



CWC HP XEA Water-to-Water Heat Pump





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Cooling capacity: 50-700 kW

Heating capacity: 60-835 kW

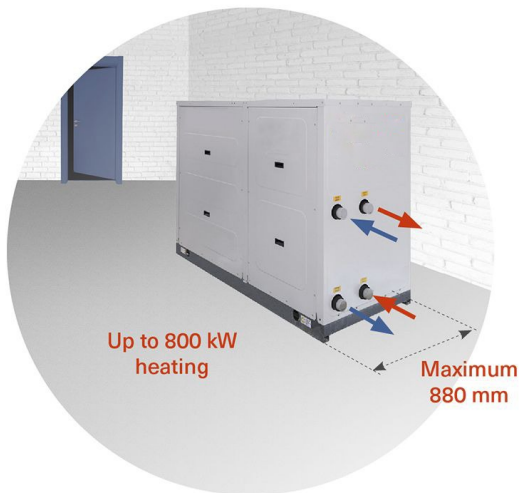
- SCOP: Seasonal efficiency up to 6.42 under EN14825:2018 conditions
- SEER: Seasonal efficiency up to 7.31 under EN14825:2018 conditions
- Compact: 880 mm maximum width
- Application flexibility: condenser water temperatures up to +65°C
- Quiet operation: low vibrations and available in low or super low noise version
- Single or dual refrigerant circuits with electronic expansion valve

Modular and scalable

CWC HP XEA heat pumps are suitable for almost any medium to large-sized commercial building or process cooling application to provide outstanding year-round efficiency.

Historic city centers and older buildings do not always allow for easy transportation of units into, onto or next to buildings. CWC units have been specially designed for restricted spaces and to facilitate internal transport and easy installation.

The modular and compact design is ideal when capacity extension is required as building demand or industrial process cooling or heating demand evolves.



High energy performance

CWC HP XEA heat pumps are sustainable, electrified alternative to traditional fossil-fueled boilers.

All CWC HP XEA heat pumps pass the high seasonal energy efficiency thresholds (SCOP or SEER) as defined in the applicable EU Ecodesign regulation.



Superior (seasonal) energy performance means:

- Low annual operating costs due to low electricity usage
- Sustainable HVAC system with low carbon emissions
- Access to national heat pump subsidy or fiscal grant schemes



Large operating map

CWC satisfies any application and covers a wide spectrum of operating conditions in both cooling and heating.

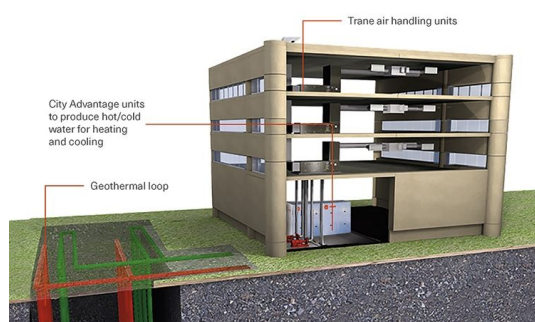
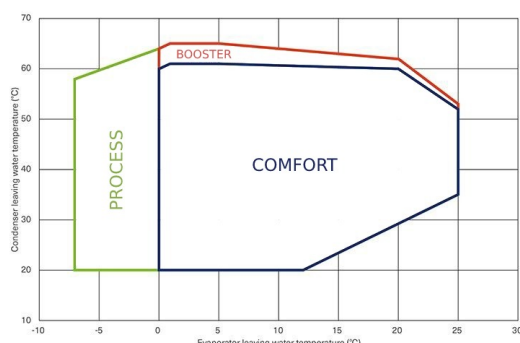
The large operating map addresses the specific design criteria of applications like hospitals, office buildings, large apartment buildings, warehouses and many industrial applications:

- Leaving chilled water temperatures between -7°C and +25°C
- Hot water temperatures up to +65°C

Geothermal applications

The technologies built into Thermocold's CWC heat pumps make them ideally suited to geothermal applications.

The unit can be provided with variable speed pumps on the source side to be coupled with borehole heat exchangers, or with 2-or 3-way valves to modulate water flow if it's connected to a water loop.



Range description

- CWC - CWC HP XEA heat pumps are available in nine different capacities, with features that can be optimized to suit your building's size and function.

Your Thermocold Sales Engineer will help you select the ideal CWC HP XEA heat pump based on your specific performance criteria and available technical room space.

Technical specifications

Cooling capacity	50-700 kW
Heating capacity	60-835 kW
Eurovent certification	●
ErP Certification	●
Refrigerants	R454B R410A
Operating mode	Cooling and electric heater Heat pump
Energy saving	
Compressor	Scroll

Product data

CWC HP XEA R454B (Single Circuit)

	Pc	Pec	EER	SEER	η _{sc}	Ph	Peh	COP	SCOP	η _{sh}	LwO	L	W	H	OW
	(1)	(1)	(1)	(2)	(2)	(3)	(3)	(3)	(4)	(4)	(5)	(6)	(6)	(6)	(6)
	kW	kW			%	kW	kW			%	dB(A)	mm	mm	mm	kg
CWC HP XEA 013 - R454I	52,7	10,5	5,04	6,70	263,6	58,8	13,6	4,33	6,41	248,4	78	1555	676	1417	448
CWC HP XEA 015 - R454I	60,4	12,3	4,92	6,50	258,3	67,9	15,9	4,28	6,23	241,2	79	1555	676	1417	450
CWC HP XEA 019 - R454I	69,7	13,9	5,03	6,70	264,6	77,3	17,7	4,38	6,52	253,0	80	1555	676	1417	455
CWC HP XEA 023 - R454I	83,6	16,6	5,04	6,70	266,6	93,2	21,1	4,42	6,40	248,2	81	1555	676	1417	465
CWC HP XEA 025 - R454I	94,0	18,8	5,00	6,50	257,8	104,4	23,5	4,44	6,45	250,1	82	1555	676	1417	510
CWC HP XEA 029 - R454I	111,2	22,1	5,04	6,60	259,4	123,5	27,7	4,46	6,44	249,5	84	1755	810	1417	692
CWC HP XEA 033 - R454I	129,8	25,1	5,17	6,80	270,4	142,9	31,5	4,54	6,55	254,0	86	1755	810	1417	738
CWC HP XEA 037 - R454I	143,1	28,0	5,11	6,70	266,8	158,2	34,9	4,53	6,52	252,7	86	1755	810	1417	747
CWC HP XEA 041 - R454I	155,8	31,1	5,01	6,50	257,7	173,2	38,7	4,48	6,38	247,3	86	1755	810	1417	749

Pc: Cooling capacity

SEER: Seasonal Energy Efficiency Ratio

Peh: Total power input in heating

η_{sh}: Seasonal space heating energy efficiency

W: Width

Pec: Total power input in cooling

η_{sc}: Seasonal space cooling energy efficiency

COP: Coefficient Of Performance (heating)

LwO: A-weighted sound power level outside

H: Height

EER: Energy Efficiency Ratio (cooling)

Ph: Heating capacity

SCOP: Seasonal Coefficient Of Performance

L: Length

OW : Operating Weight

(1): Evaporator water temperature in/out 12/7°C - Condenser water temperature in/out 30/35°C (EN 14511:2022)

(2): Ecodesign rating for comfort chillers. Source water temperature in/out 30/35°C and evaporator water temperature in/out 12/7°C. SEER/η_{sc} as defined in REGULATION (EU) N° 2016/2281 of 20 December 2016 (Prated > 400kW)

(3): Evaporator water temperature in/out 10/7°C - Condenser water temperature in/out 40/45°C

(4): Ecodesign rating at low temperature conditions. Source water temperature in/out 10/7°C and hot water temperature in/out 30/35°C. SCOP / η_{sh} as defined in REGULATION (EU) N° 813/2013 of 2 August 2013 (Prated < 400kW)

(5): According ISO 9614:2009, without accessories

(6): Basic unit without accessories

CWC HP XEA R454B (Dual Circuit)

	Pc	Pec	EER	SEER	η _{sc}	Ph	Peh	COP	SCOP	η _{sh}	LwO	L	W	H	OW
	(1)	(1)	(1)	(2)	(2)	(3)	(3)	(3)	(4)	(4)	(5)	(6)	(6)	(6)	(6)
	kW	kW			%	kW	kW			%	dB(A)	mm	mm	mm	kg
CWC HP XEA 042 - R454I	158,0	31,4	5,04	6,50	255,8	175,1	39,4	4,44	6,41	248,2	83	2511	882	1652	950
CWC HP XEA 048 - R454I	185,0	37,3	4,96	6,20	246,9	206,7	46,8	4,42	6,22	240,8	85	2511	882	1652	1043
CWC HP XEA 056 - R454I	217,2	44,6	4,87	6,20	243,2	243,3	55,7	4,37	6,09	235,5	87	2511	882	1652	1145
CWC HP XEA 064 - R454I	250,4	50,8	4,93	6,30	250,2	280,6	63,3	4,43	6,18	239,3	89	2511	882	1844	1348
CWC HP XEA 072 - R454I	277,7	55,1	5,04	6,50	258,3	310,7	69,2	4,49	6,25	242,2	89	2511	882	1844	1422
CWC HP XEA 078 - R454I	302,7	60,7	4,99	6,40	252,9	339,8	76,2	4,46	-	-	89	2511	882	1844	1425

CWC HP XEA 088 - R454I	331,4	69,5	4,77	6,20	244,3	376,8	87,6	4,30	-	-	92	2511	882	1844	1532
CWC HP XEA 096 - R454I	372,2	76,3	4,88	6,50	255,8	421,5	96,5	4,37	-	-	94	2511	882	1844	1808
CWC HP XEA 112 - R454I	431,1	86,7	4,97	6,50	258,1	484,6	108,7	4,46	-	-	95	2511	882	1844	1917
CWC HP XEA 128 - R454I	483,7	96,4	5,02	6,80	269,4	543,1	120,7	4,50	-	-	96	2511	882	1844	2038
CWC HP XEA 144 - R454I	563,5	115,0	4,90	6,60	259,6	635,7	144,8	4,39	-	-	96	3914	883	1953	2605
CWC HP XEA 162 - R454I	614,2	126,1	4,87	6,60	262,9	693,5	158,0	4,39	-	-	97	3914	883	1953	2649
CWC HP XEA 176 - R454I	663,8	137,4	4,83	6,50	257,8	750,8	171,4	4,38	-	-	97	3914	883	1953	2672
CWC HP XEA 192 - R454I	694,8	148,8	4,67	6,40	253,8	791,7	185,0	4,28	-	-	98	3914	883	1953	2706

Pc: Cooling capacity

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ηsh: Seasonal space heating energy efficiency

W: Width

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(3): Evaporator water temperature in/out 10/7°C - Condenser water temperature in/out 40/45°C

(4): Ecodesign rating at low temperature conditions. Source water temperature in/out 10/7°C and hot water temperature in/out 30/35°C. SCOP / ηs,h as defined in REGULATION (EU) N° 813/2013 of 2 August 2013 (Prated < 400kW)

(5): According ISO 9614:2009, without accessories

(6): Basic unit without accessories



Product data shown in this document are not binding.
Thermocold shall have the right to introduce at any time whatever modifications deemed necessary to the improvement of the product.



70026 Modugno – Bari
Via dei Ciclamini, 25 – Z.I.
Tel. 080/5312623
Internet: <http://www.Thermocold.it>
E-Mail: info@Thermocold.it