

YVWH

Premium-efficiency VSD water-cooled screw compressor chiller

Cooling capacities from 313 kW to 1228 kW



Available as
option



Features

YVWH is innovatively designed and manufactured, it offers **premium efficiency** at both full load and part load condition, 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 chiller SEER surpasses the Ecodesign Tier 2 requirement and contributes to the reduction of the CO2 emissions.

Key components

- Optimized motor and flow structure design ensure high compressor efficiency
- Optimized compressor Vi design further enhances partload performance
- Built-in condenser oil separator increases the oil separation effectiveness
- Counterflow subcooler design provides the most optimized subcooling

Committed to sustainability

- Low GWP solution with new refrigerant R1234ze (GWP = 7, F-Gas)
- R1234ze and R134a refrigerants protect the ozone layer (ODP = 0) and have no phase out date
- Chiller SEER exceeding by far Ecodesign Tier 2 requirements
- Premium chiller efficiency brings green building effectiveness to a remarkable level

Options / Accessories

- Spring Isolators
- Left/Right Pipe Connection
- Sound Attenuator
- Thicker Evaporator Insulation
- Refrigerant Isolation Valve
- Harmonic Filter

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YVWH 115 to 440



Performances (R1234ze)

YVWH			115	145	180	225	260	300	330	375	440
Cooling capacity		kW	313	403	492	602	724	829	884	1037	1228
EER			5.9	6.07	5.84	6.05	6.05	6.19	5.94	6.1	5.96
SEER			7.35	7.43	7.68	7.86	8.25	8.41	8.76	8.76	8.5
ηsc			286	289	299	306	322	328	342	342	332
Evaporator	Pass		4				2				
	Flow rate	l/s	15.00	19.23	23.56	28.82	33.11	39.63	42.22	49.54	58.71
	Piping dimension	mm	125		150		200				
	Pressure drop	kPa	44.5	53.6	53.3	51.6	43.0	37.2	19.6	27.1	32.8
Condenser	Pass		4				2				
	Flow rate	l/s	17.56	22.42	27.55	33.61	38.75	46.18	49.53	57.87	68.74
	Piping dimension	mm	125		150		200				
	Pressure drop	kPa	43.6	52.6	52.4	52.4	45.9	32.7	21.7	24.5	34.3
Refrigerant circuit		n.	1								
Compressor quality		n.	1								
Capacity control %			15-100%								
Refrigerant charge		kg	200		240	250	360	370	400	410	510

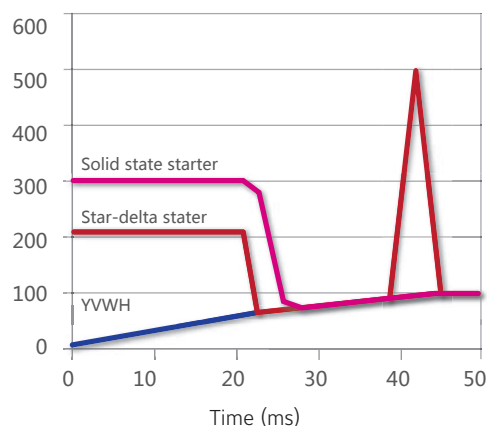
Ratings in accordance to Ecodesign, fixed water flow and variable outlet (FW/VO). Rated with YW 19.06.
For other Ecodesign calculations or R134a information, please contact your JCI Representative.

Technical data

YVWH		115	145	180	225	260	300	330	375	440
Dimensions	Length	mm	3118	3131	3154	3156	4807	4832	4873	
	Width	mm	1710	1797	1975	2005	1925	1988	2086	
	Height	mm	1966	1996	2124	2250	2300		2320	
Operating weight kg		4387	5169	6350	6951	7834	8894	9306	9983	

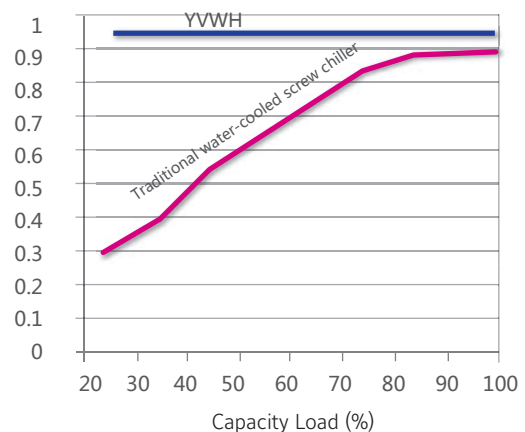
Soft Start

YVWH provides a soft start without current shock. The start-up current will never be larger than the rating current, which benefits the customer with lower cost on associated equipment and smaller backup generator and quick start function in case of the shutdown due to power supply failure.



Displacement Power Factor (DPF)

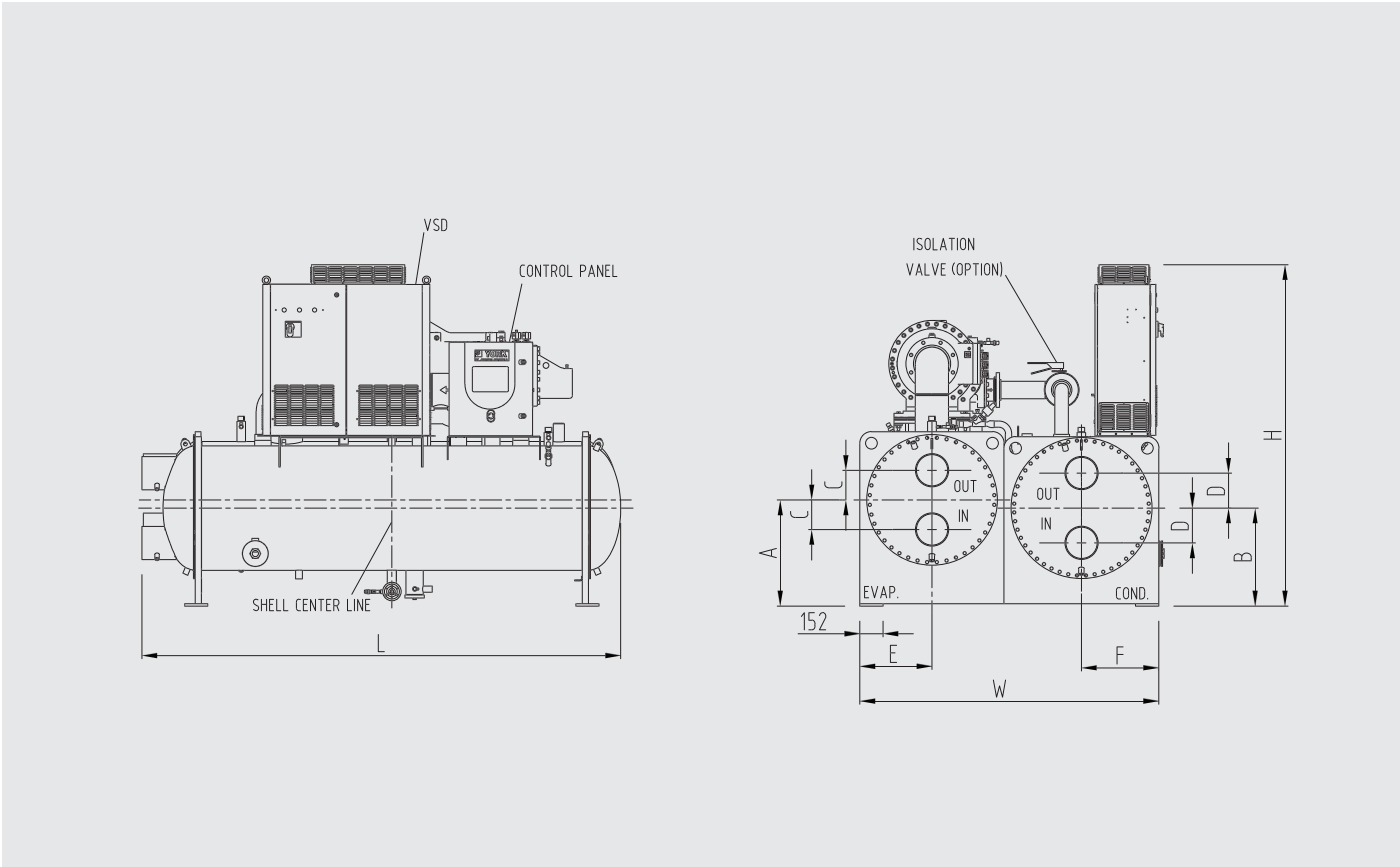
The Variable Speed Drive (VSD) design makes 0.95 high DPF achievable in standard YVWH models at all operating conditions. For traditional non-VSD designed screw chiller, the DPF will reduce when the cooling load goes down.



Manufacturer reserves the rights to change specifications without prior notice.

Dimensions and hydraulic connections

YVWH 115/145/180/225

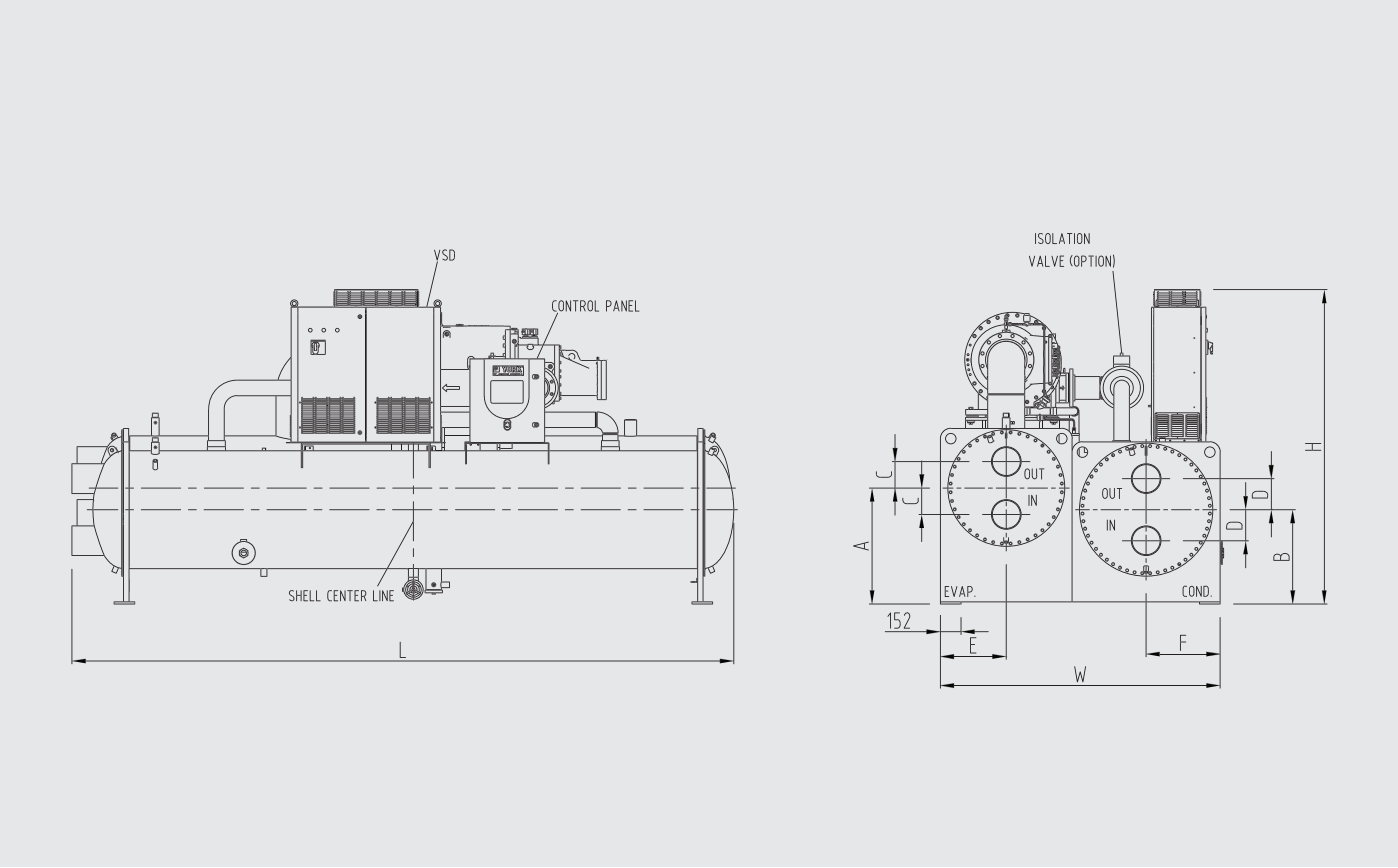


Model	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
YVWH115	3118	1710	1966	644	566	190	180	400	435
YVWH145	3131	1797	1996	694	586	165	180	425	450
YVWH180	3154	1975	2124	709	646	230	230	460	520
YVWH225	3156	2005	2250	699	646	230	230	475	510

All dimensions in mm. Drawings not in scale.

Dimensions and hydraulic connections

YVWH 260/300/330/375/440



Model	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
YVWH260	4807	1925	2300	856	696	195	195	460	485
YVWH300	4832	1988	2300	856	696	195	230	460	520
YVWH330/375/440	4873	2086	2320	856	696	195	229	485	545

All dimensions in mm. Drawings not in scale.