

Freecooling chillers EEF series, screw compressors R134a, shell and tube evaporator, brazed-plate economizers, condenser with copper tubes and aluminium finned core and axial fans

Cooling Big Evolution	Model	210	250	300	350	400	470	510	580	650	700	850	1000	1100	1210	1350
NOMINAL COOLING CAPACITY (1)	kW	237	273	304	352	420	465	514	590	653	730	850	983	1115	1245	1330
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)	kW	64,9	71,9	80,6	101,9	116,3	129,8	142,9	161,4	186,9	209,1	257,4	280,7	332,2	380,0	424,0
COP (1)	kW/kW	3,65	3,80	3,77	3,45	3,61	3,58	3,60	3,66	3,49	3,49	3,30	3,50	3,36	3,28	3,14
EER (1)	kW/kW	3,10	3,27	3,30	3,10	3,19	3,20	3,17	3,26	3,11	3,14	2,99	3,15	3,04	2,97	2,85
ESEER		3,91	3,78	4,00	4,06	4,12	4,19	4,00	4,21	4,04	4,17	4,03	4,05	4,08	4,01	3,66
IPLV		4,33	4,19	4,44	4,53	4,72	4,82	4,53	4,85	4,48	4,72	4,46	4,51	4,59	4,45	4,20
AIR TEMPERATURE 100% FREE COOLING (2)	°C	-0,6	-1,8	-3,4	-5,2	-4,0	-5,4	-3,4	-5,2	-5,0	-6,6	-6,2	-6,2	-6,0	-3,8	-3,4
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 PER COMPRESSOR	%	50-75-100														
HYDRAULIC SECTION																
NOMINAL WATER FLOW	m ³ /h	40,8	47,0	52,3	60,5	72,2	80,0	88,5	101,5	112,3	125,6	146,2	169,1	191,8	214,1	228,8
EVAPORATOR PRESSURE DROP (3)	kPa	74	56	58	68	65	75	84	74	75	94	93	86	86	107	104
FREE COOLING PRESSURE DROP (4)	kPa	119	108	120	144	135	158	156	163	131	162	181	152	167	186	196
AVAILABLE PRESSURE (5)	mca	24,7	25,0	23,1	19,2	26,7	23,6	23,1	20,7	21,9	22,5	23,1	25,5	24,7	20,4	*
MAXIMUM PUMP ABSORBED POWER (5)	P3	kW	10,2	10,2	10,2	10,2	16,2	16,2	16,2	19,9	24,9	31,9	31,9	31,9	39,1	*
MAXIMUM PUMP ABSORBED CURRENT (5)		A	17,4	17,4	17,4	17,4	26,6	26,6	26,6	32,7	42,2	53,5	53,5	53,5	65,6	*
AVAILABLE PRESSURE (5)	mca	49,3	50,0	48,4	44,9	54,0	51,2	50,5	47,8	45,6	48,9	49,1	50,9	48,2	44,8	*
MAXIMUM PUMP ABSORBED POWER (5)	P5	kW	19,9	19,9	19,9	19,9	31,9	31,9	31,9	39,1	47,3	57,7	57,7	57,7	57,7	*
MAXIMUM PUMP ABSORBED CURRENT (5)		A	32,7	32,7	32,7	32,7	53,5	53,5	53,5	53,5	65,6	77,6	93,5	93,5	93,5	*
HYDRAULIC CONNECTIONS (VICTAULIC)	DN	125	125	125	125	125	150	150	150	150	150	200	200	200	200	200
TANK VOLUME (5) (6)	dm ³	600	600	600	600	600	600	600	600	800	800	800	800	800	1000	1000
EXPANSION VESSELS NUMBER AND VOLUME (7)	nr. x liters	1 x 19									2 x 19					
FAN SECTION (AXIAL)																
TOTAL AIR FLOW	m ³ /h	95400	94800	88800	88800	118400	118400	148000	148000	177600	177600	207200	236800	266400	276000	303600
FANS	nr.	6	6	6	6	8	8	10	10	12	12	14	16	18	20	22
FANS ABSORBED POWER	kW	11,64	11,64	11,64	11,64	15,52	15,52	19,40	19,40	23,28	23,28	27,16	31,04	34,92	38,80	42,68
FANS ABSORBED CURRENT	A	23,40	23,40	23,40	23,40	31,20	31,20	39,00	39,00	46,80	46,80	54,60	62,40	70,20	78,00	85,80
TOTAL ELECTRIC DATA																
IP54 protection rating, chillers suitable for outdoor installation																
MAXIMUM ASSORBED CURRENT PER COMPRESSOR (F.L.A.)	A	66,0	86,0	108,0	124,0	144,0	162,0	155,0	182,0	196,0	214,0	280,0	310,0	320,0	360,0	413,0
MAXIMUM PEAK CURRENT PER COMPRESSOR (PW) (L.R.A.)	A	182 / 338	218 / 411	269 / 508	290 / 485	350 / 585	423 / 686	439 / 675	520 / 801	612 / 943	665 / 1023	436 / 1364	465 / 1442	586 / 1853	650 / 2029	805 / 2520
MOTOR CONNECTION (PW = part winding; Y-D = star-delta)	PW	PW	PW	PW	PW	PW	PW	PW	PW	PW	PW	Y-D	Y-D	Y-D	Y-D	Y-D
ELECTRIC FEED	V/Ph/Hz	400/3/50														
NOISE DATA																
SOUND PRESSURE FOR STANDARD CONFIGURATION (8)	dB(A)	65,2	66,2	66,3	65,8	66,5	66,4	69,1	70,0	69,5	69,7	70,6	71,0	71,7	72,4	73,1
DIMENSIONS AND WEIGHT																
LENGTH	mm	4050	4050	4050	4050	5000	5000	5950	5950	6900	6900	7850	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 FOR STANDARD CONFIGURATION	kg	3700	3800	4000	4100	4900	5200	6000	6100	6800	7000	7900	8750	9600	10500	11500
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION	kg	3850	3950	4160	4270	5080	5390	6220	6320	7030	7250	8190	9050	9950	10850	11880

The manufacturer reserves the right to modify specifications without notice.

Updated on 16/09/2015

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 P3), T.WP (tank - water pump P3), NT.PH (no tank - water pump P5), T.PH (tank - water pump P5).

(6) Minimum water content for the hydraulic circuit to be verified.

(7) With option XV (expansion vessel kit).

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

* On request, will be defined for the specific working point.