

Water cooled chillers ECWH series and condenserless CSCH version, screw compressors R134a, shell and tube evaporator, shell and tube condenser

Cooling Big Evolution	Model	260	300	350	400	460	570	630	720	850	990	1120	1270	1370	1500
Cooling Mode - ECWH version															
NOMINAL COOLING CAPACITY (1)	kW	259	303	349	401	456	568	631	721	855	987	1121	1274	1374	1499
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)	kW	55,0	63,8	72,2	82,0	93,4	113,4	127,6	145,2	170,0	193,4	221,6	250,4	289,0	308,0
EER (1)	kW/kW	4,70	4,75	4,84	4,89	4,88	5,01	4,94	4,97	5,03	5,10	5,06	5,09	4,75	4,87
ESEER (1)		5,51	5,61	5,67	6,07	6,09	5,90	5,81	6,02	6,06	5,97	6,02	6,07	5,72	6,25
IPLV (1)		5,94	6,05	6,11	6,66	6,69	6,41	6,23	6,51	6,45	6,35	6,48	6,51	6,27	6,88
EVAPORATING SECTION															
EVAPORATORS	nr.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EVAPORATOR NOMINAL WATER FLOW RATE (1)	m ³ /h	44,5	52,2	60,1	69,0	78,4	97,7	108,5	124,1	147,1	169,8	192,8	219,2	236,3	257,8
EVAPORATOR PRESSURE DROP (1)	kPa	52	48	55	51	57	51	57	56	56	66	61	55	68	71
HYDRAULIC CONNECTIONS (FLANGED)	DN	125	125	125	125	150	150	150	150	200	200	200	200	200	250
CONDENSING SECTION															
CONDENSERS	nr.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
CONDENSER NOMINAL WATER FLOW RATE EACH CONDENSER (1)	m ³ /h	27,2	31,8	36,5	41,8	47,5	59,0	65,7	75,0	88,8	102,2	116,2	132,0	143,9	156,4
CONDENSER PRESSURE DROP (1) (4)	kPa	37	41	44	45	48	51	52	53	48	51	48	49	52	53
HYDRAULIC CONNECTIONS	BSP* / DN	2 x 2"1/2 *	2 x 2"1/2 *	2 x 2"1/2 *	2 x 80	2 x 80	2 x 80	2 x 80	2 x 80	2 x 100	2 x 100	2 x 125	2 x 125	2 x 125	2 x 125
HEAT RECOVERY WITH PLATE DESUPERHEATER															
PARTIAL RECOVERY HEATING CAPACITY (5)	kW	23	26	30	34	38	47	53	60	70	80	92	104	119	127
Heat Pump Mode - EHHW version															
NOMINAL HEATING CAPACITY IN HEATING MODE (2)	kW	291	341	392	452	515	638	709	810	956	1100	1264	1435	1559	1698
TOTAL COMPRESSORS ABSORBED POWER (2)	kW	66,2	76,8	86,8	98,0	111,4	136,6	153,8	175,0	204,6	229,2	266,2	301,0	343,0	367,4
COP (2)	kW/kW	4,40	4,44	4,51	4,61	4,62	4,67	4,61	4,63	4,67	4,80	4,75	4,77	4,55	4,62
EVAPORATOR NOMINAL WATER FLOW RATE (2)	m ³ /h	38,7	45,5	52,4	60,8	69,4	86,2	95,5	109,2	129,3	149,7	171,6	195,1	209,2	228,9
CONDENSER NOMINAL WATER FLOW RATE EACH CONDENSER (2)	m ³ /h	25,3	29,6	34,0	39,2	44,7	55,4	61,6	70,4	83,1	95,5	109,8	124,7	135,4	147,5
Condenserless - CSCH version															
NOMINAL COOLING CAPACITY IN COOLING MODE (3)	kW	241	284	327	377	429	534	592	676	799	929	1056	1201	1292	1410
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (3)	kW	60,6	69,8	79,4	90,0	102,6	124,8	140,4	159,8	187,4	211,2	243,8	275,8	316,0	338,4
EER (3)	kW/kW	3,98	4,07	4,12	4,19	4,18	4,28	4,22	4,23	4,26	4,40	4,33	4,35	4,09	4,17
EVAPORATOR NOMINAL WATER FLOW RATE (3)	m ³ /h	41,5	48,8	56,2	64,8	73,8	91,8	101,8	116,3	137,5	159,8	181,7	206,6	222,2	242,6
General Informations															
REFRIGERATING CIRCUITS	nr.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
COMPRESSORS	nr.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PARTITION STEPS	%	0-25-50-75-100-75-50-0													
TOTAL ELETTRICAL DATA															
MAXIMUM ASSORBED CURRENT PER COMPRESSOR (F.L.A.)	A	79	98	124	144	162	182	196	214	280	310	320	360	413	447
MAXIMUM PEAK CURRENT PER COMPRESSOR (PW) (L.R.A.)	A	206 / 355	267 / 449	290 / 485	350 / 585	423 / 686	520 / 801	612 / 943	665 / 1023	436 / 1364	465 / 1442	586 / 1853	650 / 2029	805 / 2520	917 / 2870
MOTOR CONNECTION (PW = part winding; Y-D = star-delta)		PW	PW	PW	PW	PW	PW	PW	PW	Y-D	Y-D	Y-D	Y-D	Y-D	Y-D
ELECTRIC FEED	V/Ph/Hz	400/3/50													
NOISE DATA															
SOUND PRESSURE (6)	dB(A)	62,6	62,5	62,7	62,9	62,6	68,4	67,1	67,5	68,5	68,7	69,6	70,5	71,3	72,9
DIMENSIONS AND WEIGHT															
LENGTH	mm	3800	3800	3800	3800	4200	4200	4200	4200	4400	4400	5000	5000	5000	5000
WIDTH	mm	1500	1500	1500	1500	1650	1650	1650	1650	1800	1800	2200	2200	2200	2200
HEIGHT	mm	1800	1800	1800	1800	2000	2000	2000	2000	2100	2100	2300	2300	2300	2300
WEIGHT EMPTY	kg	2200	2210	2320	2480	2550	3480	3710	3850	5190	5260	5820	6010	6290	6630
WEIGHT OPERATIVE	kg	2450	2430	2570	2750	2860	3810	4150	4320	5750	5810	6700	6910	7190	7680
WEIGHT EMPTY FOR CSC VERSION	kg	1920	1930	1980	2040	2070	2960	3170	3260	4370	4400	4810	4940	5170	5440

The manufacturer reserves the right to modify specifications without notice.

Updated on 16/03/2015

Data referred to:

- (1) Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condenser Inlet/Outlet water temperature = +30/+35 °C; fouling factor = 0.000043 m²/K/W.
- (2) Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condenser Inlet/Outlet water temperature = +40/+45 °C; fouling factor = 0.000043 m²/K/W.
- (3) Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condensing temperature = +45 °C; fouling factor = 0.000043 m²/K/W.
- (4) Condenser only (excluding pressostatic condenser control valve).

- (5) Only with option DS: Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condenser Inlet/Outlet water temperature = +30/+35 °C; Desuperheater Inlet/Outlet water temperature = +40/+45 °C.
- (6) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface.