

# WSW - Techno Range

## Ideal for cooling water or process fluids

Liquid chillers designed for process cooling 24/7, 365 days a year, water cooled with one or two refrigerant circuits and screw compressors optimized for the use of the environmentally friendly refrigerant R513A, dry expansion evaporators and shell and tube condensers and cooling capacity from 230 kW to 1530 kW.

Cosmotec experience in process cooling has led to the development of this range of industrial chillers capable of meeting the wide operating limits (both ambient and user side) required by the new technologies used for energy saving.

All the chillers in the WSW range are characterized by high levels of energy efficiency (Class A or B) and compliance with the limits required by the 2009/125/EC Ecodesign ErP 2021 Directive.

Even in the Low Noise model, WSW units with integral enclosures maintain high performance and energy efficiency, while ensuring low noise.

The HT version is designed (on request) for applications with high temperature water (up to +25°C) and includes screw compressors with oversized motor.

The Electronic Expansion Valve (EEV) optimizes temperature and pressure of gas evaporation, increasing the efficiency at partial loads on the user side and helping to extend the operating range of the unit.

## Eco-friendly LOW GWP version

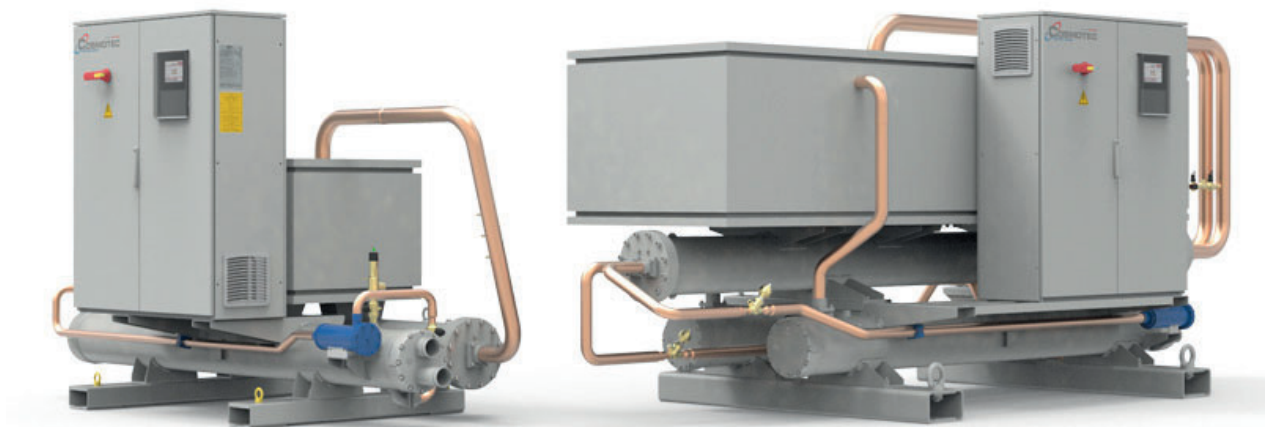
WSW units are available with environmentally friendly R513A refrigerant that provides a reduction in global warming potential (GWP = 572). Rated A1 R513A is non-toxic and non-flammable.

## Free Cooling thanks to WFM module

Thanks to the integration of the main hydronic components (plate-type water/water exchanger, servo-controlled valves and one or more inverter-controlled pumps), the WFM CyberCool Free Cooling Booster module makes it possible to transform a system consisting of a WSW chiller and a drycooler into an energy-saving free cooling system.

These Free Cooling systems provide significant energy savings, especially in applications requiring high cooling fluid temperatures (plastics, data centers) and installation in areas with cold or temperate climates.

The CyberCool Free Cooling Booster control software monitors both outdoor and operating temperatures and adjusts the cooling capacity of the remote dry cooler: this ensures both optimal control of the WSW unit's condensing temperature and maximum Free Cooling effectiveness during mid-seasons, with low operating costs and minimal environmental impact.



## WSW Standard



CODE	M.U.	WSW080	WSW090	WSW110	WSW125
Cooling capacity	kW	228,7	283,9	308,3	350,8
Absorbed Power	kW	45,4	55,4	60,4	69,5
SEPR		8,1	8,22	7,92	8,02
Refrigerant Gas		R134a	R134a	R134a	R134a
Refrigerant Gas charge	kg	61	76	82	93
Cooling circuits/Compressors	N°	1 / 1	1 / 1	1 / 1	1 / 1
Rated voltage	V~	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3
Nominal Frequency	Hz	50 60	50 60	50 60	50 60
Height x Width x Depth	mm	1880x1340x3010	1880x1340x3010	1880x1460x3306	1905x1340x3790
Shipping weight	kg	2625	2992	3029	3166

CODE	M.U.	WSW140	WSW160	WSW180	WSW220
Cooling capacity	kW	426,4	457,1	566,1	612,6
Absorbed Power	kW	83,6	90,7	110,7	120,8
SEPR		7,93	8,31	8,55	8,16
Refrigerant Gas		R134a	R134a	R134a	R134a
Refrigerant Gas charge	kg	113	15 + 15	75 + 75	81 + 81
Cooling circuits/Compressors	N°	1 / 1	2 / 2	2 / 2	2 / 2
Rated voltage	V~	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3
Nominal Frequency	Hz	50 60	50 60	50 60	50 60
Height x Width x Depth	mm	1905x1340x3790	1970x1871x4416	1970x1871x4916	2100x1871x4558
Shipping weight	kg	3640	3818	4420	4735

CODE	M.U.	WSW250	WSW265	WSW280	WSW320
Cooling capacity	kW	701,3	777,2	852,7	969,7
Absorbed Power	kW	139,1	154,1	167,2	189,1
SEPR		8,24	7,99	8	8,11
Refrigerant Gas		R134a	R134a	R134a	R134a
Refrigerant Gas charge	kg	92 + 92	103 + 103	113 + 113	128 + 128
Cooling circuits/Compressors	N°	2 / 2	2 / 2	2 / 2	2 / 2
Rated voltage	V~	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3
Nominal Frequency	Hz	50 60	50 60	50 60	50 60
Height x Width x Depth	mm	1970x1871x4916	1986x1871x5084	1986x1871x4745	1993x1931x4856
Shipping weight	kg	5069	5555	6073	6487

CODE	M.U.	WSW360	WSW420	WSW480	WSW560
Cooling capacity	kW	1099,1	1254,5	1371	1523,8
Absorbed Power	kW	213,2	240,7	272,1	300,1
SEPR		8,32	8,24	8,14	8,19
Refrigerant Gas		R134a	R134a	R134a	R134a
Refrigerant Gas charge	kg	145 + 145	160 + 160	180 + 180	200 + 200
Cooling circuits/Compressors	N°	2 / 2	2 / 2	2 / 2	2 / 2
Rated voltage	V~	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3
Nominal Frequency	Hz	50 60	50 60	50 60	50 60
Height x Width x Depth	mm	2026x1891x5278	2129x1951x4583	2165x1936x5096	2165x1931x5390
Shipping weight	kg	6736	7194	7576	7800

## WSW Low Noise

CODE	M.U.	WSW080SL	WSW090SL	WSW110SL	WSW125SL
Cooling capacity	kW	228,7	283,9	308,3	350,8
Absorbed Power	kW	45,4	55,4	60,4	69,5
SEPR		8,1	8,22	7,92	8,02
Refrigerant Gas		R134a	R134a	R134a	R134a
Refrigerant Gas charge	kg	61	76	82	93
Cooling circuits/Compressors	N°	1 / 1	1 / 1	1 / 1	1 / 1
Rated voltage	V~	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3
Nominal Frequency	Hz	50 60	50 60	50 60	50 60
Height x Width x Depth	mm	1880x1340x3010	1880x1340x3010	1880x1460x3306	1905x1340x3790
Shipping weight	kg	2650	3017	3054	3190

CODE	M.U.	WSW140SL	WSW160SL	WSW180SL	WSW220SL
Cooling capacity	kW	426,4	457,1	566,1	612,6
Absorbed Power	kW	83,6	90,7	110,7	120,8
SEPR		7,93	8,31	8,55	8,16
Refrigerant Gas		R134a	R134a	R134a	R134a
Refrigerant Gas charge	kg	113	15 + 15	75 + 75	81 + 81
Cooling circuits/Compressors	N°	1 / 1	2 / 2	2 / 2	2 / 2
Rated voltage	V~	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3
Nominal Frequency	Hz	50 60	50 60	50 60	50 60
Height x Width x Depth	mm	1905x1340x3790	1970x1871x4416	1970x1871x4916	2100x1871x4558
Shipping weight	kg	3665	3868	4470	4785

CODE	M.U.	WSW250SL	WSW265SL	WSW280SL	WSW320SL
Cooling capacity	kW	701,3	777,2	852,7	969,7
Absorbed Power	kW	139,1	154,1	167,2	189,1
SEPR		8,24	7,99	8	8,11
Refrigerant Gas		R134a	R134a	R134a	R134a
Refrigerant Gas charge	kg	92 + 92	103 + 103	113 + 113	128 + 128
Cooling circuits/Compressors	N°	2 / 2	2 / 2	2 / 2	2 / 2
Rated voltage	V~	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3
Nominal Frequency	Hz	50 60	50 60	50 60	50 60
Height x Width x Depth	mm	1970x1871x4916	1986x1871x5084	2060x1871x4745	2050x1931x4856
Shipping weight	kg	5119	5605	6123	6537

CODE	M.U.	WSW360SL	WSW420SL	WSW480SL	WSW560SL
Cooling capacity	kW	1099,1	1254,5	1371	1523,8
Absorbed Power	kW	213,2	240,7	272,1	300,1
SEPR		8,32	8,24	8,14	8,19
Refrigerant Gas		R134a	R134a	R134a	R134a
Refrigerant Gas charge	kg	145 + 145	160 + 160	180 + 180	200 + 200
Cooling circuits/Compressors	N°	2 / 2	2 / 2	2 / 2	2 / 2
Rated voltage	V~	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3	400 . 3 460 . 3
Nominal Frequency	Hz	50 60	50 60	50 60	50 60
Height x Width x Depth	mm	2100x1891x5278	2202x1951x4583	2232x1936x5096	2232x1931x5390
Shipping weight	kg	6786	7244	7626	7850