

## Report of Materials and Equipment Acceptance Division

NYC Department of Buildings 280 Broadway, New York, NY 10007 Patricia Lancaster, FAIA, Commissioner (212) 566-5000, TTY: (212) 566-4769

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

MEA 102-04-E Vol. 5 (Corrected)

Manufacturer: Daikin AC (Americas), Inc., 475 Fifth Avenue, 18<sup>th</sup>

Fl., New York, N.Y. 10017

Trade Name(s): Daikin VRVII System

**Product:** Heat pump and heat-recovery systems

Pertinent Code Section(s): 27-770, 27-777

Prescribed Test(s): RS 13-11B (ANSI B9.1), RS 13-11 (UL 1995)

Laboratory: Intertek, ETL Semko

**Test Report(s):** 3045794-001 and 3051281-001, dated

November 11, 2003, revised November 30, 2006.

**Description:** The VRVII system is original air conditioning equipment developed by Daikin. It is mainly comprised of a condensing unit (outdoor unit, type RXYQ, REYQ or RXYMQ or RWEYQ) and some evaporating units (indoor units, type FXFQ, FXSQ, FXMQ, FXAQ, FXLQ, FXNQ, FXHQ or FXDQ) associated to control devices. An electric expansion valve continually adjusts the flow of refrigerant with an intelligent PID control to respond to the load requirements of the indoor units, enabling the system to maintain temperatures at a virtually constant and comfortable level without the fluctuation of typical ON/OFF control systems.

The condensing units can be connected to make a larger capacity model, e.g., RXYQ192MTJU is made by connecting two RXYQ96MTJU. This also has a matched-pair system that is a specific combination of a condensing unit (outdoor unit, type RZQ) and an evaporating unit (indoor unit, type FCQ or FHQ).

For the heat recovery version, the VRVII system can achieve heating and cooling by diverting exhaust heat from indoor units in cooling mode to areas requiring heating. A BS box unit (type BSVQ) is installed to change the mode between cooling and heating. The VRVII system is aimed at any application where air conditioning is used.

## **Product Covered:**

Description	Model Nos.		
Heat Pump Condensing Units	RXYQ72MTJU, RXYQ96MTJU, RXYQ144MTJU, RXYQ168MTJU, RXYQ192MTJU, RXYQ216MTJU, RXYQ240MTJU, RXYQ264MTJU, RXYQ288MTJU		
	RXYMQ36MVJU, RXYMQ48MVJU, RZQ24MVJU, RZQ30MVJU,RZQ36MVJU, RZQ42MVJU		
Heat Recovery Condensing Unit	REYQ72MTJU, REYQ96MTJU, REYQ144MTJU, REYQ168MTJU, REYQ192MTJU, REYQ216MTJU, REYQ240MTJU, REYQ264MTJU, REYQ288MTJU		
Water Source Condensing Unit	RWEYQ60MTJU, RWEYQ72MTJU, RWEYQ84MTJU, RWEYQ144MTJU, RWEYQ168MTJU, RWEYQ216MTJU, RWEYQ252MTJU		
Cassette-type Evaporators	FXFQ12MVJU, FXFQ18MVJU, FXFQ24MVJU, FXFQ30MVJU, FXFQ36MVJU		
	FCQ24MVJU, FCQ30MVJU, FCQ36MVJU, FCQ42NVJU		
Concealed-type Middle Static Evaporators	FXSQ12MVJU, FXSQ18MVJU, FXSQ24MVJU, FXSQ30MVJU, FXSQ36MVJU, FXSQ48MVJU		
Concealed-type High-static Evaporators	FXMQ30MVJU, FXMQ36MVJU, FXMQ48MVJU		
High-Wall Type Evaporators	FXAQ07MVJU, FXAQ09MVJU, FXAQ12MVJU, FXAQ18MVJU, FXAQ24MVJU		
Floor-Standing Type Evaporators	FXLQ09MVJU, FXLQ12MVJU, FXLQ18MVJU, FXLQ24MVJU		
Concealed Floor-Standing Type Evaporators	FXNQ09MVJU, FXNQ12MJVU, FXNQ18MVJU, FXNQ24MVJU		
Ceiling-Suspended Type Evaporators	FXHQ12MVJU, FXHQ24MVJU, FXHQ36MVJU		
	FHQ24MVJU, FHQ30MVJU, FHQ36MVJU, FHQ42MVJU		
Concealed-type Low-static Evaporators	FXDQ07MVJU, FXDQ09MVJU, FXDQ12MVJU, FXDQ18MVJU, FXDQ24MVJU		
Refrigerant Control System as part of the REQY (VRII) Heat Recovery Condensing Unit	BSVQ		

## **Model Similarity**

In the families of Cassette Units and Concealed Units, all models within their respective families are of similar construction, with their differences being capacity and some components.

## **Electrical Ratings**

Product	Voltage	Phase	Frequency	Cooling Cap.	Heating Cap.
RXYQ72MTJU	208/230 V	3	60Hz	72,000 Btu/hr	81,000 Btu/hr
RXYQ96MTJU	208/230 V	3	60Hz	96,000 Btu/hr	108,000 Btu/hr
RXYQ144MTJU	208/230 V	3	60Hz	144,000 Btu/hr	162,000 Btu/hr
RXYQ168MTJU	208/230 V	3	60Hz	168,000 Btu/hr	189,000 Btu/hr

Product	Voltage	Phase	Frequency	Cooling Cap.	Heating Cap.
RXYQ192MTJU	208/230 V	3	60Hz	192,000 Btu/hr	216,000 Btu/hr
RXYQ216MTJU	208/230 V	3	60Hz	216,000 Btu/hr	243,000 Btu/hr
RXYQ240MTJU	208/230 V	3	60Hz	240,000 Btu/hr	258,000 Btu/hr
RXYQ264MTJU	208/230 V	3	60Hz	264,000 Btu/hr	273,000 Btu/hr
RXYQ288MTJU	208/230 V	3	60Hz	288,000 Btu/hr	324,000 Btu/hr
REYQ72MTJU	208/230 V	3	60Hz	72,000 Btu/hr	81,000 Btu/hr
REYQ96MTJU	208/230 V	3	60Hz	96,000 Btu/hr	108,000 Btu/hr
REYQ144MTJU	208/230 V	3	60Hz	144,000 Btu/hr	162,000 Btu/hr
REYQ168MTJU	208/230 V	3	60Hz	168,000 Btu/hr	189,000 Btu/hr
REYQ192MTJU	208/230 V	3	60Hz	192,000 Btu/hr	216,000 Btu/hr
REYQ216MTJU	208/230 V	3	60Hz	216,000 Btu/hr	243,000 Btu/hr
REYQ240MTJU	208/230 V	3	60Hz	240,000 Btu/hr	258,000 Btu/hr
REYQ264MTJU	208/230 V	3	60Hz	264,000 Btu/hr	273,000 Btu/hr
REYQ288MTJU	208/230 V	3	60Hz	288,000 Btu/hr	324,000 Btu/hr
RWEYQ60MTJU	208/230 V	3	60Hz	60,000 Btu/hr	66,000 Btu/hr
RWEYQ72MTJU	208/230 V	3	60Hz	72,000 Btu/hr	80,000 Btu/hr
RWEYQ84MTJU	208/230 V	3	60Hz	84,000 Btu/hr	94,000 Btu/hr
RWEYQ144MTJU	208/230 V	3	60Hz	144,000 Btu/hr	160,000 Btu/hr
RWEYQ168MTJU	208/230 V	3	60Hz	168,000 Btu/hr	186,000 Btu/hr
RWEYQ216MTJU	208/230 V	3	60Hz	216,000 Btu/hr	240,000 Btu/hr
RWEYQ252MTJU	208/230 V	3	60Hz	252,000 Btu/hr	280,000 Btu/hr
RXYMQ36MVJU	208/230 V	1	60Hz	36,000 Btu/hr	40,000 Btu/hr
RXYMQ48MVJU	208/230 V	1	60Hz	48,000 Btu/hr	54,000 Btu/hr
RZQ24MVJU	208/230 V	1	60Hz	24,000 Btu/hr	27,000 Btu/hr
RZQ30MVJU	208/230 V	1	60Hz	30,000 Btu/hr	34,000 Btu/hr
RZQ36MVJU	208/230 V	1	60Hz	36,000 Btu/hr	38,000 Btu/hr
RZQ42MVJU	208/230 V	1	60Hz	42,000 Btu/hr	44,000 Btu/hr

**Terms and Conditions:** The above-described heat pumps are accepted on the following conditions:

- 1. Units shall only use Refrigerant 410A.
- 2. If utilized for residence heating, the circulator air system shall have (a) one register or grille without closeable shutters and the duct leading thereto shall be without a damper, or (b) dampers and shutters within the system that shall be constructed or controlled so as to prevent closure beyond 80 percent of the gross duct area at all times.
- A tag must be permanently affixed to the equipment stating that if installed in New York City within 100 feet of any dwelling unit window, there shall be compliance with all provisions of Section 27-770, as to maximum sound levels permitted for exterior mechanical equipment.
- 4. Approval of all electrical equipment, apparatus, materials and devices shall be obtained from the Department's Electrical Advisory Board before installation.
- 5. Units shall be used in compliance with the Energy Conservation Construction Code of New York State.

6. All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and acceptable for use, as provided in Section 27-131 of the Building Code.

Final Acceptance 2/20/07

Examined By Shyan- D