

Free cooling chillers ENRF series, scroll compressors R410A, coaxial/shell and tube evaporator, condenser with copper tubes and aluminium finned core and axial fans

SPC (Super Process Chiller)	Model	022	030	038	045	055	061	070	075	090	100	130	160	185	230	280	340	370	
NOMINAL COOLING CAPACITY (1)	kW	23.4	29.8	39	45	58	60	70	75	87	102	118	150	174	226	276	325	355	
NOMINAL COOLING CAPACITY (1)	Frig/h	20124	25665	33201	38848	49628	52021	59835	64285	75164	87527	101480	129000	149640	194360	237360	279500	305300	
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)	kW	6.8	8.4	10.4	12.3	16.1	16.1	18.2	21.4	25.0	28.0	33.7	43.3	51.4	64.8	85.2	95.4	112.0	
COP	kW/kW	3.42	3.54	3.70	3.68	3.59	3.77	3.82	3.49	3.50	3.63	3.50	3.47	3.38	3.49	3.24	3.41	3.17	
EER	kW/kW	2.77	2.97	2.70	2.79	2.89	3.03	3.15	2.96	2.84	3.01	2.84	2.83	2.85	2.96	2.85	3.04	2.87	
ESEER		4.6	4.7	4.7	4.9	4.9	4.6	4.5	4.4	4.3	4.5	4.2	4.4	4.3	4.3	4.1	4.3	4.1	
IPLV		5.2	5.3	5.4	5.5	5.6	5.1	5.0	4.9	4.7	5.0	4.7	4.8	4.7	4.7	4.6	4.8	4.6	
AIR TEMPERATURE 100% FREE COOLING (2)	°C	0.7	0.1	2.0	1.0	0.5	2.5	2.2	1.7	2.0	1.5	1.5	1.2	1.5	0.5	-1.2	-7.0	-8.2	
COMPRESSORS	nr.	1	1	1	1	1	2	2	2	2	2	4	4	4	4	4	4	4	
REFRIGERATING CIRCUITS	nr.	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	
PARTITION STEP	nr.	1	1	1	1	1	1/1	1/1	1/1	1/1	1/1	2/2	2/2	2/2	2/2	2/2	2/2	2/2	
HYDRAULIC SECTION																			
NOMINAL WATER FLOW	m3/h	4.0	5.1	6.6	7.8	9.9	10.4	12.0	12.9	15.0	17.5	20.3	25.8	29.9	38.9	47.5	55.9	61.1	
EVAPORATOR PRESSURE DROP (4)	kPa	49	47	56	58	60	33	33	26	42	58	66	78	88	53	60	68	77	
FREE COOLING PRESSURE DROP (5)	kPa	75	76	74	82	107	58	63	60	85	112	121	120	128	98	120	117	122	
AVAILABLE PRESSURE	P2	mca	20.0	18.3	20.8	19.7	16.5	24.0	23.5	23.8	21.2	18.2	21.1	20.7	19.5	26.9	23.8	22.8	21.3
MAXIMUM PUMP ABSORBED POWER		kW	1.28	1.28	2.20	2.20	2.20	3.46	3.46	3.46	3.46	3.46	6.12	6.12	6.12	10.25	10.25	10.25	10.25
MAXIMUM PUMP ABSORBED CURRENT		A	2.37	2.37	4.24	4.24	4.24	6.33	6.33	6.33	6.33	6.33	10.40	10.40	10.40	17.40	17.40	17.40	17.40
AVAILABLE PRESSURE	P5	mca	48	62	58	54	45	44	44	56	53	49	46	45	44	52	49	48	47
MAXIMUM PUMP ABSORBED POWER		kW	1.47	2.94	2.94	2.94	2.94	6.12	6.12	8.30	8.30	8.30	12.04	12.04	12.04	19.94	19.94	19.94	19.94
MAXIMUM PUMP ABSORBED CURRENT		A	2.86	5.83	5.83	5.83	5.83	10.40	10.40	14.10	14.10	14.10	20.20	20.20	20.20	32.70	32.70	32.70	32.70
HYDRAULIC CONNECTIONS	BSP/DN	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"	DN65	DN65	DN65	DN125	DN125	DN125	DN150	
TANK VOLUME	dm3	110	270	270	270	270	410	410	410	410	410	390	390	390	500	500	500	500	
FAN SECTION (AXIAL)																			
TOTAL AIR FLOW	m3/h	13800	13000	30000	30000	28000	36000	36000	36000	49500	54000	66000	72000	71000	84000	84000	84000	84000	
FANS	nr.	2	2	2	2	2	2	2	2	3	3	4	5	5	6	6	6	6	
FANS ABSORBED POWER	kW	1.62	1.62	3.88	3.88	3.88	3.88	3.88	3.88	5.82	5.82	7.76	9.70	9.70	11.64	11.64	11.64	11.64	
FANS ABSORBED CURRENT	A	3.08	3.08	7.80	7.80	7.80	7.80	7.80	7.80	11.70	11.70	15.60	19.50	19.50	23.40	23.40	23.40	23.40	
TOTAL ELECTRIC DATA IP54 protection rating, chillers suitable for outdoor installation																			
NOMINAL ABSORBED POWER (6)	kW	9.7	11.3	16.5	18.4	22.2	23.4	25.6	28.7	34.3	37.3	47.6	59.1	67.3	86.7	107.1	117.3	133.9	
MAXIMUM ABSORBED CURRENT(F.L.A.) (6)	A	21.4	24.7	36.5	42.0	48.5	52.6	57.8	63.1	78.0	84.5	102.9	127.8	149.9	186.6	219.2	248.6	278.0	
MAXIMUM PEAK CURRENT (L.R.A.) (6)	A	102.4	120.4	144.2	178.2	229.2	151.4	173.4	178.6	222.0	273.0	201.7	243.3	293.9	375.1	446.6	499.3	528.7	
ELECTRIC FEED	V/Ph/Hz 400/3/50																		
NOISE DATA																			
SOUND PRESSURE (3) (6)	dB(A)	55.3	55.3	59.0	59.1	59.9	59.1	59.2	59.3	60.8	61.4	61.8	62.9	63.0	64.8	66.1	66.1	66.1	
DIMENSIONS AND WEIGHT																			
LENGTH	mm	1610	1610	2220	2220	2220	3355	3355	3355	3355	4355	4355	5350	5350	6350	6350	6350	6350	
WIDTH	mm	860	860	1100	1100	1100	1105	1105	1105	1105	1105	1105	1105	1105	1305	1305	1305	1305	
HEIGHT	mm	1540	1540	2100	2100	2100	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	
WEIGHT EMPTY	kg	460	600	760	800	820	1455	1460	1470	1510	2100	2200	2420	2470	2795	2995	3245	3345	
WEIGHT OPERATIVE	kg	600	900	1060	1100	1120	1925	1930	1940	1980	2800	2900	3120	3170	3645	3845	4095	4195	

The manufacturer reserves the right to modify specifications without notice.

Updated on 02/03/2015

Notes:

- (1) 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) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface
- (4) Evaporator + valve + piping pressure drop (no free cooling)
- (5) Free cooling coil + evaporator + valve + piping pressure drop
- (6) Data referred to standard configuration (with pump P2)