

Report

Project

Customer:

Project Name: UMaine Eastport Phase II

Location: USA, Bangor, ME

Date: 2025-02-04

Designer

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Software

Version: 2.0.1.28

DB version: 20250204-061202

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 of ACU-OU2

Type	Model Code	Description	Unit	Qty.	
ODU	AM120BXVTFH/AA	DVM S2 Heat Pump	EA	1	
IDU	AM007NNNDCH/AA	WindFree Mini 4-Way cassette	EA	1	
	AM009NNNDCH/AA	WindFree Mini 4-Way cassette	EA	8	
	AM012NNNDCH/AA	WindFree Mini 4-Way cassette	EA	4	
	AM007TNVDCH/AA	Wall-Mounted (WindFree)	EA	1	
Pipe Mat.	MXJ-YA2512M	Y-joint	EA	1	
	MXJ-HA3115M	Header joint	EA	2	
Controller	MWR-WG00UN	Wired remote controller	EA	14	
Accessory	586WBS-4SW	1/4" Isolation valve swedged braze	EA	11	
	586WBS-8SW	1/2" Isolation valve swedged braze	EA	11	
	WHG-F1-B	WHG-F1-B Medium Chassis Front Guard	EA	1	
	WHG-R2-B	WHG-R2-B Medium Chassis Rear Guard	EA	1	
	WHG-SL-B	WHG-SL-B Small/Large Left Guard	EA	1	
	WHG-SR-B	WHG-SR-B Small/Large Right Guard	EA	1	
	WHG-T2-B	WHG-T2-B Medium Chassis Top Guard	EA	1	
	PC4SUFMUN	Mini 4-Way Cassette front panel, WindFree, triangle, DA White	EA	13	
	MHC-015VK1	Base pan heater, medium chassis	EA	1	
Add. Ref.	R410A	Refrigerant	lbs	24.28	
Type	Size	Length [ft] / Quantity [EA]			
		Liquid Pipe	Gas Pipe	H.P. Gas	Total
Ref. Pipe	6.35(1/4")	610.00	0.00	0.00	610.00
	9.52(3/8")	15.00	0.00	0.00	15.00
	12.7(1/2")	50.00	610.00	0.00	660.00
	19.05(3/4")	0.00	15.00	0.00	15.00
	28.58(1 1/8")	0.00	50.00	0.00	50.00

Equipment List of AC-OU3

Type	Model Code	Description	Unit	Qty.	
ODU	AM120BXVTFH/AA	DVM S2 Heat Pump	EA	1	
IDU	AM009NNNDCH/AA	WindFree Mini 4-Way cassette	EA	1	
	AM012NNNDCH/AA	WindFree Mini 4-Way cassette	EA	4	
	AM018NNNDCH/AA	WindFree Mini 4-Way cassette	EA	4	
	AM007TNVDCH/AA	Wall-Mounted (WindFree)	EA	3	
Pipe Mat.	MXJ-YA2512M	Y-joint	EA	1	
	MXJ-HA2512M	Header joint	EA	1	
	MXJ-HA3115M	Header joint	EA	1	
Controller	MWR-WG00UN	Wired remote controller	EA	12	
Accessory	586WBS-4SW	1/4" Isolation valve swedged braze	EA	12	
	586WBS-8SW	1/2" Isolation valve swedged braze	EA	12	
	MHC-015VK1	Base pan heater, medium chassis	EA	1	
	PC4SUFMUN	Mini 4-Way Cassette front panel, WindFree, triangle, DA White	EA	9	
	WHG-F1-B	WHG-F1-B Medium Chassis Front Guard	EA	1	
	WHG-R2-B	WHG-R2-B Medium Chassis Rear Guard	EA	1	
	WHG-SL-B	WHG-SL-B Small/Large Left Guard	EA	1	
	WHG-SR-B	WHG-SR-B Small/Large Right Guard	EA	1	
	WHG-T2-B	WHG-T2-B Medium Chassis Top Guard	EA	1	
Add. Ref.	R410A	Refrigerant	lbs	19.84	
Type	Size	Length [ft] / Quantity [EA]			
		Liquid Pipe	Gas Pipe	H.P. Gas	Total
Ref. Pipe	6.35(1/4")	460.00	0.00	0.00	460.00
	9.52(3/8")	20.00	0.00	0.00	20.00
	12.7(1/2")	45.00	460.00	0.00	505.00
	15.88(5/8")	0.00	20.00	0.00	20.00
	28.58(1 1/8")	0.00	45.00	0.00	45.00

Controller Equipment List

Type	Model Code	Description	Unit	Qty.
Controller	MWR-WG00UN	Wired remote controller	EA	26

Piping

System (ACU-OU2)

Design Condition

Design Condition (Air)	Outdoor		Indoor	
	CM	HM	CM	HM
Temperature (DB/WB) [°F]	89.0 / 74.0	-12.0 / -12.0	75.0 / 63.0	70.0 / 52.0
Altitude Correction	-			

Installation

Type	Floor	Room Name	Equip. Name	Model Code
ODU	1F	-	ACU-OU2	AM120BXVTFH/AA
IDU	1F	-	AC-UI-18	AM009NNNDCH/AA
		-	AC-UI-19	AM009NNNDCH/AA
		-	AC-UI-20	AM007TNVDCH/AA
		-	AC-UI-21	AM012NNNDCH/AA
		-	AC-UI-22	AM012NNNDCH/AA
		-	AC-UI-23	AM009NNNDCH/AA
		-	AC-UI-24	AM009NNNDCH/AA
		-	AC-UI-11	AM009NNNDCH/AA
		-	AC-UI-12	AM009NNNDCH/AA
		-	AC-UI-13	AM007NNNDCH/AA
		-	AC-UI-14	AM012NNNDCH/AA
		-	AC-UI-15	AM012NNNDCH/AA
		-	AC-UI-16	AM009NNNDCH/AA
		-	AC-UI-17	AM009NNNDCH/AA

Outdoor Unit

Equip. Name	Model Code	CR [%]	Max. Capa. [Btu/h]		Corr. Capa. [Btu/h]	
			CM	HM	CM	HM
ACU-OU2	AM120BXVTFH/AA	115.83	120312.00	151681.00	120312.00	151681.00

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°F]		Max. Capa. [Btu/h]			Corr. Capa. [Btu/h]		
			CM	HM	CM	HM	CM	HM		
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
AC-UI-18	AM009NNNDCH/AA	H	63.00	70.00	8700.00	6542.00	10500.00	8226.00	6186.00	10288.00
AC-UI-19	AM009NNNDCH/AA	H	63.00	70.00	8700.00	6542.00	10500.00	8226.00	6186.00	10288.00

Piping (Continued)

System (ACU-OU2) (Continued)

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°F]		Max. Capa. [Btu/h]			Corr. Capa. [Btu/h]		
			CM	HM	CM		HM	CM		HM
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
AC-UI-20	AM007TNVDCH/AA	H	63.00	70.00	6772.00	5000.00	8111.00	6404.00	4727.00	7947.00
AC-UI-21	AM012NNNDCH/AA	H	63.00	70.00	11000.00	8885.00	13500.00	10401.00	8401.00	13227.00
AC-UI-22	AM012NNNDCH/AA	H	63.00	70.00	11000.00	8885.00	13500.00	10401.00	8401.00	13227.00
AC-UI-23	AM009NNNDCH/AA	H	63.00	70.00	8700.00	6542.00	10500.00	8226.00	6186.00	10288.00
AC-UI-24	AM009NNNDCH/AA	H	63.00	70.00	8700.00	6542.00	10500.00	8226.00	6186.00	10288.00
AC-UI-11	AM009NNNDCH/AA	H	63.00	70.00	8700.00	6542.00	10500.00	8226.00	6186.00	10288.00
AC-UI-12	AM009NNNDCH/AA	H	63.00	70.00	8700.00	6542.00	10500.00	8226.00	6186.00	10288.00
AC-UI-13	AM007NNNDCH/AA	H	63.00	70.00	6867.00	4908.00	8700.00	6493.00	4641.00	8524.00
AC-UI-14	AM012NNNDCH/AA	H	63.00	70.00	11000.00	8885.00	13500.00	10401.00	8401.00	13227.00
AC-UI-15	AM012NNNDCH/AA	H	63.00	70.00	11000.00	8885.00	13500.00	10401.00	8401.00	13227.00
AC-UI-16	AM009NNNDCH/AA	H	63.00	70.00	8700.00	6542.00	10500.00	8226.00	6186.00	10288.00
AC-UI-17	AM009NNNDCH/AA	H	63.00	70.00	8700.00	6542.00	10500.00	8226.00	6186.00	10288.00

Accessory

Equip. Name	Model Code	Address				Accessory
		Main		RMC		
ACU-OU2	AM120BXVTFH/AA	-	-	-	-	LSVK1, WHG-T2-B, WHG-SL-B, WHG-SR-B, WHG-R2-B, WH
AC-UI-18	AM009NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-19	AM009NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-20	AM007TNVDCH/AA	-	-	-	-	586WBS-4SW, 586WBS-8SW
AC-UI-21	AM012NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-22	AM012NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-23	AM009NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-24	AM009NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-11	AM009NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-12	AM009NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-8SW, 586WBS-4SW
AC-UI-13	AM007NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-14	AM012NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-8SW, 586WBS-4SW
AC-UI-15	AM012NNNDCH/AA	-	-	-	-	PC4SUFMUN
AC-UI-16	AM009NNNDCH/AA	-	-	-	-	PC4SUFMUN
AC-UI-17	AM009NNNDCH/AA	-	-	-	-	PC4SUFMUN

Piping (Continued)

System (ACU-OU2) (Continued)

Combination Ratio

Model Code	CR [%]	Operation Mode	Min. HOR [%]	Block Load [Btu/h]		Max. Capacity [Btu/h]	
				CM	HM	CM	HM
AM120BXVTFH/AA	115.83	HP	-	-	-	120312.00	151681.00

System Check Result

Checklist	Restriction Value	Design Result
Long pipe length is 131.97 ft (Restriction: 656.17 ft).	656.17 ft	131.97 ft
Total pipe length is 677.95 ft (Restriction: 3280.84 ft).	3280.84 ft	677.95 ft
Pipe length from first Y-Joint to the farthest IDU is 81.97 ft (Restriction: 147.64 ft).	147.64 ft	81.97 ft
Height difference between ODU and IDU is 0.00 ft (restriction: 361.00 ft) (ODU higher than IDUs).	361.00 ft	0.00 ft
Height difference between ODU and IDU is 6.56 ft (restriction: 361.00 ft) (ODU lower than IDUs).	361.00 ft	6.56 ft
Height difference between IDUs when there is no wall mounts with EEV is 0.00 ft (restriction: 164.04 ft).	164.04 ft	0.00 ft
Height difference between IDUs when there are wall mounts with EEV is 0.00 ft (restriction: 98.43 ft).	98.43 ft	0.00 ft
Height difference between the lowest IDU and the highest wall mount with EEV is 0.00 ft (restriction: 49.21 ft).	49.21 ft	0.00 ft

Refrigerant

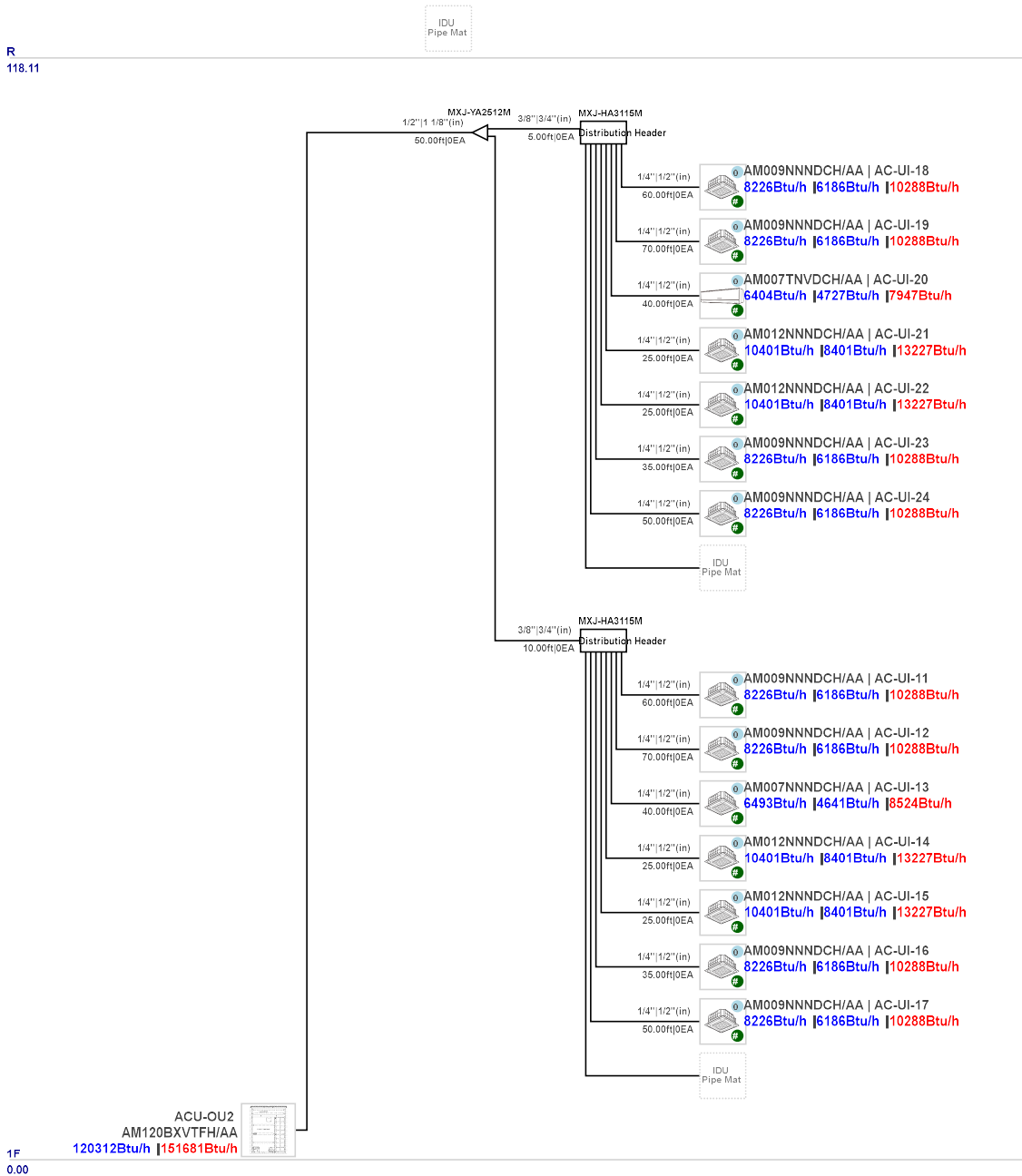
Factory Charging and Additional Refrigerant Amount	Refrigerant Amount [lbs]
Factory Charging Refrigerant Amount	23.10
Additional Refrigerant Amount	24.28
Total	47.38

Piping (Continued)

System (ACU-OU2) (Continued)

Piping Diagram

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

Piping (Continued)

System (AC-OU3)

Design Condition

Design Condition (Air)	Outdoor		Indoor	
	CM	HM	CM	HM
Temperature (DB/WB) [°F]	89.0 / 74.0	-12.0 / -12.0	75.0 / 63.0	70.0 / 52.0
Altitude Correction	-			

Installation

Type	Floor	Room Name	Equip. Name	Model Code
ODU	1F	-	AC-OU3	AM120BXVTFH/AA
IDU	1F	-	AC-UI-25	AM018NNNDCH/AA
		-	AC-UI-26	AM018NNNDCH/AA
		-	AC-UI-27	AM018NNNDCH/AA
		-	AC-UI-28	AM018NNNDCH/AA
		-	AC-UI-29	AM012NNNDCH/AA
		-	AC-UI-30	AM012NNNDCH/AA
		-	AC-UI-31	AM012NNNDCH/AA
		-	AC-UI-32	AM012NNNDCH/AA
		-	IDU_24	AM007TNVDCH/AA
		-	IDU_27	AM009NNNDCH/AA
		-	IDU_25	AM007TNVDCH/AA
		-	IDU_26	AM007TNVDCH/AA

Outdoor Unit

Equip. Name	Model Code	CR [%]	Max. Capa. [Btu/h]		Corr. Capa. [Btu/h]	
			CM	HM	CM	HM
AC-OU3	AM120BXVTFH/AA	126.67	132559.00	157567.00	132559.00	157567.00

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°F]		Max. Capa. [Btu/h]			Corr. Capa. [Btu/h]		
			CM	HM	CM		HM	CM		HM
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
AC-UI-25	AM018NNNDCH/AA	H	63.00	70.00	16567.00	11631.00	20000.00	15767.00	11069.00	18665.00
AC-UI-26	AM018NNNDCH/AA	H	63.00	70.00	16567.00	11631.00	20000.00	15767.00	11069.00	18665.00
AC-UI-27	AM018NNNDCH/AA	H	63.00	70.00	16567.00	11631.00	20000.00	15767.00	11069.00	18665.00
AC-UI-28	AM018NNNDCH/AA	H	63.00	70.00	16567.00	11631.00	20000.00	15767.00	11069.00	18665.00

Piping (Continued)

System (AC-OU3) (Continued)

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°F]		Max. Capa. [Btu/h]			Corr. Capa. [Btu/h]		
			CM	HM	CM		HM	CM		HM
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
AC-UI-29	AM012NNNDCH/AA	H	63.00	70.00	11000.00	8885.00	13500.00	10469.00	8456.00	12599.00
AC-UI-30	AM012NNNDCH/AA	H	63.00	70.00	11000.00	8885.00	13500.00	10469.00	8456.00	12599.00
AC-UI-31	AM012NNNDCH/AA	H	63.00	70.00	11000.00	8885.00	13500.00	10469.00	8456.00	12599.00
AC-UI-32	AM012NNNDCH/AA	H	63.00	70.00	11000.00	8885.00	13500.00	10469.00	8456.00	12599.00
IDU_24	AM007TNVDCH/AA	H	63.00	70.00	6772.00	5000.00	8111.00	6445.00	4758.00	7570.00
IDU_27	AM009NNNDCH/AA	H	63.00	70.00	8700.00	6542.00	10500.00	8280.00	6226.00	9799.00
IDU_25	AM007TNVDCH/AA	H	63.00	70.00	6772.00	5000.00	8111.00	6445.00	4758.00	7570.00
IDU_26	AM007TNVDCH/AA	H	63.00	70.00	6772.00	5000.00	8111.00	6445.00	4758.00	7570.00

Accessory

Equip. Name	Model Code	Address				Accessory
		Main	RMC			
AC-OU3	AM120BXVTFH/AA	-	-	-	-	LSVK1, WHG-T2-B, WHG-SL-B, WHG-SR-B, WHG-R2-B, WH
AC-UI-25	AM018NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-26	AM018NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-27	AM018NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-28	AM018NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-29	AM012NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-30	AM012NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-31	AM012NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
AC-UI-32	AM012NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
IDU_24	AM007TNVDCH/AA	-	-	-	-	586WBS-4SW, 586WBS-8SW
IDU_27	AM009NNNDCH/AA	-	-	-	-	PC4SUFMUN, 586WBS-4SW, 586WBS-8SW
IDU_25	AM007TNVDCH/AA	-	-	-	-	586WBS-4SW, 586WBS-8SW
IDU_26	AM007TNVDCH/AA	-	-	-	-	586WBS-4SW, 586WBS-8SW

Combination Ratio

Model Code	CR [%]	Operation Mode	Min. HOR [%]	Block Load [Btu/h]		Max. Capacity [Btu/h]	
				CM	HM	CM	HM
AM120BXVTFH/AA	126.67	HP	-	-	-	132559.00	157567.00

Piping (Continued)

System (AC-OU3) (Continued)

System Check Result

Checklist	Restriction Value	Design Result
Long pipe length is 106.97 ft (Restriction: 656.17 ft).	656.17 ft	106.97 ft
Total pipe length is 527.95 ft (Restriction: 3280.84 ft).	3280.84 ft	527.95 ft
Pipe length from first Y-Joint to the farthest IDU is 81.97 ft (Restriction: 147.64 ft).	147.64 ft	81.97 ft
Height difference between ODU and IDU is 0.00 ft (restriction: 361.00 ft) (ODU higher than IDUs).	361.00 ft	0.00 ft
Height difference between ODU and IDU is 6.56 ft (restriction: 361.00 ft) (ODU lower than IDUs).	361.00 ft	6.56 ft
Height difference between IDUs when there is no wall mounts with EEV is 0.00 ft (restriction: 164.04 ft).	164.04 ft	0.00 ft
Height difference between IDUs when there are wall mounts with EEV is 0.00 ft (restriction: 98.43 ft).	98.43 ft	0.00 ft
Height difference between the lowest IDU and the highest wall mount with EEV is 0.00 ft (restriction: 49.21 ft).	49.21 ft	0.00 ft

Refrigerant

Factory Charging and Additional Refrigerant Amount	Refrigerant Amount [lbs]
Factory Charging Refrigerant Amount	23.10
Additional Refrigerant Amount	19.84
Total	42.94

Piping (Continued)
System (AC-OU3) (Continued)
Piping Diagram

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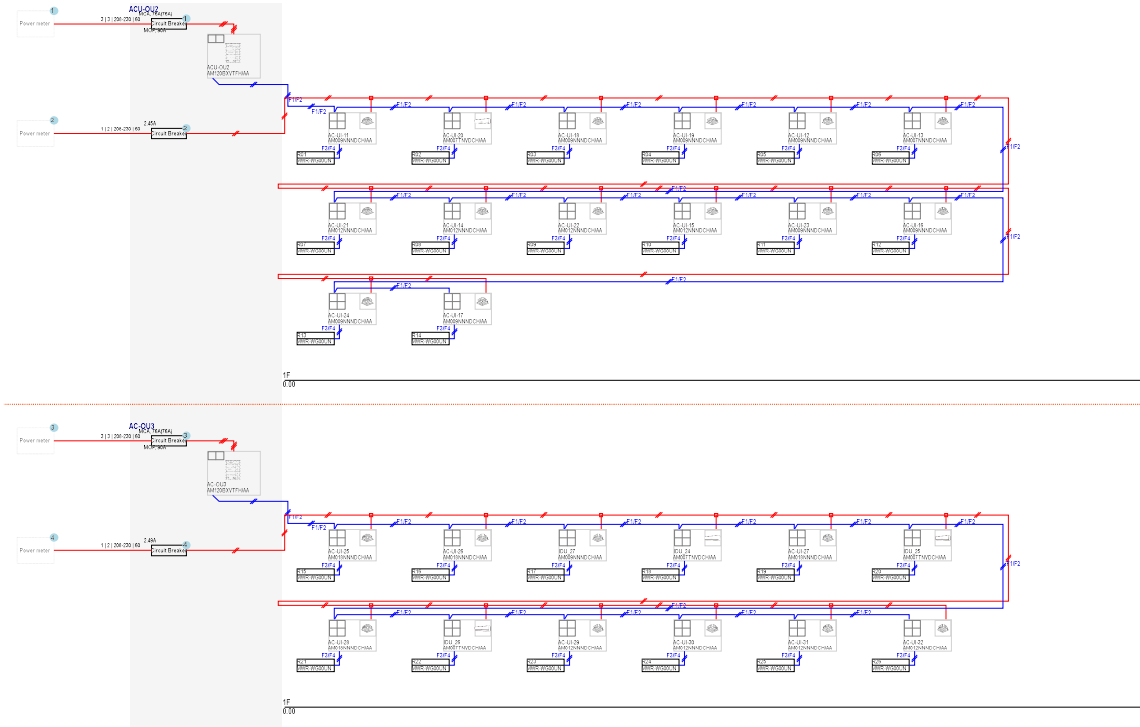
IDU
Pipe Mat



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

Wiring and Controller

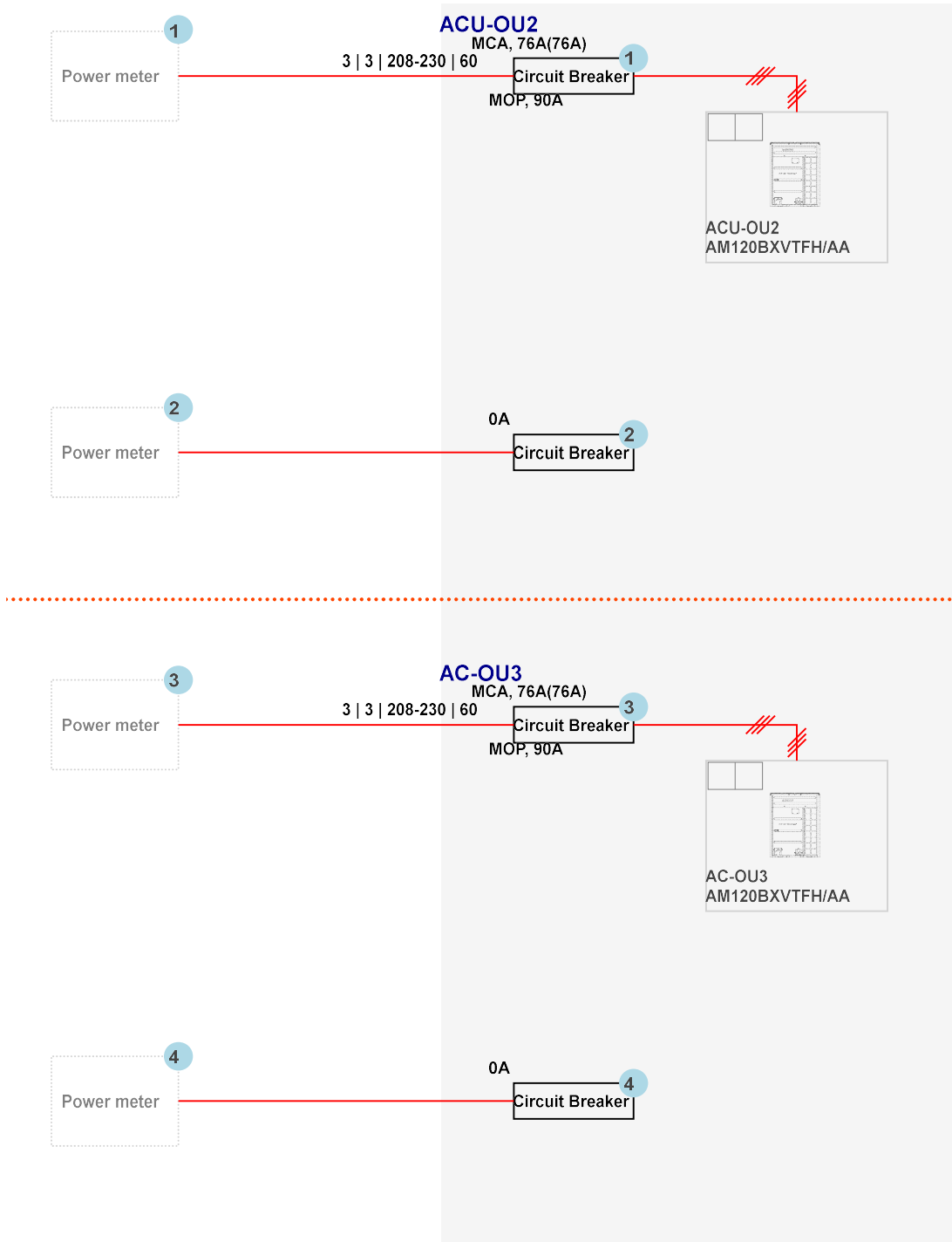
Wiring and Controller Diagram



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Controller

Controller Diagram

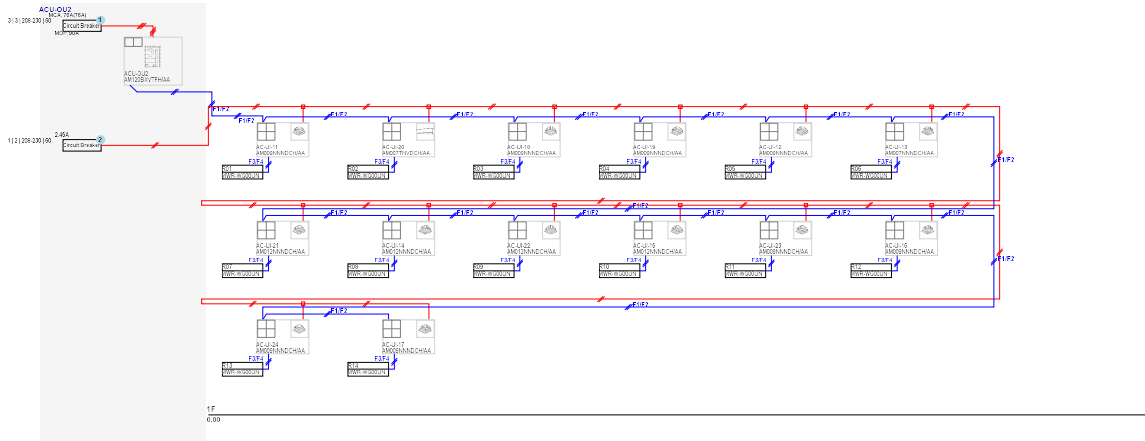


-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Wiring

System (ACU-OU2)

Wiring Diagram

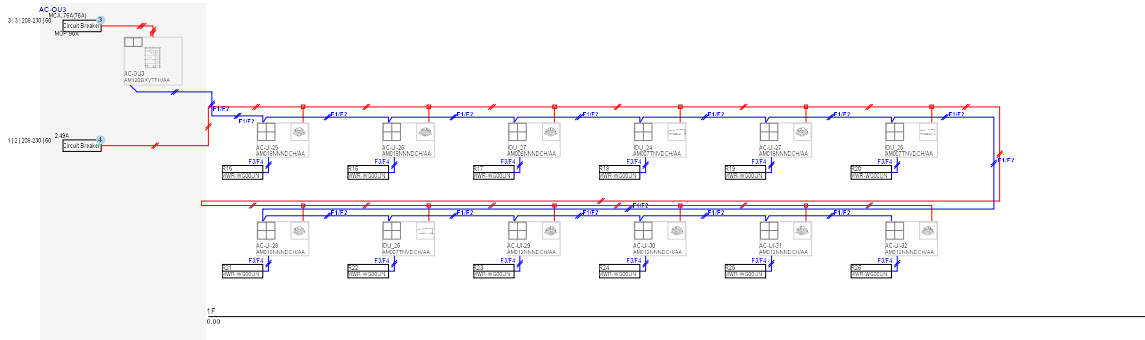


-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Wiring

System (AC-OU3)

Wiring Diagram



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

Product Specification

ACU-OU2

Outdoor Unit

Model Name					AM120BXVTFH/AA
Module					Single
Power Supply				Ø, #, V, Hz	3 3 208-230 60
Mode					HP
Performance	Ton				10
	Capacity	Cooling	Nominal	Btu/h	120000
			Rated	Btu/h	114000
		Heating	Nominal	Btu/h	135000
			Rated	Btu/h	129000
Power	Current	MCA		A	76
		MOP		A	90
Casing	Material	Body			GI Steel Plate
		Base			GI Steel Plate
Heat Exchanger	Type				Fin & Tube
	Material	Fin			Al
		Tube			
	Fin Treatment				Anti-corrosion
Compressor	Quantity			EA	2
Fan	Type				Propeller
	Discharge direction				Top discharge
	Air Flow Rate	High		CFM	10171
	External Static Pressure	Max		W G	0.43
Fan Motor	Type				BLDC
	Quantity			EA	2
	Output			W	620
Piping Connections	Liquid Pipe	Type			Welding
		Diameter			in
	Gas Pipe	Type			Welding
		Diameter			in
Wiring connections	Communication	Min.		mm ²	0.75
		Comm.Layer			F1, F2
Refrigerant	Type				R410A
	Factory Charging			lbs	23.1
Sound	Sound Pressure	Cooling		dB(A)	59
	Sound Power Level	Cooling		dB(A)	79

Product Specification

ACU-OU2 (Continued)

Outdoor Unit

External Dimension	Net Weight		lbs	644
	Shipping Weight		lbs	681
	Net Dimensions	W	in	51
		H	in	66.73
		D	in	30.12
	Shipping Dimensions	W	in	53.62
		H	in	74.29
D		in	32.64	
Operating Temp. Range	Cooling	Min.	°F	5
		Max.	°F	122
	Heating	Min.	°F	-22
		Max.	°F	75
Maximum number of connectable indoor units			EA	20

Product Specification

ACU-OU2 (Continued)

Indoor Unit

Model Name					AM009NNNDCH/AA	
Power Supply				Ø, #, V, Hz	1 2 208-230 60	
Mode					HP/HR	
Performance	MBH				9	
	Capacity	Cooling	Nominal	Btu/h	9500	
		Heating	Nominal	Btu/h	10500	
Power	Power Input	Cooling	Nominal	kW	0.024	
		Heating	Nominal	kW	0.024	
	Current Input	Cooling	Nominal	A	0.17	
		Heating	Nominal	A	0.17	
	Current	MCA			A	0.24
		MOP			A	15
		FLA	Quantity		EA	1
			A		A	0.33
Heat Exchanger	Type				Fin & tube	
	Material	Fin			Al	
		Tube			Cu	
	Fin Treatment				Louver, Hydrophile	
Fan	Type				Turbo	
	Air Flow Rate	High		CFM	353	
		Mid		CFM	300	
		Low		CFM	265	
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	
Wiring connections	Communication	Min.		AWG	2 X 16 AWG SHIELDED	
		Comm.Layer			F1, F2	
Refrigerant	Type				R410A	
	Control Type				EEV included	
Sound	Sound Pressure	High		dB(A)	33	

Product Specification

ACU-OU2 (Continued)

Indoor Unit

Sound	Sound Pressure Level	Mid	dB(A)	30
		Low	dB(A)	26
	Sound Power Level	Cooling	dB(A)	50
External Dimension	Net Weight		lbs	26.5
	Shipping Weight		lbs	30.9
	Net Dimensions	W	in	22.63
		H	in	9.81
		D	in	22.63
	Shipping Dimensions	W	in	24.31
		H	in	11.31
D		in	22.63	

Product Specification

ACU-OU2 (Continued)

Indoor Unit

Model Name					AM007TNVDCH/AA	
Power Supply				Ø, #, V, Hz	1 2 208-230 60	
Mode					HP/HR	
Performance	MBH				7	
	Capacity	Cooling	Nominal	Btu/h	7500	
		Heating	Nominal	Btu/h	8500	
Power	Power Input	Cooling	Nominal	kW	0.024	
		Heating	Nominal	kW	0.024	
	Current Input	Cooling	Nominal	A	0.16	
		Heating	Nominal	A	0.16	
	Current	MCA			A	0.2
		MOP			A	15
		FLA	Quantity		EA	1
			A		A	0.16
Heat Exchanger	Type				F&T	
	Material	Fin			Al	
		Tube			Cu	
	Fin Treatment				Green Hydrophile	
Fan	Type				Crossflow Fan	
	Air Flow Rate	High		CFM	201.3	
		Mid		CFM	176.6	
		Low		CFM	158.9	
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.		AWG	2 X 16 AWG SHIELDED	
		Comm.Layer			F1, F2	
Refrigerant	Type				R410A	
	Control Type				EEV included	
Sound	Sound Pressure	High		dB(A)	34	

Product Specification

ACU-OU2 (Continued)

Indoor Unit

Sound	Sound Pressure Level	Mid	dB(A)	32
		Low	dB(A)	30
	Sound Power Level	Cooling	dB(A)	51
External Dimension	Net Weight		lbs	19.8
	Shipping Weight		lbs	23.1
	Net Dimensions	W	in	32.3
		H	in	11.8
		D	in	8.5
	Shipping Dimensions	W	in	34.6
		H	in	11.4
D		in	14.8	

Product Specification

ACU-OU2 (Continued)

Indoor Unit

Model Name					AM012NNNDCH/AA	
Power Supply				Ø, #, V, Hz	1 2 208-230 60	
Mode					HP/HR	
Performance	MBH				12	
	Capacity	Cooling	Nominal	Btu/h	12000	
		Heating	Nominal	Btu/h	13500	
Power	Power Input	Cooling	Nominal	kW	0.028	
		Heating	Nominal	kW	0.028	
	Current Input	Cooling	Nominal	A	0.19	
		Heating	Nominal	A	0.19	
	Current	MCA			A	0.26
		MOP			A	15
		FLA	Quantity		EA	1
			A		A	0.33
Heat Exchanger	Type				Fin & tube	
	Material	Fin			Al	
		Tube			Cu	
	Fin Treatment				Louver, Hydrophile	
Fan	Type				Turbo	
	Air Flow Rate	High		CFM	371	
		Mid		CFM	335	
		Low		CFM	283	
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	
Wiring connections	Communication	Min.		AWG	2 X 16 AWG SHIELDED	
		Comm.Layer			F1, F2	
Refrigerant	Type				R410A	
	Control Type				EEV included	
Sound	Sound Pressure	High		dB(A)	34	

Product Specification

ACU-OU2 (Continued)

Indoor Unit

Sound	Sound Pressure Level	Mid	dB(A)	30
		Low	dB(A)	26
	Sound Power Level	Cooling	dB(A)	51
External Dimension	Net Weight		lbs	26.5
	Shipping Weight		lbs	30.9
	Net Dimensions	W	in	22.63
		H	in	9.81
		D	in	22.63
	Shipping Dimensions	W	in	24.31
		H	in	11.31
D		in	22.63	

Product Specification

ACU-OU2 (Continued)

Indoor Unit

Model Name					AM007NNNDCH/AA	
Power Supply				Ø, #, V, Hz	1 2 208-230 60	
Mode					HP/HR	
Performance	MBH				7	
	Capacity	Cooling	Nominal	Btu/h	7500	
		Heating	Nominal	Btu/h	8700	
Power	Power Input	Cooling	Nominal	kW	0.018	
		Heating	Nominal	kW	0.018	
	Current Input	Cooling	Nominal	A	0.17	
		Heating	Nominal	A	0.17	
	Current	MCA			A	0.24
		MOP			A	15
		FLA	Quantity		EA	1
			A		A	0.33
Heat Exchanger	Type				Fin & tube	
	Material	Fin			Al	
		Tube			Cu	
	Fin Treatment				Louver, Hydrophile	
Fan	Type				Turbo	
	Air Flow Rate	High		CFM	318	
		Mid		CFM	272	
		Low		CFM	230	
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	
Wiring connections	Communication	Min.		AWG	2 X 16 AWG SHIELDED	
		Comm.Layer			F1, F2	
Refrigerant	Type				R410A	
	Control Type				EEV included	
Sound	Sound Pressure	High		dB(A)	32	

Product Specification

ACU-OU2 (Continued)

Indoor Unit

Sound	Sound Pressure Level	Mid	dB(A)	29
		Low	dB(A)	25
	Sound Power Level	Cooling	dB(A)	47
External Dimension	Net Weight		lbs	26.5
	Shipping Weight		lbs	30.9
	Net Dimensions	W	in	22.63
		H	in	9.81
		D	in	22.63
	Shipping Dimensions	W	in	24.31
		H	in	11.31
D		in	22.63	

Product Specification

AC-OU3

Outdoor Unit

Model Name					AM120BXVTFH/AA
Module					Single
Power Supply				Ø, #, V, Hz	3 3 208-230 60
Mode					HP
Performance	Ton				10
	Capacity	Cooling	Nominal	Btu/h	120000
			Rated	Btu/h	114000
		Heating	Nominal	Btu/h	135000
			Rated	Btu/h	129000
Power	Current	MCA		A	76
		MOP		A	90
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	2
Fan	Type				Propeller
	Discharge direction				Top discharge
	Air Flow Rate	High	CFM	10171	
	External Static Pressure	Max	W G	0.43	
Fan Motor	Type				BLDC
	Quantity			EA	2
	Output			W	620
Piping Connections	Liquid Pipe	Type			Welding
		Diameter			in
	Gas Pipe	Type			Welding
		Diameter			in
Wiring connections	Communication	Min.	mm ²	0.75	
		Comm.Layer		F1, F2	
Refrigerant	Type				R410A
	Factory Charging			lbs	23.1
Sound	Sound Pressure	Cooling	dB(A)	59	
	Sound Power Level	Cooling	dB(A)	79	

Product Specification

AC-OU3 (Continued)

Outdoor Unit

External Dimension	Net Weight		lbs	644
	Shipping Weight		lbs	681
	Net Dimensions	W	in	51
		H	in	66.73
		D	in	30.12
	Shipping Dimensions	W	in	53.62
		H	in	74.29
D		in	32.64	
Operating Temp. Range	Cooling	Min.	°F	5
		Max.	°F	122
	Heating	Min.	°F	-22
		Max.	°F	75
Maximum number of connectable indoor units			EA	20

Product Specification

AC-OU3 (Continued)

Indoor Unit

Model Name					AM018NNNDCH/AA	
Power Supply				Ø, #, V, Hz	1 2 208-230 60	
Mode					HP/HR	
Performance	MBH				18	
	Capacity	Cooling	Nominal	Btu/h	18000	
		Heating	Nominal	Btu/h	20000	
Power	Power Input	Cooling	Nominal	kW	0.036	
		Heating	Nominal	kW	0.036	
	Current Input	Cooling	Nominal	A	0.27	
		Heating	Nominal	A	0.27	
	Current	MCA			A	0.38
		MOP			A	15
		FLA	Quantity		EA	1
			A		A	0.33
Heat Exchanger	Type				Fin & tube	
	Material	Fin			Al	
		Tube			Cu	
	Fin Treatment				Louver, Hydrophile	
Fan	Type				Turbo	
	Air Flow Rate	High		CFM	459	
		Mid		CFM	388	
		Low		CFM	335	
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	
Wiring connections	Communication	Min.		AWG	2 X 16 AWG SHIELDED	
		Comm.Layer			F1, F2	
Refrigerant	Type				R410A	
	Control Type				EEV included	
Sound	Sound Pressure	High		dB(A)	39	

Product Specification

AC-OU3 (Continued)

Indoor Unit

Sound	Sound Pressure Level	Mid	dB(A)	36
		Low	dB(A)	33
	Sound Power Level	Cooling	dB(A)	56
External Dimension	Net Weight		lbs	26.5
	Shipping Weight		lbs	30.9
	Net Dimensions	W	in	22.63
		H	in	9.81
		D	in	22.63
	Shipping Dimensions	W	in	24.31
		H	in	11.31
D		in	22.63	

Product Specification

AC-OU3 (Continued)

Indoor Unit

Model Name					AM012NNNDCH/AA	
Power Supply				Ø, #, V, Hz	1 2 208-230 60	
Mode					HP/HR	
Performance	MBH				12	
	Capacity	Cooling	Nominal	Btu/h	12000	
		Heating	Nominal	Btu/h	13500	
Power	Power Input	Cooling	Nominal	kW	0.028	
		Heating	Nominal	kW	0.028	
	Current Input	Cooling	Nominal	A	0.19	
		Heating	Nominal	A	0.19	
	Current	MCA			A	0.26
		MOP			A	15
		FLA	Quantity		EA	1
			A		A	0.33
Heat Exchanger	Type				Fin & tube	
	Material	Fin			Al	
		Tube			Cu	
	Fin Treatment				Louver, Hydrophile	
Fan	Type				Turbo	
	Air Flow Rate	High		CFM	371	
		Mid		CFM	335	
		Low		CFM	283	
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	
Wiring connections	Communication	Min.		AWG	2 X 16 AWG SHIELDED	
		Comm.Layer			F1, F2	
Refrigerant	Type				R410A	
	Control Type				EEV included	
Sound	Sound Pressure	High		dB(A)	34	

Product Specification

AC-OU3 (Continued)

Indoor Unit

Sound	Sound Pressure Level	Mid	dB(A)	30
		Low	dB(A)	26
	Sound Power Level	Cooling	dB(A)	51
External Dimension	Net Weight		lbs	26.5
	Shipping Weight		lbs	30.9
	Net Dimensions	W	in	22.63
		H	in	9.81
		D	in	22.63
	Shipping Dimensions	W	in	24.31
		H	in	11.31
D		in	22.63	

Product Specification

AC-OU3 (Continued)

Indoor Unit

Model Name					AM007TNVDCH/AA	
Power Supply				Ø, #, V, Hz	1 2 208-230 60	
Mode					HP/HR	
Performance	MBH				7	
	Capacity	Cooling	Nominal	Btu/h	7500	
		Heating	Nominal	Btu/h	8500	
Power	Power Input	Cooling	Nominal	kW	0.024	
		Heating	Nominal	kW	0.024	
	Current Input	Cooling	Nominal	A	0.16	
		Heating	Nominal	A	0.16	
	Current	MCA			A	0.2
		MOP			A	15
		FLA	Quantity		EA	1
			A		A	0.16
Heat Exchanger	Type				F&T	
	Material	Fin			Al	
		Tube			Cu	
	Fin Treatment				Green Hydrophile	
Fan	Type				Crossflow Fan	
	Air Flow Rate	High		CFM	201.3	
		Mid		CFM	176.6	
		Low		CFM	158.9	
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.		AWG	2 X 16 AWG SHIELDED	
		Comm.Layer			F1, F2	
Refrigerant	Type				R410A	
	Control Type				EEV included	
Sound	Sound Pressure	High		dB(A)	34	

Product Specification

AC-OU3 (Continued)

Indoor Unit

Sound	Sound Pressure Level	Mid	dB(A)	32
		Low	dB(A)	30
	Sound Power Level	Cooling	dB(A)	51
External Dimension	Net Weight		lbs	19.8
	Shipping Weight		lbs	23.1
	Net Dimensions	W	in	32.3
		H	in	11.8
		D	in	8.5
	Shipping Dimensions	W	in	34.6
		H	in	11.4
D		in	14.8	

Product Specification

AC-OU3 (Continued)

Indoor Unit

Model Name					AM009NNNDCH/AA	
Power Supply				Ø, #, V, Hz	1 2 208-230 60	
Mode					HP/HR	
Performance	MBH				9	
	Capacity	Cooling	Nominal	Btu/h	9500	
		Heating	Nominal	Btu/h	10500	
Power	Power Input	Cooling	Nominal	kW	0.024	
		Heating	Nominal	kW	0.024	
	Current Input	Cooling	Nominal	A	0.17	
		Heating	Nominal	A	0.17	
	Current	MCA			A	0.24
		MOP			A	15
		FLA	Quantity		EA	1
			A		A	0.33
Heat Exchanger	Type				Fin & tube	
	Material	Fin			Al	
		Tube			Cu	
	Fin Treatment				Louver, Hydrophile	
Fan	Type				Turbo	
	Air Flow Rate	High		CFM	353	
		Mid		CFM	300	
		Low		CFM	265	
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	
Wiring connections	Communication	Min.		AWG	2 X 16 AWG SHIELDED	
		Comm.Layer			F1, F2	
Refrigerant	Type				R410A	
	Control Type				EEV included	
Sound	Sound Pressure	High		dB(A)	33	

Product Specification

AC-OU3 (Continued)

Indoor Unit

Sound	Sound Pressure Level	Mid	dB(A)	30
		Low	dB(A)	26
	Sound Power Level	Cooling	dB(A)	50
External Dimension	Net Weight		lbs	26.5
	Shipping Weight		lbs	30.9
	Net Dimensions	W	in	22.63
		H	in	9.81
		D	in	22.63
	Shipping Dimensions	W	in	24.31
		H	in	11.31
D		in	22.63	