



# Chiller Solutions for Hotels



# Smarter, more comfortable hotels

Every substantial facility needs efficient, reliable climate control. Today, Johnson Controls offers the largest portfolio of HVAC equipment and controls in the world, helping to create healthier, more productive building environments that deliver energy savings, operational savings and sustainable solutions for thousands of hotels of all sizes ranging from luxury properties to budget accommodations.



**Hotels come with a unique set of challenges compared with other commercial buildings of similar size. They feature a variety of open plan communal areas in addition to multiple private occupancy rooms. Furthermore, hotel occupants tend to be short term, have different expectations from one another and different requirements, and in today's social media-powered world, they can use a variety of public or social channels to air any grievances they have with the service they were provided.**

## Sound performance

Hotels guests expect a peaceful environment. Furthermore, hotels are normally situated in city centre locations where low sound performances are very important with regards to the surrounding buildings or residential areas.

The YORK® AMICHI units have excellent sound performance featuring sound power at 6 dB(A) below the competitor average when low sound option has been installed.

For large facilities (resorts), it is more frequent to find Large Tonnage Chillers installed indoors (technical rooms). When this is the case, YZ is also a perfect solution thanks to magnetic bearing technology.

## Efficiency

Efficiency is always one of the most important features. Recently the YORK® HVAC product portfolio has been evolved to meet the European Ecodesign regulations that focus in achieving high part load efficiencies.

Efficiency has a related cost. Some chillers may have the same cooling capacity as others but feature better efficiency. This improved performance is usually reflected in the price. Over time an expensive but more efficient chiller will have a better ROI than a less efficient chiller with an attractive upfront cost. A good payback analysis/result could determine for example the change of an old chiller for a new one.

## Heat recovery

Hotels often require heat recovery units that heat and cool spaces simultaneously and allow for the simultaneous production of chilled and warm water, this functionality is especially in demand for hot water and spa baths.

Some examples of YORK® HVAC chillers with heat recovery option are:

- Air Cooled Fixed Screw Chillers YCME/YHME Series 2 and Water Cooled Fixed Screw Chillers YCSE
- Air Cooled Scroll Chiller YLAA R410A

## Heat pumps

Heat pumps are vital for redistributing heated water in multi-storied properties. YORK® HVAC Air Cooled (AC) heat pumps in the portfolio include:

- YMPA
- YHME
- YLPB



## Quality & reliability

YORK® Smart Connected Chillers allow for real-time monitoring which enables proactive maintenance and fast response when the customer needs it most. With this unprecedented insight into equipment, YORK® is revolutionising how chillers are serviced. Today's Smart Connected Chillers mean fewer disruptions, reduced downtime, and longer equipment life.

## Control

Hoteliers require simple and effective HVAC management systems. Though ideal solutions vary according to site size.

- Small-Mid size want to control the facility from the hotel reception for which Johnson Controls' Verasys is the perfect solution.
- Large Resorts are normally controlled by a facility manager using a more complex BMS system such as Johnson Controls' Metasys Building Automation System.

## Guest Room Management Systems (GRMS)

Putting localised HVAC control in the hands of guests helps to enhance the experience of a stay and can also help reduce overhead costs. Johnson Controls GRMS solutions feature a user-friendly graphical interface enabling front desk staff to interpret and respond to alerts, notifications, emergencies and housekeeping calls through a standard platform. Real-time information such as room status, presence of a guest or housekeeper in the room, make-up room or do not disturb requests can be monitored and action taken directly through the GRMS software.

## Footprint

Available space in hotels comes in a variety of sizes and shapes. The Amichi chiller is a great option for hotels as it is possible to combine several units to grow in capacity. The flexibility of the disposition of the models helps to adapt to the space that is available at a hotel.

## Our service offering

From preventative maintenance and operations, to HVAC repair, Johnson Controls is a key partner to deliver on your heating, ventilation, and air conditioning service needs, which can:

- Reduce unplanned downtime
- Increase asset life and reliability
- Ensure productive environments

### We offer our customers:

- Planned HVAC maintenance and diagnostic services
- Remote Operations Centre for monitoring on site
- AC repair service experts in the event of an emergency

# YORK® Chillers for Hotels

With York Chiller Solutions from Johnson Controls, we help you respond to your building efficiency needs by providing the widest variety of water and air-cooled industrial and commercial chillers on the market. From reducing your facility's carbon footprint, to delivering a healthier indoor environment and cutting energy costs, our energy efficient chillers are tailored to fit almost any comfort or process cooling application – even heating.

## YORK® Amichi Series Air-Cooled DC Inverter Scroll Chillers and Heat Pumps

Delivering performance beyond typical chiller and heat pump efficiency levels, the YORK® Amichi Series meets or exceeds stringent regulatory requirements through an optimized combination of YORK® efficiency-enhancing technologies. Built specifically to deliver better performance through a wider operating envelope, the Amichi chiller and heat pump can maintain efficiency in a variety of conditions without kits or add-ons – down to an impressive  $-18^{\circ}\text{C}$  ambient in cooling mode and  $-15^{\circ}\text{C}$  ambient in heating mode.

To help maximize efficiency and keep you in control, the YORK® Amichi Series comes standard with integrated Smart Equipment. This technology allows the equipment to connect seamlessly to building controls like our world-class Verasys system, where smart-enabled equipment can self-identify and interoperate.



## YLAA Air-Cooled Scroll Chiller

A true plug and play system that provides the highest efficiency for its operation, our YORK® YLAA Air-Cooled Scroll Chiller allows you to reduce your energy costs while being friendlier to the environment. Whether your cooling needs are industrial or commercial, we can help you put together a complete air-cooled chiller system.

With advanced technology, air-cooled water chiller systems featuring our YLAA Chillers offer remarkable real-world performance and are now available with low GWP refrigerant R454B. Brazed evaporators and microchannel condensers enable more efficient heat transfer, providing lower life-cycle costs.

## YLPB Heat pump scroll compressor

The YLPB heat pump delivers premium energy efficiency, it is easy to install, quiet to run, and it is supported by a knowledgeable service force. Featuring improved defrost cycle, extended operating envelope. Maximize heating efficiency and renewable energy use with the YLPB heat pump.

Designed for quiet operation at full and part load conditions in addition to being quick and easy to install, the YLPB heat pump is Smart Equipment and Verasys ready.



## YORK® YZ Water-Cooled Magnetic Bearing Centrifugal Chiller

The design premise for the YORK® YZ was simple: don't just make a new chiller – make the best chiller. This was accomplished through a holistic approach to system design and engineering, optimizing every component around a carefully selected next generation refrigerant for ultimate performance.

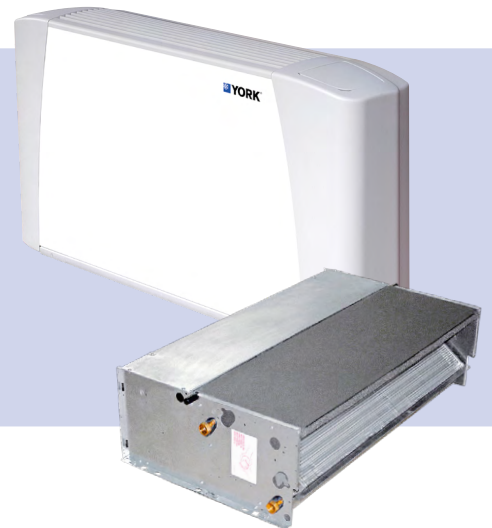
To maximize value, the YORK® YZ design has been optimized to minimize operating costs by leveraging the benefits of a new refrigerant (R1233zd) in our new heat exchangers and motor/compressor driveline while also mitigating the high cost of a next generation refrigerant.

True sustainability means the lowest total emissions – from beginning to end. Our design optimization for the highest possible efficiency, combined with a low-GWP refrigerant, makes the YORK® YZ Centrifugal Chiller the best choice for the environment.



## Fan Coil Units

Johnson Controls offers a diverse selection of Fan Coil Units which are designed for quiet, energy saving operation. Our Fan Coil units are available in horizontal, and vertical configuration. All products include variable airflow configurations as well as an industry leading set of options and accessories. Furthermore, Fan Coil Units are compatible with the Verasys system. Therefore Johnson Controls can provide the complete offer Chiller + Fancoils (even Air Handling Units) + Verasys.



## Air Handling Units

Increase the efficiency and performance of your HVAC system with YORK® Air Handling Units. When it comes to creating the right air-handling unit for your building environment, you shouldn't have to choose between one-size fits all and reinventing the wheel. Our range of Air Handling units offer a comprehensive range to suit all requirements.

# Flexibility for everyone – who we help



## Specialised Contractor

Specialised contractors lead HVAC and mechanical construction projects, they manage the commissioning team for singular buildings as well as for energy efficiency and renewable energy projects. In addition to this they manage purchase orders, oversee relationships with suppliers and lead efforts to reach the economic target.

Johnson Controls helps specialised contractors by providing a single expert in the field point of contact, and chiller solutions that reduce energy budgets and work as efficiently as possible.

## Building Owner/Manager (End User)

Building owners/managers are responsible for carrying out regular building inspections, logging any faults and ensuring appropriate actions are taken. They manage tenant fit-outs and ensure that necessary work permits are issued prior to the commencement of any work. In addition to this they attend regular tenants' meetings and resolve any issues raised at agreed time, and carry out monthly KPIs and monitor PPMs.

Johnson Controls helps by supplying highly durable equipment that is going to last, be efficient and provide a good return, in addition to support after the sale and an extended warranty. Johnson Controls has the right level of technical understanding about chiller specifications and product details, and a proven track record when it comes to delivering and installing orders on time.





## General Contractor

General contractors engage consultants and co-ordinate with design teams, they manage scope and coordinate between cross-functional teams to deliver a project brief. They communicate and manage processes with external subcontractors to ensure projects are completed on time and to agreed quality standards, and ensure projects are achieved within agreed budgets through financial planning and monitoring. They maintain effective communication with all key stakeholders and review all equipment procurement, maintenance and service requirements.

Johnson Controls provides a positive experience with a trusted supplier, competitive pricing and on-time delivery. Johnson Controls offers the complete system, and minimises the number of contacts it maintains with its customers.

## Consultant (Design/Engineer)

Consultant designers or engineers design HVAC systems for commercial applications. They coordinate design and production between clients, contractors, owners and engineers, provide timely responses to requests for information, equipment submittals and client calls, and collaborate in project management in order to meet client goals, and project budget and schedule.

Johnson Controls provides valuable consultation and education for consultants along with pre-sales technical support, and equipment that is compatible with existing systems.



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## About Johnson Controls Building Technologies & Solutions

Johnson Controls Building Technologies & Solutions is making the world safer, smarter and more sustainable – one building at a time. Our technology portfolio integrates every aspect of a building – whether security systems, energy management, fire protection or HVACR – to ensure that we exceed customer expectations at all times. We operate in more than 150 countries through our unmatched network of branches and distribution channels, helping building owners, operators, engineers and contractors enhance the full lifecycle of any facility. Our arsenal of brands includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Sabroe®, ZETTLER® and Sensormatic®.

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