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# CHiRef

XVA

DATA CENTER INDUSTRIAL

SERVICES

### WATER CONDENSED CHILLERS AND HEAT PUMPS WITH INVERTER DRIVEN SCREW COMPRESSORS

## 445–1494 kW



XVA is HiRef's range of water-cooled chillers with screw compressors and shell and tube heat exchangers. Use of the new R1234ze refrigerant, with ultra-low GWP (Global Warming Potential), and achievement of high energy efficiency levels, especially at partial loads, ensures the system has a low TEWI (Total Equivalent Warming Impact). The broad capacity range offered and the availability of different versions caters to a wide variety of needs. It's possible to choose operation in chiller-only mode with evaporative tower or Dry Cooler and operation in heat pump mode for high or low temperatures.



- Refrigerant R1234ze and R515B
- Also available with R515B refrigerant on request
- Available in version with Eurovent A (XVA) energy efficiency class
- Available in versions: chilling only (with well water or evaporative tower), chilling only (with Dry Cooler), heating only heat pump
- Electronic expansion valve
- Monitoring and limitation of the maximum absorbed power
- Available with screw compressors driven by inverters
- Thermal insulation hoods on the compressors for the high temperature heat pump versions

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### CATALOGUE CHILLERS AND HEAT PUMPS



**Power and flexibility** 

Screw compressor allows **high cooling capacities** to be achieved with load modulation via the special slide valve. On request, a version with inverter either on one or on both compressors is available, **for finer adjustment of cooling capacity and obvious advantages in terms of energy efficiency.** 



Low Noise set-up

The screw compressors, the only source of noise on the machine, can be placed in a dedicated enclosure lined with sound-absorbing material **that reduces the overall noise emission.** 



### New concept of heat exchange

Single pass shell and tube evaporators provide **excellent levels of thermodynamic efficiency** thanks to full heat exchange counter-flow.



#### Suitable for coupling to Polymorph HiRef modules

The XVA range offers **great versatility when combined with PLM hydronic modules,** allowing for different system configurations. Thanks to this flexibility, it can be used as: a reversible heat pump, a chiller with total recovery, a multi-purpose heat pump for 2-pipe systems, a multi-purpose heat pump for 4-pipe systems or an air conditioning system with Free-Cooling.



XVA		491D	541D	601D	681D	801D	921D	1141D	1281D	451D	551D	641D	701D	821D	911D	1061D	1221D	1291D	1431D	1501D
User water values 12/7°C, 30/35°C source water side																				
Cooling capacity	kW	488.5	563.7	648.5	729.4	871	953.7	1113.8	1289.1	444.6	542.3	618.2	709	811.6	903.4	1096.5	1215	1260	1419.9	1493.9
Total absorbed power	kW	90.4	101.5	119.3	135.1	158.2	177.9	190.5	220.2	80.8	97.8	115.8	133.2	154.4	170.3	205.6	230.1	248.2	279.4	291.5
EER		5.41	5.56	5.44	5.4	5.51	5.36	5.85	5.85	5.5	5.55	5.34	5.32	5.26	5.3	5.33	5.28	5.08	5.08	5.12
SEER		7.63	7.52	7.52	7.56	7.54	7.52	7.88	7.94	7.63	7	6.79	6.93	6.94	6.94	7.03	6.99	7.23	7.52	7.55
SEPR		8.15	8.01	8	8	8	8.16	8.03	8.01	8.15	8	8	8.06	8.04	8.04	8.12	8.05	8.13	8.55	8.55
Sound power [Standard]	dB(A)	95	97	97	98	99	100	102	103	95	92	95	96	97	98	99	100	101	102	103
Dimensions [LxHxD]	mm	4250x2050x1500			4800 x2250 x1500		5200 x2250 x1900		5200 x2250 x2050	4250x2050x1500					4800 x2250 x1500		5200	)x2250x	5400 x2250 x2050	