

Aircooled liquid chillers ECS series, screw compressors R407C, shell and tube evaporator, condenser with copper tubes and aluminium finned core and axial fans

BIG (Big Chillers)	Model	220	290	330	390	430	500	580	630	690	800	860	940	1060	1200	1330	1430
NOMINAL COOLING CAPACITY (1)	kW	221	288	325	393	435	501	581	633	688	797	863	937	1055	1204	1326	1428
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)	kW	75,7	93,1	104,7	127,9	139,4	157,7	183,7	201,3	221,3	259,6	267,3	303,7	340,7	393,7	430,6	454,0
COP (1)	kW/kW	2,92	3,10	3,10	3,07	3,12	3,18	3,16	3,15	3,11	3,07	3,23	3,08	3,10	3,06	3,08	3,15
EER (1)	kW/kW	2,65	2,75	2,79	2,74	2,81	2,89	2,86	2,87	2,81	2,82	2,93	2,80	2,84	2,81	2,82	2,88
ESEER		3,47	3,54	3,61	3,54	3,64	3,81	3,74	3,79	3,69	3,77	3,84	3,70	3,79	3,77	3,78	3,81
IPLV		3,95	4,01	4,11	4,02	4,13	4,34	4,26	4,31	4,20	4,30	4,36	4,21	4,32	4,30	4,31	4,35
COMPRESSORS	nr.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
REFRIGERATING CIRCUITS	nr.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PARTITION STEPS	%	0-33-66-100			0-25-50-75-100												
HYDRAULIC SECTION																	
NOMINAL WATER FLOW	m3/h	38,0	49,6	55,9	67,7	74,8	86,2	99,9	108,9	118,3	137,1	148,4	161,1	181,5	207,2	228,0	245,7
EVAPORATOR PRESSURE DROP	kPa	55	51	53	50	55	65	62	62	65	50	52	63	60	52	51	66
AVAILABLE PRESSURE (2)	mca	25,7	25,5	24,2	21,9	22,6	24,1	22,6	24,2	23,1	22,8	21,3	21,1	25,2	25,0	23,9	21,1
MAXIMUM PUMP ABSORBED POWER (2)	kW	6,1	8,3	8,3	8,3	10,3	12,0	12,0	16,2	16,2	16,2	16,2	19,8	23,5	23,5	23,5	23,5
MAXIMUM PUMP ABSORBED CURRENT (2)	A	10,4	14,1	14,1	14,1	17,4	20,2	20,2	26,6	26,6	26,6	26,6	33,3	39,0	39,0	39,0	39,0
HYDRAULIC CONNECTIONS (VICTAULIC)	DN	125	125	125	125	150	150	150	150	150	200	200	200	200	200	200	200
TANK VOLUME (2)	dm3	450	600	600	600	600	600	600	600	800	800	800	800	800	800	1000	1000
FAN SECTION (AXIAL)																	
TOTAL AIR FLOW	m3/h	69000	103800	103500	138400	138000	128400	172000	162000	194400	194400	225400	257600	259200	291600	324000	356400
FANS	nr.	4	6	6	8	8	8	10	10	12	12	14	16	16	18	20	22
FANS ABSORBED POWER	kW	7,76	11,64	11,64	15,52	15,52	15,52	19,40	19,40	23,28	23,28	27,16	31,04	31,04	34,92	38,80	42,68
FANS ABSORBED CURRENT	A	15,60	23,40	23,40	31,20	31,20	31,20	39,00	39,00	46,80	46,80	54,60	62,40	62,40	70,20	78,00	85,80
TOTAL ELECTRIC DATA																	
MAXIMUM ASSORBED CURRENT PER COMPRESSOR (F.L.A.)	A	87,0	115,0	122,0	146,0	163,0	183,0	209,0	229,0	254,0	294,0	319,0	319,0	374,0	430,0	473,0	508,0
MAXIMUM PEAK CURRENT PER COMPRESSOR (PW) (L.R.A.)	A	163 / 325	239 / 450	239 / 450	329 / 530	423 / 650	497 / 765	640 / 985	640 / 985	646 / 950	915 / 1345	996 / 1465	996 / 1465	527 / 1580	693 / 2080	777 / 2330	827 / 2480
MOTOR CONNECTION (PW = part winding; Y-D = star-delta)		PW	PW	PW	PW	PW	PW	PW	PW	PW	PW	PW	PW	Y-D	Y-D	Y-D	Y-D
ELECTRIC FEED	V/Ph/Hz	400/3/50															
NOISE DATA																	
SOUND PRESSURE (3)	dB(A)	62,4	64,0	65,2	66,1	66,2	66,4	67,3	67,8	69,0	69,6	70,4	71,3	71,7	72,0	72,3	72,7
DIMENSIONS AND WEIGHT																	
LENGTH	mm	3100	4050	4050	5000	5000	5000	5950	5950	6900	6900	7850	8800	8800	9750	10700	11650
WIDTH	mm	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
WEIGHT EMPTY	kg	2900	3460	3630	4270	4340	4480	5280	5430	6220	6360	7200	7700	7900	8620	9680	10610
WEIGHT OPERATIVE	kg	3500	4060	4230	5170	5240	5380	6180	6330	7120	7260	8100	8700	8900	9520	10680	11710

The manufacturer reserves the right to modify specifications without notice.

Updated on 02/02/2015

Data referred to:

(1) 100% of Load - Inlet/Outlet water temperature = +12/+7 °C - Condenser air temperature = +35°C; fouling factor = 0.000043 m²K/W.

(2) With options NT.WP (no tank - water pump) or T.WP (tank - water pump).

(3) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface