

YMC² Water-cooled magnetic centrifugal chiller

Cooling capacities from 800 kW to 3600 kW

At Eurovent Standard Conditions this equipment meets A Class energy efficiency levels.



Compatible range

Features

Our most advanced water-cooled chiller offers the following benefits:

Enhanced efficiency

Achieved through application of active magnetic bearing technology with variable speed drive.

Enhanced sustainability

Achieved by leak free refrigerant design, lower refrigerant charge and falling film evaporator.

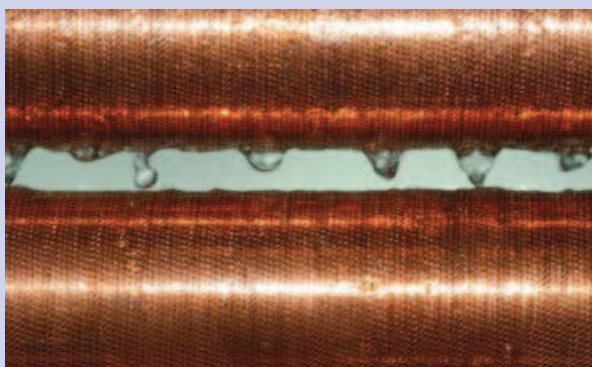
Low sound levels

Advanced technology results in sound levels as low as 75dBA.

Superior reliability

Use of active magnetic bearing technology removes friction and the need for oil resulting in a quieter and more reliable chiller.

Photo courtesy of the LTCM lab of the Ecole Polytechnique Fédérale de Lausanne, Switzerland



A falling-film evaporator is more efficient because refrigerant is sprayed over the tubes, offering improved heat transfer and reducing refrigerant charge by 30%.



To eliminate mechanical-contact losses in the driveline, the YMC² chiller utilises a permanent-magnet motor and active magnetic-bearing technology.

Water-cooled magnetic centrifugal chiller

YMC² S0800AA to S3600AB



Nominal capacity (*)

YMC ²	S0800AA	S1000AA	S1200AB	S1400AA	S1600AB	S1800AB	S2000AB
Cooling capacity (kW)	800	1000	1200	1400	1600	1800	2000
EER	6.06	6.13	6.32	6.33	6.31	6.07	6
SEER	7.58	7.83	7.92	8.34	8.59	7.83	8.16
ηs, c	295	305	309	326	335	305	318
Sound pressure at 1 m (dBA)	77	77	76	76	77	79	80

YMC ²	S2200AB	S2400AB	S2600AB	S2800AB	S3000AB	S3200AB	S3400AB	S3600AB
Cooling capacity (kW)	2200	2400	2600	2800	3000	3200	3400	3600
EER	6.2	6.25	6.1	6.15	6.2	6.2	6.1	6.1
Sound pressure at 1 m (dBA)	81	82	82	82	82	82	83	83

Cooling Capacity at Eurovent Conditions, entering/leaving chilled water temperature 12°C/7°C, entering/leaving condenser water temperature 30°C/35°C
 (*) YMC² is a tailor and tune chiller. Its performance will be factory-adjusted to match the exact site requirements based on the specific project operating.
 The table above shows only a representative sample of performance points based on generic project operating conditions working with R134a refrigerant.
 For R513a information contact your JCI Representative.
 The above data is based on Johnson Control's selection software YORKworks 17.06. Please refer to the latest version of the software for specific projects.

Technical data

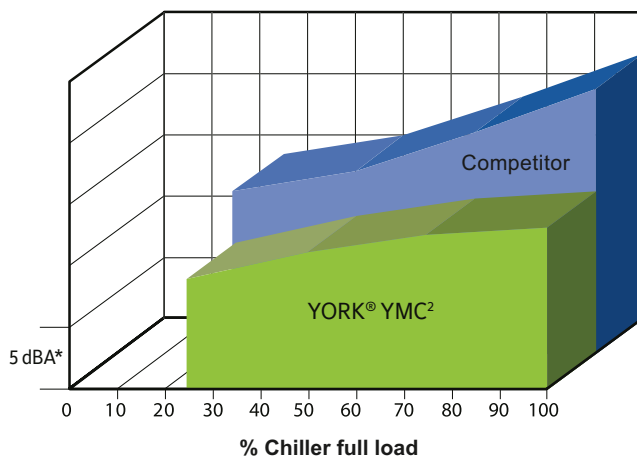
YMC ²	S0800AA	S1000AA	S1200AB	S1400AA	S1600AB	S1800AB	S2000AB
Dimensions	Length	mm	3048			4267	
	Width	mm	1880			2007	
	Height	mm	2410			2499	2573
Shipping weight (kg)	5171		5810		6579	7809	
Refrigerant charge (kg)	278	280	423	454	445	612	656

YMC ²	S2200AB	S2400AB	S2600AB	S2800AB	S3000AB	S3200AB	S3400AB	S3600AB
Dimensions	Length	mm	5154			5054		
	Width	mm	2007			2235		
	Height	mm	2573			2656		
Shipping weight (kg)	10095	10161	10255	10432	11500	11669	12048	12254
Refrigerant charge (kg)	667	666	658	647	766	760	750	750

1. All dimensions are approximate. Certified dimensions are available on request.
2. Refrigerant charge quantity and shipping weights will vary based on tube count.
3. Shipping weights are based on fully assembled and charged units.
4. Refer to product drawings for detailed weight information.

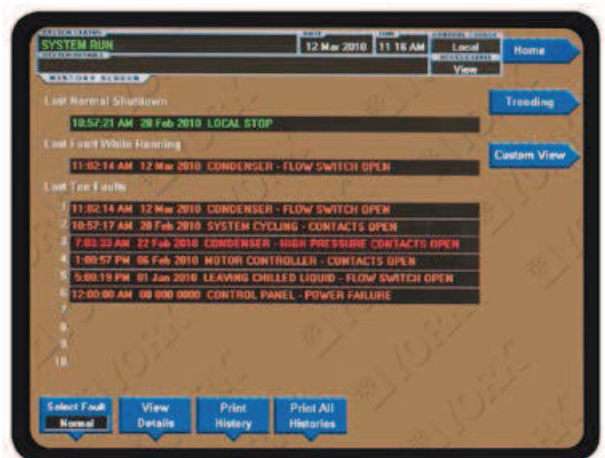
Superior sound reduction

A-Weighted sound pressure level (dBA (re: 20μPa))
 Measured in accordance with AHRI-575



The YMC² chiller is so much quieter than competitive magnetic-bearing chillers, it sounds about half as loud. *Note: each segment on the Y axis = 5 dBA.

OptiView control centre



The OptiView control centre provides complete diagnostics to speed troubleshooting.



Manufacturer reserves the rights to change specifications without prior notice.