	0.99	27.0	19.0	1.63	20.0	Crossflow Fan	68.33	75.00	81.67	-
1.5	1.50	1.70	1.49	0.99	27.0	19.0	1.63	20.0	Crossflow Fan	68.33	75.00	81.67	-
1.5	1.50	1.70	1.49	0.99	27.0	19.0	1.63	20.0	Crossflow Fan	68.33	75.00	81.67	-

Refrigerant Flow (VRF) Indoor Unit Schedule

Electricity Characteristic									Noise	Weight	Dimension (W x H x D)
Power	Phase	Frequency	MCA	MFA	Current Consumption		Power Consumption				
					Cooling	Heating	Cooling	Heating			
(V)		(Hz)	(A)	(A)	(A)	(A)	(kW)	(kW)	(dB(A))	(kg)	(mm)
220-240	1	50	-	-	0.21	0.21	0.030	0.030	29	24.00	947x281x947
220-240	1	50	-	-	0.21	0.21	0.030	0.030	29	24.00	947x281x947
220-240	1	50	-	-	0.21	0.21	0.030	0.030	29	24.00	947x281x947
220-240	1	50	-	-	0.21	0.21	0.030	0.030	29	24.00	947x281x947
220-240	1	50	-	-	0.21	0.21	0.030	0.030	29	24.00	947x281x947
220-240	1	50	-	-	0.21	0.21	0.030	0.030	29	24.00	947x281x947
220-240	1	50	-	-	0.21	0.21	0.030	0.030	29	24.00	947x281x947
220-240	1	50	-	-	0.21	0.21	0.030	0.030	29	24.00	947x281x947
220-240	1	50/60	0.16	15.00	0.13	0.13	0.020	0.020	31	9.00	820x299x215
220-240	1	50/60	0.16	15.00	0.13	0.13	0.020	0.020	31	9.00	820x299x215
220-240	1	50/60	0.16	15.00	0.13	0.13	0.020	0.020	31	9.00	820x299x215

Panel		Refrigerant Pipe		Water Heat Source							
Model Code	Dimension (W x H x D)			Temperature(°C)				Flow Rate(LPM)		Pressure Loss(mmAq/h)	
	(mm)	Liquid	Gas	Cooling Water		Heating Water		Cooling	Heating	Cooling	Heating
		(in)	(in)	Entering	Leaving	Entering	Leaving				
PC4NUNMAN	1050x94x1050	1/4"	1/2"	-	-	-	-	-	-	-	-
PC4NUNMAN	1050x94x1050	1/4"	1/2"	-	-	-	-	-	-	-	-
PC4NUNMAN	1050x94x1050	1/4"	1/2"	-	-	-	-	-	-	-	-
PC4NUNMAN	1050x94x1050	1/4"	1/2"	-	-	-	-	-	-	-	-
PC4NUNMAN	1050x94x1050	1/4"	1/2"	-	-	-	-	-	-	-	-
PC4NUNMAN	1050x94x1050	1/4"	1/2"	-	-	-	-	-	-	-	-
PC4NUNMAN	1050x94x1050	1/4"	1/2"	-	-	-	-	-	-	-	-
PC4NUNMAN	1050x94x1050	1/4"	1/2"	-	-	-	-	-	-	-	-
-	-	1/4"	1/2"	-	-	-	-	-	-	-	-
-	-	1/4"	1/2"	-	-	-	-	-	-	-	-
-	-	1/4"	1/2"	-	-	-	-	-	-	-	-

[illegible]

■All System

Equipment Name	Manufacturer	Model Code	Product Description	Refrigerant	Rated Performance	
					HP	Cooling
						(kW)
01. Unit 1	Samsung	AM040BXMDEH/EU	DVM S Eco Heat Pump	R410A	4	12.10
03. Unit 3	Samsung	AM060BXMDER/EU	DVM S Eco Heat Recovery	R410A	6	15.50
02. Unit 2	Samsung	AM080BXMWGH/EU	DVM S Eco Heat Pump	R410A	8	22.40

Variable Refrigerant Flow (VRF) Outdoor Unit Schedule										
Performance	Corrected Capacity				Compressor		Fan			
Heating	Cooling		Heating		Type	Output	Type	Airflow	Power	Phase
(kW)	(kW)	OUT DB(°C)	(kW)	OUT DB(°C)		(kW)		(l/s)	(V)	
12.10	11.20	28.3	11.61	-3.1	Twin BLDC Inv. Rotary	4.04	Propeller	1066.67	220-240	1
15.50	15.57	28.3	17.00	-3.1	Twin BLDC Inv. Rotary	4.04	Propeller	1666.67	220-240	1
22.40	22.27	28.3	24.75	-3.1	SSC Scroll	5.18	Propeller	2250.00	380-415	3

Electricity Characteristic					Noise	Weight	Dimension (W x H x D)	Refrigerant Pipe			Water Pipe	Note
Frequency	MCA	MFA	wer Consumption(k					Liquid	Gas	H.P. Gas		
(Hz)	(A)	(A)	Cooling	Heating	(dB(A))	(kg)	(mm)	(in)	(in)	(in)	(in)	
50	24.00	32.00	3.900	3.230	53	79.00	940x998x330	3/8"	5/8"	-	-	-
50	30.00	40.00	5.740	4.430	53	100.00	940x1210x330	3/8"	3/4"	5/8"	-	-
50	18.00	25.00	9.960	5.890	58	135.00	940x1420x330	3/8"	3/4"	-	-	-

■Design Condition : United Kingdom, LONDON/HEATHROW, Altitude

Design Condition(Air)	Outdoor		Indoor	
	Cooling	Heating	Cooling	Heating
Temperature (DB/WB) [°C]	28.3/18.7	-3.1/-5.6	27.0/19.0	20.0/15.0

■All System (DVM S Eco, Single split (CAC))

Load Profile						Equipment Name
Floor	Room Name	Area [m²]	Load [kW]			
			Cooling		Heating	
			TC	SHC	TC	
1F	-	-	-	-	-	FCU1
1F	-	-	-	-	-	FCU2
1F	-	-	-	-	-	FCU3
1F	-	-	-	-	-	FCU4
1F	-	-	-	-	-	FCU5
1F	-	-	-	-	-	FCU6
1F	-	-	-	-	-	FCU7
1F	-	-	-	-	-	FCU15
1F	-	-	-	-	-	FCU8
1F	-	-	-	-	-	FCU16
1F	-	-	-	-	-	FCU9
1F	-	-	-	-	-	FCU10

Indoor Unit										
Model Code	Fan Mode	Design Temperature		Nominal Capacity [kW]			Corrected Capacity [kW]			Equipment Name
		Cooling	Heating	Cooling		Heating	Cooling		Heating	
		IN WB [°C]	IN DB [°C]	TC	SHC	TC	TC	SHC	TC	
AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.60	3.90	5.80	01. Unit 1
AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.60	3.90	5.80	
AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.57	3.88	6.19	02. Unit 2
AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.57	3.88	6.19	
AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.57	3.88	6.19	
AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.57	3.88	6.19	
AC026BNAPKG/EU	-	19.0	20.0	2.60	-	3.30	3.19	2.41	4.19	04. Unit 2
AM015TNVDKH/EU	H	19.0	20.0	1.50	1.00	1.70	1.49	0.99	1.63	03. Unit 3
AM015TNVDKH/EU	H	19.0	20.0	1.50	1.00	1.70	1.49	0.99	1.63	
AM015TNVDKH/EU	H	19.0	20.0	1.50	1.00	1.70	1.49	0.99	1.63	
AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.55	3.87	6.05	
AM056KN4DEH/EU	H	19.0	20.0	5.60	3.90	6.30	5.55	3.87	6.05	

Outdoor Unit					
Model Code	Combination Ratio [%]	Nominal Capacity [kW]		Corrected Capacity [kW]	
		Cooling	Heating	Cooling	Heating
AM040BXMDEH/EU	92.56	12.10	12.10	11.20	11.61
AM080BXMWGH/EU	100.00	22.40	22.40	22.27	24.75
AC026BXAPKG/EU	-	2.60	3.30	3.19	4.19
AM060BXMDER/EU	101.29	15.50	15.50	15.57	17.00