

Freecooling chillers ECF series, screw compressors R407C, shell and tube evaporator, condenser with copper tubes and aluminium finned core and axial fans

Cooling Big Evolution	Model	220	290	330	390	430	500	580	630	690	800	860	940	1060	1200	1330	
NOMINAL COOLING CAPACITY (1)	kW	216	284	319	384	425	495	567	613	672	787	825	915	1026	1178	1294	
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)	kW	77,7	95,1	107,5	131,0	143,0	160,5	189,2	208,1	227,0	262,2	279,5	310,2	347,3	403,1	441,6	
COP (1)	kW/kW	2,77	2,99	2,97	2,93	2,97	3,08	3,00	2,95	2,96	3,00	2,95	2,95	2,95	2,92	2,93	
EER (1)	kW/kW	2,52	2,66	2,68	2,62	2,68	2,75	2,72	2,65	2,68	2,72	2,66	2,68	2,68	2,67	2,67	
ESEER		3,36	3,44	3,51	3,43	3,53	3,58	3,61	3,51	3,58	3,63	3,53	3,59	3,61	3,60	3,59	
IPLV		3,83	3,90	3,98	3,91	4,01	4,07	4,11	4,00	4,08	4,14	4,02	4,09	4,12	4,11	4,10	
AIR TEMPERATURE 100% FREE COOLING (2)	°C	-4,2	-2,6	-4,0	-3,0	-4,2	-3,0	-4,6	-4,4	-5,4	-5,2	-3,8	-5,0	-5,0	-5,2	-5,0	
COMPRESSORS	nr.	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	
PARTITION STEPS	%	0-33-66-100				0-25-50-75-100											
HYDRAULIC SECTION																	
NOMINAL WATER FLOW	m3/h	37,1	48,9	54,9	66,1	73,2	85,2	97,6	105,5	115,6	135,3	141,9	157,3	176,5	202,7	222,6	
EVAPORATOR PRESSURE DROP (3)	kPa	59	53	52	93	60	65	61	68	69	57	58	64	59	67	81	
FREE COOLING PRESSURE DROP (4)	kPa	95	98	109	114	122	123	134	111	123	125	97	110	121	151	184	
AVAILABLE PRESSURE (5)	mca	21,7	25,7	23,9	26,6	27,8	26,6	24,0	24,4	22,3	25,2	23,8	29,8	28,4	24,2	19,9	
MAXIMUM PUMP ABSORBED POWER (5)	kW	6,1	10,3	10,3	12,0	16,2	16,2	16,2	19,9	19,9	24,9	24,9	31,9	31,9	31,9	31,9	
MAXIMUM PUMP ABSORBED CURRENT (5)	A	10,4	17,4	17,4	20,2	26,6	26,6	26,6	32,7	32,7	42,2	42,2	53,5	53,5	53,5	53,5	
HYDRAULIC CONNECTIONS (VICTAULIC)	DN	125	125	125	125	150	150	150	150	150	200	200	200	200	200	200	
TANK VOLUME (5)	dm3	450	600	600	600	600	600	600	800	800	800	800	800	800	1000	1000	
FAN SECTION (AXIAL)																	
TOTAL AIR FLOW	m3/h	59800	89400	89700	119200	119600	149000	148000	177600	177600	207200	238400	236800	266400	296000	325600	
FANS	nr.	4	6	6	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	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	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	
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	
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	
ELECTRIC FEED	V/Ph/Hz	400/3/50															
NOISE DATA																	
SOUND PRESSURE (6)	dB(A)	62,4	64,0	65,2	66,1	66,2	67,0	67,3	68,2	69,0	69,9	70,7	71,3	71,9	72,2	72,5	
DIMENSIONS AND WEIGHT																	
LENGTH	mm	3100	4050	4050	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	
HEIGHT	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	
WEIGHT EMPTY	kg	3000	3620	3740	4710	4880	5720	5870	6460	6780	7760	8410	8690	9500	10400	11420	
WEIGHT OPERATIVE	kg	3150	3780	3910	4890	5060	5910	6090	6690	7030	8050	8710	9040	9850	10750	11800	

The manufacturer reserves the right to modify specifications without notice.

Updated on 22/05/2015

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) Inlet/outlet water temperature = +12/+7 °C.
- (3) Evaporator + valve + piping pressure drop (no free cooling).
- (4) Free cooling + evaporator + valves + piping pressure drop.
- (5) With options NT.WP (no tank - water pump) or T.WP (tank - water pump).
- (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