AHU INTEGRATION KIT

DAIKIN

VRV

ENERGY-INTELLIGENT™ TECHNOLOGY HEATING AND COOLING SYSTEMS

Air Handling Unit (AHU) Integration Kit

Designed for High Efficiency

The Daikin Air Handling Unit Integration Kit enables a non-VRV Air Handling Unit to be fully integrated into a Daikin VRV system, allowing the benefits of inverter technology to extend to custom terminal units and air handling equipment.

Designed for high system efficiency, the Air Handling Unit Integration Kit offers a seamless integration and optimized design flexibility for Air Handling Units while keeping total installation and commissioning time to a minimum.

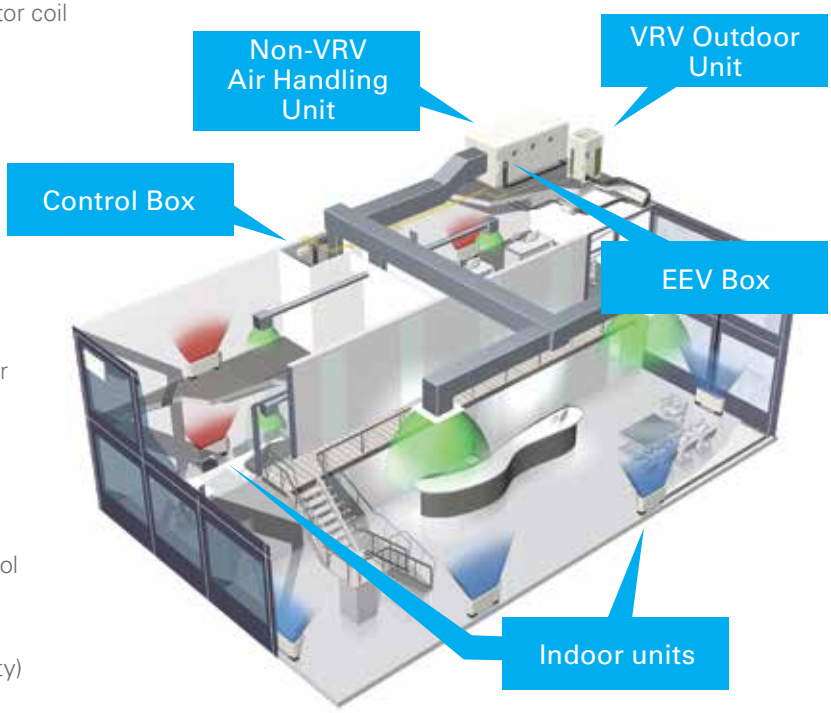
A kit consists of one Control Box and one EEV Box. Two different control methods can be used for an evaporator coil of up to 16 tons.

Control Box
EKEQMCBAV3-US
EKEQFCBAV3-US

Electronic Expansion Valve Box
EKEXV_-US

Features and Benefits

- Enables non-VRV Air Handling Units to be seamlessly integrated into a Daikin VRV system
- Integrates to VRV Heat Pump and Heat Recovery systems*
- Daikin DIII-NET communication compatible — can be used with both Daikin iTM and NAV controller
- Separate Control Box and EEV Box accommodates flexible installation
- Available with two control methods:
  - EKEQMCBAV3-US (Z-Control)
  - Standard VRV indoor unit room temperature control
  - EKEQFCBAV3-US (W-Control)
  - Field supplied temperature sensor (Field supplied DDC controller with 0-10V capability)



* Important! For any VRV systems that utilize the AHU integration kits to perform as intended, the DX coil(s) in the non-VRV AHU unit(s) must meet the range of criteria set forth in the AHU Integration Kit Selection Guide and all associated piping and combination rules (refer to IOD-7041A and IOD-7042A), and should be installed in accordance to the installation manual provided with the EKEQ control boxes.

Electronic Expansion Valve Box EKEXV_-US

ELECTRONIC EXPANSION VALVE BOX SPECIFICATIONS		EKEXV50-US	EKEXV63-US	EKEXV80-US	EKEXV100-US	EKEXV125-US	EKEXV140-US	EKEXV200-US	EKEXV250-US	EKEXV400-US	EKEXV500-US
Nominal Capacity	BTU/h	18,000	24,000	30,000	36,000	48,000	60,000	72,000	96,000	144,000	192,000
AHU Heat Exchanger Cooling Capacity Range	BTU/h	17,000-21,000	21,500-26,500	27,000-34,500	34,000-42,000	42,500-52,500	53,000-60,000	60,500-84,000	84,500-105,000	120,000-169,000	170,000-210,000
AHU Heat Exchanger Heating Capacity Range	BTU/h	19,000-24,000	24,200-30,000	30,500-38,000	38,500-47,000	47,500-59,000	59,500-67,500	68,000-94,500	95,000-118,500	136,000-187,500	188,000-236,500
AHU Heat Exchanger* Refrigerant Volume Range	in^3	46-100	101-126	127-161	162-201	202-251	252-281	282-402	403-503	564-804	806-1006
Power Supply	V/ph/Hz	208-230/1/60									
Weight	lbs	6.4									
Height	in.	15-3/4									
Width	in.	8-1/2									
Depth	in.	3-1/16									
Pipe Connections	in.	1/2 x 1/4	3/8 x 5/8					3/4 x 3/8	7/8 x 3/8	1-1/8 x 1/2	1-1/8 x 5/8

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Features and Benefits

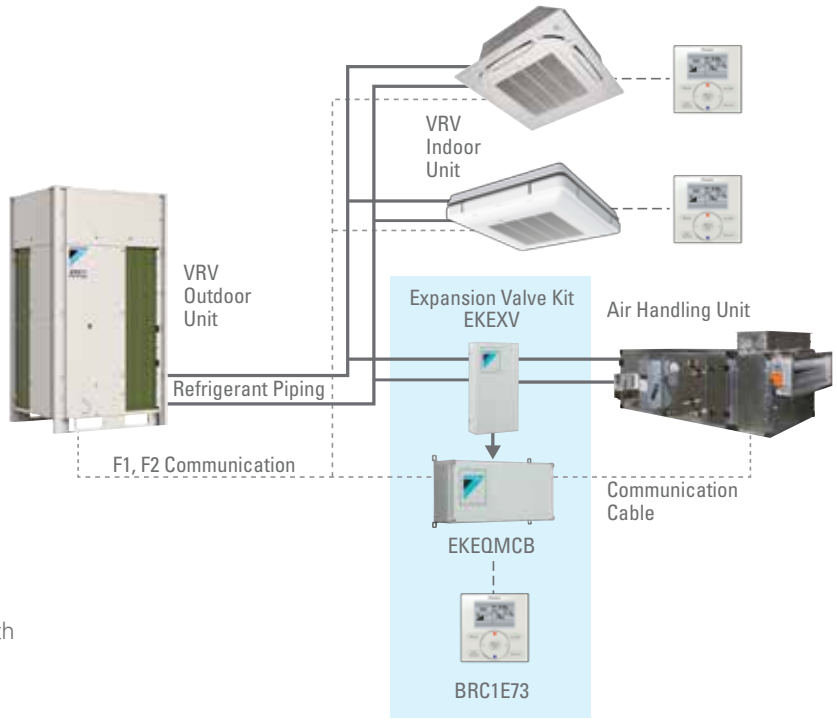
- Designed for both indoor and outdoor installation
- Equipped with refrigerant filters on both sides of the expansion valve
- Can be mounted up to 16 ft (5m) away from the air handling unit
- Simplified installation with inlet and outlet brazed connections
- Wide range that covers from 1.5 ton to 16 ton
- Same EEVs as used in standard VRV Indoor product to deliver precise refrigerant control

Control Box
EKEQ_CBAV3-US

EKEQMCBAV3 - US

For use with both Daikin VRV indoor units and custom air handling units

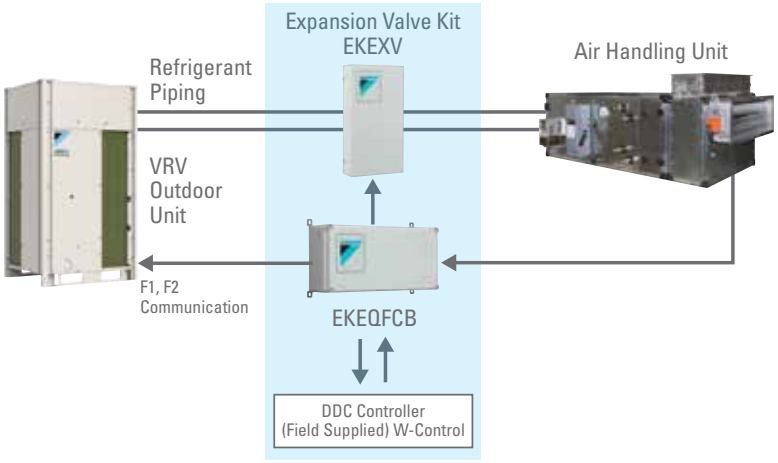
- Allows for discharge air control
- Seamless integration of non-VRV air handling units with VRV IV HP and HR systems
- Enables control of the AHU as a VRV Indoor unit when integrated with a Daikin remote control
- Connect other VRV indoor units along with the AHU to the condensing units
- Provides remote ON/OFF option when integrated with optional KRP4A71 board
- Designed for both indoor and outdoor installations



EKEQFCBAV3 - US

For use with custom air handling units only

- Seamlessly integrate non-VRV air handling units with VRV IV HP
- Best suited for applications where 1 AHU is connected to 1 VRV system only
- Connect up to 3 integration kits per VRV system to serve a large capacity AHU
- Unified cooling and heating mode programming
- Enables control of AHU unit using field temperature sensor and 0-10V field supplied DDC controller
- Allows for discharge air temperature control



CONTROL BOX SPECIFICATIONS		EKEQMCBAV3-US (Z-Control)	EKEQFCBAV3-US (W-Control)
Entering Air Temperature Limits	Cooling °F	57 WB - 77 WB	95 DB/77 WB
	Heating °F	50 DB - 80 DB	Min. of 50 DB
Power Supply	V/ph/Hz	208-230/1/60	
Weight	lbs	8	8.6
Height	in.	5-13/64	
Width	in.	15-3/4	
Depth	in.	9-3/8	
Connection Ratio		50 - 110%	90 - 110%
Max Piping Distance	EKEXV to AHU	16 ft.	16ft.
	ODU to AHU	Standard VRV outdoor unit piping limitations based on model selection apply	164 ft.
Max number of IDU/system VRV IDU + AHU AHU Only		 64 32	 Not available 1

COMPATIBILITY MATRIX	EKEQMCBAV3-US (Z-Control)	EKEQFCBAV3-US (W-Control)
VRV IV HP (RXYQ_TTJU/TYDN)	■	■
VRV IV HR (REYQ_TTJU/TYDN)	■	Not available
VRV IV W (RWEYQ_PCTJ/PCYD)	■	□
VRV III PC (REYQ_PCTJ/PCYD)	■	Not available
VRV III S (RXYMQ_PVJU)	Not available	Not available

□ Heat pump configuration only

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.