

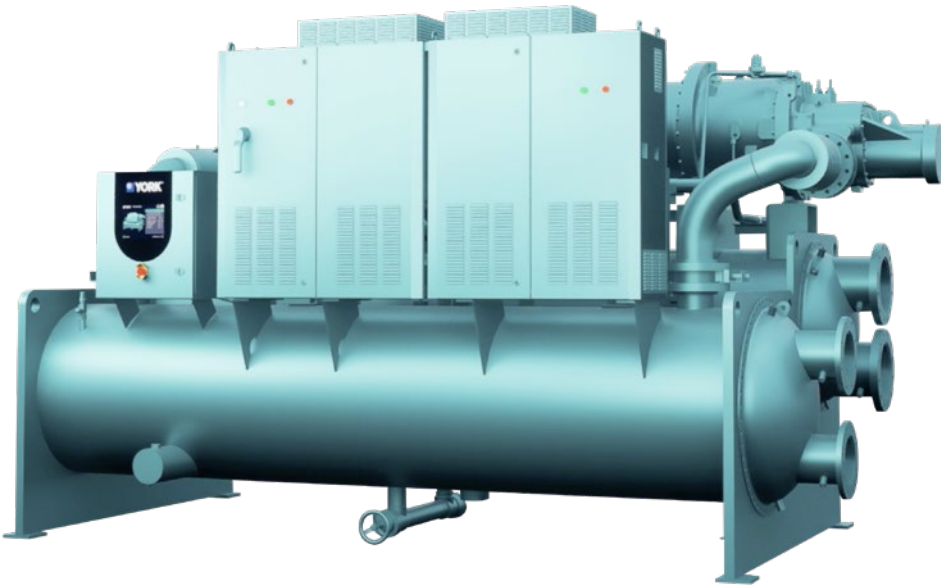
YVWH HP

Premium-efficiency VSD water-cooled screw compressor heat pump

NEW

Cooling capacity: 788 kW to 1576 kW

Heating capacity: 900 kW to 1800 kW



R1234ze



INVERTER



R515B



Features

YVWH HP is innovatively designed and manufactured. It is a sustainable, cost-effective alternative to traditional boiler and chiller systems and ideal for commercial buildings, hospitals, industrial processes and district energy applications.

It offers **premium efficiency** at both full load and part load condition of cooling and heating, helping the customer achieving the greatest value. Thanks to the combination of high efficiency and the use of the new 4th generation **HFO refrigerant R1234ze**, the heat pump SCOP surpasses the Ecodesign Tier 2 requirement and contributes to the reduction of the CO₂ emissions.

Key components

- High-head compressor capable to provide high-temperature hot water up to 80°C
- Compressor with variable Vi design delivers optimized efficiency of heating and cooling
- Variable-speed drive helps achieve premium off-design performance
- Economizer design increases the cycle efficiency and heating capacity
- Built-in condenser oil separator increases the oil separation effectiveness
- Counterflow subcooler design provides the most optimized subcooling

Committed to sustainability

- Achieve sustainability goals by reducing fossil fuel-fired boilers
- More than 2 times efficient than typical boiler reduces energy consumption and CO₂ emissions
- Low GWP solution with new refrigerant R1234ze (GWP = 7, F-Gas)
- Alternate R515B refrigerant available
- R1234ze and R515B refrigerants protect the ozone layer (ODP = 0) and have no phase out date
- Heat pump SCOP exceeding by far Ecodesign Tier 2 requirements

Options/Accessories

- Spring isolators
- Left/right pipe connection
- Refrigerant isolation valve
- Harmonic filter (floor mounted)

Premium-efficiency VSD water-cooled screw compressor heat pump

YVWH HP 270 to 550



Performances (R1234ze and 515B) – Preliminary Data

YVWH HP		270	370	450	550	
Heating range at 12/7 - 60/65°C						
Heating capacity	kW	900	1245	1440	1800	
COP		3,34	3,33	3,38	3,33	
Heating range at 10/7 - 40/45°C						
Heating capacity	kW	931	1260	1480	1850	
COP		5,19	5,16	5,24	5,18	
Ecodesign Medium Temperature Heat Pump						
SCOP ^{(1), (2)}		5,21	5,14	5,16	5,21	
η_s, h ^{(1), (2)}		200,4	197,6	198,4	200,4	
Cooling Range at 12/7 - 30/35°C						
Cooling capacity	kW	788	1092	1266	1576	
EER		5,64	5,63	5,67	5,63	
SEER ⁽²⁾		7,78	7,68	8,08	8,08	
η_s, c ⁽²⁾	%	308	304	320	320	
Sound pressure @ 1m		84,5	86,5	87,5	88,5	
Evaporator	Pass	2	2	2	2	
	Flow rate	l/s	37,6	52,09	60,35	75,17
	Piping dimension	mm	150	200	200	250
	Pressure drop	kPa	57,8	54,5	55	51
Condenser	Pass	2	2	2	2	
	Flow rate	l/s	44,6	61,81	71,5	89,19
	Piping dimension	mm	150	200	200	250
	Pressure drop	kPa	70,8	70,7	70,6	71
Refrigerant circuit	n.	1	1	1	1	
Compressor quantity	n.	1	2	2	2	
Refrigerant charge	kg	300	400	420	460	

1) Ratings in accordance to Ecodesign at 10/7 - 47/55°C

2) Ratings variable water flow and variable outlet (VW/VO).

3) The table above shows only a representative sample of performance points. For job specific operating conditions contact your JCI Representative.

Technical data

YVWH		270	370	450	550	
Dimensions	Length	mm	4169	4235	4235	4543
	Width	mm	2005	2140	2160	2240
	Height	mm	2110	2456	2482	2541
Operating weight	kg	6908	9391	10286	12399	
Shipping weight	kg	6417	8660	9442	11345	

GT Screw Compressor



Variable Speed Drive



OptiView LT Panel



Manufacturer reserves the rights to change specifications without prior notice.