

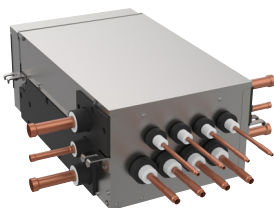
VRV

DAIKIN *FLEX*
BRANCH SELECTOR
BOXES



Daikin *Flex Branch Selector* Box

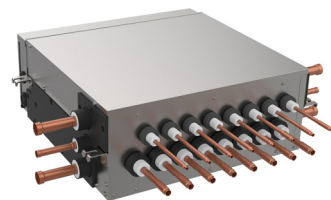
Daikin's new *Flex Branch Selector* boxes are engineered to be compact and provide flexibility in design, installation, maintenance, and service. Packed with Daikin's state of the art technology, the new *Flex Branch Selector* boxes fit in tight mechanical spaces (common in ceilings) combined with flexibility in piping configuration and movable E-box makes the new design an ideal choice for commercial buildings.



4-PORT



6-PORT



8-PORT

Main Features and Benefits

Flexible

- » Design flexibility with versatile piping configurations of Left or Right or Pass through layouts.
- » Engineered for tight ceiling spaces with a compact height of 9-1/2" and 0"¹ service clearance between the slab and the top of the *Flex Branch Selector* box.
- » Flexibility to expand design with up to 12¹ ports and 230Mbh¹ down stream capacity by connecting multiple boxes in series.
- » Ability to optimize installed system cost by reducing *REFNETs* and braze joints in pass thru configuration vs non-pass through configuration.
- » Simple electrical configurations with flexibility to re-position E-box.²
- » Ability to mix and match Daikin *Flex Branch Selector* boxes and standard branch selector box for ultimate design flexibility.

Installation Flexibility

- » Ease of maintenance with access to electronic expansion valve (EEV) heads and motor via side access panel.
- » Eliminate cross piping with refrigerant pipe identification labels.
- » Simple electrical and communication wiring with connection from the front side of E-box.²

¹ Refer to engineering manuals for design rules

² Feature available for BSF4Q54TAVJU (4-port) model only

Innovative

- » Daikin's high specification EEV enables precise refrigerant control for high comfort in user spaces and reliable system operation.
- » Hermetically sealed to prevent condensate build up within the unit, eliminating the need for a condensate drain pan and plumbing connections for a simple installation.
- » Low ambient cooling down to -4°F¹ for simple and integrated system design.

System Compatibility

- » Branch Selector Boxes: *T-series Branch Selector* Boxes
- » Indoor Units: All *M-series*, *P-series* and *T-series VRV* indoor units.
- » Outdoor Units: *VRV IV*, *VRV IV X*, *VRV AURORA*, and *VRV T-series Water-Cooled Heat recovery* units.
- » Seamless integration with full suite of Daikin *VRV Controls*.

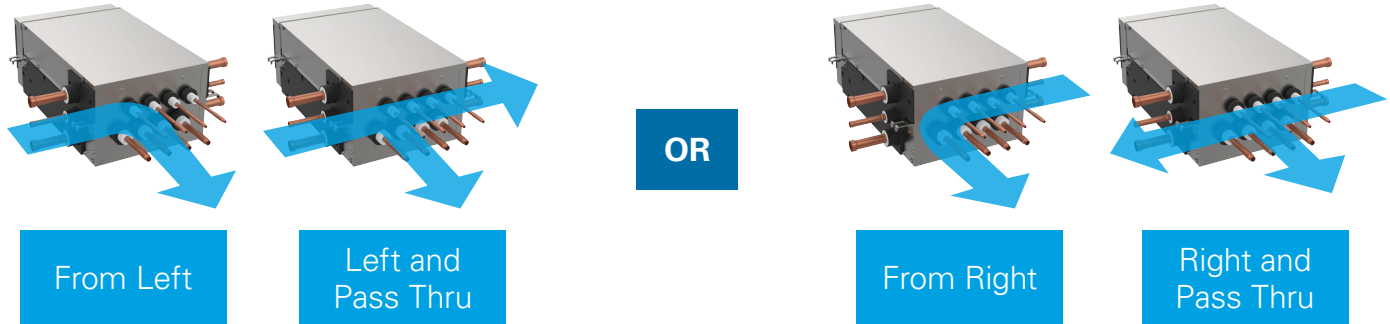


* Complete warranty details available from your local distributor, manufacturer's representative, www.daikincomfort.com or www.daikinac.com.

Flexibility in Design

Piping Flexibility

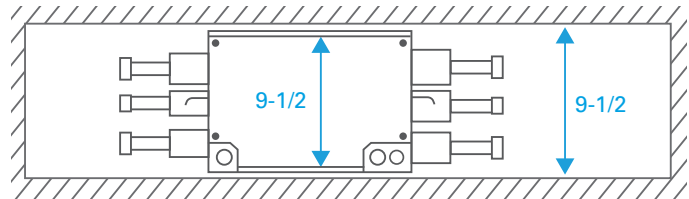
Flex Branch Selector boxes offer the flexibility to install multiple branch selector boxes in series, in parallel, or a mix of both for ultimate flexibility. Refrigerant pipe routing can be customized based on project needs for Left or Right or Pass through configurations.



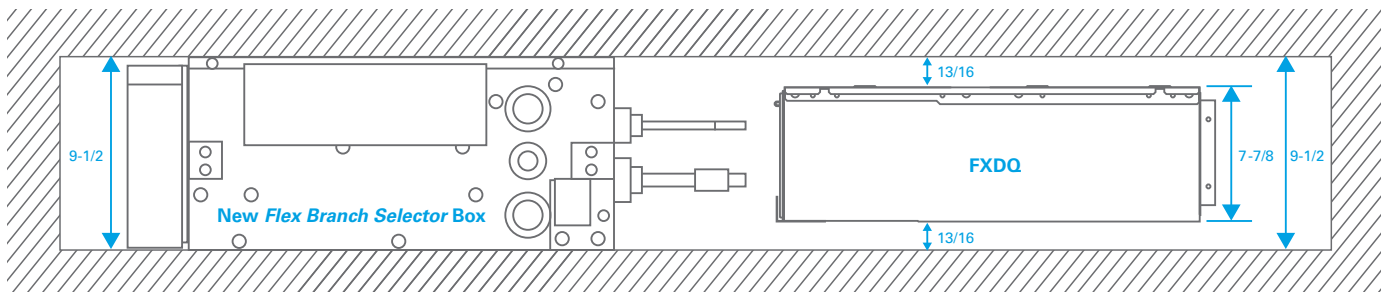
Able to Fit in Tight Ceiling Spaces

Engineered at a compact height of 9-1/2" and for 0" service clearance between slab and the top of the unit. The new *Flex Branch Selector* boxes allow for up to 50% height reduction in installed indoor unit and branch selector box space combined.

Flex Branch Selector Box Height Requirements



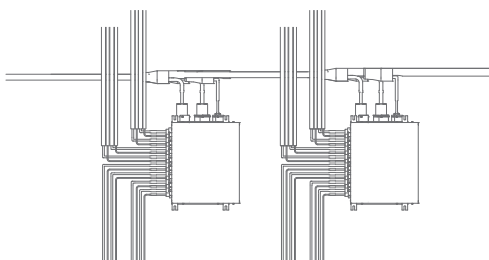
Flex Branch Selector Box with FXDQ family of VRV Indoor units



Expandable Design

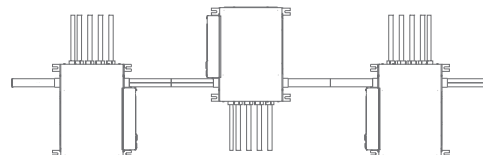
Flex Branch Selector boxes offer the flexibility to expand design with the ability to connect up to 12¹ ports and 230MBh¹ in series while maintaining the same long piping flexibility as previous generation. Combined with piping flexibility, this allows for ease of design in Office, Multi-family, Hotel, and other applications where branch selector boxes are installed in corridors.

Connectible in Parallel



AND

Connectible in Series



Flex Branch Selector Box Overview

The new *Flex Branch Selector* boxes are packed with Daikin's state of the art technology to deliver precision refrigerant control and high space comfort.

High Spec EEV

Dedicated high specification Electronic Expansion Valves (EEVs) per circuit ensure precise refrigerant control for high space comfort and reliable system operation.

Electrical Box

Safety with completely closed E-box. Easy dis-assemble for relocation to Left or Right side on 4-port box.

Technical Cooling

Simple system design with the ability to provide low ambient cooling down to -4°F while continuing to offer simultaneous cooling and heating operations from the remaining indoor units in the system.

Hermetically Sealed

The *Flex Branch Selector* box is hermetically sealed to prevent any moisture build up inside the unit and does not require a drain pan and plumbing connection.

Removable Side Access Panel

The new *Flex Branch Selector* boxes are equipped with side access panels to offer quick access to the EEVs for ease of maintenance and service.

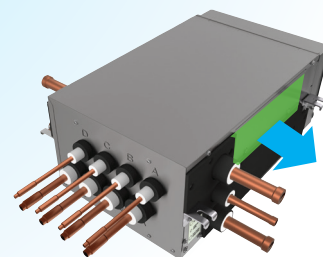
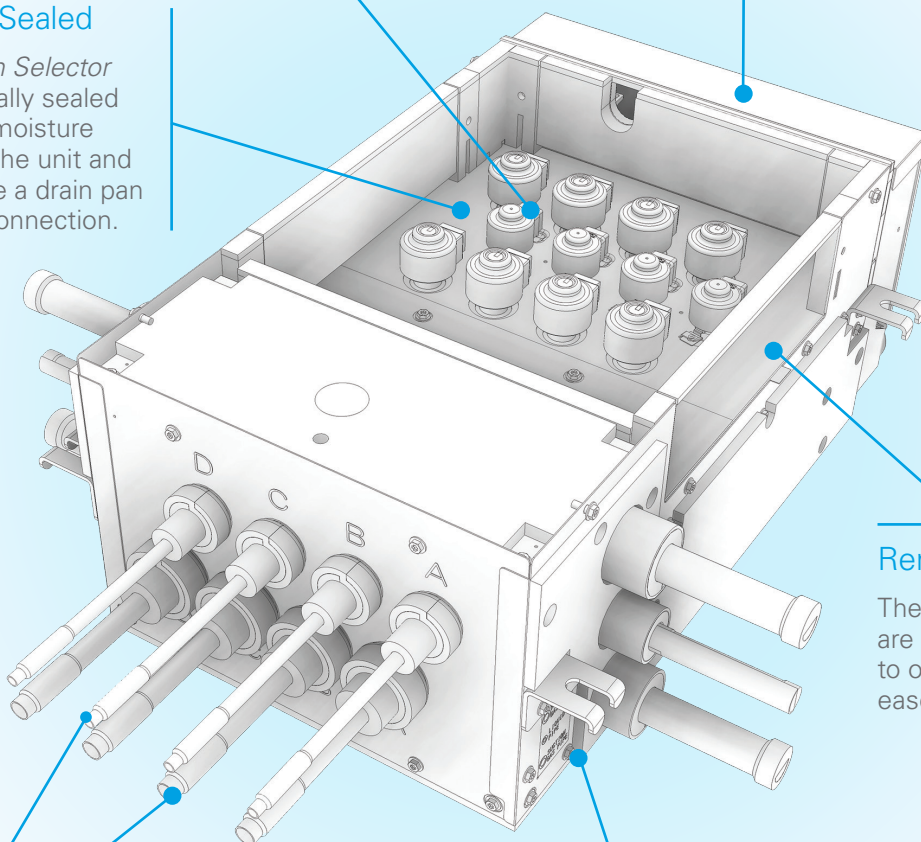
Liquid Line and Hot Gas for Indoor

Multiple diameter point tips allow for ease of brazing connection to indoor units.

Pipe Labels

Label on the *Flex Branch Selector* box to clearly identify piping and eliminate cross piping.

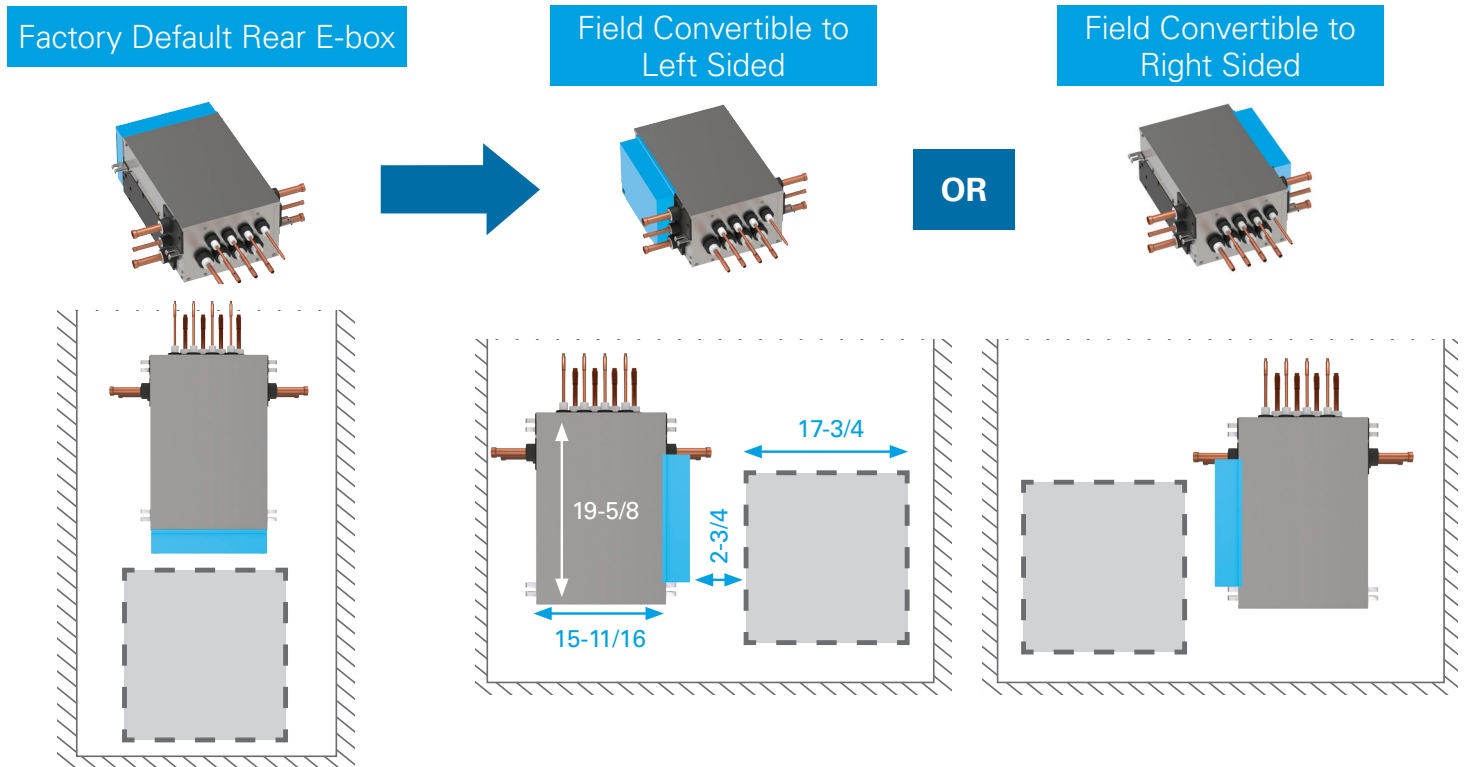
- HP/LP Gas Pipe
- Liquid Pipe
- Suction Gas Pipe



Ease of Maintenance and Service

Flexible E-Box Location

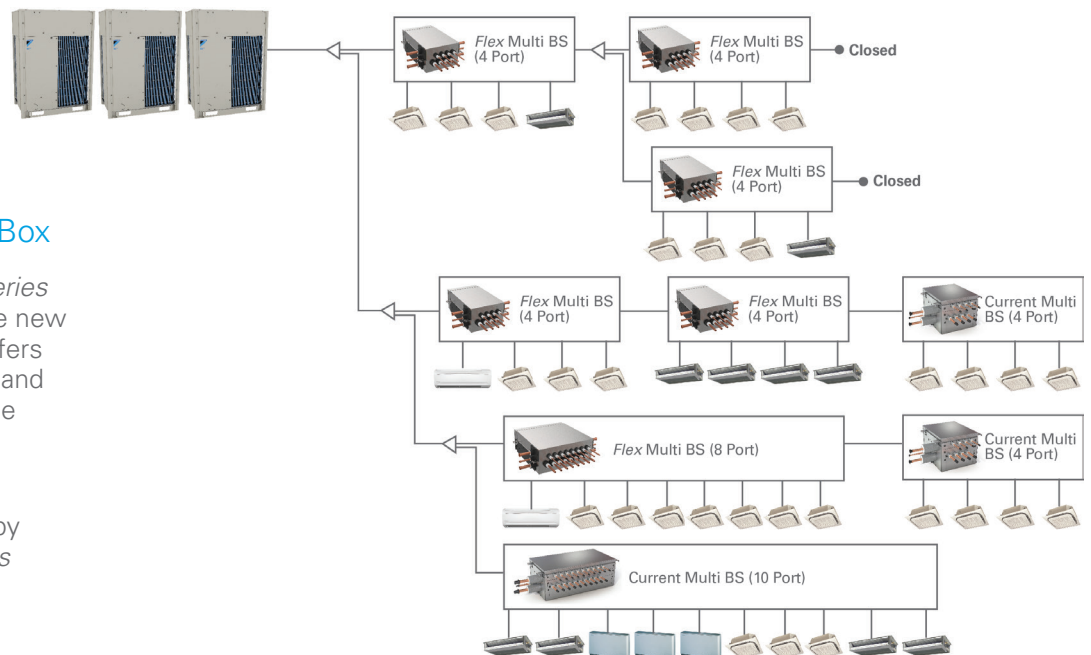
The new 4-port offers freedom to customize the E-box location based on available install space. This ability to re-position the E-box allows for possible reduction of number of access panels while offering flexibility in design of service and electrical clearances for applications with tight spaces.



Mix and Match with T-series Branch Selector Box

The ability to mix Daikin's *T-series Branch Selector* boxes and the new *Flex Branch Selector* boxes offers flexibility to customize design and system selection (based on the application) for a simple and elegant design¹.

Ease of design and selection by leveraging Daikin's *WebXpress* platform. Learn more at www.daikinac.com.



Daikin Branch Selector Box Offering

# OF PORTS						
Box	4	6	8	10	12	Single
Flex Branch Selector	■	■	■	-	-	-
T-series Branch Selector	■	-	-	■	■	■

Specifications

				FLEX BRANCH SELECTOR BOX		
Type				Multi-Port		
Model				BSF4Q54TVJ	BSF6Q54TVJ	BSF8Q54TVJ
Power Supply				Single-phase 208/230V 60Hz		
Number of branches				4	6	8
Max capacity index of connectable indoor unit per BS box, (in series connection)				144	216 (162)	290 (162)
Maximum connection index per port				54		
Max capacity index of total connectable indoor units under BS units connected in series				230		
Piping connections	Indoor Unit	Liquid	in.	3/8 (1/4) Brazing		
		Gas	in.	5/8 (1/2) Brazing		
	Outdoor Unit	Liquid	in.	5/8 Brazing		
		Suction Gas	in.	1-1/8 Brazing		
		HP/LP Gas	in.	1-1/8 Brazing		
				1-1/8 Brazing		
Weight			lbs (kg)	49 (22)	73 (33)	81 (37)
Dimensions		Height	in. (mm)	9 -1/2 (241)		
		Width	in. (mm)	13-3/4 (348)	23-3/8 (593)	
		Depth	in. (mm)	23-3/4 (603)		
Refrigerant				R410A		

*Please refer to the Engineering Manual for details on capacity index rules.

Pipe Reducer Kit KHFP26A200T (Optional)

PARTS NAME	REDUCER (1)	REDUCER (2)	REDUCER (3)	REDUCER (4)	REDUCER (5)
QUANTITY	2 PCS.	2 PCS.	1 PC.	1 PC.	1 PC.
SHAPE OF REDUCERS					

TOTAL INDOOR UNIT CAPACITY (X)	PIPE SIZE (OUTSIDE DIAMETER)			REDUCER		
	Suction Gas Port	Hlgh/Low Pressure Pipe	Liquid Pipe	Suction Gas Port	Hlgh/Low Pressure Pipe	Liquid Pipe
<54	Ø 5/8 (Ø 15.9)	Ø 1/2 (Ø 12.7)	Ø 3/8 (Ø 9.5)	Reducer (1) + (2) (*1)	Reducer (1) + (2) (*1)	Reducer (3)
54 ≤ x < 72	Ø 3/4 (Ø 19.1)	Ø 5/8 (Ø 15.9)		Reducer (1)		
72 ≤ x < 111	Ø 7/8 (Ø 22.2)	Ø 3/4 (Ø 19.1)		Unnecessary		
111 ≤ x < 162	Ø 1-1/8 (Ø 28.6)	Ø 1-1/8 (Ø 28.6)	Ø 1/2 (Ø 12.7)	Unnecessary	Unnecessary	Unnecessary
162 ≤ x < 230			Ø 5/8 (Ø 15.9)			
230 ≤ x < 300	Ø 1-3/8 (Ø 34.9)		Ø 3/4 (Ø 19.1)	Reducer (5)		Reducer (**4)

* 1) Braze Reducer (1) with Reducer (2) to use.

** 2) Use Reducer (4) when the pipe size of Ø 7/8(Ø22.2) is needed due to one size up for the liquid pipe.

About Daikin:



Daikin Industries, Ltd. (DIL) is a global Fortune 1000 company which celebrated its 95th anniversary in May 2019. The company is recognized as one of the largest HVAC (Heating, Ventilation, Air Conditioning) manufacturers in the world. DIL is primarily engaged in developing indoor comfort systems and refrigeration products for residential, commercial and industrial applications. Its consistent success is derived, in part, from a focus on innovative, energy-efficient and premium quality indoor climate and comfort management solutions.

WARNINGS:

- » Always use a licensed installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- » Use only those parts and accessories supplied or specified by Daikin. Ask a licensed contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- » Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.
- » For any inquiries, contact your local Daikin sales office.

ADDITIONAL INFORMATION

Before purchasing this appliance, read important information about its estimated annual energy consumption, yearly operating cost, or energy efficiency rating that is available from your retailer.

