



**For Immediate Release**

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## **Carrier Japan Expands Toshiba Total Heat Exchanger *Heatcle Air* Series**

*New ceiling models feature humidifier and direct expansion coil; all models driven by DC motor for enhanced energy efficiency in ventilation*

**TOKYO, Aug. 8, 2024** - Carrier Japan Corporation (CJC) announces today that the company will expand the line-up of Toshiba *Heatcle Air*<sup>TM</sup>, a light commercial total heat exchanger <sup>(\*)1</sup> series in Japan with nine new ceiling models with humidifier and six ceiling models with direct expansion coil with and without humidifier. These new models will be launched Sept. 1, 2024. CJC is a part of Carrier Global Corporation (NYSE: CARR), global leader in intelligent climate and energy solutions.

With this new launch, CJC is newly adding ceiling models with humidifier to its lineup and updating ceiling and direct expansion coil models without humidifier as well as ceiling and direct expansion coil models with humidifier from the existing models. All models are equipped with high-efficiency DC motor. The newly-launched models complement the company's conventional basic ceiling models <sup>(\*)2</sup> and under-ceiling models with enhanced indoor air quality with humidifier and high-performance ventilation – offering superior energy efficiency and design flexibility.

“Adding a humidifier feature <sup>(\*)3</sup> to our existing total heat exchanger models, which have attained high energy efficiency and ventilating performance, allows us to extensively address customer needs. The direct expansion coil models, that come with or without a humidifier, provide our customers with diverse choices for indoor units of VRF systems for buildings,” said Toru Kubo, President, Carrier Japan Corporation. “We continue our endeavor to develop products and solutions that exceed expectations, anticipate needs and deliver added values to customers.”

For more details, please click [here](#) and visit [Carrier Japan Corporation website](#) (Japanese only).

## ***Heatcle Air*<sup>TM</sup>**

Total Heat Exchanger Series for Light Commercial Applications



Ceiling type with humidification



Ceiling and direct expansion coil type with humidification



Ceiling and direct expansion coil type without humidification

Key features of the *Heatcle Air* include:

- 1) High-volume ventilation with high external static pressure <sup>(\*4)</sup> compared to legacy product
  - High external static pressure to ensure sufficient airflow capacity even in case of a long-ducted connection and as a result enable enhanced design flexibility and easier installation.
  - Enhanced capability of attaining higher air ventilation volume to address post-pandemic needs.
- 2) High-efficiency DC motor
  - Automated air ventilation volume control within the range of 30 to 120% <sup>(\*5)</sup> of the rated air volume to allow easy calculation of air ventilation volume and help secure stable ventilation volume when the duct length is unknown in case of replacement.
  - Continuously variable control of static pressure and air volume properties with fixed power control within the range of 5 to 100% of peak power, enabling fine-tuning of air volume for enhanced energy efficiency and easy adjustment after installation.
- 3) Optional CO<sub>2</sub> and PM2.5 sensor <sup>(\*6)</sup>
  - Detecting and monitoring CO<sub>2</sub> and PM2.5 values displayed on a screen panel of remote control.
  - Automated ventilation control according to the CO<sub>2</sub> and/or PM2.5 density, also available during operation with fixed air ventilation volume mode.
- 4) Micro control unit for centralized control
  - Customers to build a centralized control system that covers *Heatcle Air* solutions and Toshiba SMMS-u™ series variable refrigeration flow (VRF) system.
- 5) Dropwise evaporative humidifier with corrugated humidifying element <sup>(\*3)</sup>
  - Clean humidification: Dropwise evaporative humidifier with corrugated humidifying element enables clean humidification which uses only pure water to humidify without mixing dust and particles included in the water.
  - Sanitary: Drying operation after humidifying operation to inhibit mold, etc.
  - Energy efficiency: the evaporative humidification only requires passing air for evaporative humidification; no additional heat source is needed.
  - Auto-adjustment of humidifying capacity: The humidification capacity increases when the indoor air is dry and decreases when the indoor relative humidity increases.

Note 1: Total heat exchanger is a device that recovers heat from air-conditioned indoor air while ventilating.

Note 2: The “basic” type means a product without humidifier.

Note 3 Excluding ceiling and direct expansion coil type without humidifier

Note 4: External static pressure means the pressure measured at the discharge outlet of the fan. The higher the value, the higher the air flow performance.

Note 5: For ceiling and direct expansion coil type with/without humidification, the airflow volume can be set at “low”, “high” and “very high” in increments of 1% from 60% to 115% of the rated air volume, and “very low” can be set in increments of 1% from 30% to 60% of the rated air volume.

Note 6: Particulate matter (PM) 2.5 refers to tiny particles or droplets in the air that are 2.5 microns or less in width.

## Product Lineup

Type	Power supply (1 phase)	Air volume (m <sup>3</sup> /h) タイプ						
		150	250	350	500	650	800	1000
Basic ducted	単相 100V	VN-UM150RW	VN-UM250RW	VN-UM350RW	VN-UM500RW	VN-UM650RW	VN-UM800RS	VN-UM1000RS
	単相 200V						VN-UM800RT	VN-UM1000RT
Ducted with humidifier.	単相 100V	VNK-UM150RW	VNK-UM250RW	VNK-UM350RW	VNK-UM500RW	VNK-UM650RW	VNK-UM800RS	VNK-UM1000RS
	単相 200V						VNK-UM800RT	VNK-UM1000RT
Ceiling suspended.	単相 100V	VNC-UM150RW	VNC-UM250RW	VNC-UM350RW	VNC-UM500RW			
	単相 200V							

  

Type	Power supply (1 phase)	Air volume (m <sup>3</sup> /h) タイプ		
		500	800	1000
Ducted with direct expansion coil w/ humidifier.	単相 200V	MMD-UVNK501HEX	MMD-UVNK801HEX	MMD-UVNK1001HEX
Ducted with direct expansion coil wo/ humidifier.	単相 200V	MMD-UVN501HEX	MMD-UVN801HEX	MMD-UVN1001HEX

\*In addition to the models shown above, models with enhanced air volume (1500 m<sup>3</sup>/h, 2000 m<sup>3</sup>/h) of basic ducted type of the same “Heatcle Air” series to be added to the line-up.

## **About Carrier Japan Corporation**

Carrier Japan Corporation (CJC) provides sustainable solutions integrating energy efficient products for residential, light commercial and industrial customers. CJC is a part of Carrier Global Corporation (NYSE: CARR), global leader in intelligent climate and energy solutions that matter for people and our planet for generations to come. For more information, visit the Carrier HVAC Asia Pacific [here](#).