

January 24, 2017
 Johnson Controls - Hitachi Air Conditioning

**“FLEXMULTI High Efficiency Heat Pump Type”
 Multi-Split Air Conditioning System for Buildings and
 Room Air Conditioner “Stainless Clean Shirokuma-kun” X Series
 have received “The FY2016 Grand Prize for Excellence in Energy Efficiency and
 Conservation”**



FLEXMULTI High Efficiency Heat Pump Type
 Rated Cooling Capacity 14.0~150.0kW: 26 models



RAS-X40G2 Star White (W)
 : 33 models

Johnson Controls - Hitachi Air Conditioning (CEO: Franz Cerwinka) took part in the Products / Business Models Category of “The FY2016 Grand Prize for Excellence in Energy Efficiency and Conservation” organized by The Energy Conservation Center, Japan. “FLEXMULTI High Efficiency Heat Pump Type” Multi-Split Air Conditioning System for Buildings (26 models^(*)) including RAS-AP280SG) and Room Air Conditioner “Stainless Clean Shirokuma-kun” X Series (33 models^(*)) including RAS-X40G2) received “The Chairman’s Prize, The Energy Conservation Center, Japan”.

“The Grand Prize for Excellence in Energy Efficiency and Conservation” is designed to broadly share the efforts of companies that work on energy conservation and develop products with excellent energy-saving performance in Japan and recognize companies that run great initiatives. The Prize contributes to raising the awareness of energy conservation and promoting energy-saving products.

The multi-split air conditioning system for buildings was recognized for high energy-saving performance and less footprint by compact body. Energy-saving performance enabled through improvements in major components, as well as the Smooth Drive Control, which reduces energy loss when a compressor turns on and off during low-load operation and enables lower power consumption during operation.

The room air conditioner was recognized for high energy-saving performance in a compact indoor unit (less than 800mm width) and attaining both energy-saving performance and comfortability with “Kurashi Camera AI” employing image processing for recognizing people.

Johnson Controls - Hitachi Air Conditioning will continue actively developing energy-saving products on a global basis and offering high-performance and highly reliable air conditioning systems for homes and businesses, contributing to the global environmental conservation.

The awarded products will be featured in a panel display in the “Awards Corner” of “ENEX2017,” to be held at Tokyo Big Sight (Koto Ward, Tokyo) from February 15 to 17 (Wed. - Fri.), 2017. Also, the Awards Ceremony is planned to be held at Tokyo Big Sight on February 15 (Wed.).

Highlights of awarded products:

1. “FLEXMULTI High Efficiency Heat Pump Type” Multi-Split Air Conditioning System for Buildings
Diverse new technologies have been employed to the main components for enhancing the energy-saving performance, such as heat exchangers, fan systems, and compressors, greatly improving operating efficiency during low-load operation. As a result, the FLEXMULTI system achieved an industry-leading⁽³⁾ energy-saving performance in Annual Performance Factor (APF) 2015⁽⁴⁾ (14.0 - 50.0kW models). It also employs a “Smooth Drive Control” which reduces energy loss when a compressor turns on and off during low-load operation, thus enabling lower power consumption during operation of the system.

In addition, the capacity range of single unit is wider than conventional high-efficiency-type systems and the number of combined outdoor modules has been reduced⁽⁵⁾. This has enabled a smaller installation footprint and also reduced the number of work processes required when the 40.0 - 50.0kW and 73.0 - 100.0kW units are installed. Especially the space required for installing the 40.0kW model has been reduced by approximately 44%.

2. Room Air Conditioner “Stainless Clean Shirokuma-kun” X Series

It employs a compact indoor unit (less than 800mm in width) to meet the needs of replacement demand. In the components of the air conditioner, performance has been primarily enhanced in the compressor, the component with the highest level of power consumption. As a result, the model with a cooling capacity of 4.0kW (RAS-X40G2) delivers high energy-saving performance at an Annual Performance Factor of 7.6⁽⁶⁾.

Furthermore, for the first time in the industry⁽⁷⁾, the Shirokuma-kun X Series is installed with a “Kurashi Camera AI (Artificial Intelligence),” which can recognize individual people in the room and can predict changes in sensory temperature according to the length of time the people have spent in the room. The system carefully monitors each person and ensures comfortable air conditioning combined with energy-saving operation.⁽⁸⁾ Also, in the “Karatto Jyoshitsu” that reduces humidity without lowering the temperature⁽⁹⁾, a “humidity camera” function has been employed, enabling the mapping of the humidity distribution in the room. This feature gives priority to the dehumidification of areas of high humidity, ensuring the maximum comfort level of both the room and its occupants.

- (*1) Awarded product is a multi-split air conditioning system for buildings in modular design that offers up to 150.0kW by combining maximum three outdoor units.
- (*2) For details of the products receiving awards, please go to the Room Air Conditioning Systems website (<http://kadenfan.hitachi.co.jp/ra/>).
- (*3) As of January 16, 2017, in a comparison of Annual Performance Factor (APF) 2015 when used with "4-way Ceiling Cassette" in a multi-split air conditioning system for buildings.
- (*4) APF is based on JIS B 8616:2015. A higher figure indicates a higher level of energy-saving efficiency.
- (*5) 40.0 - 50.0kW models will be switched from combined 2 units to a single unit, and 73.0 - 100.0kW models will be switched from combined 3 to 2 units.
- (*6) Indicates the APF based on JIS C 9612:2013.
- (*7) Based on JCH's research. The product was launched on October 31, 2016. Refers to room air conditioners in Japan. Technology that identifies people and measures time spent in the room.
- (*8) As measured in JCH's environmental testing laboratory. For RAS-X40G2. 14-tatami-mat Western-style room, two persons in room. Outside temperature at 2 degrees Celsius. Room temperature set at 25 degrees Celsius. Comparison of accumulated power consumption per hour in six-hour operation when [human recognition] function is on (523 kWh) and off (552kWh).
- (*9) A reheating method that does not lower room temperature specified by "The Japan Refrigeration and Air Conditioning Industry Association". Conditions: The Japan Refrigeration and Air Conditioning Industry Association's criteria. In RAS-X40G2. Continuous operation in temperature-controlled room with outside temperature of 24 degrees Celsius/humidity of 80% and inside temperature of 24 degrees Celsius/humidity of 60%. Fan speed set at rapid powerful, humidity set at 40%. Power consumption 775W, dehumidification capacity: 1,420ml/h, blowout temperature: 24 degrees Celsius.

■ Customer Inquiries

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* Please note, the above telephone number is Hitachi Consumer Marketing.

Customer Support Center (Distributor)

Open 09:00 - 17:30 (Mondays - Saturdays), 09:00 - 17:00 (Sundays and national holidays)

(No service during the year-end and New Year holidays)

■ For Buildings

Multi-split air conditioning systems (commercial & refrigeration) website

<http://www.jci-hitachi.com/jp/products/commercial-air-conditioning>

■ Room Air Conditioning Systems website

<http://kadenfan.hitachi.co.jp/ra/>

Information (including product prices, product specifications, details of services, launch dates, inquiry information, and URLs) contained in this news release is current as of the date of the press release but is subject to change without notice. Please note that details may differ from those effective on the search date.
