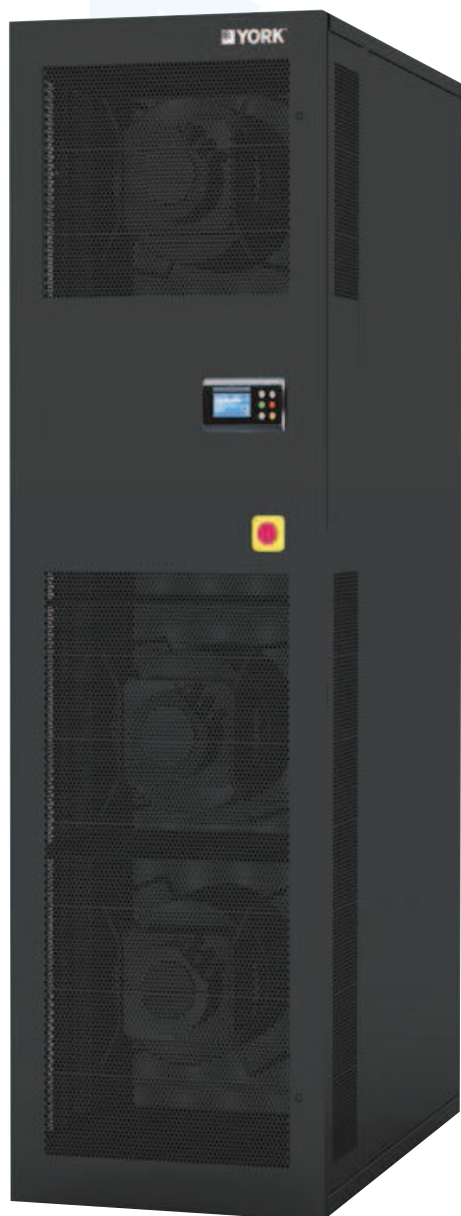


YORK® YC-R Series Close Control Air Conditioners

A complete range from 20.6 kW up to 36.2 kW



Applications

"R" Series YORK air conditioners consist of a family of units specially designed and constructed to have the same dimensions as the racks.

In the design of air conditioning plant for large Data Centres, the reduction of energy consumption is of ever increasing importance. For this reason the following concepts have become consolidated international standard practice:

- The racks containing the servers are more often positioned according to the "hot corridor aisle" and "cold corridor/aisle" layout.
- The working air temperatures are now allowed to go up to 30–35°C in the hot corridor and 20–25°C in the cold one, with very low humidity (never above 30%). Consequently, also the water temperature is allowed to rise up to 20–28°C, using the Free Cooling system to the best effect.
- Server capacities keep going up while their dimensions keep going down. This means that more servers can be installed in a rack so that some of these racks, remaining empty, can be removed. At the same time the heat dissipated rises and more capacity is required from the air conditioners.
- The servers work day and night albeit with a night time reduction of their capacity. It is therefore essential for the air conditioning installation to have an efficient modulating cooling capacity control and to be designed for minimum energy consumption and minimum environmental impact.

Horizontal supply



Version for in-row installation with front and lateral air supply.

Technical Characteristics

YC-HRA: direct expansion air conditioners with air-cooled or water-cooled condensers and horizontal air supply

Models		231	361
Total cooling capacity (1)	kW	20.6	36.2
Sensible cooling capacity (1)	kW	20.6	35.6
EER (2)		3.31	3.65
Airflow	m³/h	6 500	7 500
Sound pressure level (3)	dB(A)	52	54
Length	mm	600	600
Depth	mm	1 180	1 180
Height	mm	2 000	2 000
Net weight	kg	215	215
Free Cooling		●	○
Two Sources		●	○

YC-HRU: chilled water coil air conditioners with horizontal air supply

Models		40
Total cooling capacity (1)	kW	31.6
Sensible cooling capacity (1)	kW	31.6
EER (3)		26.58
Airflow	m³/h	9 000
Sound pressure level	dB(A)	61
Length	mm	600
Depth	mm	1 180
Height	mm	2 000
Net weight	kg	190
Free Cooling		●
Two Sources		●

(1) Performance refers to: R410a refrigerant; condensing temperature 45°C; incoming air 30°C-30%Rh; water 14/20°C; external static pressure 30 Pa. The declared performance does not take into account the heat generated by fans, which must be added to the system thermal load.

(2) EER (Energy Efficiency Ratio) = total cooling capacity / compressors power consumption + fans power consumption (air cooled condensers excluded).

(3) Sound levels at a 2 m distance, in a free field, as per UNI EN ISO 3744:2010.



Manufacturer reserves the rights to change specifications without prior notice.