SHOP DRAWING REVIEW



This review by Hilditch Architect Inc. is for the sole purpose of ascertaining conformance with the general design concept features only, and does not in any way constitute review of the design of engineering elements which form part of the Contract Documents prepared by others. This review shall not mean that Hilditch Architect Inc. approves the design detail inherent in the shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of the work of all trades.

Hilditch Architect Inc.

By: Sasha Stairs Project No: 1809

Date Rec'd: Date Rev'd: 2024.11.06

GC/CM: 2024.11.06 Consultant: 2024.11.06

HAI; reviewed for 54 pages total:

- 1. Refer to mechanical consultant comments; resubmit partial as requested.
- 2. Locations of interior units to be approved prior to completion of rough-ins on site. Units typically centred above windows or centred horizontally on walls.
- 3. All plumbing, wiring connections, etc. to be concealed within walls. If impossible in a location and surface mounted rough-in required, installation shall be complete with cover kit / sleeves to conceal.

Submittal No. 06

Split AC Units

Project Name: Neshama Hospice

Owner: Neshama

Prime Consultant: Hilditch Architect Inc

General Contractor: Renokrew

SustainGlobe:

- 1. AC/CU-1 to AC/CU-4 are approved with comments.
- 2. AC/CU-5 is not approved. Resubmit AC/CU-5 only for review.

RK: Mechanical trade to coordinate with Architect for location & Electrician for power requirements.

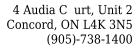
SHOP DRAWING ——— SUBMITTAL REVIEW	JOB NAME Neshama Hospice JOB # 24-130 DATE Nov 6, 2024		
REVIEWED ✓	This review is for general conformance of plans and specifications only. Approvals are subject to subcontractors performance within the confines of the		
REJECTED	contract documents. Review of dimensions will not serve to relieve the subcontractor of contractual responsibility for any deviation from the contract requirements.		
REVIEW & RESUBMIT	SPECIFICATION	CHECKED BY:	
REVIEW AS NOTED	SHOP DRAWING PRODUCT DATA DOCUMENTATIO LETTER	REVIEWED BY:	

Sustain Globe Ltd.

THIS DRAWING REVIEWED SOLELY FOR GENERAL CONFORMITY WITH DESIGN CONCEPTS. QUANTITIES, DETAILS, DIMENSIONS AND DESIGNS INHERENT IN THE SHOP DRAWINGS ARE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DATA WITH FIELD DIMENSIONS. CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGN OF MANUFACTURED ITEMS, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION AND INSTALLATION OF EQUIPMENT.

DATE RECEIVED: November 06, 2024		✓ MECHANICAL □ ELECTRICAL □ OTHERS	
THIS DRAWING IS:		BY: TL	
□	REVIEWED AS NOTED	DATE: November 06, 2024	2024
REVIEWED AND TO BE RESUBMIT		PROJ. NO.: 18031	







Su mittal 24-256-005

PROJECT NAME PROJECT ADDRESS DATE SUBMITTED

NESHAMA HOSPICE 24-256 3 Cadillac Avenue N th York, ON M3H 1R9 Nov 6, 2024

TO FROM

Taranjeet Singh PAUL LEDDY COMPANY COMPANY

1568796 ONTARIO INC. C/A RENOKREW Consult Mechanical Inc.

EMAIL EMAIL

taranjeet@renokrew.com paul.l@consultmechanical.com

ADDRESS ADDRESS

43 LEPAGE COURT TORONTO, ON M3J 1Z9 54 Audia Court, Unit 2 Concord, ON L4K 3N5

Title

Daikin Split AC Units

Description

AC/CU 3,4 Daikin Model # FTXF24AXVJU / RXF24AXVJU AC/CU 1,2 Daikin Model # FTKF12AXVJU / RKF12AXVJU AC/CU 5 Daikin Model # FTX36WVJU9 / RX36WMVJU9

Package Items

SPEC SUBSECTION ITEM TYPE

Drawing M15 Schedule of Equipment M15 AC Units Schedule of Equipment Shop Drawings



Submittal #82871

APPROVAL REQUIRED

Project 22404896-MECH-1- Neshama Hospice - 3 Cadillac

LeaderNevin WongJob SiteNeshama HospiceSubmission Date2024-11-05Sold ToCONSULT MECH

Submitted By Rohan Syal

Contacts

Role	Customer	Our Rep
Mechanical Contractor	Con-Sult Mechanical Inc.*	Nevin Wong
Mechanical Contractor	Con-Sult Mechanical Inc.*	Nevin Wong
Designer	Sustainglobe Ltd	John Samson

Deliverables

Track #	281371	281376	281377
Tag	AC/CU-3,4, AC/CU-1,2, AC/CU-5	BAFFLE-1, BAFFLE-1	BAS-1
Description	Daikin Split System	Baffle	DMS BACnet
Quantity	5	5	1
Manufacturer	Daikin Commercial	Daikin Commercial	Daikin Commercial
Revision #	0	0	0
Track #	281378	281375	281373
Tag	INTERFACE-1,2,3,4,5	LOW-1	PUMP-1
Description	Interface Adaptor	Low Ambient Kit	Condensate Pumps
Quantity	5	2	5
Manufacturer	Daikin Commercial	Daikin Commercial	Daikin Commercial
Revision #	0	0	0
Track #	281374	281372	
Tag	STAND-1, STAND-1	TSTAT-1, TSAT-2	
Description	Quicksling Stand	Controls	
Quantity	5	5	
Manufacturer	Daikin Commercial	Daikin Commercial	
Revision #	0	0	

Attention:

- 1) HTS will provide equipment in accordance with the attached shop drawings.
- 2) Upon approved submittal and customer release, HTS will release equipment to fabrication per the published lead times. Any storage fees associated with project schedule changes will be the responsibility of the purchaser.
- 3) HTS can provide freight and logistics to the purchaser as an added benefit of doing business with HTS. When freight is received by the purchaser, any noticeable damage must be recorded. Otherwise, HTS is not responsible for subsequent damage claims.



Approval Stamps			



SUBMITTAL DATA APPROVAL REQUIRED



APPROVAL STAMPS

Electrical Details:

Outdoor unit power: 208-230/1/60 Indoor unit power: 208-230/1/60 *Outdoor unit powers indoor unit*

Controls:

Indoor unit c/w wired remote controller (shipped loose for field installation) Indoor unit c/w KRP928 adapter card to enable BAS integration

- Mounting and wiring by others

System c/w BACnet Gateway for BAS integration

- Contractor to mount Gateway and bring 24 VAC power and Daikin D-III network
- BAS contractor to connect to IP Gateway and program front end as per sequence of operation
- BAS contractor to provide IP address and instance number prior to commissioning by DXS
- Mounting and wiring by others

Condensate Pumps:

AC-1 to AC-5 Indoor units c/w condensate pumps (shipped loose for field installation)

Filters:

AC-1 to AC-5 Indoor units c/w integral washable filters

Condensing Unit Elevation:

CU-1 to CU-5 Condensing units c/w support frames for 18" elevation above roof level

Low Ambient Kit:

CU-1/2/3/4/5 c/w wind baffle (shipped loose for field installation) CU-1/2 Low ambient kit for cooling operation down to -40 F CU-5 shall equip with low ambient kit for cooling operation down to -4F

DX Piping Details:

VRV System c/w REFNET Y Joints for refrigeration piping installation (shipped loose for field install)

Contractor to confirm pipe lengths with DXS prior to installation. Pipe measurements shown in the shop drawings are subject to change based on site conditions.

Upon installation, contractor to provide DXS with as-built piping schematic for proper calculation of field refrigerant charge.

All systems shall display appropriate Ozone Depletion Prevention (ODP) tags prior to commissioning. VRV manufacturer cannot commission any system not displaying proper ODP tag.

Systems exceeding 5-tons require TSSA registration and inspection.

NOTE: EQUIPMENT WILL NOT BE RELEASED FOR PRODUCTION UNTIL APPROVED SHOP DRAWINGS ARE RECEIVED BY HTS ENGINEERING. PRODUCTION TIMING AND SHIPPING INFORMATION CAN NOT BE DETERMINED UNTIL APPROVED DRAWINGS ARE RECEIVED. RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THE SPECIFIED EQUIPMENT.



SUBMITTAL DATA APPROVAL REQUIRED



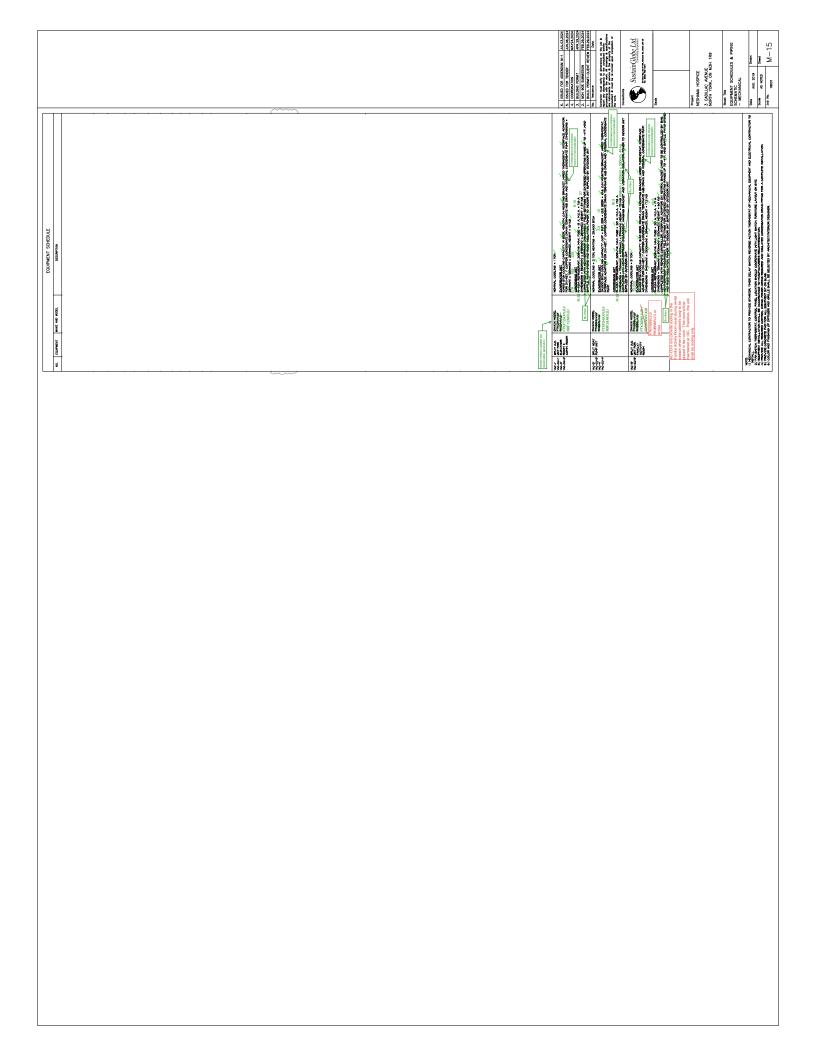
VRV Installation Key Points

- 1. Contractor to ensure that air cooled VRV condensing units are elevated a minimum of 18".
- 2. Contractor to contact DXS with any changes to pipe lengths or locations and receive revised piping & wiring diagrams which will be used for sizing pipe diameters and calculating extra refrigerant charge.
- 3. Contractor to confirm final location of condensing units.
- 4. Contractor to use clamps and installation practices which allow the pipes to expand & contract freely. Contractor to determine the use of expansion joints based on regular refrigeration practices to ensure piping does not rupture.
- 5. Contractor to schedule a site meeting with DXS technician prior to beginning piping installation. DXS may request to schedule a site visit to verify installation methods are in accordance with the Daikin requirements.
- 6. Control wiring is 18-AWG, 2 wire stranded, non-shielded for the entire system (control wiring between the fan coils & stats). No exception.
- 7. Contractor to pressure test system with the following procedure. 150 PSI test for 3 minutes, then 325 PSI for 3 minutes, then 550 PSI for 24 hours. Following the pressure test the system is to be vacuumed/dehydrated to 500 microns and held in a vacuum for 1 hour.
- 8. Contractor to insulate both suction and liquid refrigerant lines with armaflex insulation. 1/2" wall insulation for indoor piping, 3/4" wall diameter insulation for outdoor piping.
- 9. Refrigerant charge is to be calculated by DXS as per the actual installed pipework.
- 10. Condensate piping must be 3/4" ID, maximum lift noted in installation manual.





Schedule Compliance







Split Systems Piping & Wiring Diagrams





Split Piping Diagrams

Piping CU-1/2

NOTE: PIPING LENGTHS ARE ESTIMATES BASED ON TENDER DRAWINGS, LENGTHS AND DIAMETERS MAY CHANGE DUE TO SITE CONDITIONS

CU-1/2 **RKF12AXVJU**



Max. 66.0 ft

1/4 x 3/8"

AC-1/2 FTKF12AXVJU

All piping to be as per TSSA. Contractor to provide TSSA refrigerant piping certificate B31.5 prior to commissioning by VRV manufacturer
All systems shall display appropriate ODP tags prior to commissioning by VRV manufacturer.

Exposed outdoor insulation shall be protected by aluminum, sheet metal, painted canvas, plastic cover, or painted with an approved UV coating.

Isolation valves (if shown below) shall be bi-Irow self seating valves rated for R-410A with operating pressures up to 650 PSI. Brass shrader connections shall be
located on valve body
All pipe lengths and sizes below are estimates. Contractor to contact VRV manufacturer prior to purchase and install of refrigerant piping to confirm actual piping
lengths and sizes

Insulation:

- For indoor piping : 1/2" wall diameter Armaflex
 For outdoor piping : 3/4" wall diameter Armaflex





Split Piping Diagrams

Piping CU-3/4

NOTE: PIPING LENGTHS ARE ESTIMATES BASED ON TENDER DRAWINGS, LENGTHS AND DIAMETERS MAY CHANGE DUE TO SITE CONDITIONS

CU-3/4 RXF24AXVJU



Max. 99.0 ft

1/4 x 5/8"

AC-3/4

FTXF24AXVJU

All piping to be as per TSSA. Contractor to provide TSSA refrigerant piping certificate B31.5 prior to commissioning by VRV manufacturer
All systems shall display appropriate ODP tags prior to commissioning by VRV manufacturer.

Exposed outdoor insulation shall be protected by aluminum, sheet metal, painted canvas, plastic cover, or painted with an approved UV coating.

Esolation valves (if shown below) shall be bi-Tlow self seating valves rated for R-10A with operating pressures up to 650 PSI. Brass shrader connections shall be located on valve body

Contractor to use clamps, expansion joints and installation practices which allows the pipes to expand and contract freely.

All pipe lengths and sizes below are estimates. Contractor to contact VRV manufacturer prior to purchase and install of refrigerant piping to confirm actual piping lengths and sizes.

Insulation:

- For indoor piping : 1/2" wall diameter Armaflex
 For outdoor piping : 3/4" wall diameter Armaflex





Split Piping Diagrams

Piping CU-5

NOTE: PIPING LENGTHS ARE ESTIMATES BASED ON TENDER DRAWINGS, LENGTHS AND DIAMETERS MAY CHANGE DUE TO SITE CONDITIONS

CU-5 RX36WMVJU9



Max. 99.0 ft

1/4 x 5/8"

AC-5

FTX36WVJU9

All piping to be as per TSSA. Contractor to provide TSSA refrigerant piping certificate B31.5 prior to commissioning by VRV manufacturer
All systems shall display appropriate ODP tags prior to commissioning by VRV manufacturer.
Exposed outdoor insulation shall be protected by aluminum, sheet metal, painted canvas, plastic cover, or painted with an approved UV coating.
Isolation valves (if shown below) shall be bi-flow self seating valves rated for R-410A with operating pressures up to 650 PSI. Brass shrader connections shall be located on valve body
Contractor to use clamps, expansion joints and installation practices which allows the pipes to expand and contract freely.
All pipe lengths and sizes below are estimates. Contractor to contact VRV manufacturer prior to purchase and install of refrigerant piping to confirm actual piping lengths and sizes.

Insulation:

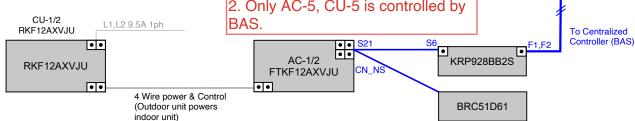
- For indoor piping : 1/2" wall diameter Armaflex
 For outdoor piping : 3/4" wall diameter Armaflex



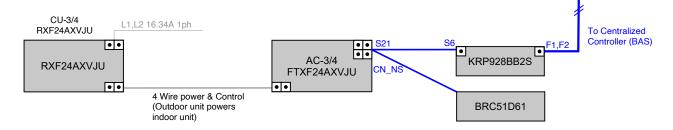


Split Wiring Diagrams Wiring CU-1/2

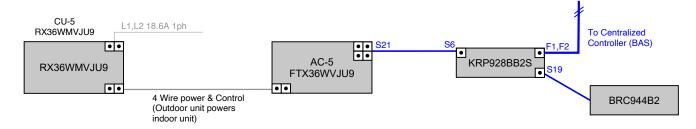
AC-1, CU-1 to AC-4, CU-4 are controlled independently by wall hung wired thermostats. No BAS control will be provided.
 Only AC-5, CU-5 is controlled by BAS.



Wiring CU-3/4



Wiring CU-5



Div 15 : Low Voltage control wiring 18 AWG 2-conductor stranded non-shielded (unless otherwise noted)

Div 16 : Electrical power wiring

Notes:

- Individual disconnects are required for each piece of equipment
- Disconnect switches not provided by DXS/HTS, to be supplied and installed by others





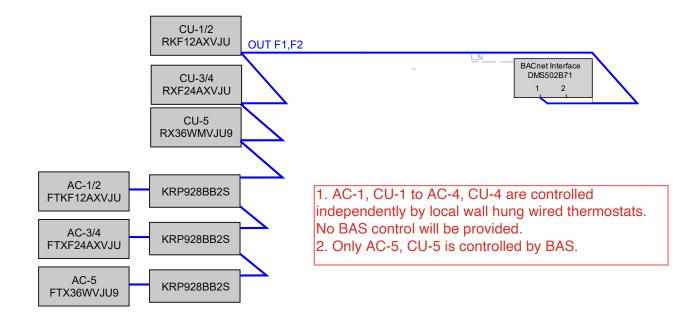
Centralized Controls





Controller wiring diagrams

Control Group







Split System Technical Details





Daikin Split System

Mini Splits

AC/CU - 3, 4 FTXF24AXVJU / RXF24AXVJU (2) AC/CU - 1, 2 FTKF12AXVJU / RKF12AXVJU (2) AC/CU - 5 FTX36WVJU9 / RX36WMVJU9 (1)

AC-CU-5 is to provide cooling in the Family/ Activity Room even during winter season when the patient's body to be placed in the room. The room will be maintained at 19C. Therefore, this unit shall be cooling only.



R-32 --- 2-Ton Wall Mounted Daikin OTERRA Heat Pump System FTXF24AXVJU-RXF24AXVJU

Tag: AC/CU-3/4

FEATURES

- Daikin Swing Compressor
- Indoor Quite Operation
- Included Handheld Remote
- Titanium Apatite Air-Purifying Filter
- Anti-corrosion Treatment of Outdoor Heat Exchanger

AC/CU-3 and AC/CU-4 controlled locally by wired thermostat.

BENEFITS

- Precharged Line set 33 ft
- Cooling Operation Range 50-115F
- Heating Operation Range 5-65F
- 12 Year Parts and Compressor Registered Residential Warranty
- 5 year Parts and Compressor Commercial Warranty
- R-32 Easy, Proven, Efficient, Available

INDOOR UNIT



OUTDOOR UNIT





R-32 --- 2-Ton Wall Mounted Daikin OTERRA Heat Pump System FTXF24AXVJU-RXF24AXVJU

SYSTEM PERFORMANCE			
Indoor Unit Model No.	FTXF24AXVJU	Indoor Unit Name:	R-32 2- Ton, Heat Pump, Wall Mounted IDU Daikin OTERRA
Outdoor Unit Model No.	RXF24AXVJU	Outdoor Unit Name:	R-32 2 Ton, Heatpump, Ductless, ODU Daikin OTERRA
Rated Cooling Capacity (Btu/hr):	22,400	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Sensible Capacity (Btu/hr):	16,360	Rated Piping Length(ft):	25
Max/Min Cooling Capacity (Btu/hr):	26,400 / 7,000	Rated Height Difference (ft):	0.00
Cooling Input Power (kW):	6.570	Heating Input Power (kW):	6.92
SEER2 (Non-Ducted/Ducted):	21.00 /	HSPF2 (Non-Ducted/Ducted):	9.1 /
EER2 (Non-Ducted/Ducted):	12.00 /	Heating COP (Non-Ducted/Ducted):	3.3 /
Rated Heating Capacity (Btu/hr):	23,600	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 60 Ambient (°F DB/WB): 47 / 43
Max/Min Heating Capacity (Btu/hr):	28,600 / 6,200		

SYSTEM DETAILS			
Refrigerant Type:	R-32	Cooling Operation Range (°F DB):	50 - 122
Holding Refrigerant Charge (lbs):	3.31	Heating Operation Range (°F WB):	5 - 65
Additional Charge (oz/ft):	0.18	Max. Pipe Length (Vertical) (ft):	66
Pre-charge Piping (Length) (ft):	33	Cooling Range w/Baffle (°F DB):	-4 - 122
Max. Pipe Length (Total) (ft):	99		
Max Height Separation (Ind to Ind ft):	0		

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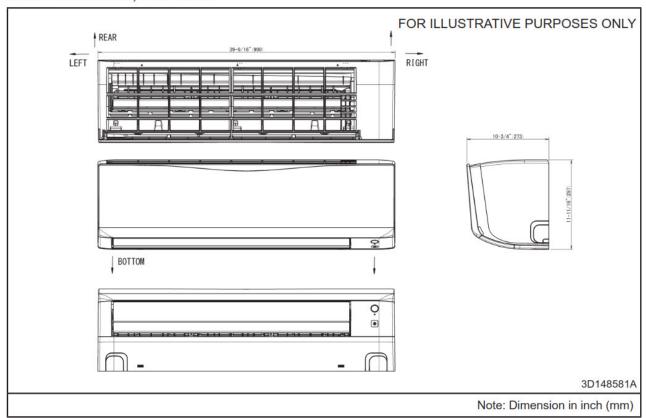


R-32 --- 2-Ton Wall Mounted Daikin OTERRA Heat Pump System FTXF24AXVJU-RXF24AXVJU

INDOOR UNIT DETAILS			
Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (HH/H/M/L/SL) (CFM):	754/716/605/467/395
Power Supply Connections:	L1, L2, L3, Ground	Moisture Removal (Gal/hr):	0.9
Min. Circuit Amps MCA (A):		Gas Pipe Connection (inch):	5/8
Max Overcurrent Protection (MOP) (A):		Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	11-11/16 x 39-9/16 x 10-3/4	Condensate Connection (inch):	5/8
Net Weight (lb):	30.5	Sound Pressure (H/M/L/SL) (dBA):	53/45/39/34
Ext. Static Pressure (Rated/Max) (inWg):	1	Sound Power Level (dBA):	

DIMENSIONAL DRAWING - INDOOR UNIT

Model: FTKF18/24A, FTXF18/24A



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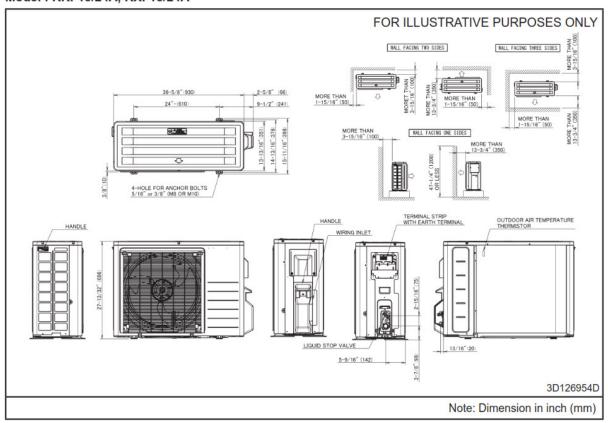


R-32 --- 2-Ton Wall Mounted Daikin OTERRA Heat Pump System FTXF24AXVJU-RXF24AXVJU

OUTDOOR UNIT DETAILS			
Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Compressor Stage:	Inverter
Power Supply Connections:	L1, L2, L3, Ground	Capacity Control Range (%):	-
Min. Circuit Amps MCA (A):	16.34	Airflow Rate (H) (CFM):	1879
Max Overcurrent Protection (MOP) (A):	20	Gas Pipe Connection (inch):	5/8
Max Starting Current MSC(A):		Liquid Pipe Connection (inch):	1/4
Rated Load Amps RLA(A):		Sound Pressure (H) (dBA):	55
Dimensions (HxWxD) (in):	27-13/32 x 36-5/8 x 13-13/16	Sound Power Level (dBA):	
Net Weight (lb):	101		

DIMENSIONAL DRAWING - OUTDOOR UNIT

Model: RKF18/24A, RXF18/24A





R-32 --- 2-Ton Wall Mounted Daikin OTERRA Heat Pump System FTXF24AXVJU-RXF24AXVJU

INDOOR ACCESSORIES

PART NUMBER	DESCRIPTION	INCLUDED
AZAI6WSCDKB	DKN Residential Cloud Wi-Fi Adaptor for Single- and Multi-Zone System (S21)	No
AZAI6WSPDKC	DKN Plus Interface	No
BRC51D61	Wired Remote Controller Kit	No
DACA-CP1-1	Mini Aqua Condensate Pump	No
DACA-CP4-1	MINI WHITE PUMP KIT 100-250V	No
DTST-LTE-LA-A	Daikin One Lite (with Translation Adaptor for S21 only)	No
DTST-ONE-ADA-A	Daikin One+ Smart Thermostat for VRV, SkyAir, Single- and Multi-Zone System	No
DTST-TOU-ADA-A	Daikin One Touch Smart Thermostat (with Translation Adaptor for S21 and P1P2)	No
KRP928BB2S	RA Interface Adaptor for DIII-Net -	No

OUTDOOR ACCESSORIES

PART NUMBER	DESCRIPTION	INCLUDED
DACA-WB-3	Powder-Coated Wall-Mounted Bracket	No
KEH063A4EA	Bml LRg Drain Pan Heater Rev A	No
KPW063B4E	Air Adjustment Grille	No

Submittal Date: 8/16/2024 10:38:52 AM



R-32 --- 1-Ton Wall Mounted Daikin OTERRA Cooling Only System FTKF12AXVJU-RKF12AXVJU

Tag: AC/CU-1/2

FEATURES

- Daikin Swing Compressor
- Indoor Quite Operation
- Included Handheld Remote
- Titanium Apatite Air-Purifying Filter
- Anti-corrosion Treatment of Outdoor Heat Exchanger

AC/CU-1 and AC/CU-2 controlled locally by wired thermostat.

BENEFITS

- R-32 Easy, Proven, Efficient, Available
- Precharged for up to 33 ft
- Cooling Operation Range 50-118F for 9K/12K 50-122F for 18/24K
- 12 Year Parts and Compressor Registered Residential Warranty
- 5 year Parts and Compressor Commercial Warranty
- Cooling down to -4F for Facilities

INDOOR UNIT



OUTDOOR UNIT





R-32 --- 1-Ton Wall Mounted Daikin OTERRA Cooling Only System FTKF12AXVJU-RKF12AXVJU

SYSTEM PERFORMANCE			
Indoor Unit Model No.	FTKF12AXVJU	Indoor Unit Name:	R-32 Daikin OTERRA 1 Ton AC only mini split indoor unit
Outdoor Unit Model No.	RKF12AXVJU	Outdoor Unit Name:	R-32 1 Ton, Cooling only, Ductless ODU Daikin OTERRA
Rated Cooling Capacity (Btu/hr):	12,000	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Sensible Capacity (Btu/hr):	9,540	Rated Piping Length(ft):	25
Max/Min Cooling Capacity (Btu/hr):	14,600 / 4,400	Rated Height Difference (ft):	0.00
Cooling Input Power (kW):	3.520		
SEER2 (Non-Ducted/Ducted):	21.00 /		
EER2 (Non-Ducted/Ducted):	12.50 /		

SYSTEM DETAILS			
Refrigerant Type:	R-32	Cooling Operation Range (°F DB):	50 - 118
Holding Refrigerant Charge (lbs):	1.65		
Additional Charge (oz/ft):	0.18	Max. Pipe Length (Vertical) (ft):	49
Pre-charge Piping (Length) (ft):	33	Cooling Range w/Baffle (°F DB):	-44
Max. Pipe Length (Total) (ft):	66		
Max Height Separation (Ind to Ind ft):	0		

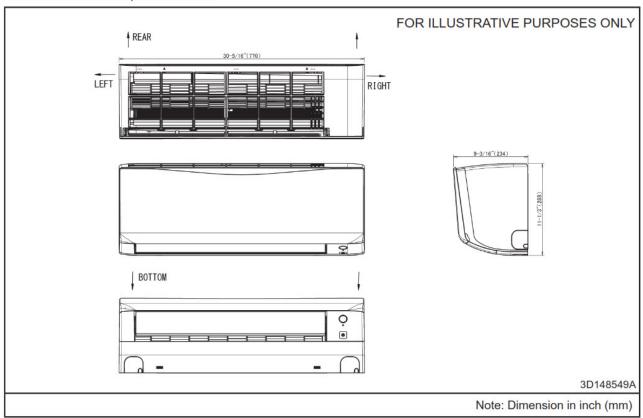


R-32 --- 1-Ton Wall Mounted Daikin OTERRA Cooling Only System FTKF12AXVJU-RKF12AXVJU

INDOOR UNIT DETAILS			
Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (HH/H/M/L/SL) (CFM):	473/436/316/247/132
Power Supply Connections:	L1, L2, L3, Ground	Moisture Removal (Gal/hr):	0.2
Min. Circuit Amps MCA (A):		Gas Pipe Connection (inch):	3/8
Max Overcurrent Protection (MOP) (A):		Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	11-1/3 x 30-5/16 x 9-3/16	Condensate Connection (inch):	5/8
Net Weight (lb):	20.9	Sound Pressure (H/M/L/SL) (dBA):	46/38/32/19
Ext. Static Pressure (Rated/Max) (inWg):	1	Sound Power Level (dBA):	

DIMENSIONAL DRAWING - INDOOR UNIT

Model: FTKF09/12A, FTXF09/12A



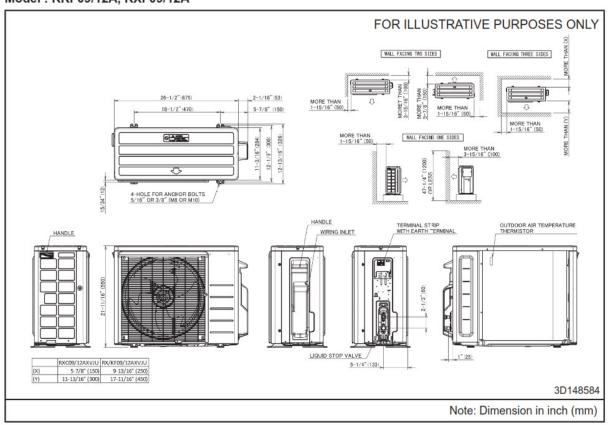


R-32 --- 1-Ton Wall Mounted Daikin OTERRA Cooling Only System FTKF12AXVJU-RKF12AXVJU

OUTDOOR UNIT DETAILS			
Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Compressor Stage:	Inverter
Power Supply Connections:	L1, L2, L3, Ground	Capacity Control Range (%):	-
Min. Circuit Amps MCA (A):	9.15	Airflow Rate (H) (CFM):	1051
Max Overcurrent Protection (MOP) (A):	15	Gas Pipe Connection (inch):	3/8
Max Starting Current MSC(A):		Liquid Pipe Connection (inch):	1/4
Rated Load Amps RLA(A):		Sound Pressure (H) (dBA):	49
Dimensions (HxWxD) (in):	21-11/16 x 26-1/2 x 11-3/16	Sound Power Level (dBA):	
Net Weight (lb):	60		

DIMENSIONAL DRAWING - OUTDOOR UNIT

Model: RKF09/12A, RXF09/12A





R-32 --- 1-Ton Wall Mounted Daikin OTERRA Cooling Only System FTKF12AXVJU-RKF12AXVJU

INDOOR ACCESSORIES

PART NUMBER	DESCRIPTION	INCLUDED
AZAI6WSCDKB	DKN Residential Cloud Wi-Fi Adaptor for Single- and Multi-Zone System (S21)	No
AZAI6WSPDKC	DKN Plus Interface	No
BRC51D61	Wired Remote Controller Kit	No
DACA-CP1-1	Mini Aqua Condensate Pump	No
DACA-CP4-1	MINI WHITE PUMP KIT 100-250V	No
DTST-LTE-LA-A	Daikin One Lite (with Translation Adaptor for S21 only)	No
DTST-ONE-ADA-A	Daikin One+ Smart Thermostat for VRV, SkyAir, Single- and Multi-Zone System	No
DTST-TOU-ADA-A	Daikin One Touch Smart Thermostat (with Translation Adaptor for S21 and P1P2)	No
KRP928BB2S	RA Interface Adaptor for DIII-Net -	No

OUTDOOR ACCESSORIES

PART NUMBER	DESCRIPTION	INCLUDED
DACA-WB-3	Powder-Coated Wall-Mounted Bracket	No
KEH067A41E	Daikin BMS DrainPan Heater Small RX09,12 and RXN09,12	No
KKG067A41	Back protection wire net (09 & 12)	No
KPW937F4	Air direction adjustment grille (09 & 12)	No

Submittal Date: 7/2/2024 9:58:39 AM



Daikin Polara 3.0-Ton Wall Mounted Heat Pump System FTX36WVJU9RX36WMVJU9

Tag: AC/CU-5

FEATURES

"Auto Changeover Powerful Operation Mode Econo Mode Program Dry Function Intelligent Eye Auto Fan Speed Wide Angle Louvers Dual Flap System Comfort Mode 3-D Airflow Low Ambient Cooling Quiet indoor and outdoor unit operation Auto Changeover and auto restart Self Diagnosis""

BENEFITS

""For rooms with no false ceiling nor free floor space 10-year parts limited warranty for residential/commercial applications Cooling operation down to -22 F outside temperature Error codes display for fast and easy fault diagnosis Long lasting Titanium Apatite air filter Easy to clean flat panels Econo mode reduces power consumption."

INDOOR UNIT



OUTDOOR UNIT



AC-CU-5 is to provide cooling in the Family/ Activity Room even during winter season when the patient's body to be placed in the room. The room will be maintained at 19C. Therefore, this unit shall be cooling only and provides cooling when outdoor temperature is -4F.

AC-CU-5 equips with Interface adaptor DIII NET(RA), BACnet Card to be controlled by BAS.



Daikin Polara 3.0-Ton Wall Mounted Heat Pump System FTX36WVJU9RX36WMVJU9

SYSTEM PERFORMANCE			
Indoor Unit Model No.	FTX36WVJU9	Indoor Unit Name:	Daikin POLARA 3.0T Wall Mounted Type IDU
Outdoor Unit Model No.	RX36WMVJU9	Outdoor Unit Name:	Daikin POLARA 3.0-Ton, Heat Pump, Ductless ODU
Rated Cooling Capacity (Btu/hr):	33,200	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Sensible Capacity (Btu/hr):		Rated Piping Length(ft):	25
Max/Min Cooling Capacity (Btu/hr):	33,200 / 10,200	Rated Height Difference (ft):	0.00
Cooling Input Power (kW):			
SEER2 (Non-Ducted/Ducted):	15.90 /	HSPF2 (Non-Ducted/Ducted):	7.5 /
EER2 (Non-Ducted/Ducted):	9.10 /	Heating COP (Non-Ducted/Ducted):	2.7 /
Rated Heating Capacity (Btu/hr):	35,200	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 60 Ambient (°F DB/WB): 47 / 43
Max/Min Heating Capacity (Btu/hr):	35,200 / 10,200		

SYSTEM DETAILS			
Refrigerant Type:	R-410A	Cooling Operation Range (°F DB):	50 - 114
Holding Refrigerant Charge (lbs):	3.64	Heating Operation Range (°F WB):	5 - 64
Additional Charge (oz/ft):	0.32	Max. Pipe Length (Vertical) (ft):	66
Pre-charge Piping (Length) (ft):	33	Cooling Range w/Baffle (°F DB):	-22 - 115
Max. Pipe Length (Total) (ft):	99		
Max Height Separation (Ind to Ind ft):	0		

Page 2 of 5

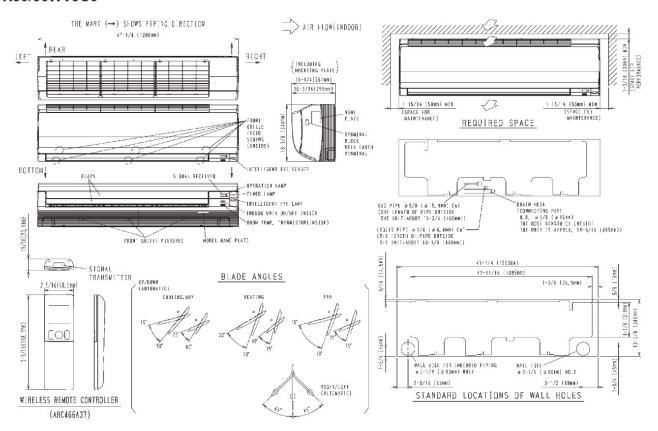


Daikin Polara 3.0-Ton Wall Mounted Heat Pump System FTX36WVJU9RX36WMVJU9

INDOOR UNIT DETAILS			
Power Supply (V/Hz/Ph):	208/230 / 60 / 1	Airflow Rate (H/M/L/SL) (CFM):	915/742/572/512
Power Supply Connections:		Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):		Gas Pipe Connection (inch):	5/8
Max Overcurrent Protection (MOP) (A):		Liquid Pipe Connection (inch):	1/4
Dimensions (HxWxD) (in):	13-3/8 x 47-1/4 x 10-3/16	Condensate Connection (inch):	
Net Weight (lb):	38	Sound Pressure (H/M/L/SL) (dBA):	54/47/40/37
Ext. Static Pressure (Rated/Max) (inWg):	1	Sound Power Level (dBA):	

DIMENSIONAL DRAWING - INDOOR UNIT

FTX30/36WVJU9



Daikin City Generated Submittal Data

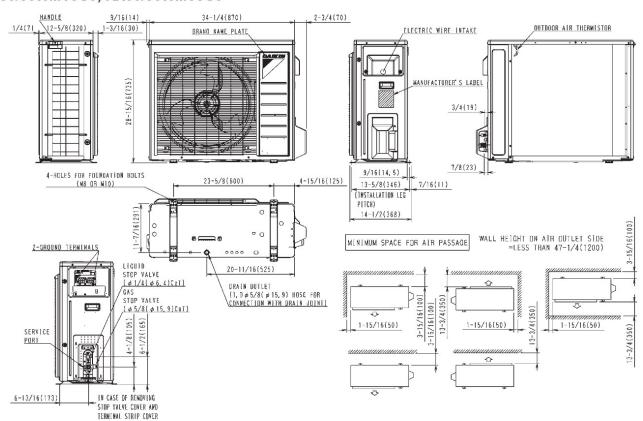


Daikin Polara 3.0-Ton Wall Mounted Heat Pump System FTX36WVJU9RX36WMVJU9

OUTDOOR UNIT DETAILS			
Power Supply (V/Hz/Ph):	208/230 / 60 / 1	Compressor Stage:	Inverter
Power Supply Connections:	1, 2, 3, Ground	Capacity Control Range (%):	-
Min. Circuit Amps MCA (A):	18.6	Airflow Rate (H) (CFM):	2811
Max Overcurrent Protection (MOP) (A):	20	Gas Pipe Connection (inch):	5/8
Max Starting Current MSC(A):		Liquid Pipe Connection (inch):	1/4
Rated Load Amps RLA(A):	18.3	Sound Pressure (H) (dBA):	59
Dimensions (HxWxD) (in):	28-15/16 x 34-1/4 x 12-5/8	Sound Power Level (dBA):	
Net Weight (lb):	133		

DIMENSIONAL DRAWING - OUTDOOR UNIT

RK30/36WMVJU9, RX30/36WMVJU9





Daikin Polara 3.0-Ton Wall Mounted Heat Pump System FTX36WVJU9RX36WMVJU9

INDOOR ACCESSORIES

PART NUMBER	DESCRIPTION	INCLUDED
AZAI6WSCDKB	DKN Residential Cloud Wi-Fi Adaptor for Single- and Multi-Zone System (S21)	No
AZAI6WSPDKC	DKN Plus Interface	No
BRC944B2-A08	Wired Remote Controller kit	No
BRCW901A03	BRC944B2 CONTROL CABLE, 10FT	No
BRCW901A08	Wired Remote Controller Cord - 8m/26ft	No
BRP072A43	Daikin Comfort Control WiFi Adaptor	No
DACA-CP1-1	Mini Aqua Condensate Pump	No
DACA-CP4-1	MINI WHITE PUMP KIT 100-250V	No
DTST-LTE-LA-A	Daikin One Lite (with Translation Adaptor for S21 only)	No
DTST-ONE-ADA-A	Daikin One+ Smart Thermostat for VRV, SkyAir, Single- and Multi-Zone System	No
KRP928BB2S	RA Interface Adaptor for DIII-Net -	No

OUTDOOR ACCESSORIES

PART NUMBER	DESCRIPTION	INCLUDED
DACA-WB-3	Powder-Coated Wall-Mounted Bracket	No
KEH063A4E	Daikin BML DrainPan Heater Large	No
KKG063A42	Back protection wire net	No
KPS063A41	Snow hood (intake side plate) (15, 18 & 24)	No
KPS063A44	Snow hood (intake rear plate) (15,18 & 24)	No
KPS063A47	Snow hood (outlet) (15, 18 & 24)	No
KPW063B4	Air direction adjustment grille	No
RAQAHLGD1	Rear Coil Guard BML	No

Daikin North America LLC, 19001 Kermier Rd, Waller, TX 77484

WW.dalkindo.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)

Daikin City Generated Submittal Data





Split Accessories

Wired Remote Controller kit (Includes BRCW901A08 26ft cable)	BRC944B2-A08 (1)
Wired Remote Controller Kit	BRC51D61 (4)
Mini Aqua Condensate Pump	DACA-CP1-1 (5)
Quicksling Stand	QSMS1801 (3)
Quicksling Stand	QSMS1800 (2)
Wind Guard	KPW937F4 (2)
Wind Guard	KPW063B4 (3)
Interface for use in BACnet	DMS502B71 (1)
RA Interface Adaptor for DIII-Net -	KRP928BB2S (5)



BRC944B2-A08 - Wired Remote Controller Kit

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

MODEL COMPATIBILITY:

Compatible with Single-Zone and Multi-Zone indoor unit models: CDXS, CTXS, FDXS, FTK_N, FTK_A, FTX_A, FTX_B, FTX_N, FTX_U, FTXG*, FTXR, FTXS, FTXM, FVXS

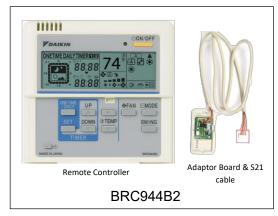
The following indoor units do not have the S21 connection and require an additional interface adaptor (ordered separately):

Indoor Unit Models	Required Interface Adaptor
FTX09NMVJU(A), FTX12NMVJU(A), FTX09WMVJU9, FTX12WMVJU9	KRP067A41E
FTX15NMVJU(A), FTX15WMVJU9	KRP980B2E
FTXM09VVJU, FTXM12VVJU, FTXM18VVJU, FTXM24VVJU, FTXM09WVJU9, FTXM12WVJU9, FTXM18WVJU9, FTXM24WVJU9	KER087A41

SPECIFICATIONS:

Model	BRC944B2-A08
Description	Wired Remote Controller Kit ¹
Maximum Indoor Units	1
Dimensions	4.75 in x 4.75 in x 0.69 in (120mm x 120mm x 17.5 mm)
Communication Protocol	S21
Comfort Setpoint Range	64°F – 90°F Set Point Range
Operation	Start / Stop
	Mode (Auto/Heat/Cool/Dry)
	Set Temperature Setpoint
	Fan Speed
	Airflow Direction
Scheduling	One-time Timer
	Daily Timer

PRODUCT IMAGE:





¹The Wired Remote Controller Kit includes the BRC944B2 (the remote controller, adaptor board and S21 cable) and the BRCW901A08 (wired remote controller cable).

DAIKIN COMFORT TECHNOLOGIES NORTH AMERICA, INC.

19001 Kermier Road | Waller, TX, 77484 www.daikinac.com www.daikincity.com Rev.0923

^{*}The Sarara drying function of the QUATERNITY units is not supported with the BRC944.



BRC944B2-A08 - Wired Remote Controller Kit

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

FEATURES:

- Selectable auto / cool / heat / dry operation modes with adjustable setpoint and fan speed
- Set temperature setpoint in °F or °C units with 1-degree increments.
- Temperature is controlled through indoor unit temperature sensor.
- Built in one time or daily timer functionality with up to 2 timer actions per day.
- Approximately two-hour battery backup
- Can be used together with the factory supplied standard wireless remote controller.
- An additional or replacement wired remote controller cable can be ordered:
 - o BRCW901A03: Non-plenum rated, 10ft.
 - o BRCW901A08: Non-plenum rated, 26ft.
 - o DACA-BRCW901P10: Plenum rated, 10ft.
 - o DACA-BRCW901P25: Plenum rated, 25ft.
- For FTX_B, FTK_B, FTXB_B models the unit is running based on a 1°C temperature control. The setpoint command will be rounded to °C to send to the indoor unit. For some setpoints, the indoor unit temperature command may not change as shown in the table below.

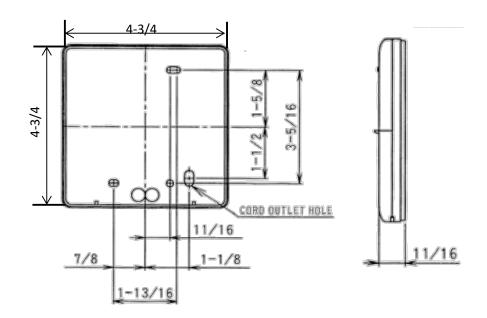
User Setpoint on Controller (°F)	Actual Indoor Unit Setpoint (°F)
68	68
69	68
70	70
71	70
72	72
73	73
74	73
75	75
76	75
77	77
78	77
79	79
80	79
81	81
82	82



BRC944B2-A08 - Wired Remote Controller Kit

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

DIMENSIONS:



DOCUMENTATION:

Documentation available on www.daikincity.com and/or www.daikinac.com:

- Submittal
- Installation Manual
- Operation Manual



BRC51D61 – Wired Remote Controller Kit

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

MODEL COMPATIBILITY:

Compatible with Single-Zone system indoor unit models:

Indoor Unit Models	Interface Adaptor
FTKB09AXVJU, FTKB12AXVJU, FTKB18AXVJU, FTKB24AXVJU, FTXB09AXVJU, FTXB12AXVJU, FTXB18AXVJU, FTXB24AXVJU, FTXB09BXVJU, FTXB12BXVJU, FTXB18BXVJU, FTXB24BXVJU	Not needed
CTX07AXVJU, CTX09AXVJU, CTX12AXVJU, FTK09AXVJU, FTK12AXVJU, FTK18AXVJU, FTK24AXVJU, FTX09AXVJU, FTX12AXVJU, FTX18AXVJU, FTX24AXVJU, FTK09BXVJU, FTK12BXVJU, FTK18BXVJU, FTX24BXVJU, FTX09BXVJU, FTX12BXVJU, FTX18BXVJU, FTX24BXVJU	Not needed

SPECIFICATIONS:

Model	BRC51D61
Description	Wired Remote Controller Kit
Maximum Indoor Units	1
Total Wiring Length	32.8ft (10m)
Dimensions	4.72 in x 4.72 in x 0.78 in (120mm x 120mm x 19.5 mm)
Connection Point	CN_WIRED (FTK/XB_AXVJU) CN_NS (FTK/X_AXVJU, FTK/X_BXVJU, FTXB_BXVJU)
Comfort Setpoint Range	60°F – 86°F
	Start / Stop
	Mode (Auto/Heat/Cool/Dry/Fan)
	Set Temperature Setpoint
Operation	Fan Speed
•	Airflow Direction
	Feature Selection (SLEEP, ECO+, POWERFUL, QUIET)
	Turn ON/OFF indoor unit LED display
Scheduling	Weekly ON/OFF Timer

PRODUCT IMAGE:



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Rev.0923

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BRC51D61 – Wired Remote Controller Kit

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

FEATURES:

- The Wired Remote Controller Kit includes a wired remote controller, a 32 ft. connecting cable and mounting screws.
- Selectable auto / cool / heat / dry / fan operation modes with adjustable setpoint and fan speed
- Set temperature setpoint in °F or °C units with 1 degree increments
- Temperature is controlled through indoor unit temperature sensor
- Built in weekly ON/OFF timer functionality with up to 2 ON/OFF cycles per day
- Can be used together with the factory supplied standard wireless remote controller the system will follow the last command provided by either the handheld remote or BRC51D61.
- Room temperature display available via jumper readout is return air temp at the indoor unit.
- System maintains a 3° to 5°F temperature correction of the set point, depending on the mode of operation.
- The unit runs based on a 1°C temperature control. The setpoint command will be rounded to °C and sent to the indoor unit. For some setpoints, the indoor unit temperature command may not change as shown in the table below.

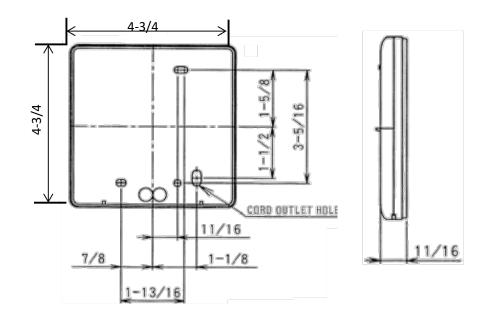
User Setpoint on Controller (°F)	Actual Indoor Unit Setpoint (°F)
68	68
69	68
70	70
71	70
72	72
73	73
74	73
75	75
76	75
77	77
78	77
79	79
80	79
81	81
82	82



BRC51D61 – Wired Remote Controller Kit

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

DIMENSIONS:



DOCUMENTATION:

Documentation available on www.daikincity.com and/or www.daikinac.com:

- Submittal
- Operation Manual (including installation instructions)

Submittal ASPEN **Data Sheet**

DACA-CP1-1

Dunio et Information

Mini Univolt 100-250 Pump Kit DACA-CP1-1

Froject iniorniation.
Job Name:
Location:
Engineer:
Submitted to:
For: ☐ Reference ☐ Approval ☐ Construction
Submitted by:
Reference:
Submittal Information:
Approval:
Date:
Construction:
Unit #:
Drawing #:

(Sec. I) Product Specifications:

Pump Length - 6.5"

Pump Width - 1.125" Pump Height - 1.125" Capacity - 3.2 GPH @ 0' Head Max BTUs - 30000 Max Head in Feet - 33 Max Temperature - 104F Max Suction Lift - 3'.3" Sound Level - 25dB(A) Dry Contact Rating - 3A NC Voltage - 100-250 Amperes - .15 MAX Watts - 16 Remote Reservoir - Y Plenum Rated - N Cable Length - 6'

Pump Selector & Wiring Diagrams Available at

http://www.rectorseal.com//index.php/daikin/

www.rectorseal.com	2601 Spenwick Drive, Houston,	TX 77055
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(Sec. II) Ordering Information:

Product Code - DACA-CP1-1 Model - DACA-CP1-1 Carton Qty - 1 Carton Weight - 1.5

(Sec. III) Carton Contents:

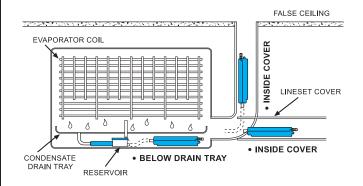
Pump Assembly Inline Reservoir 8"x5/8" i.d. Inlet Tube 5'x1/4" i.d. Vinyl Discharge Tube Installation Manual 6"x1/4" i.d. Vinyl Breather Tube

Drain Hose Adaptor Inline Fuse Cable Ties (6) Self Adhesive Velcro Strips (2) Anti-siphon (1)

(Fig. I) Product Image:



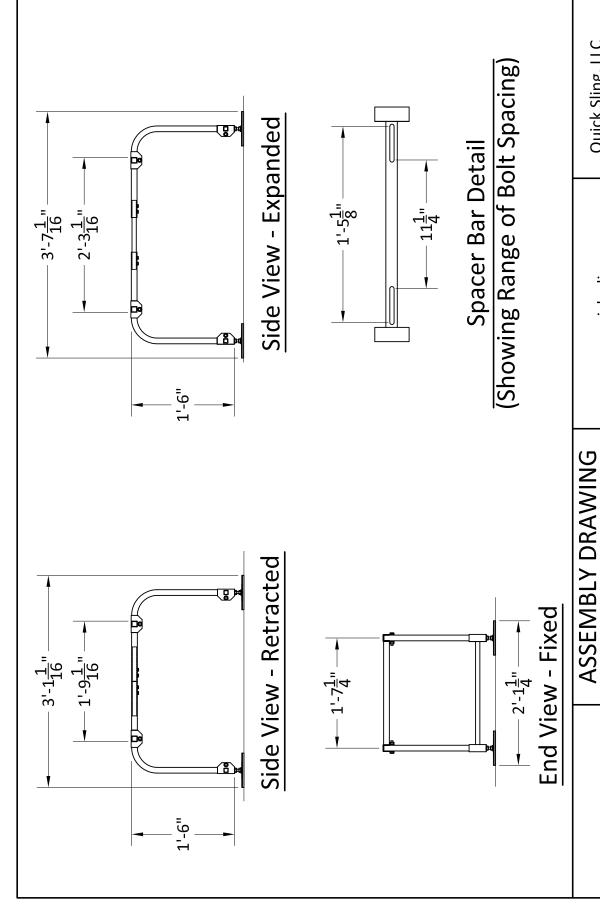
(Fig. II) Typical Pump Locations:



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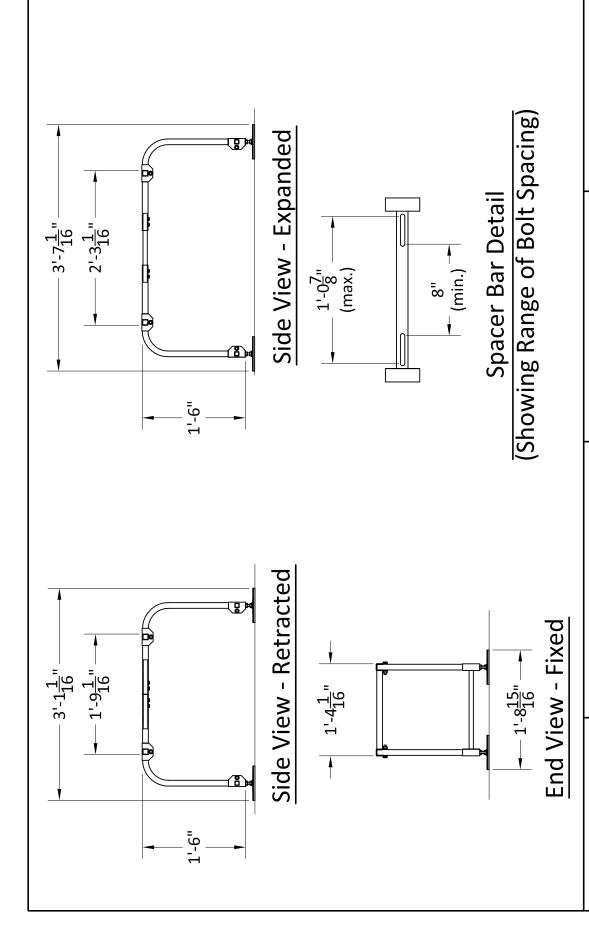
www.quick-sling.com email: info@quick-sling.com fax: 1-(800)-699-0423

"MINI-SPLIT 18" ADJUSTABLE STAND - WIDE

QUICK-SLING

Quick Sling, LLC 391 W. Water Street Taunton, MA 02780 1-(800)-699-0543

MODEL NO. QSMS1801



ASSEMBLY DRAWING

"MINI-SPLIT 18"

ADJUSTABLE STAND - THIN

Fax: 1-(800)-699-0423

Quick Sling, LLC 391 W. Water Street Taunton, MA 02780 1-(800)-699-0543



U.S. Patent No. 8,827,232 B2

MODEL NO. QSMS1800



Wind Baffle KPW937F4

DESCRIPTION

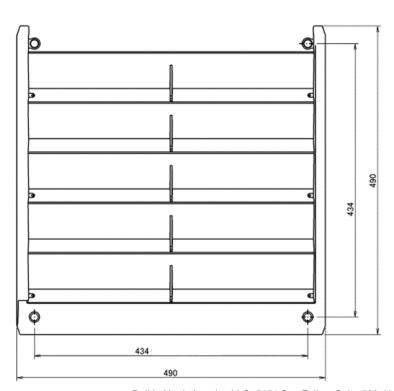
Wind Baffle mounts over the standard air grille and allows adjustment in air blow-off direction.





SPECIFICATIONS		
Model No:	KPW937F4	
Unit Compatibility:	RK09NMVJU, RK12NMVJU, RX09NMVJU, RX12NMVJU, RX09RMVJU(9), RX12RMVJU(9), RXL09QMVJU, RXL12QMVJU(9), RXS09LVJU, RXS12LVJU, RXG09HVJU, RXG12HVJU, RXG15HVJU	Qty (1)
Unit Names:	Wind Baffle	
Dimensions (WxHxD):	19-5/16" x 19-5/16" x 3-5/8" (490mm x 490mm x 92mm)	
Shipping Unit Weight:	6.75 lb.	
Material:	Flame Retardant Grade UL94V-HB	

DIMENSIONAL DRAWING (mm)





Daikin North America LLC, 5151 San Felipe, Suite 500, Houston TX, 77056 <u>www.daikinac.com</u> <u>www.daikincomfort.com</u>



Air Adjustment Grille (Wind Baffle) KPW063B4

DESCRIPTION

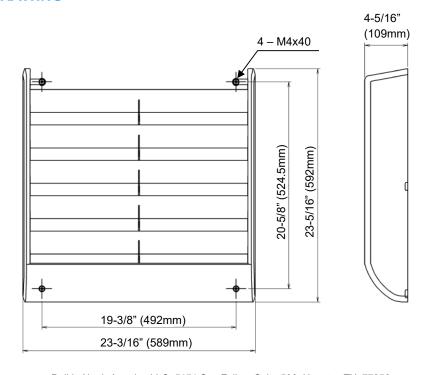
Air Adjustment Grille (Wind Baffle) mounts over the standard air grille and allows adjustment in air blow-off direction.





SPECIFICATION	CIFICATIONS			
Model No:	Model No: KPW063B4			
Unit Compatibility:	RK18NMVJU, RK24NMVJU, RX24NMVJU, RX18NMVJU, RK30NMVJU(A), RK36NMVJU(A), RX30NMVJU(A), RX36NMVJU(A), RX15RMVJU(A), RX18RMVJU(9)(A), RX24RMVJU(A), RXL15QMVJU(A), RXL18UMVJU(A), RXL24UMVJU(A), 2MXS18NMVJU(A), 3MXS24RMVJU(A), 4MXS36RMVJU(A), 2MXL18QMVJU(A), 3MXL24RMVJU(A)			
Unit Names:	Air Adjustment Grille (Wind Baffle)			
Dimensions (WxHxD):	23-3/16" x 23-5/16" x 4-5/16" (589mm x 592mm x 109mm)			
Shipping Unit Weight: 5.75 lb. (2.6 kg)				
Material:	terial: Flame Retardant Grade UL94V-HB			

DIMENSIONAL DRAWING



Daikin North America LLC, 5151 San Felipe, Suite 500, Houston TX, 77056 www.daikinac.com www.daikincomfort.com



DMS502B71 - Interface for use in BACnet

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #	

MODEL COMPATIBILITY:

Compatible with VRV and VRV LifeTM indoor unit models: FXAQ, FXDQ, FXEQ, FXFQ, FXHQ, FXLQ, FXMQ, FXMQ_MF, FXNQ, FXSQ, FXTQ, FXUQ, FXZQ, CXTQ, VAM
Compatible with SkyAir indoor unit models: FAQ, FBQ, FCQ, FHQ, FTQ
Compatible with Single Zone/Multi Zone/SkyAir system indoor unit models:

- FDMQ, FFQ Q
- FFQ LVJU with the use of the Interface Adaptor DTA112BA51
- FTXS, CTXS, CTXG, FTXG, FDXS, CDXS, FVXS with the use of the DIII-Net Adapter KRP928BB2S
- FTX, FTXN, FTK, and FTKN with the use of the DIII-Net Adapter KRP928BB2S and an Interface adaptor KRP067A41E/KRP980B1/KRP980B2E

SPECIFICATIONS:

Model	DMS502B71
Description	BACnet Interface
Maximum Indoor Units	128 groups/256 indoor units (256 groups/512 indoor units with DAM411B51)
Maximum Outdoor Units	20 (40 with DAM411B51)
DIII-Net Communication Wire	18AWG-2, No polarity Stranded, Non-shielded
BACnet IP Communication Wiring	10Base-T/100Base-TX
Communication Protocol	Daikin Proprietary DIII-Net protocol / BACnet IP
IP Setting Range	Class C network
Power	24VAC (field supplied) (40VA maximum)
Comfort Setpoint Range	60 to 90 °F (16 to 32 °C)
Setpoint	Single Setpoint
Temperature Units	Degrees Fahrenheit or Celsius
Operating Temp Range	14 to 122°F (-10 to 50°C)
Operating Humidity Range	90% or less (RH) (w/o condensation)
Dimensions (WxHxD)	10.81 x 10.34 x 2.69 inch (274.57 x 262.13 x 68.33 mm)
Weight (Mass)	6.2 lbs. (2.8 kg)
Certification	FCC Part 15 Subpart B Class A

PRODUCT IMAGE:



Notes:

Image shows BACnet Interface (DMS502B71) with Optional DIII Board (DAM411B51) inserted

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



DMS502B71 - Interface for use in BACnet

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #	

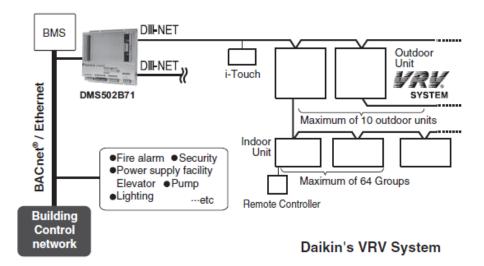
OPTIONS:

Option DIII Board DAM411B51 can be applied to add two additional DIII-Net ports to the BACnet Interface

FEATURES:

- Integrate Daikin VRV, SkyAir, Single and Multi-zone systems with third party building automation systems supporting the BACnet protocol
- BACnet Application Specific Controller (B-ASC) device profile compatible with BACnet (ANSI / ASHRAE-135)
- BACnet IP Data Link Layer (Annex J)
- Supports COV Change of Value, Property Array Index and Segmented requests
- IPv4 and Foreign Device registration for use with BACnet Broadcast Management Devices (BBMD)
- BTL listed (operating system version 6.2 and later)
- Diagnostic LEDs
- 2 Alarm Output contacts DO-1 and DO-2
- 4 Digital Inputs for Forced Off function
- The following programing is required from BMS:
 - o Auto-changeover
 - Setpoint Range Limitation
 - o Setback
 - o Scheduling
 - Dual Setpoints

SYSTEM DIAGRAM:



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



DMS502B71 - Interface for use in BACnet

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

INDOOR UNIT MONITORING AND CONTROL POINTS:

Check the appropriate box indicating the required integrated points for this project.

Function		Description
	On/Off (Note2)	Start / stops the indoor unit and monitors the latest status
g	Operation Mode (Note 2)	Sets the cool / Heat / Fan/ Dry mode for the indoor unit and monitors the latest mode
rin	Setpoint setting (Note 2)	Sets the setpoint of the indoor unit and monitors the latest setpoint.
monitoring	Filter sign and reset	Monitors filter run time, provides service alert, and allows a manual reset of the status as required.
	Remote controller permit/prohibit	Permits or prohibits the remote controller so that it can or cannot be used to control the indoor unit's On/Off/Operation mode/Setpoint
ր, and	Lower Centralized Controller operation enable/disable	Enables or disables operation of a Centralized Controller connected to the DIII network.
ioi	Fan Speed setting (Note 2)	Sets the fan speed and monitors the latest setting.
ıra	Airflow direction setting (Note 2)	Sets the airflow direction and monitors the latest setting.
Operation, configuration,	Forced system stop	The forced system stop command will force the indoor units to stop running based upon a received emergency alarm input. Remote controllers will be locked out from restarting indoor units during a forced system stop event.
on, c	Forced Thermo-off	In response to the forced thermo-off command, the indoor unit stops actively cooling or heating.
ərati	Energy saving	Offsets the internal setpoint +3.6°F (2°C) in cooling, and -3.6°F (-2°C) in heating in an indoor unit. The actual setpoint is not changed.
dC	Ventilation mode setting (Note 2)	Sets the ventilation mode and monitors the latest mode.
0	Ventilation amount setting (Note 2)	Sets the ventilation amount and monitors the latest amount.
	On/Off status	Monitors the On/Off status of the indoor unit.
	Alarm	Monitors whether or not the indoor unit is operating normally, and issues an alarm if the indoor unit has a malfunction.
	Malfunction code	Displays a malfunction code specified by Daikin if an indoor unit in the system has a malfunction.
g	Operation mode	Monitors if the indoor unit is in Cool, Heat, Fan, or Dry mode.
ri	Room temperature (Note 1)	Monitors the room temperature.
ij	Filter sign	Monitors filter run time and provides service alert.
Monitoring	Thermo-on status	Monitors whether or not the indoor unit is in actively cooling or heating.
Š	Compressor status	Monitors if the compressor of the outdoor unit connected to the indoor unit is properly operating.
	Indoor fan status	Monitors if the indoor unit's fan is properly operating.
	Heater status	Monitors if the indoor unit's heater is properly operating.
	Ventilation mode status	Monitors the ventilation mode status of the Energy Recover Ventilator
	Ventilation amount status	Monitors the ventilation amount status of the Energy Recovery Ventilator

^{1.} Room temperature data (BACnet object name RoomTemp_XXX) by default is reported from the Daikin indoor units return air thermistor. This applies to all VRV indoor unit styles and capacities. During periods when the indoor unit is turned off or during certain operating modes that cycle the fan off including defrost operation, hot-start and system pressure equalization, the reported temperature may not accurately reflect the actual space temperature. For applications where this temperature value will be primary to system control including mode and

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DMS502B71 - Interface for use in BACnet

Project Name:		
Location:	Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

temperature setpoint management, it is recommended that the Daikin remote temperature sensor (Part No. KRCS01-1B or 4B depending on model) is specified for each indoor unit and installed within the occupied space or unit be configured to be controlled from temperature sensor in BRC1E73 Navigation Controller if the unit is capable.

- 2. In the indoor unit, the setpoints, start/stop status, mode, airflow direction, and fan speed are written to the non-volatile memory each time they are changed so the settings are not lost in the event of a power failure. The number of times this non-volatile memory can be written is limited, and writing beyond that limit may cause failure to the indoor unit EEPROM. This will not cause the indoor unit to stop functioning; however, the volatile memory will not retain the last settings received. Consequently, when the setpoints, start/stop status, mode, airflow direction, and fan speed are frequently changed by automatic control from the BMS, the number of times each setting for each indoor unit is limited to 70,000 80,000 times per year (dependent on the indoor unit manufacturing date). If the same value is repeatedly sent, it will not be added to the total "write to" count.
- 3. BACnet® is a registered trademark of ASHRAE.

COMPATIBILITY:

Function	VRV indoor unit	SkyAir indoor unit (except FTXS)	VAM	Outdoor air processing unit	Mini-Split & SkyAir FTXS indoor units (KRP928 adapter required)	FFQ indoor unit for Multi-split & Super Multi Plus (DTA112BA51 adapter required)
On/Off operation and monitoring	~	~	~	~	~	~
Indoor unit malfunction notification	V	~	V	V	~	~
Room temperature monitoring	~	~	N/A	✓ (return air	~	V
Setpoint setting and monitoring	~	~	N/A	N/A	~	~
Operation mode setting and monitoring	~	>	N/A	~	V	V
Remote-control permit/prohibit setting and monitoring	~	>	~	~	~	~
Filter sign monitoring and reset	~	>	~	~	N/A	~
Thermo-on status monitoring	~	~	N/A	~	N/A	~
Compressor operation status monitoring	~	~	N/A	~	N/A	V
Indoor fan status monitoring	~	~	V	~	N/A	~
Heater status monitoring	~	~	N/A	~	N/A	~
Airflow direction setting and monitoring	~	~	N/A	N/A	N/A	V
Fan speed settings and monitoring	~	~	(Monitoring	N/A	N/A	~
Forced thermo-off setting and monitoring	~	>	N/A	~	N/A	~
Energy saving (setpoint offset)	~	~	N/A	~	N/A	N/A
Ventilation Mode	N/A	N/A	V	N/A	N/A	N/A
Ventilation Amount	N/A	N/A	V	N/A	N/A	N/A

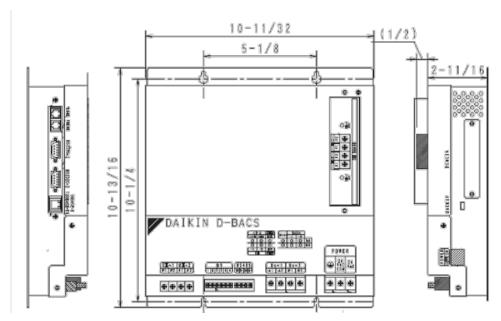
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Project Name:		
Location:	Approval:	
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Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

DIMENSIONS:



DOCUMENTATION:

Documentation available on www.daikinac.com:

- BACnet Design Guide
- Installation Manual
- Submittal
- Guide Specifications

EDMT721210A Adaptor

1.6 |Interface Adaptor for DIII-NET Use (RA) <KRP928B2S>

1.6.1 Functions

Туре	BRC1C62	KRP928B2S
Group/Zone Item	One Group	Unified control for all Zone
ON/OFF	Possible	Possible
Temp. setting	Possible	Possible
Airflow rate setting	Possible	Impossible
Airflow direction setting	Possible	Impossible
Timer setting twice a day	Possible	Impossible
Mode setting	Possible	Possible
Filter sign reset	Possible	Impossible
Inspection/Test operation	Possible	Operation display only by lamps

<Overview, Features and Compatible Models>

This kit is the interface required when connecting the centralized control equipment and a Daikin Room Air Conditioner. Use of the centralized control equipment makes it possible to perform the following monitoring and operations. It is compatible with room air conditioners which have an HA connector S21.

- 1.Run / stop for the centralized control equipment and wired remote controller, operating mode selection, and temperature can be set.
- 2.The operating status, any errors, and the content of those errors can be monitored from the centralized control equipment and wired remote controller.
- 3.Run / stop for the centralized control equipment and wireless remote controller, operating mode selection, and the temperature setting can be limited by the centralized control equipment.
- 4.Zone control can be performed from the centralized control equipment.
- 5.The unit can remember the operating status of the air conditioner before a power outage and then start operating in the same status when the power comes back on.
- 6.Card keys, operating control panels, and other constant / instantaneous connection-compatible equipment can be connected.
- 7. The Operating / error signals can be read.
- 8.HA JEM-A-compatible equipment can be connected.
- 9. The indoor temperature can be monitored from the intelligent Touch Manager.

Precaution

- 1. When reading the Operating / error signals, a separate external power supply (DC 12V) is needed.
- 2.A separate timer power supply (DC 16V) is needed when using the schedule timer independently, and not in conjunction with other centralized control equipment.
- 3.The range of temperatures that can be set from the centralized control equipment is 18°C to 32°C in cooling and 14°C to 28°C in heating.
- 4.Fan operation cannot be selected from the centralized control equipment or wired remote controller.
- 5. Group control (i.e., control of multiple indoor units with a single remote controller) is not available.
- 6.Monitoring is not available of the thermo. status, compressor operating status, indoor fan operating status, electric heater, or humidifier operating status.
- 7.Forced thermo. off, filter sign display and reset, fan direction and speed settings, air conditioning fee management, energy savings instructions, low-noise instructions, and demand instructions cannot be made.

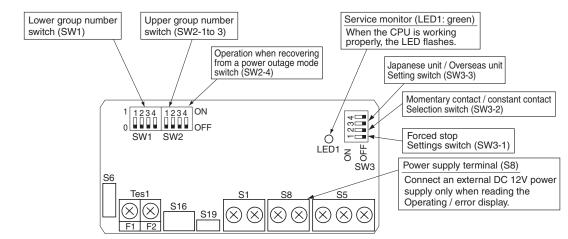
<Component Parts and Separately-Sold Parts which are Required>

This kit includes the following components. Check to ensure that none of these are missing.

Parts	Parts Q'ty		Q'ty
Kit assy		Connection harness (about 1.6m)	1set
PCB is in the housing.	4	Mounting screws	3pcs.
Screw cover	'	Binding band	1pc.
		Installation manual	1set

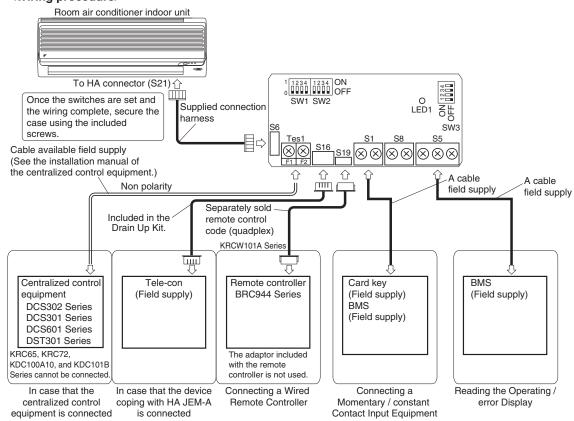
Adaptor EDMT721210A

1.6.2 | Part Names and Functions



1.6.3 Electric Wiring Work and Initial Settings

<Wiring procedure>



<Switch Settings>

NOTE

Turn the power on after all the switches have been set. Settings made while the power is on are invalid.

Open the Kit's case and set the switches on the circuit board.

(1) For Overseas / Japanese unit setting (SW3-3)

Room air conditioners, different methods are used for setting the temperature in automatic mode, so this switch needs to be set.

110000	DO 001.	
Destination	SW3-3 setting	What Happens
Japan	OFF (Factory setting)	 "Automatic" operation is not available from the centralized control equipment. When using "automatic" operation using the wireless remote controller, the centralized control equipment displays automatic cooling (heating) and 25°C. Even if the temperature is changed, it will return to 25°C after a while.
Other countries	ON	"Automatic" operation is available from the centralized control equipment.

(2) Group number settings (SW1 and SW2-1 to SW2-3)

Set these when using the centralized control equipment. (Set to the side.) Do not set more than one unit to the same number.

However, these settings do not need to be made when using the schedule timer independently.

(The settings are needed when used in conjunction with another DCS Series centralized control equipment.)

In this case, the schedule timer performs an auto address after the power is turned on, so new group numbers are automatically set. Settings made using the switches will be overwritten.

0						
SW2	Upper		SW1	Lower	SW1	Lower
setting	group No.		setting	group No.	setting	group No.
	1—	0	1 2 3 4	0 0	1 2 3 4	0 8
1 2 3	2—		1 2 3 4	0 1	1 2 3 4	0 9
1 2 3	3—		1 2 3 4	0 2	1 2 3 4	1 0
1 2 3	4—		1 2 3 4	0 3	1 2 3 4	1 1
1 2 3	5—		1 2 3 4	0 4	1 2 3 4	1 2
1 2 3	6—		1 2 3 4	0 5	1 2 3 4	1 3
1 2 3	7—		1 2 3 4	0 6	1 2 3 4	1 4
1 2 3	8—		1 2 3 4	0 7	1 2 3 4	1 5

NOTE also that a separate timer power supply is needed when using the schedule timer independently. Power supply specs: DC 16V, +10%, -15%, 200mA.

Recommended power supply: Omron S82J-01015A. (Should be used with the output voltage adjusted to the center, DC 16V.)

(3) Settings when recovering from a power outage (SW2-4)

This selects whether to restart operation when the power comes back on after a power outage occurred during operation. This setting is given priority in cases where the indoor unit has an auto start ON / OFF jumper. Note also that regardless of whether switch SW2-4 is on or off, the operating mode, set temperature, fan direction and speed settings, and remote control prohibition status are stored.

SW2-4 setting What Happens					
OFF (Factory setting)	Stops after recovering from a power outage				
ON	Stops if the unit was stopped before the power outage and runs if it was running.				

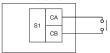
(4) Contact input function settings (SW3-1 to SW3-2)

When using contact input (S1), choose one of the following functions.

S1			What Happens	Control mode		
operating mode	setting	setting				
Instantaneous contact input (factory setting)	OFF		The operating status of the air conditioner is reversed by an instantaneous input of 100 msec or more.	Last command priority		
Constant contact input	OII	ON	Contact - Open to close: air condition runs. Close to open: air conditioner is stopped (NOTE 1.).	ON / OFF control is rejected (operate / stop / timer prohibition) (NOTE 2.).		
Forced stop or remote controller permission input	ON	Invalid	Contact - Open to close: air condition stops (forced stop). Close to open: no change in operating status.	During a forced stop, all remote controller actions are prohibited.		

Note

- 1. Since centralized control equipment and HA JEM-A-compatible equipment both use last command priority, the contact status and operating status of the air conditioner might not match sometimes.
- Example: If the unit is run from the centralized control equipment while the air conditioner is stopped with an open contact, the contact will be open and the unit will be running.
- 2. Operating mode and fan direction and speed settings can be changed.



Run / stop Input Contact specs

No-voltage minute electric current contact (Minimum applicable load DC 12V, 1mA or lower)

Total wire length max: 100m

11

Adaptor EDMT721210A

<Control Codes>

When using the centralized control equipment, the operating codes can be used to limit operation from wireless remote controllers.

O : permitted; x: prohibited

	Control mode	Control code	Operations from the remote controller Operations from the								
S1 operating mode							"Stop" control from the centralized control equipment				centralized control equipment, contact
			Run / timer	Stop	Operating mode temperature	Fan direction and fan speed	Run / timer	Stop	Operating mode temperaturet	Fan direction and fan speed	input and HA JEM-A input
	ON / OFF control	0,1,3	×	×	0		×	×	0	_	
	is rejected	10,11	×	×	×		×	×	×		
	Only OFF control is accepted	2 12–19	×	0	×		×	0	×		
	Central priority	4	0	0	0		×	0	×	1	
Instantaneous		5	0	0	0	0	×	×	0	0	0
contact mode	Last command priority	6,7	0	0	0		0	0	0		
	Timer operation is accepted by remote controller	8	O (Only dur	oring timer o	O peration)		×	0	×		
		9	Only dur	O ring timer o	Oneration)		×	×	0	1	
Constant contact mode			×	×	0		×	×	0		
Forced stop			×	×	×	×	×	×	×	×	

The remote controller permission / prohibition settings using the intelligent Touch Manager are as follows.

O: permitted; x: prohibited

S1 pin operating mode	intelligent	Touch Manage	er settings	Оре	Operations from the centralized control equipment, contact input and HA JEM-A			
	Start / stop	Change operating mode	Change set temperature	Run / timer	Stop	Operating mode temperature	Fan direction and fan speed	input
	ON / OFF	permitted	permitted	×	×	0		0
Instantaneous	ON / OFF		prohibited	×	×	0	0	
contact mode	control is	prohibited	permitted	×	×	×		
_	rejected		prohibited	×	×	×		
•	Only OFF control is accepted	permitted	permitted	×	×	0		
Constant			prohibited	×	0	×		
contact mode		prohibited	permitted	×	0	×		
			prohibited	×	0	×		
	Last	permitted	permitted	0	0	0		
Instantaneous			prohibited	0	0	0		
contact mode		prohibited	permitted	×	0	×		
	command	prombited	prohibited	×	0	×		
Constant contact mode	priority	permitted	permitted	×	×	0		
		permitted	prohibited	×	×	0		
		prohibited	permitted	×	×	×		
		prombited	prohibited	×	×	×		
Forced stop	Doe	s not affect set	ings	×	×	×	×	

<Read Operating / Error Display Signal>

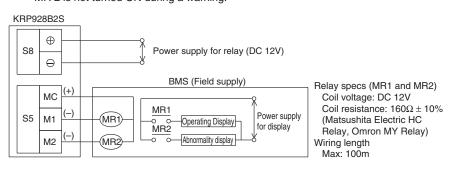
The Operating / error signals can be read from the contact output (S5).

Output specs

M1: Turn MR 1 ON when the air conditioner is running.

M2: Turn MR 2 when a communication error has occurred between the KRP928B2S and the air conditioner, or MR 1 is ON and the unit has stopped after an error.

MR 2 is not turned ON during a warning.



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