

## Submittal Form

ARCHITECT

ENGINEER

## AHSC

(Project)

Submittal No. 001

**Description:** Terminal HVAC Equipment

**Date:** 07/17/17 **Return By:** 07/31/17

Division: 23

Section: 23 80 00

Andersen

Subcontract/Supplier:

The review by O'Neill Walsh Community Builders ("OWCB") of the above Submittal shall not relieve Subcontractor/Supplier from any of its obligations under the agreement with OWCB nor give rise to any claim in favor of the Subcontractor/Supplier or third parties against OWCB or Owner.

By: Logan Bright

O'Neill Walsh Community Builders

Notes:

Notes:

Notes:

Revise and Resubmit.

Checking is only for general conformance with the design concept of the project and general compliance with the information given in the contact documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for: Dimensions, which shall be confirmed and correlated at the job site; fabrication processes and techniques of construction; coordination of his work with that of all other trades; and the satisfactory performance of his work.

MFIA, Inc. Consulting Engineers

By: Takako Baker, Date: 7/24/17

See attached for submittal review letter.



**"Your Green Heating & Cooling Professionals  
Dedicated to Serving Your and Your Community"**

## **HVAC Submittals**

**Asian Health & Service Center  
9005 SE Foster Rd.  
Portland, OR 97266**

**General Contractor  
O'Neill / Walsh Community Builders  
2905 SW First Avenue  
Portland, OR 97201**

**Submitted By  
Andersen Mechanical  
16285 SW 85<sup>th</sup> Ave, Suite 410  
Tigard, OR 97224**



23\_80\_00

## Terminal HVAC Equipment

May 11, 2017

## SUBMITTAL

**Project:** Asian Health & Service Center

**Contractor:** Andersen Mechanical  
16285 SW 85th Ave  
Tigard, Oregon 97224

**Engineer:** MFIA  
2007 S.E Ash St.  
Portland Oregon 97214

**Section:** VRV System



**Manufacturer:** Daikin AC

Model	Qty	Description
REYQ264TTJU	2	Heat recovery VRV-IV (208-230V)
BS4Q54TVJ	6	Branch selector unit
BS6Q54TVJ	2	Branch selector unit
FXAQ18PVJU	2	VRV A (P) - Wall Mounted Unit
FXAQ24PVJU	1	VRV A (P) - Wall Mounted Unit
FXFQ24TVJU	1	VRV F (T) - Round Flow Sensing Cassette
FXMQ15PBVJU	4	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXMQ18PBVJU	2	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXMQ24PBVJU	1	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXMQ36PBVJU	0	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXMQ48PBVJU	2	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXZQ07MVJU9	7	VRV Z - 4-Way Discharge Ceiling Mounted Cassette (2' x 2')
FXZQ12MVJU9	0	VRV Z - 4-Way Discharge Ceiling Mounted Cassette (2' x 2')
FXZQ15MVJU9	2	VRV Z - 4-Way Discharge Ceiling Mounted Cassette (2' x 2')
FXZQ18MVJU9	6	VRV Z - 4-Way Discharge Ceiling Mounted Cassette (2' x 2')
KHRP25M72TU9	1	Refnet branch piping kit
KHRP25M73TU9	5	Refnet branch piping kit
DCM601A71	1	intelligent Touch Manager (iTM)
KHFP26A100C	2	Branch Selector Closed Pipe Kit
BRC1E73	28	new Navigation Remote Controller
BYCQ125B-W1	1	Standard Decoration Panel
BYFQ60B3W1	15	Decoration panel - All FXZQ
BHFP26P100U	2	Condensing Unit Multi Connection Piping kit - VRVIV HR

Submitted

Steve Patnode



**Produced on 5/11/2017 with Xpress Selection V7.3.2 - database Central\_USA 9.9.3**

*Project name* ASIAN HEALTH PERMIT SET  
*Project address* United States  
*Reference* Submittals 5-11-2017  
*Client name* ANDERSEN MECH  
*Revision* Submittals 5-11-2017

Selection parameters of the indoor units can be found under the chapter Indoor unit details  
 Selection parameters of the outdoor units can be found under the chapter Outdoor unit details  
 Only the data published in the data book are correct. This program uses close approximations of these data.

## 1. Material List

Model	Qty	Description
REYQ264TTJU	2	Heat recovery VRV-IV (208-230V)
BS4Q54TVJ	6	Branch selector unit
BS6Q54TVJ	2	Branch selector unit
FXAQ18PVJU	2	VRV A (P) - Wall Mounted Unit
FXAQ24PVJU	1	VRV A (P) - Wall Mounted Unit
FXFQ24TVJU	1	VRV F (T) - Round Flow Sensing Cassette
FXMQ15PBVJU	4	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXMQ18PBVJU	3	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXMQ24PBVJU	2	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXMQ36PBVJU	2	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXMQ48PBVJU	2	VRV M (PB) - Ceiling Mounted Ducted (Medium Static)
FXZQ07MVJU9	7	VRV Z - 4-Way Discharge Ceiling Mounted Cassette (2' x 2')
FXZQ12MVJU9	2	VRV Z - 4-Way Discharge Ceiling Mounted Cassette (2' x 2')
FXZQ15MVJU9	2	VRV Z - 4-Way Discharge Ceiling Mounted Cassette (2' x 2')
FXZQ18MVJU9	6	VRV Z - 4-Way Discharge Ceiling Mounted Cassette (2' x 2')
KHRP25M72TU9	1	Refnet branch piping kit
KHRP25M73TU9	5	Refnet branch piping kit
DCM601A71	1	intelligent Touch Manager (iTM)
KHFP26A100C	2	Branch Selector Closed Pipe Kit
BRC1E73	34	new Navigation Remote Controller
BYCQ125B-W1	1	Standard Decoration Panel
BYFQ60B3W1	17	Decoration panel - All FXZQ
BHFP26P100U	2	Condensing Unit Multi Connection Piping kit - VRVIV HR

**Note: BOM shown on this page includes "Future" Fan coils**

## 2. Indoor Unit Details

### 2.1. *Table of Abbreviations*

Name	Logical name of the device
FCU	Device model name
Tmp C	Indoor conditions in cooling (dry bulb temp. / wet bulb temp.)
Rq TC	Required total cooling capacity
Max TC	Available total cooling capacity
Rq SC	Required sensible cooling capacity
Max SC	Available sensible cooling capacity
Tevap	Evaporating temperature of indoor unit coil
Tdis C	Indoor unit discharge air temperature in cooling
Tmp H	Indoor temperature in heating
Rq HC	Required heating capacity
Max HC	Available heating capacity
Tdis H	Indoor unit discharge air temperature in heating
Airflow	Supplied airflow
Sound	Sound pressure low and high
PS	Power supply (voltage and phases)
MCA	Minimum Circuit Amps
Fuses	Fuses
WxHxD	WidthxHeightxD
Wght	Weight of the device



## Submittal Data Sheet

2.0-Ton Round Flow Sensing Cassette - **FXFQ24**TVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: **CC-17**

## FEATURES

- True 360° airflow distribution and three room sensors enables optimized occupant comfort and efficiency
- Optional self-cleaning filter panel to further increase efficiency and reduce maintenance costs
- Individually controlled supply air louvers for comfortable air supply
- Improved efficiency with new DC fan motor and auto logic that adjusts fan speed based on space load
- Industry leading flexibility with 23 possible airflow patterns
- Integral condensate pump with up to 26-1/2" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts

## BENEFITS

- Compact design to allow for installation in small ceiling voids
- Very low sound levels increases flexibility regarding location of the unit
- Increased indoor air quality with high efficiency filter options & ventilation connection kit
- Automatic occupancy dependant Set back function to save energy





## Submittal Data Sheet

### 2.0-Ton Round Flow Sensing Cassette - FXFQ24TVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: CC-17

#### PERFORMANCE

Indoor Unit Model No.	FXFQ24TVJU	Indoor Unit Name:	2.0-Ton Round Flow Sensing Cassette
Type:	Ceiling Cassette	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	24,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	20,000	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.080	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	27,000		
Heating Input Power (kW):	0.08		

#### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (H/M/L) (CFM):	777/618/477
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	0.70	Gas Pipe Connection (inch):	5/8
Max Overcurrent Protection (MOP) (A):		Liquid Pipe Connection (inch):	3/8
Dimensions (HxWxD) (in):	9-11/16 x 33-1/16 x 33-1/16	Condensate Connection (inch):	1-1/4
Panel (HxWxD) (in):	2 x 37-3/8 x 37-3/8	Sound Pressure (H/L) (dBA):	32/28
Net Weight (lb):	51	Sound Power Level (dBA):	
Panel Weight (lb):	22	Ext. Static Pressure (Rated/Max) (inWg):	0.00 / 0.00







## Submittal Data Sheet

0.5-Ton 2' x 2' 4-Way Ceiling Cassette - **FXZQ07**MVJU9

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: **CC-14, CC-8, CC-2, CC-7, CC-9, CC-10, CC-15**

## FEATURES

- New and extremely compact casing (2'x2') enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles
- Modern style decoration panel in white
- Quiet operation down to 25 dBA sound pressure level
- Vertical auto-swing function moves the discharge flaps up and down for efficient air distribution throughout the room
- Any one of 5 air flow patterns can be freely selected between zero and 40 degrees and will then be maintained during the operational cycle of the air conditioner
- Integral condensate pump with up to 21-7/16" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts





## Submittal Data Sheet

0.5-Ton 2' x 2' 4-Way Ceiling Cassette - FXZQ07MVJU9

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: CC-14, CC-8, CC-2, CC-7, CC-9, CC-10, CC-15

### PERFORMANCE

Indoor Unit Model No.	FXZQ07MVJU9	Indoor Unit Name:	0.5-Ton 2' x 2' 4-Way Ceiling Cassette
Type:	Ceiling Cassette	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	7,500	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	5,900	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.080	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	8,700		
Heating Input Power (kW):	0.07		

### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (H/L) (CFM):	320/247
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	0.80	Gas Pipe Connection (inch):	1/2
Max Overcurrent Protection (MOP) (A):	15.00	Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	11 1/4 x 22 5/8 x 22 5/8	Condensate Connection (inch):	1-1/32
Panel (HxWxD) (in):	2 5/32 x 27 9/16 x 27 9/16	Sound Pressure (H/L) (dBA):	31/29
Net Weight (lb):	42	Sound Power Level (dBA):	
Panel Weight (lb):	6	Ext. Static Pressure (Rated/Max) (inWg):	0.00 / 0.00



Submittal Data Sheet

0.5-Ton 2' x 2' 4-Way Ceiling Cassette - FXZQ07MVJU9

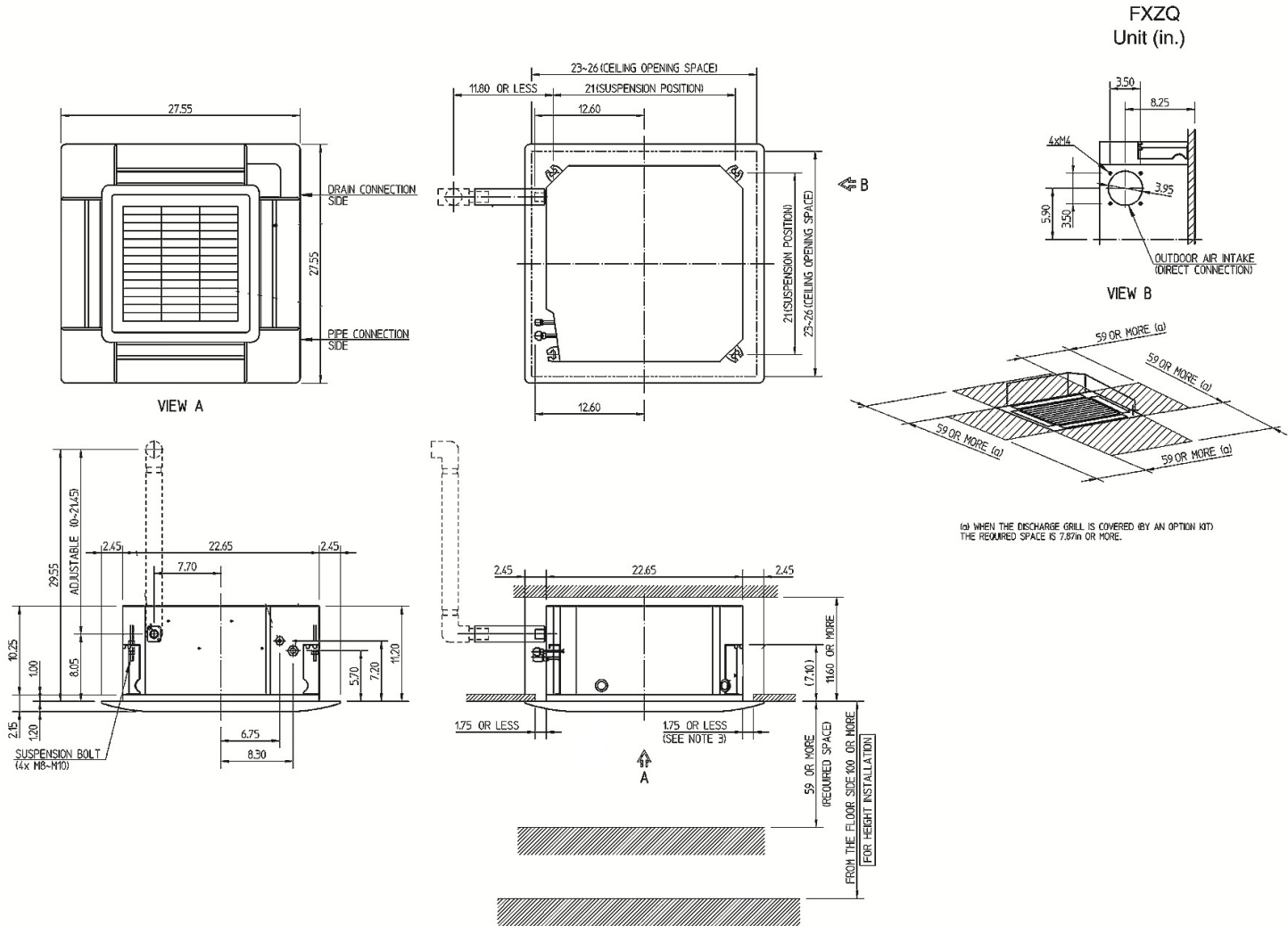
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: CC-14, CC-8, CC-2, CC-7, CC-9, CC-10, CC-15

DIMENSIONAL DRAWING





## Submittal Data Sheet

1.0-Ton 2'x2' 4-Way Ceiling Cassette - **FXZQ12MVJU9**

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: **Future CC-A2, Future CC-A1**

## FEATURES

- New and extremely compact casing (2'x2') enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles
- Modern style decoration panel in white
- Quiet operation down to 25 dBA sound pressure level
- Vertical auto-swing function moves the discharge flaps up and down for efficient air distribution throughout the room
- Any one of 5 air flow patterns can be freely selected between zero and 40 degrees and will then be maintained during the operational cycle of the air conditioner
- Integral condensate pump with up to 21-7/16" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts





## Submittal Data Sheet

1.0-Ton 2'x2' 4-Way Ceiling Cassette - FXZQ12MVJU9

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: Future CC-A2, Future CC-A1

### PERFORMANCE

Indoor Unit Model No.	FXZQ12MVJU9	Indoor Unit Name:	1.0-Ton 2'x2' 4-Way Ceiling Cassette
Type:	Ceiling Cassette	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	12,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	8,000	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.080	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	14,000		
Heating Input Power (kW):	0.07		

### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (H/L) (CFM):	335/265
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	0.80	Gas Pipe Connection (inch):	1/2
Max Overcurrent Protection (MOP) (A):	15.00	Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	11 1/4 x 22 5/8 x 22 5/8	Condensate Connection (inch):	1-1/32
Panel (HxWxD) (in):	2 5/32 x 27 9/16 x 27 9/16	Sound Pressure (H/L) (dBA):	41/34
Net Weight (lb):	42	Sound Power Level (dBA):	
Panel Weight (lb):	6	Ext. Static Pressure (Rated/Max) (inWg):	0.00 / 0.00

## Submittal Data Sheet

1.0-Ton 2'x2' 4-Way Ceiling Cassette - FXZQ12MVJU9

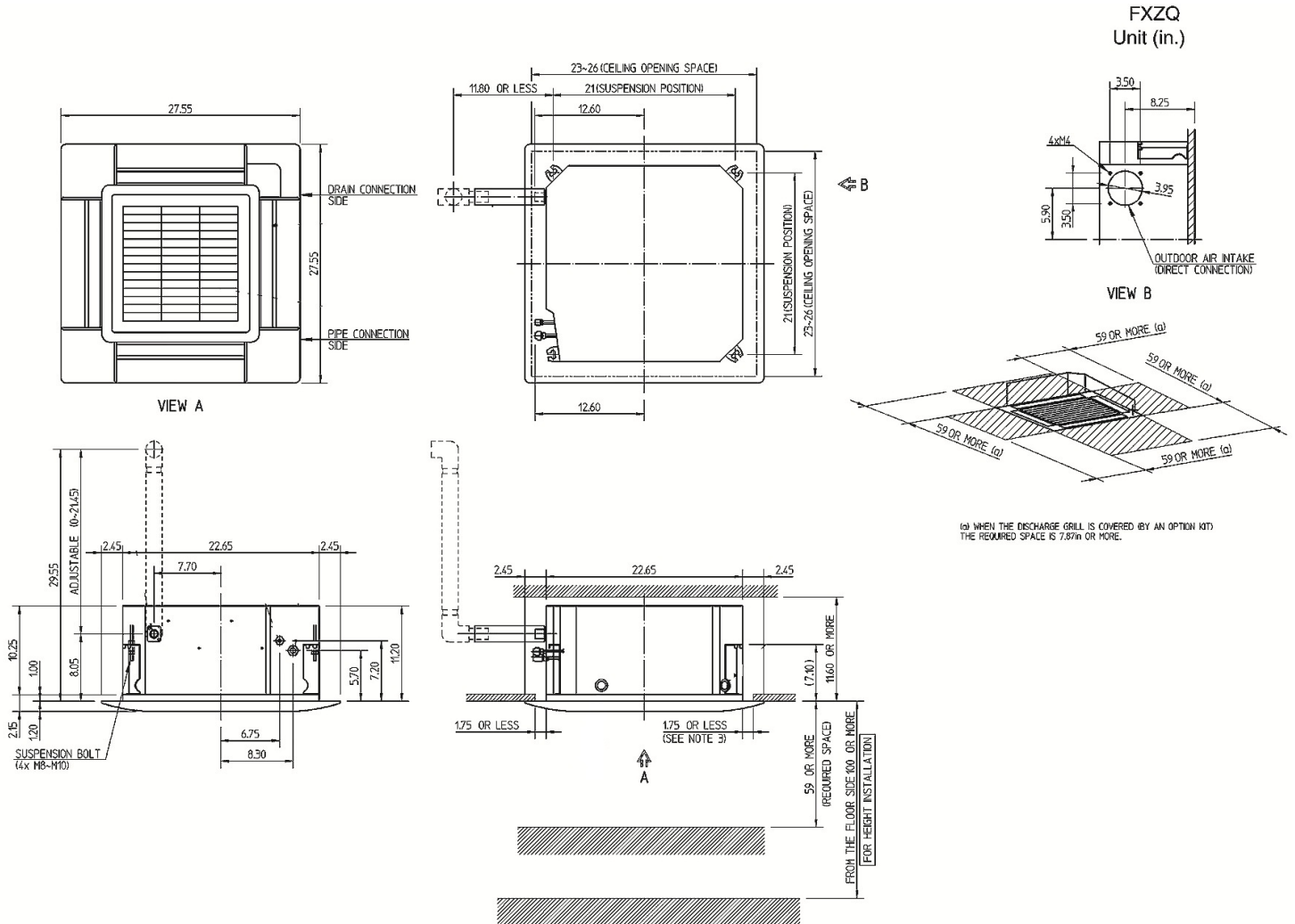
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: Future CC-A2, Future CC-A1

## DIMENSIONAL DRAWING





## Submittal Data Sheet

1.25-Ton 2'x2' 4-Way Ceiling Cassette - **FXZQ15**MVJU9

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: **CC-11, CC-12**

## FEATURES

- New and extremely compact casing (2'x2') enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles
- Modern style decoration panel in white
- Quiet operation down to 25 dBA sound pressure level
- Vertical auto-swing function moves the discharge flaps up and down for efficient air distribution throughout the room
- Any one of 5 air flow patterns can be freely selected between zero and 40 degrees and will then be maintained during the operational cycle of the air conditioner
- Integral condensate pump with up to 21-7/16" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts







## Submittal Data Sheet

1.25-Ton 2'x2' 4-Way Ceiling Cassette - FXZQ15MVJU9

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: CC-11, CC-12

### PERFORMANCE

Indoor Unit Model No.	FXZQ15MVJU9	Indoor Unit Name:	1.25-Ton 2'x2' 4-Way Ceiling Cassette
Type:	Ceiling Cassette	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	15,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	10,900	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.100	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	17,500		
Heating Input Power (kW):	0.09		

### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (H/L) (CFM):	388/282
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	0.80	Gas Pipe Connection (inch):	1/2
Max Overcurrent Protection (MOP) (A):	15.00	Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	11 1/4 x 22 5/8 x 22 5/8	Condensate Connection (inch):	1-1/32
Panel (HxWxD) (in):	2 5/32 x 27 9/16 x 27 9/16	Sound Pressure (H/L) (dBA):	41/34
Net Weight (lb):	42	Sound Power Level (dBA):	
Panel Weight (lb):	6	Ext. Static Pressure (Rated/Max) (inWg):	0.00 / 0.00

## Submittal Data Sheet

1.25-Ton 2'x2' 4-Way Ceiling Cassette - FXZQ15MVJU9

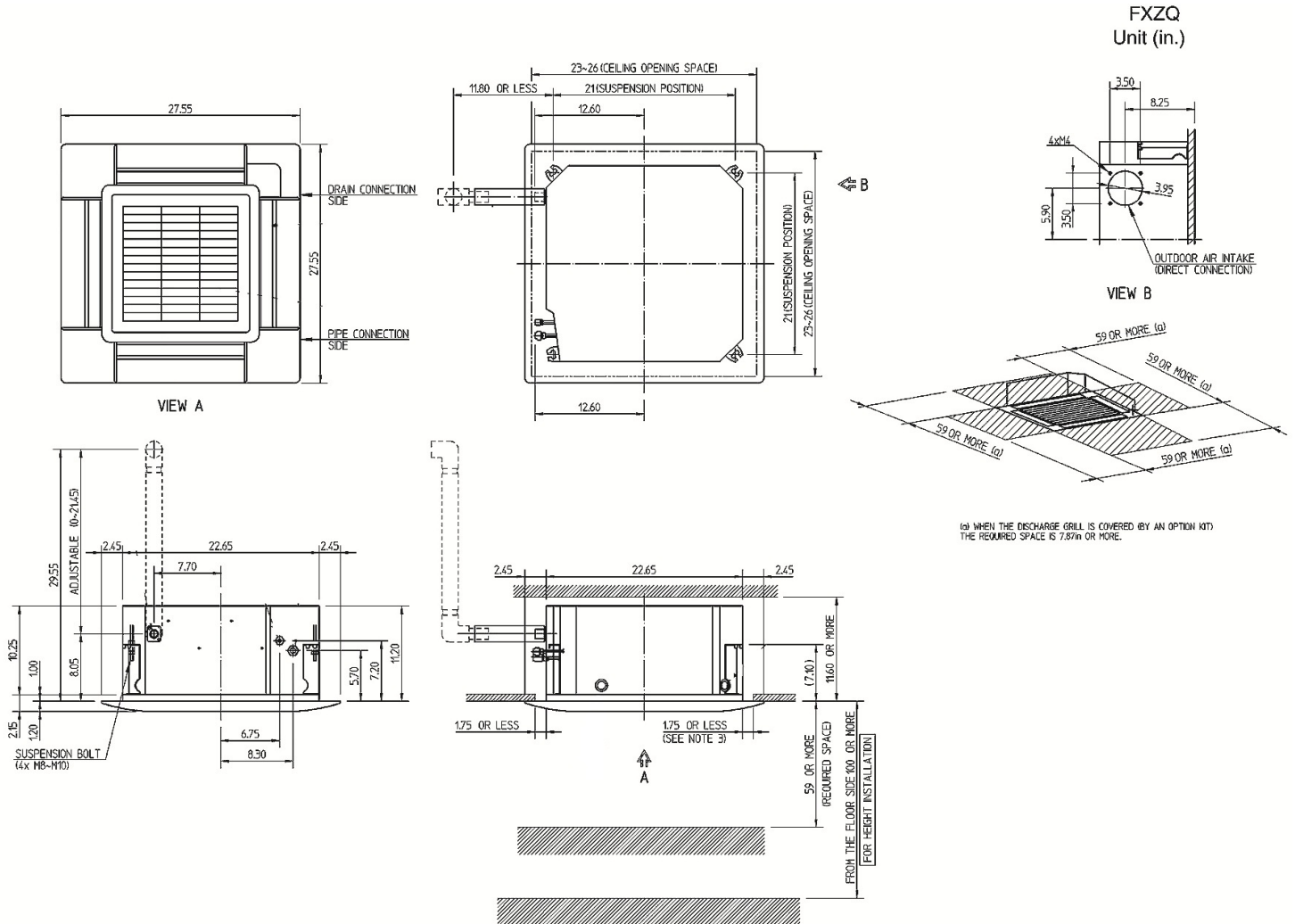
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: CC-11, CC-12

## DIMENSIONAL DRAWING





## Submittal Data Sheet

1.5-Ton 2'x2' 4-Way Ceiling Cassette - **FXZQ18MVJU9**

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: **CC-1, CC-3, CC-4, CC-5, CC-6, CC-13**

## FEATURES

- New and extremely compact casing (2'x2') enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles
- Modern style decoration panel in white
- Quiet operation down to 25 dBA sound pressure level
- Vertical auto-swing function moves the discharge flaps up and down for efficient air distribution throughout the room
- Any one of 5 air flow patterns can be freely selected between zero and 40 degrees and will then be maintained during the operational cycle of the air conditioner
- Integral condensate pump with up to 21-7/16" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts





## Submittal Data Sheet

1.5-Ton 2'x2' 4-Way Ceiling Cassette - FXZQ18MVJU9

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: CC-1, CC-3, CC-4, CC-5, CC-6, CC-13

### PERFORMANCE

Indoor Unit Model No.	FXZQ18MVJU9	Indoor Unit Name:	1.5-Ton 2'x2' 4-Way Ceiling Cassette
Type:	Ceiling Cassette	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	18,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	13,300	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.130	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	21,000		
Heating Input Power (kW):	0.12		

### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (H/L) (CFM):	495/353
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	0.90	Gas Pipe Connection (inch):	1/2
Max Overcurrent Protection (MOP) (A):	15.00	Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	11 1/4 x 22 5/8 x 22 5/8	Condensate Connection (inch):	1-1/32
Panel (HxWxD) (in):	2 5/32 x 27 9/16 x 27 9/16	Sound Pressure (H/L) (dBA):	41/34
Net Weight (lb):	42	Sound Power Level (dBA):	
Panel Weight (lb):	6	Ext. Static Pressure (Rated/Max) (inWg):	0.00 / 0.00

## Submittal Data Sheet

### 1.5-Ton 2'x2' 4-Way Ceiling Cassette - FXZQ18MVJU9

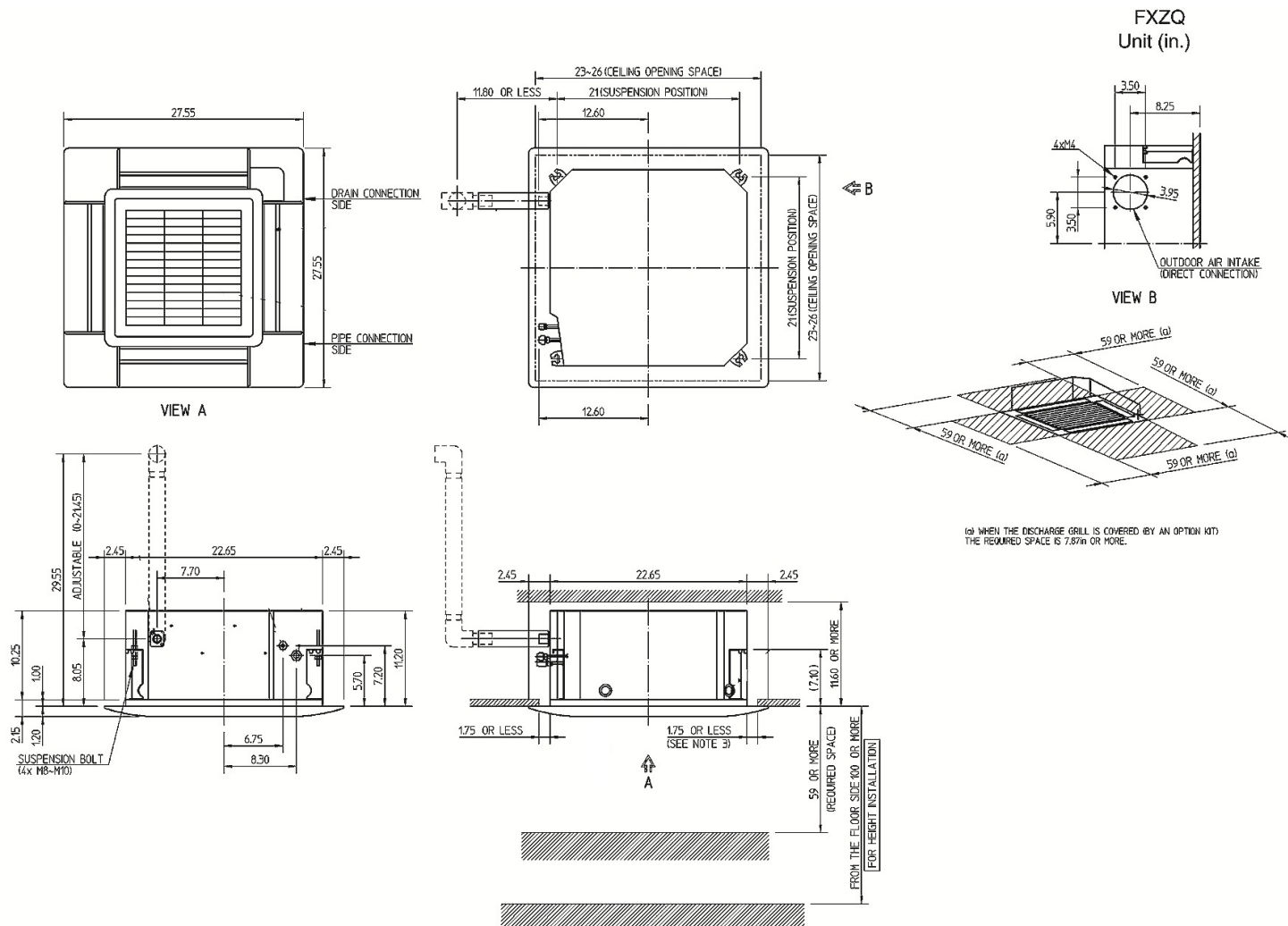
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: CC-1, CC-3, CC-4, CC-5, CC-6, CC-13

## DIMENSIONAL DRAWING





## Submittal Data Sheet

1.25-Ton DC Ducted Concealed Ceiling - FXMQ15PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: FC-3, FC-5, FC-6, FC-7

## FEATURES

- Increased capacity range for increased flexibility
- Improved efficiency with DC fan motor
- Ease of installation with auto adjusting airflow at commissioning based on external static pressure
- Easy maintenance with service access from below
- Installation flexibility with a low profile, compact design at less than 12" in height
- Integral condensate pump with up to 18-3/8" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts

## BENEFITS

- Enhanced indoor air quality and LEED ready with MERV 13 filter options
- Flexible ductwork design with ESP capabilities up to 0.80" W.G.
- New economizer control logic
- New configurable auxiliary heater control logic
- Design allows it to be completely concealed - perfect for retail, classrooms, offices, banks, restaurants, and hotels.





## Submittal Data Sheet

1.25-Ton DC Ducted Concealed Ceiling - FXMQ15PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: FC-3, FC-5, FC-6, FC-7

### PERFORMANCE

Indoor Unit Model No.	FXMQ15PBVJU	Indoor Unit Name:	1.25-Ton DC Ducted Concealed Ceiling
Type:	Ducted	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	15,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	12,000	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.200	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	17,000		
Heating Input Power (kW):	0.19		

### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (HH/H/M/L) (CFM):	560/560/530/500
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	1.50	Gas Pipe Connection (inch):	1/2
Max Overcurrent Protection (MOP) (A):	15.00	Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	11-13/16 x 39-3/8 x 27-9/16	Condensate Connection (inch):	1-1/4
Panel (HxWxD) (in):		Sound Pressure (H/M/L) (dBA):	40/38/37
Net Weight (lb):	80	Sound Power Level (dBA):	
Panel Weight (lb):		Ext. Static Pressure (Rated/Max) (inWg):	0.40 / 0.80

## Submittal Data Sheet

1.25-Ton DC Ducted Concealed Ceiling - FXMQ15PBVJU

Project: Asian Health 5-11-2017

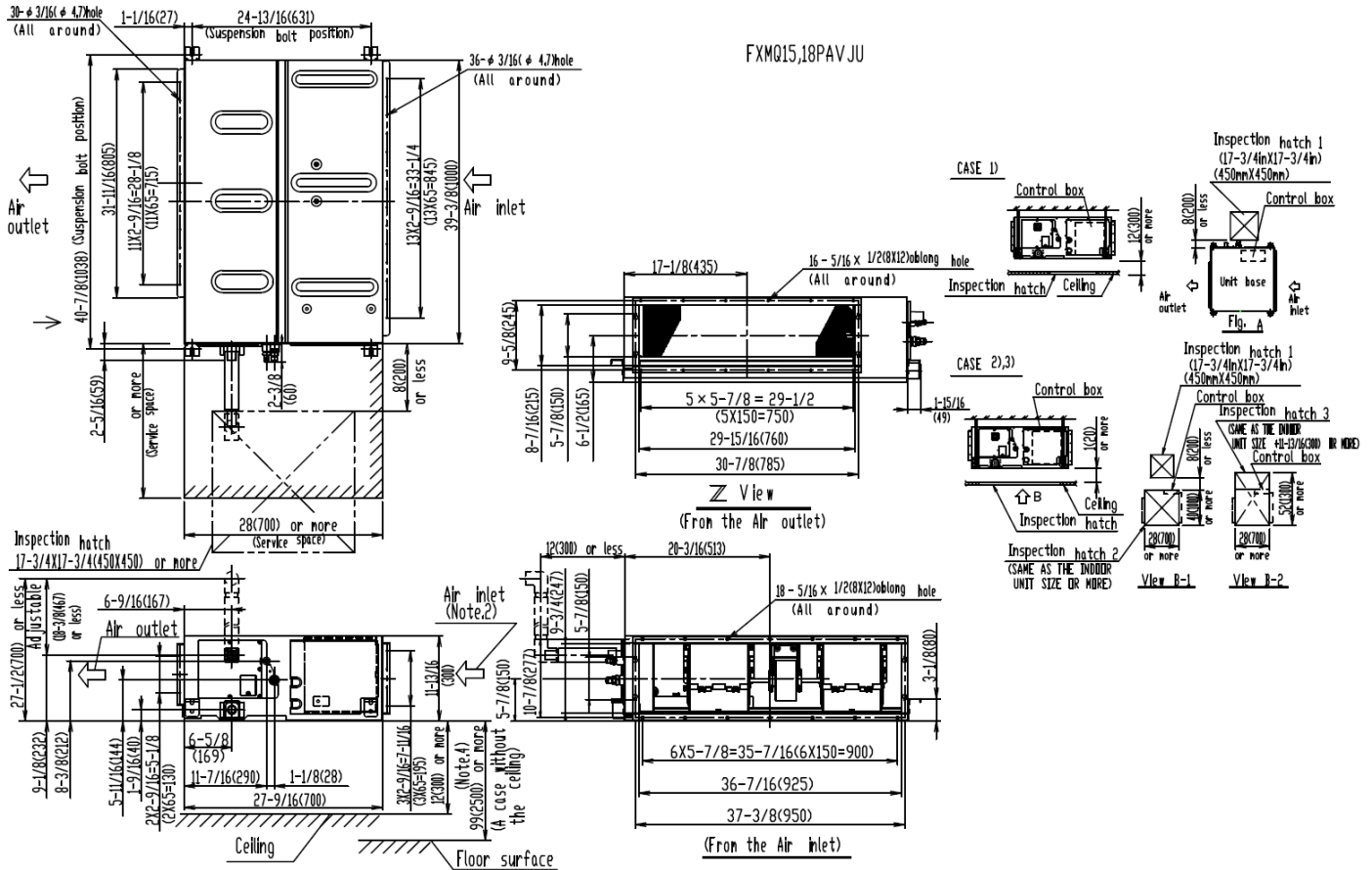
Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: FC-3, FC-5, FC-6, FC-7

## DIMENSIONAL DRAWING

FXMQ15.18PAVJU







## Submittal Data Sheet

1.5-Ton DC Ducted Concealed Ceiling - FXMQ18PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: FC-1, Future FC-A2, FC-4

## FEATURES

- Increased capacity range for increased flexibility
- Improved efficiency with DC fan motor
- Ease of installation with auto adjusting airflow at commissioning based on external static pressure
- Easy maintenance with service access from below
- Installation flexibility with a low profile, compact design at less than 12" in height
- Integral condensate pump with up to 18-3/8" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts

## BENEFITS

- Enhanced indoor air quality and LEED ready with MERV 13 filter options
- Flexible ductwork design with ESP capabilities up to 0.80" W.G.
- New economizer control logic
- New configurable auxiliary heater control logic
- Design allows it to be completely concealed - perfect for retail, classrooms, offices, banks, restaurants, and hotels.





## Submittal Data Sheet

1.5-Ton DC Ducted Concealed Ceiling - FXMQ18PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: FC-1, Future FC-A2, FC-4

### PERFORMANCE

Indoor Unit Model No.	FXMQ18PBVJU	Indoor Unit Name:	1.5-Ton DC Ducted Concealed Ceiling
Type:	Ducted	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	18,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	14,400	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.210	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	20,000		
Heating Input Power (kW):	0.20		

### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (HH/H/M/L) (CFM):	635/635/582/529
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	1.60	Gas Pipe Connection (inch):	1/2
Max Overcurrent Protection (MOP) (A):	15.00	Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	11-13/16 x 39-3/8 x 27-9/16	Condensate Connection (inch):	1-1/4
Panel (HxWxD) (in):		Sound Pressure (H/M/L) (dBA):	41/39/37
Net Weight (lb):	80	Sound Power Level (dBA):	
Panel Weight (lb):		Ext. Static Pressure (Rated/Max) (inWg):	0.40 / 0.80

## Submittal Data Sheet

### 1.5-Ton DC Ducted Concealed Ceiling - FXMQ18PBVJU

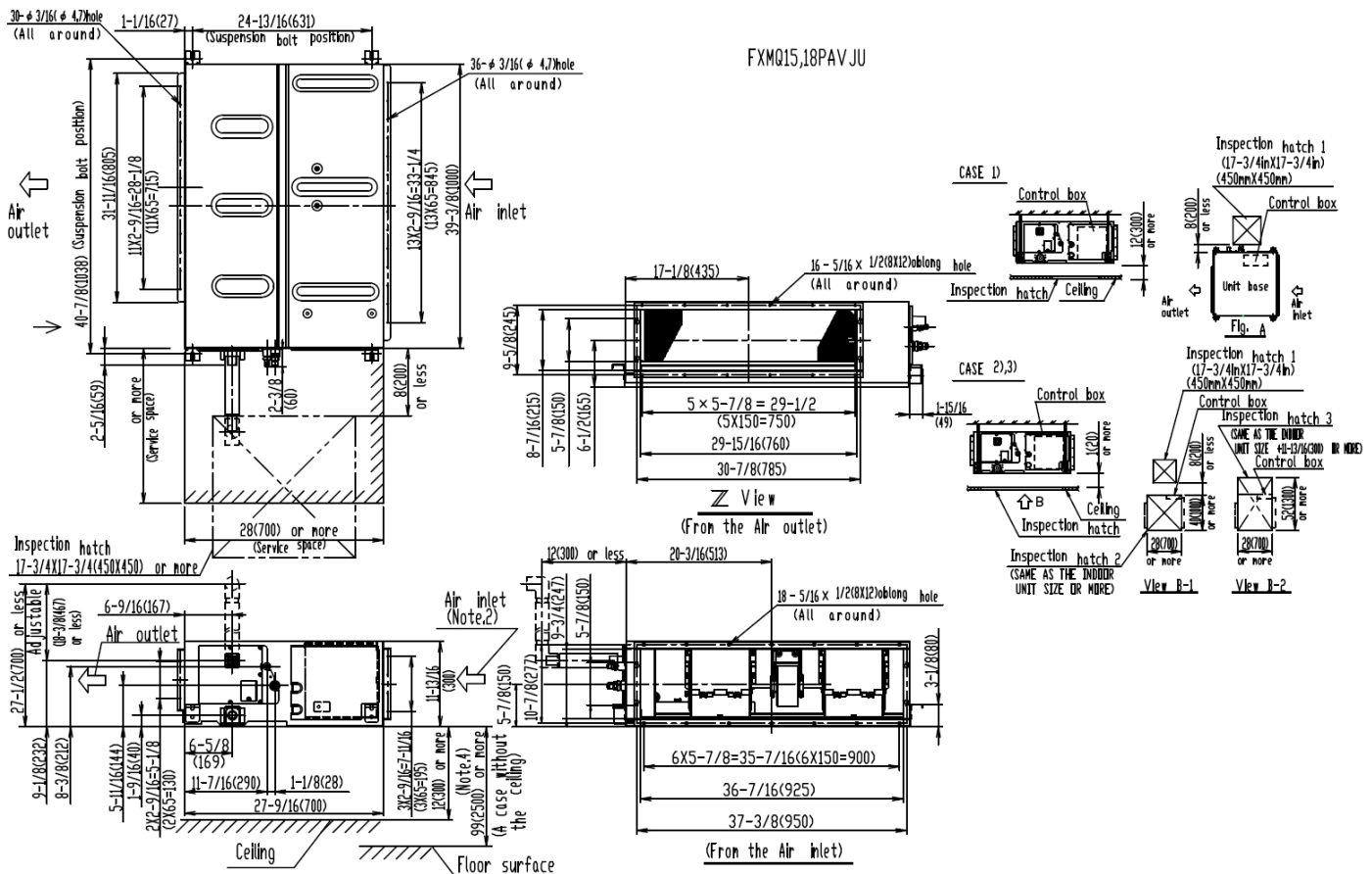
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: FC-1, Future FC-A2, FC-4

## DIMENSIONAL DRAWING





## Submittal Data Sheet

2.0-Ton DC Ducted Concealed Ceiling - FXMQ24PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: Future FC-A3, FC-2

## FEATURES

- Increased capacity range for increased flexibility
- Improved efficiency with DC fan motor
- Ease of installation with auto adjusting airflow at commissioning based on external static pressure
- Easy maintenance with service access from below
- Installation flexibility with a low profile, compact design at less than 12" in height
- Integral condensate pump with up to 18-3/8" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts

## BENEFITS

- Enhanced indoor air quality and LEED ready with MERV 13 filter options
- Flexible ductwork design with ESP capabilities up to 0.80" W.G.
- New economizer control logic
- New configurable auxiliary heater control logic
- Design allows it to be completely concealed - perfect for retail, classrooms, offices, banks, restaurants, and hotels.





## Submittal Data Sheet

2.0-Ton DC Ducted Concealed Ceiling - FXMQ24PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: Future FC-A3, FC-2

### PERFORMANCE

Indoor Unit Model No.	FXMQ24PBVJU	Indoor Unit Name:	2.0-Ton DC Ducted Concealed Ceiling
Type:	Ducted	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	24,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	18,800	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.230	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	27,000		
Heating Input Power (kW):	0.22		

### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (HH/H/M/L) (CFM):	688/688/618/565
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	1.80	Gas Pipe Connection (inch):	5/8
Max Overcurrent Protection (MOP) (A):	15.00	Liquid Pipe Connection (inch):	3/8
Dimensions (HxWxD) (in):	11-13/16 x 39-3/8 x 27-9/16	Condensate Connection (inch):	1-1/4
Panel (HxWxD) (in):		Sound Pressure (H/M/L) (dBA):	42/40/38
Net Weight (lb):	80	Sound Power Level (dBA):	
Panel Weight (lb):		Ext. Static Pressure (Rated/Max) (inWg):	0.40 / 0.80

## Submittal Data Sheet

2.0-Ton DC Ducted Concealed Ceiling - FXMQ24PBVJU

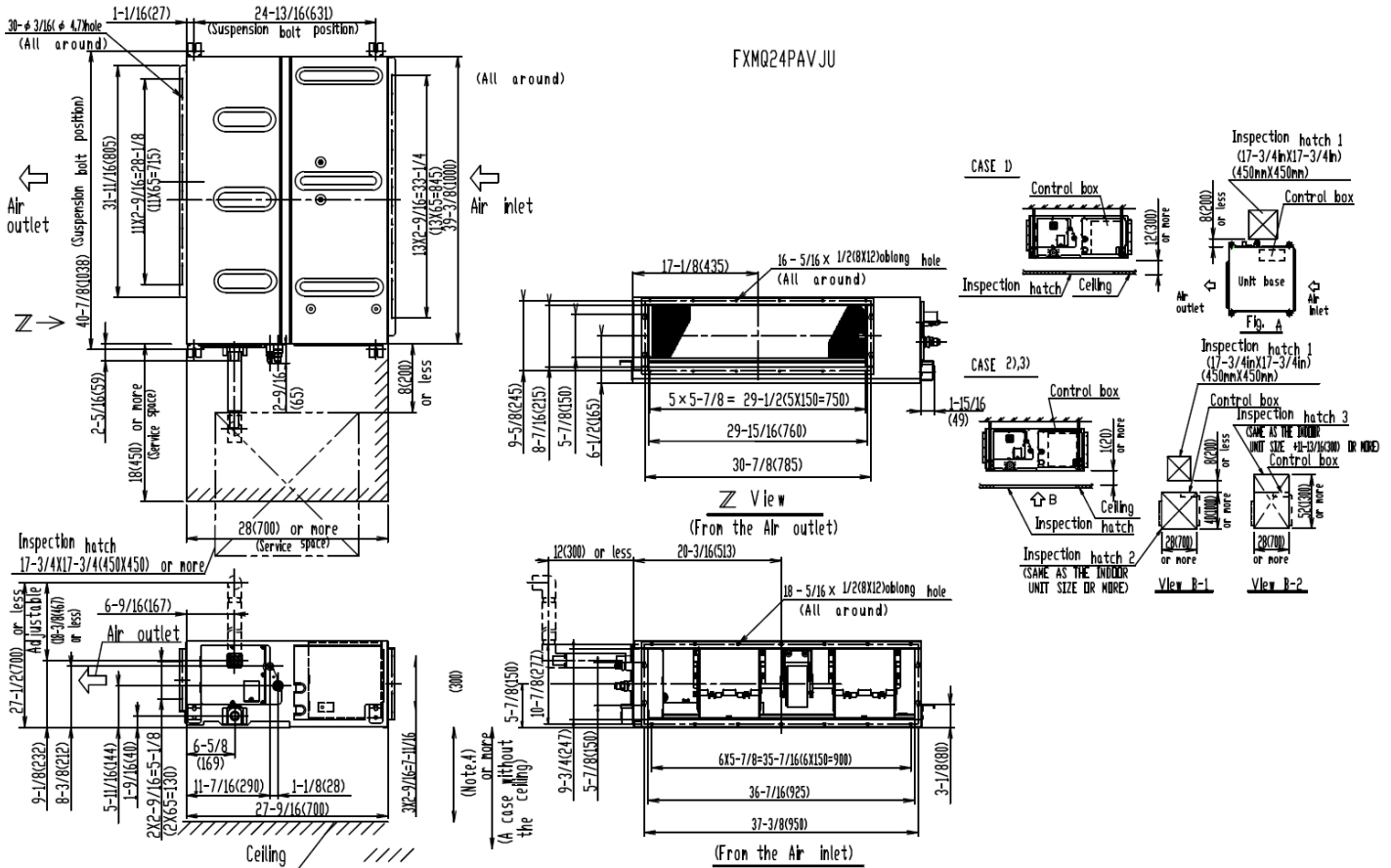
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: Future FC-A3, FC-2

## DIMENSIONAL DRAWING





## Submittal Data Sheet

3.0-Ton DC Ducted Concealed Ceiling - FXMQ36PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: Future FC-A4, Future FC-A1

## FEATURES

- Increased capacity range for increased flexibility
- Improved efficiency with DC fan motor
- Ease of installation with auto adjusting airflow at commissioning based on external static pressure
- Easy maintenance with service access from below
- Installation flexibility with a low profile, compact design at less than 12" in height
- Integral condensate pump with up to 18-3/8" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts

## BENEFITS

- Enhanced indoor air quality and LEED ready with MERV 13 filter options
- Flexible ductwork design with ESP capabilities up to 0.80" W.G.
- New economizer control logic
- New configurable auxiliary heater control logic
- Design allows it to be completely concealed - perfect for retail, classrooms, offices, banks, restaurants, and hotels.





## Submittal Data Sheet

3.0-Ton DC Ducted Concealed Ceiling - FXMQ36PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: Future FC-A4, Future FC-A1

### PERFORMANCE

Indoor Unit Model No.	FXMQ36PBVJU	Indoor Unit Name:	3.0-Ton DC Ducted Concealed Ceiling
Type:	Ducted	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	36,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	28,800	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.380	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	40,000		
Heating Input Power (kW):	0.36		

### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (HH/H/M/L) (CFM):	1,130/1,130/953/812
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	2.90	Gas Pipe Connection (inch):	5/8
Max Overcurrent Protection (MOP) (A):	15.00	Liquid Pipe Connection (inch):	3/8
Dimensions (HxWxD) (in):	11-13/16 x 55-1/8 x 27-9/16	Condensate Connection (inch):	1-1/4
Panel (HxWxD) (in):		Sound Pressure (H/M/L) (dBA):	43/41/39
Net Weight (lb):	102	Sound Power Level (dBA):	
Panel Weight (lb):		Ext. Static Pressure (Rated/Max) (inWg):	0.40 / 0.80



## Submittal Data Sheet

3.0-Ton DC Ducted Concealed Ceiling - FXMQ36PBVJU

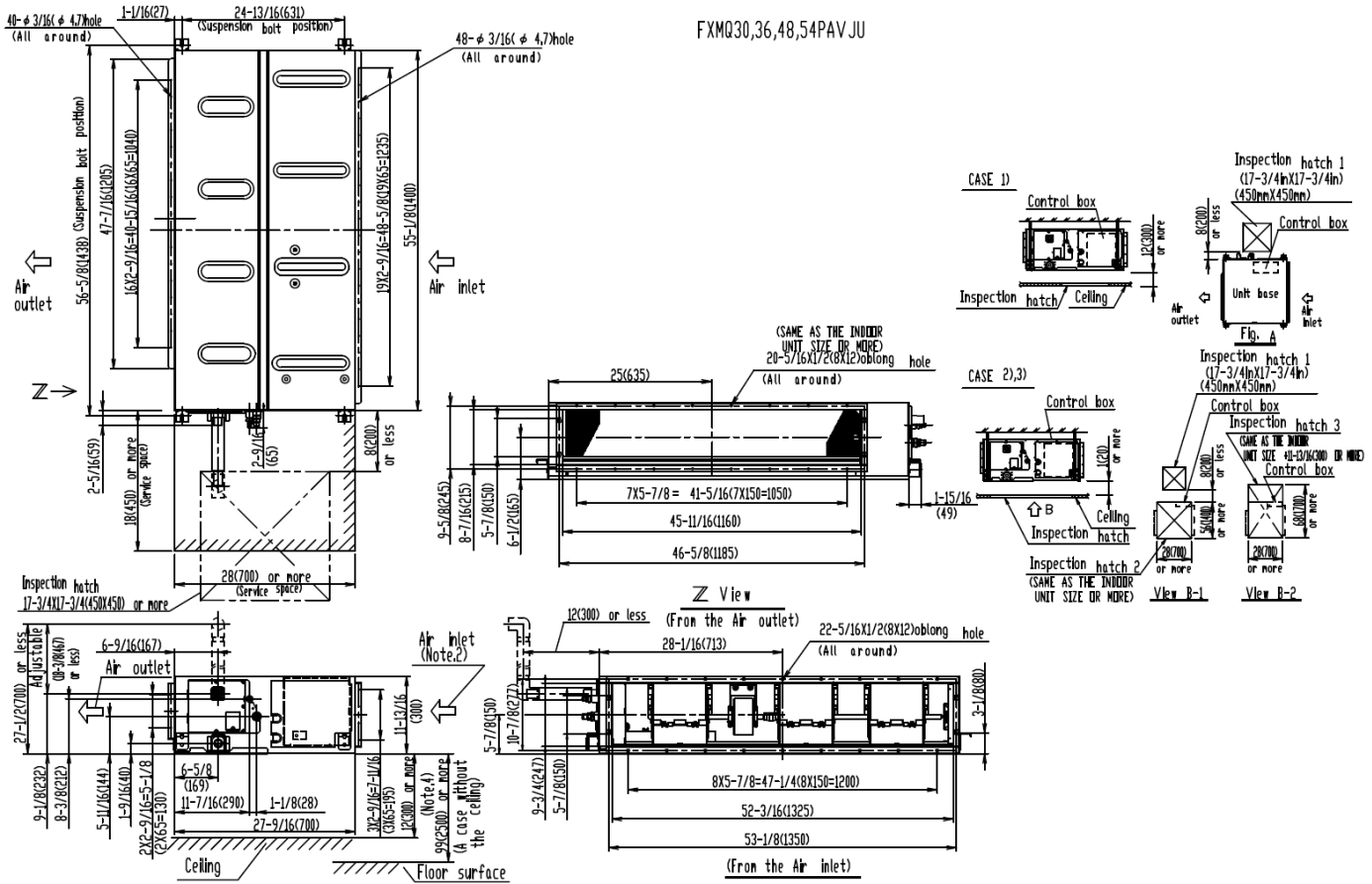
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: Future FC-A4, Future FC-A1

## DIMENSIONAL DRAWING





## Submittal Data Sheet

4.0-Ton DC Ducted Concealed Ceiling - FXMQ48PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: FC-8, FC-9

## FEATURES

- Standard Limited Warranty: 10-year warranty on compressor and all parts
- Installation flexibility with a low profile, compact design at less than 12" in height
- Increased capacity range for increased flexibility
- Improved efficiency with DC fan motor
- Ease of installation with auto adjusting airflow at commissioning based on external static pressure
- Easy maintenance with service access from below
- Integral condensate pump with up to 18-3/8" lift

## BENEFITS

- Design allows it to be completely concealed - perfect for retail, classrooms, offices, banks, restaurants, and hotels.
- New economizer control logic
- Flexible ductwork design with ESP capabilities up to 0.80" W.G.
- Enhanced indoor air quality and LEED ready with MERV 13 filter options
- New configurable auxiliary heater control logic





## Submittal Data Sheet

### 4.0-Ton DC Ducted Concealed Ceiling - FXMQ48PBVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: FC-8, FC-9

#### PERFORMANCE

Indoor Unit Model No.	FXMQ48PBVJU	Indoor Unit Name:	4.0-Ton DC Ducted Concealed Ceiling
Type:	Ducted	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	48,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	35,800	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.460	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	54,000		
Heating Input Power (kW):	0.45		

#### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (HH/H/M/L) (CFM):	1,377/1,377/1,165/988
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	3.40	Gas Pipe Connection (inch):	5/8
Max Overcurrent Protection (MOP) (A):	15.00	Liquid Pipe Connection (inch):	3/8
Dimensions (HxWxD) (in):	11-13/16 x 55-1/8 x 27-9/16	Condensate Connection (inch):	1-1/4
Panel (HxWxD) (in):		Sound Pressure (H/M/L) (dBA):	44/42/40
Net Weight (lb):	102	Sound Power Level (dBA):	
Panel Weight (lb):		Ext. Static Pressure (Rated/Max) (inWg):	0.40 / 0.80

## Submittal Data Sheet

4.0-Ton DC Ducted Concealed Ceiling - FXMQ48PBVJU

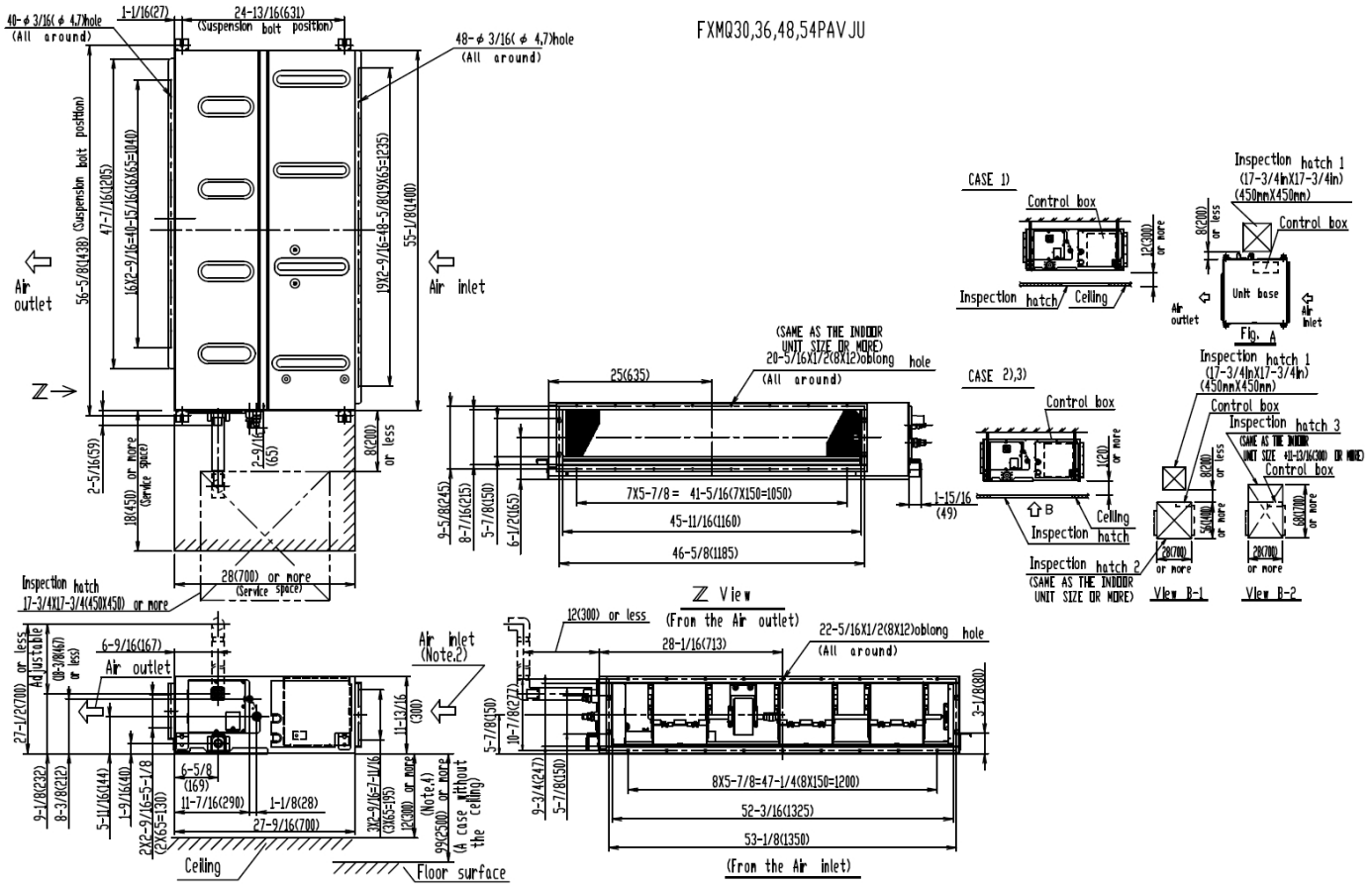
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: FC-8, FC-9

## DIMENSIONAL DRAWING





## Submittal Data Sheet

1.5-Ton Wall Mounted Unit - FXAQ18PVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: WU-2, WU-3

## FEATURES

- Auto-swing mechanism ensures efficient air distribution via louvers that automatically close when the unit is turned off
- Easy to clean front panel with a flat smooth surface that can be removed for additional cleaning
- Five different airflow distribution angles programmable by the optional controller
- Condensate drain pipe can be installed on either the left or right side of the unit
- Wide air discharge outlet distributes a comfortable airflow throughout the entire space
- Standard Limited Warranty: 10-year warranty on compressor and all parts





## Submittal Data Sheet

### 1.5-Ton Wall Mounted Unit - FXAQ18PVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: WU-2, WU-3

#### PERFORMANCE

Indoor Unit Model No.	FXAQ18PVJU	Indoor Unit Name:	1.5-Ton Wall Mounted Unit
Type:	Wall Mounted	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	18,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	13,700	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.030	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	20,000		
Heating Input Power (kW):	0.04		

#### INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (H/L) (CFM):	500/400
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	0.50	Gas Pipe Connection (inch):	1/2
Max Overcurrent Protection (MOP) (A):		Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	11-3/8 x 41-3/8 x 9-1/4	Condensate Connection (inch):	11/16
Panel (HxWxD) (in):		Sound Pressure (H/L) (dBA):	43/37
Net Weight (lb):	31	Sound Power Level (dBA):	
Panel Weight (lb):		Ext. Static Pressure (Rated/Max) (inWg):	0.00 / 0.00



Submittal Data Sheet

1.5-Ton Wall Mounted Unit - FXAQ18PVJU

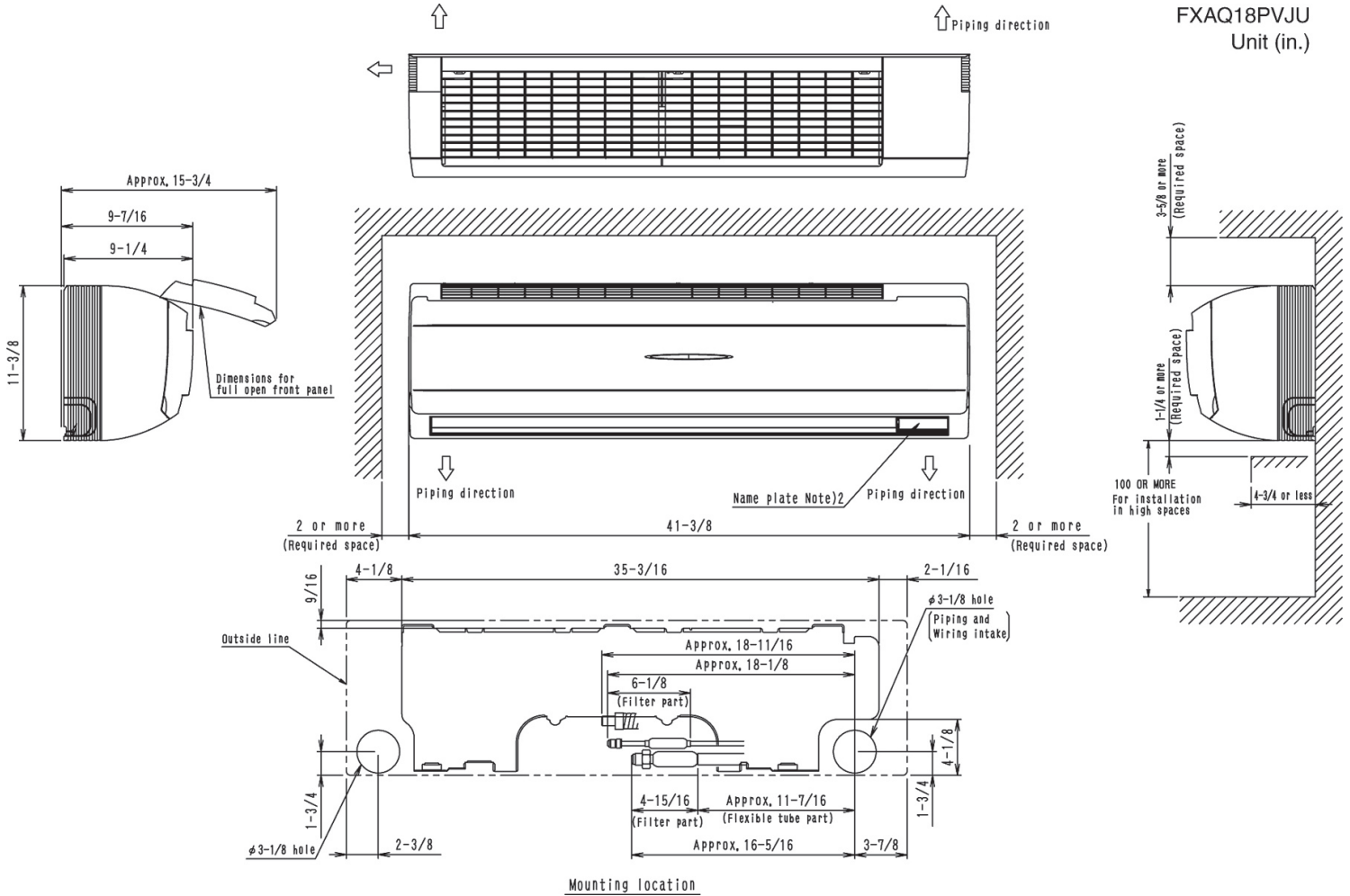
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: WU-2, WU-3

DIMENSIONAL DRAWING





## Submittal Data Sheet

2.0-Ton Wall Mounted Unit - FXAQ24PVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: WU-1

## FEATURES

- Auto-swing mechanism ensures efficient air distribution via louvers that automatically close when the unit is turned off
- Easy to clean front panel with a flat smooth surface that can be removed for additional cleaning
- Five different airflow distribution angles programmable by the optional controller
- Condensate drain pipe can be installed on either the left or right side of the unit
- Wide air discharge outlet distributes a comfortable airflow throughout the entire space
- Standard Limited Warranty: 10-year warranty on compressor and all parts







Submittal Data Sheet

2.0-Ton Wall Mounted Unit - FXAQ24PVJU

Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: WU-1

PERFORMANCE			
Indoor Unit Model No.	FXAQ24PVJU	Indoor Unit Name:	2.0-Ton Wall Mounted Unit
Type:	Wall Mounted	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Rated Cooling Capacity (Btu/hr):	24,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Sensible Capacity (Btu/hr):	18,000	Rated Piping Length(ft):	
Cooling Input Power (kW):	0.050	Rated Height Separation (ft):	
Rated Heating Capacity (Btu/hr):	26,500		
Heating Input Power (kW):	0.06		
INDOOR UNIT DETAILS			
Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (H/L) (CFM):	635/470
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	0.60	Gas Pipe Connection (inch):	5/8
Max Overcurrent Protection (MOP) (A):		Liquid Pipe Connection (inch):	3/8
Dimensions (HxWxD) (in):	11-3/8 x 41-3/8 x 9-1/4	Condensate Connection (inch):	11/16
Panel (HxWxD) (in):		Sound Pressure (H/L) (dBA):	47/41
Net Weight (lb):	31	Sound Power Level (dBA):	
Panel Weight (lb):		Ext. Static Pressure (Rated/Max) (inWg):	0.00 / 0.00



## Submittal Data Sheet

2.0-Ton Wall Mounted Unit - FXAQ24PVJU

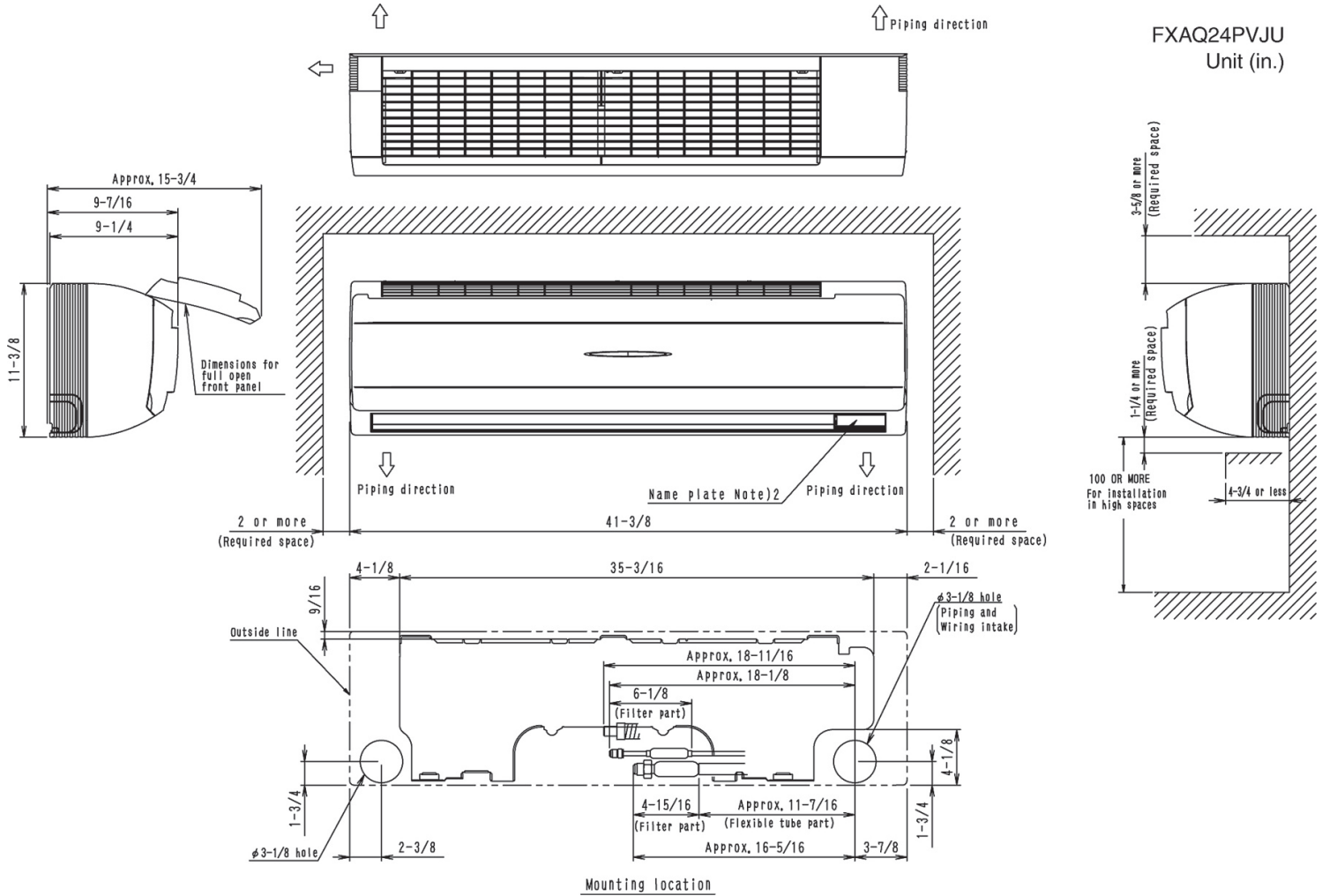
Project: Asian Health 5-11-2017

Submitted by: Steve Patnode of AIR REPS LLC - OREGON on 5/11/2017

Submitted to: No Engineer Name Specified

Tags: WU-1

## DIMENSIONAL DRAWING





## Submittal Data Sheet

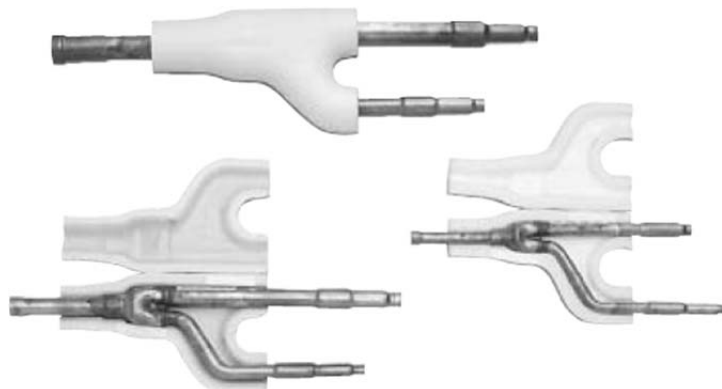
3 PIPE REFNET JOINT  
KHRP25M72TU9

## DESCRIPTION

REFNET Joints provide a factory designed option for the branching within the refrigerant piping network.

## FEATURES

- Engineered for uniform refrigerant flow and refrigerant distribution.
- Designed to help smoother oil return.
- Flexible installation; vertical or  $\pm 30^\circ$  from horizontal.
- Designed with tube diameters (I.D. and O.D.) required for VRV system installations.
- Pre-formed clamshell style insulation<sup>1,2</sup> for cleaner and reliable application.
- Accounts for 1.5 ft equivalent pipe length calculation.



Picture for REFERENCE ONLY



## SPECIFICATIONS

Piping Material:	ACR Copper Alloy C12200		
Ports / Branches:	2		
Included in Branch Kit	1 pcs. – Suction Gas Side		
	1 pcs. – Discharge Gas Side		
	1 pcs. - Liquid Side		
Kit Name:	SUCTION GAS SIDE	DISCHARGE GAS SIDE	LIQUID SIDE
Reducer Fittings:	1 pcs – I.D. Ø 5/8 2 pcs – I.D. Ø 7/8 1 pcs – I.D. Ø 1-1/8	1 pcs – I.D. Ø 3/8 1 pcs – I.D. Ø 1/2	1 pcs – I.D. Ø 5/8 1 pcs – I.D. Ø 3/4
Insulation Material:	Polypropylene		Expandable Polystyrene (EPS)
Insulation Quantity (per Joint):	1 pcs.	1 pcs.	1 pcs.
Indoor Unit Capacity Index:	$111 \leq x < 246$		
Pipe Connection Size:	Refer to Dimensional Drawing and VRV Express Calculations		

### Notes:

- In applications where the REFNET kits are installed in an environment requiring fire-rated materials to be used, it is necessary for the installer to obtain from a third party supplier and to utilize, for insulation, fire-rated materials that meet all applicable building codes and other requirements. The Factory-provided insulation that is supplied with the REFNET kit should be discarded in a manner meeting all applicable laws.
- The insulation of the refrigerant piping must be reinforced based on the environment of the installation. Otherwise dew may condensate on the surface of insulation.

Daikin North America LLC, 5151 San Felipe, Suite 500, Houston TX, 77056  
[www.daikinac.com](http://www.daikinac.com) [www.daikincomfort.com](http://www.daikincomfort.com)

(Daikin's products are subject to continuous improvements. Daikin reserves the right to modify product design, specifications and information in this data sheet without notice and without incurring any obligations).



## Submittal Data Sheet

3 PIPE REFNET JOINT

KHRP25M72TU9

## DIMENSIONAL DRAWING

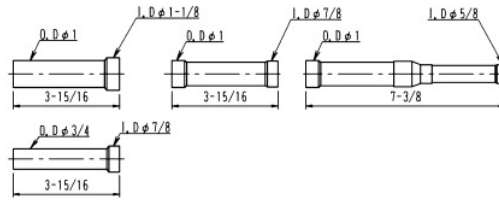
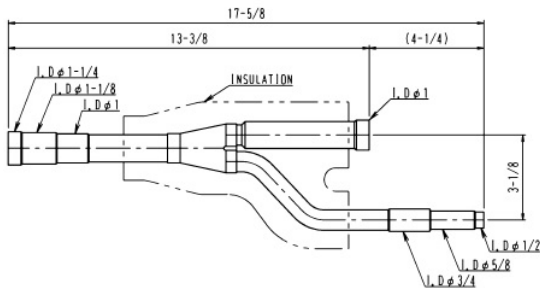
KHRP25M72TU9

Unit: in.

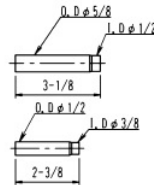
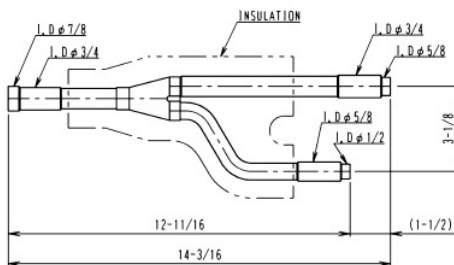
### ACCESSORIES

REDUCER: 4 pcs. (FOR SUCTION GAS SIDE)  
: 2 pcs. (FOR DISCHARGE GAS SIDE)  
: 2 pcs. (FOR LIQUID SIDE)  
INSULATION: 3 pcs.  
INSTALLATION MANUAL: 1 sheet

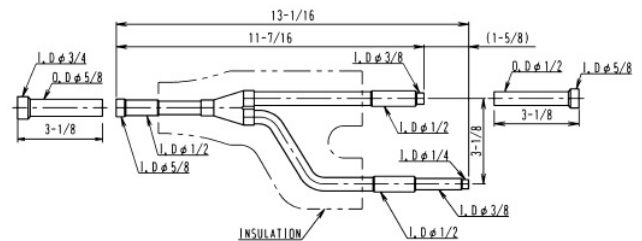
### SUCTION GAS SIDE



### DISCHARGE GAS SIDE

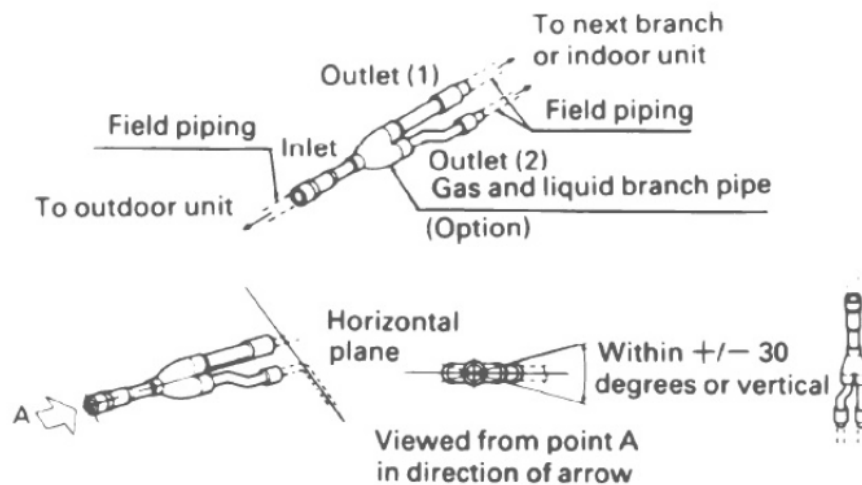


### LIQUID SIDE



D3K04888B

## TYPICAL INSTALLATION DRAWING



Daikin North America LLC, 5151 San Felipe, Suite 500, Houston TX, 77056

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(Daikin's products are subject to continuous improvements. Daikin reserves the right to modify product design, specifications and information in this data sheet without notice and without incurring any obligations).



## Submittal Data Sheet

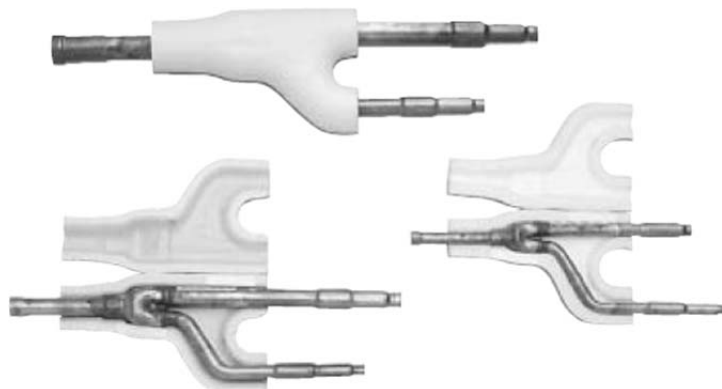
3 PIPE REFNET JOINT  
KHRP25M73TU9

## DESCRIPTION

REFNET Joints provide a factory designed option for the branching within the refrigerant piping network.

## FEATURES

- Engineered for uniform refrigerant flow and refrigerant distribution.
- Designed to help smoother oil return.
- Flexible installation; vertical or  $\pm 30^\circ$  from horizontal.
- Designed with tube diameters (I.D. and O.D.) required for VRV system installations.
- Pre-formed clamshell style insulation<sup>1,2</sup> for cleaner and reliable application.
- Accounts for 1.5 ft equivalent pipe length calculation.



Picture for REFERENCE ONLY



## SPECIFICATIONS

Piping Material:	ACR Copper Alloy C12200		
Ports / Branches:	2		
Included in Branch Kit	1 pcs. – Suction Gas Side		
	1 pcs. – Discharge Gas Side		
	1 pcs. - Liquid Side		
Kit Name:	SUCTION GAS SIDE	DISCHARGE GAS SIDE	LIQUID SIDE
Reducer Fittings:	1 pcs – I.D. Ø 1/2 1 pcs – I.D. Ø 5/8 2 pcs – I.D. Ø 1-1/8	1 pcs – I.D. Ø 3/8 1 pcs – I.D. Ø 1/2 1 pcs – I.D. Ø 3/4	1 pcs – I.D. Ø 1/4 1 pcs – I.D. Ø 3/8 1 pcs – I.D. Ø 1/2
Insulation Material:	Polypropylene		
Insulation Quantity (per Joint):	1 pcs.	1 pcs.	1 pcs.
Indoor Unit Capacity Index:	$\geq 246$		
Pipe Connection Size:	Refer to Dimensional Drawing and VRV Express Calculations		

### Notes:

- 1) In applications where the REFNET kits are installed in an environment requiring fire-rated materials to be used, it is necessary for the installer to obtain from a third party supplier and to utilize, for insulation, fire-rated materials that meet all applicable building codes and other requirements. The Factory-provided insulation that is supplied with the REFNET kit should be discarded in a manner meeting all applicable laws.
- 2) The insulation of the refrigerant piping must be reinforced based on the environment of the installation. Otherwise dew may condensate on the surface of insulation.

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## Submittal Data Sheet

3 PIPE REFNET JOINT

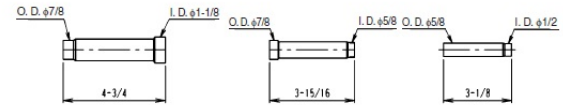
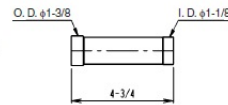
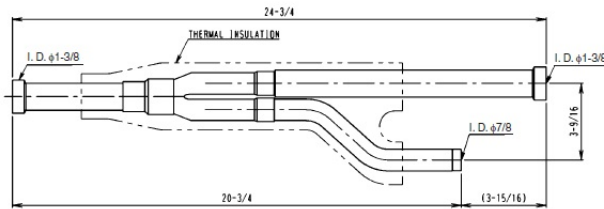
KHRP25M73TU9

## DIMENSIONAL DRAWING

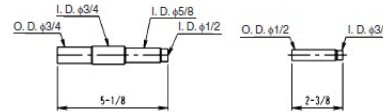
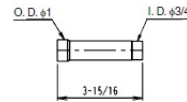
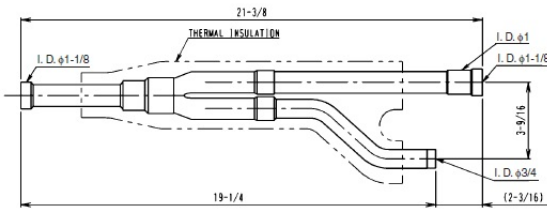
KHRP25M73TU9

Unit: in.

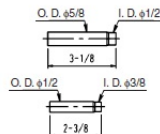
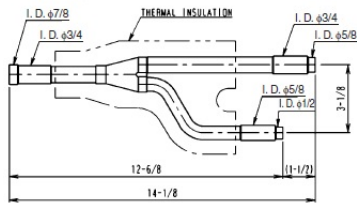
### SUCTION GAS SIDE JOINT



### DISCHARGE GAS SIDE JOINT



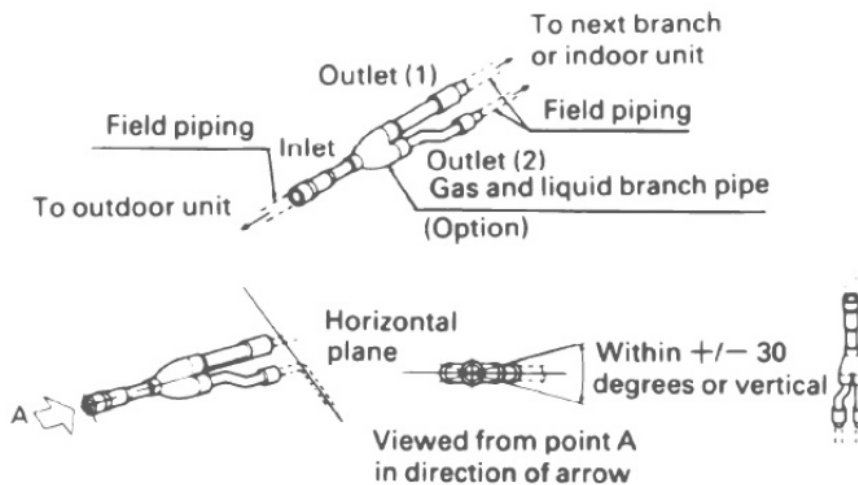
### LIQUID SIDE JOINT



ACCESSORY  
REDUCER: SUCTION GAS SIDE JOINT 4 PIECES  
DISCHARGE GAS SIDE JOINT 3 PIECES  
LIQUID SIDE JOINT 3 PIECES  
THERMAL INSULATION: 1 SET  
INSTALLATION MANUAL

D3K05573A

## TYPICAL INSTALLATION DRAWING



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# Submittal Data Sheet

intelligent Touch Manager  
DCM601A71

Project Name:

Location:

Engineer:

Submitted to:

Submitted by:

Reference:

Approval:

Date:

Construction:

Unit #:

Drawing #:

For use with the following VRV Models: FXAQ, FXDQ, FXEQ, FXFQ, FXHQ, FXLQ, FXMQ, FXMQ\_MF, FXNQ, FXTQ, FXUQ, FXZQ, VAM

For use with the following Daikin SkyAir Models: FAQ, FBQ, FCQ, FHQ, FTQ

## Capacity:

Model No.	intelligent Touch Manager DCM601A71	iTM Plus Adapter (option) DCM601A72
Maximum Indoor Unit Groups:	64	64
Max Indoor Units:	128	128
Max Outdoor Units:	10	10
Max BACnet Servers:	50	-
*Systems Total:	512 Indoor Unit Groups (1024 Indoor Units)	

## Operating Details:

Power Supply (Externally supplied):	24 VAC, 60 Hz	24 VAC, 60 Hz
Power Consumption:	23 Watts	23 Watts
Operating Temp Range:	32-104°F	14 - 122°F
Operating Humidity Range:	85% or less (w/o condensation)	85% or less (w/o condensation)
Dimensions (WxHxD):	11.42 x 9.57 x 1.97 in.	6.30 x 5.87 x 2.41 in.
Weight (Mass):	5.3 lbs. (2.4 kg)	1.1 lbs. (0.5 kg)
Certifications:	FCC Part 15 Class B	

## Communication:

DIII-NET Systems:	1	1
RJ-45 (Ethernet)	2	N/A
100Base-TX or 10Base-T		
USB Port	1	N/A
USB2.0 (2GB to 32GB)		
RS485 (19 - 22 AWG)	1	1

## Input Terminals:

Digital Input forced shutdown of all indoor unit systems	1	N/A
Digital Input and/or Pulse Input Terminals:	3 x 10 mA @ 16 VDC/ 3 x 1 pulse at 1 or 10 kWh at 100 ms interval	4 x 10 mA @ 16 VDC/ 4 x 1 pulse at 1 or 10 kWh at 100 ms interval

Configuration and engineering for each project is necessary

The Power Proportional Distribution (PPD) feature supplies the user with a reasonably calculated apportionment of the total power consumption by the Daikin air-conditioning system to individual units on the system. Because input to the PPD includes measured pulses in the refrigerant system and because the air-conditioning system includes a number of variables, to include operating temperatures and pressures, piping lengths, heat exchange rates and others, no meter-type apportionment of individual user's consumption can be made. However, the PPD feature provides an apportionment methodology that uses highly advanced technology as applied to the many variables in the air-conditioning system.

\*Note: See Management size on page two for System Total explanation

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touch  
intelligent Manager



## Software Options:

- Web/Email Software standard
- Power Proportional Distribution (PPD) Software (DCM002A71)
- BACnet IP Client Software (DCM009A51)
- BACnet IP Server Gateway Software (DCM014A51)

## Hardware Options:

- iTM Plus Adapter(DCM601A72) for expanding indoor unit groups up to 512 groups (1024 indoor units)
- WAGO I/O unit for controlling/ monitoring of external equipment via Di, Do, Ai, Ao and Pi
- Digital Input (DEC101A51-US2) for monitoring of external equipment
- Digital Input/Output (DEC102A51-US2) for controlling / monitoring of external equipment





# Submittal Data Sheet

intelligent Touch Manager  
DCM601A71

Project Name: \_\_\_\_\_

Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Submitted to: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Reference: \_\_\_\_\_

Approval: \_\_\_\_\_

Date: \_\_\_\_\_

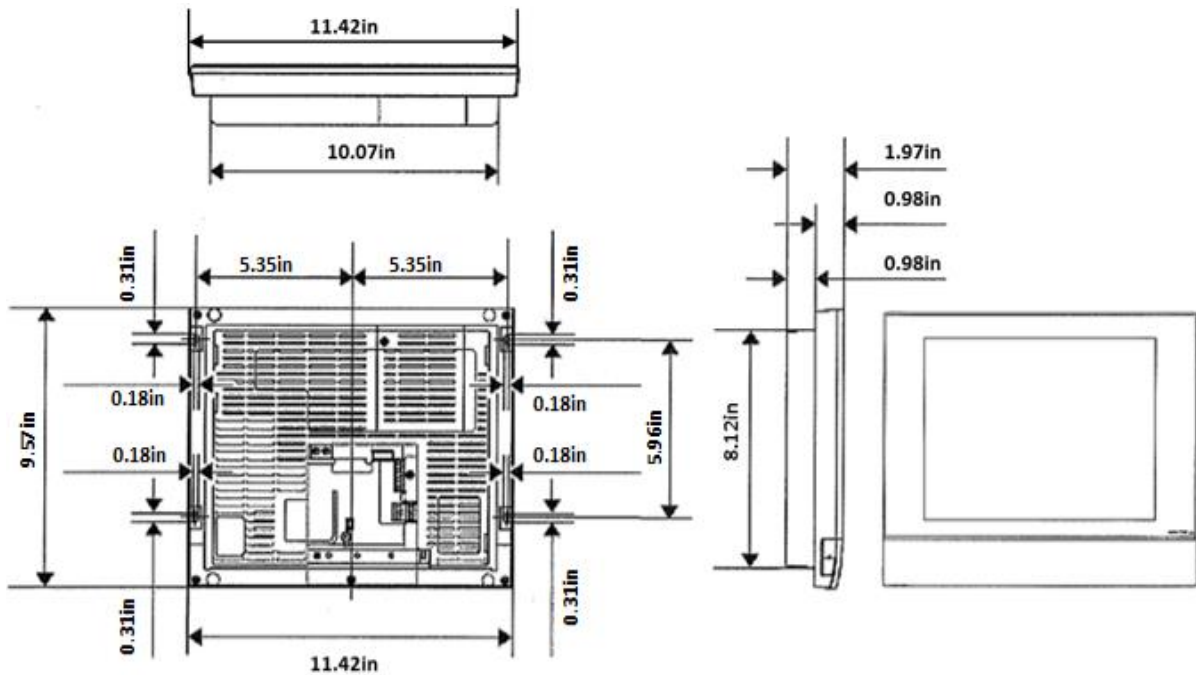
Construction: \_\_\_\_\_

Unit #: \_\_\_\_\_

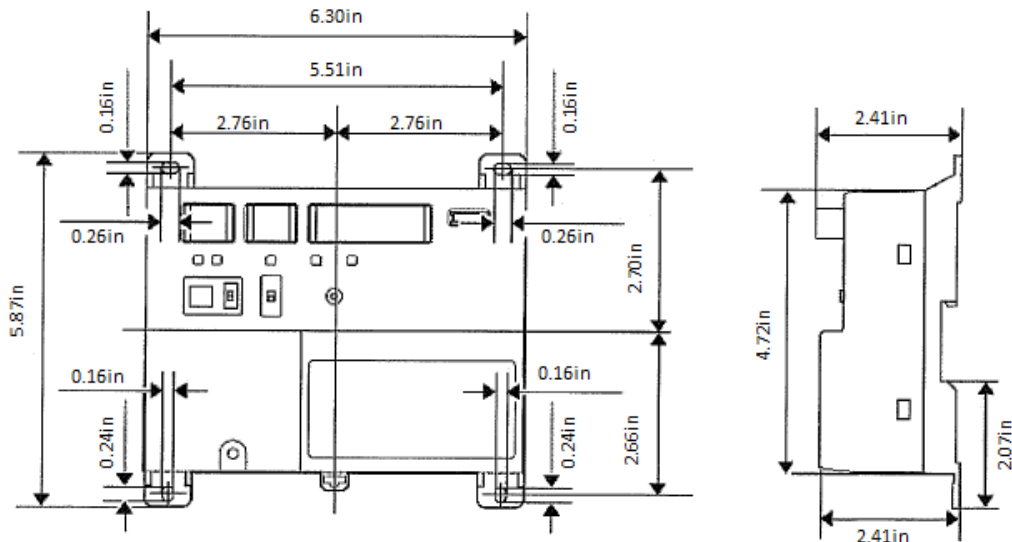
Drawing #: \_\_\_\_\_

## 4. Dimensions

### Intelligent Touch Manager (iTM) DCM601A71



### iTM Plus Adapter DCM601A72



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Project Name:

Location:

Engineer:

Submitted to:

Submitted by:

Reference:

Approval:

Date:

Construction:

Unit #:

Drawing #:

### Model Compatibility:

For use with the following VRV indoor unit models: FXAQ, FXDQ, FXEQ, FXFQ, FXHQ, FXLQ, FXMQ, FXMQ\_MF, FXNQ, FXTQ, FXUQ, FXZQ

For use with the following Daikin SkyAir indoor unit models: FAQ, FBQ, FCQ, FHQ, FTQ

### Specifications:

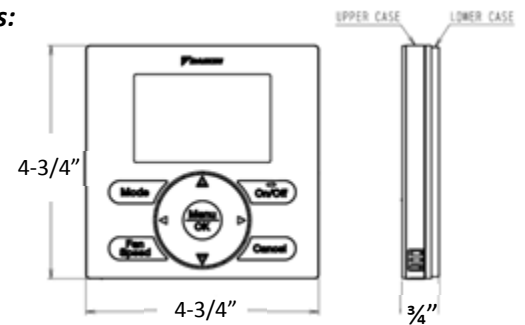
Model	BRC1E73
Description	Navigation Remote Controller
Maximum Connections	16 indoor units
Communication Wire	18AWG-2, No polarity Stranded, Non-shielded
Total Wiring Length	1,640 ft. (500 m)
Communication Protocol	Daikin Proprietary P1P2 protocol
Power	16VDC supplied by Indoor unit (1.58VA maximum)
Comfort Setpoint Range	60 to 90 °F (16 to 32 °C)
Setback Setpoint Range	40 to 95 °F (5 to 35 °C)
Operating Temp Range	14 to 122 °F (-10 to 50 °C)
Operating Humidity Range	75% or less (RH) (w/o condensation)
Dimensions (WxHxD)	4.72x4.72x0.75 inch (120x120x19 mm)
Weight (Mass)	0.42 lbs. (0.19 kg)

### Product Image:

1 of 3 display options –  
Detailed display shown



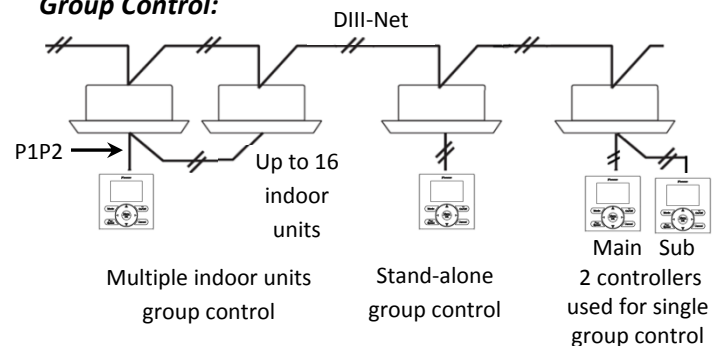
### Dimensions:



### Features/Benefits:

- Up to 16 indoor units are controllable within one group
- Within one group, up to 2 Navigation Remote Controllers can be used, one as a main and one as a sub
- Backlit LCD displays in English, Spanish or French
- Temperature sensor built-in with configurable offset
- Display of Temperature and Setpoint in 1°F / °C increments
- Three configurable display options: Detailed, Standard and Simple
- Dual setpoints (independent cooling and heating setpoints) with configurable minimum setpoint differential or Single Setpoint (occupied period)
- Setpoint range limit for cooling and heating modes
- Independent cooling and heating setback setpoints (unoccupied period)
- Auto changeover control with configurable Primary changeover at setpoint  $\pm 1^\circ$  F with guard timer

### Group Control:



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