YVWA Water-cooled VSD screw compressor chiller

Cooling capacity from 545 kW to 1067 kW Heating capacity from 600 kW to 1000 kW





Key components

The **YVWA** reduces operating expenses with the application of a standard variable speed drive Inverter (VSD).

Application flexibility

Tailor and tune flexilibility makes the **YVWA** ideal for any high lift application, primarily **Heat Pump** duty higher than 50°C hot water set point, glycol and low temperature process cooling.

Enhanced sustainability

Achieved through high efficiency operation and low refrigerant charges.

Product confidence

R-513A is a refrigerant that is classified as A1. It combines zero ODP and lower GWP (631, F-Gas) than R-134a. It offers higher specific cooling capacity (kW/kg ref.) compared to R-1234ze and therefore it is **ideal for small footprint retrofit applications.**



Reduce refrigerant charges by up to 15% beyond traditoinal chiller designs with the YVWA's falling film evaporator design.



Options/Accessories

- BMS Interfacing options
- Heat pump up to 60°C hot water production
- Different options of tubes and nozzle arrangements for the heat exchangers
- Dual pressure relief valve
- Several options for flow switches
- Thermal insulation options
- Anti-vibration mounts options



The YVWA chiller can efficiently handle the high condenser pressure required for dry cooling.



R513A sample selections

Model	YVWACDCDFX	YVWACDCDGX	YVWAMBMCEE	YVWAMEMEFF
Cooling capacity (kW)	545	696	872	1067
EER	5.10	4.73	4.86	4.91
SEER	6.90	7.11	6.85	7.05
ŊS, C	273	281	271	279

Ratings in accordance to Ecodesign, fixed water flow and fixed outlet (FW/FO). For other Ecodesign calculations, please contact your JCI representative. The table above shows only a representative sample of performance points based on generic project operating conditions working with R513A refrigerant (2 pass evaporator, 1 pass condenser). For R134a information contact your JCI Representative.

The above data is based on Johnson Controls' selection software YORKworks 21.00. Please refer to the latest version of the software for specific projects

Technical data

Model			YVWACDCDFX	YVWACDCDGX	YVWAMBMCEE	YVWAMEMEFF
Compressors / Circuit(s)			1	1	2	2
Dimensions	Length	mm	3571	3720	4390	4390
	Width	mm	1413	1413	1405	1405
	Height	mm	1846	1846	1824	1824
Operating weight (kg)			4169	4299	6032	6540
Refrigerant charge (kg)			153	163	250	260

YVWA Efficiency vs. Ordinary Chiller



The YVWA chiller delivers superior energy performance at all operating hours.

YVWA Energy Cost vs. Ordinary Chiller



Note: 3,500 operating hours, 0.10 EUR/kWh energy rate, 800 kW design cooling load An investment in an optimized YVWA chiller reduces energy costs by 25%.



Dimensions and hydraulic connections

YVWA C models



All dimensions in mm. Drawings not in scale.

Dimensions and hydraulic connections

YVWA M models



All dimensions in mm. Drawings not in scale.