

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

Process Cooling Application	Model	022	030	038	045	055	061	070	075	090	100	130	160	185	200	230	280	340	370	
NOMINAL COOLING CAPACITY (1)	kW	23,4	29,8	39	45	58	60	70	75	87	102	118	150	174	200	226	276	325	355	
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	57,6	64,8	85,2	95,4	112,0	
EER		2,77	2,97	2,72	2,78	2,90	3,01	3,17	2,97	2,82	3,02	2,84	2,83	2,85	2,97	2,96	2,85	3,04	2,87	
SEPR (HT) (8)		6,15	6,08	6,42	6,26	6,31	6,85	6,80	6,50	6,48	6,46	6,29	6,21	6,30	6,13	6,09	5,85	5,17	5,06	
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	0,8	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	4	
REFRIGERATING CIRCUITS	nr.	1	1	1	1	1	1	1	1	1	1	2	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	2/2	
HYDRAULIC SECTION		Self-cleaning coaxial evaporator										Shell and tube evaporator								
NOMINAL WATER FLOW	m3/h	4,0	5,1	6,7	7,7	10,0	10,3	12,0	12,9	15,0	17,5	20,3	25,8	29,9	34,4	38,9	47,5	55,9	61,1	
WATER FLOW RANGE	m3/h	4÷8	4÷8	6÷12	6÷12	6÷12	8,6÷19	10÷22	10÷22	10÷22	11,5÷23	14÷27	17,6÷31	26÷35	26÷46	26÷46	31÷58	38÷72	42÷80	
EVAPORATOR PRESSURE DROP (4)	kPa	49	47	56	58	60	33	33	26	42	58	66	78	88	64	53	60	68	77	
FREE COOLING PRESSURE DROP (5)	kPa	75	76	74	82	107	58	63	60	85	112	121	120	128	102	98	120	117	122	
AVAILABLE PRESSURE	kPa	196	179	204	193	162	235	230	233	208	178	207	203	191	261	264	233	223	209	
MAXIMUM PUMP ABSORBED POWER	P3	kW	1,28	1,28	2,20	2,20	2,20	3,46	3,46	3,46	3,46	6,12	6,12	6,12	10,25	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	kPa	473	606	571	534	444	434	428	545	516	485	447	443	430	506	506	478	473	461
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 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"	DN65	DN65	DN65	DN125	DN125	DN125	DN125	DN150	
TANK VOLUME	dm3	270	270	270	270	270	410	410	410	410	410	390	500	500	500	500	500	500	500	
EXPANSION VESSEL VOLUME (6)	liters	12							19											
FAN SECTION (AXIAL)		RV "fan speed cut-phase regulator" included																		
TOTAL AIR FLOW	m3/h	13800	13000	30000	30000	28000	36000	36000	36000	49500	54000	66000	72000	71000	80000	89000	89000	89000	89000	
FANS	nr.	2	2	2	2	2	2	2	2	3	3	4	5	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	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	19,50	23,40	23,40	23,40	23,40	
TOTAL ELECTRIC DATA		IP54 protection rating, chillers suitable for outdoor installation																		
NOMINAL ABSORBED POWER (7)	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	77,5	86,7	107,1	117,3	133,9	
MAXIMUM ABSORBED CURRENT (F.L.A.) (7)	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	169,8	186,6	219,2	248,6	278,0	
MAXIMUM PEAK CURRENT (L.R.A.) (7)	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	358,3	375,1	446,6	499,3	528,7	
ELECTRIC FEED	V/Ph/Hz	400/3/50																		
NOISE DATA																				
SOUND PRESSURE (3) (7)	dB(A)	57,3	57,3	59,0	59,1	59,9	59,1	59,2	59,3	60,8	61,4	61,8	62,9	63,0	63,7	64,8	66,1	66,1	66,1	
SOUND PRESSURE FOR LOW NOISE CONFIGURATION(3) (7)	dB(A)	57,1	57,1	58,8	58,8	59,1	58,8	58,8	58,9	60,4	60,6	61,5	62,5	62,5	62,8	63,6	64,2	64,2	64,2	
DIMENSIONS AND WEIGHT																				
LENGTH	mm	1610	1610	2220	2220	2220	3355	3355	3355	3355	4355	4355	5350	5350	6350	6350	6350	6350	6350	
WIDTH	mm	860	860	1100	1100	1100	1105	1105	1105	1105	1105	1105	1105	1105	1305*	1305*	1305*	1305*	1305*	
HEIGHT	mm	1540	1540	2100	2100	2100	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	2180	
WEIGHT EMPTY	kg	460	470	635	650	740	1120	1125	1150	1180	1480	1675	1910	2000	2465	2695	2820	2920	2980	
WEIGHT OPERATIVE	kg	745	755	930	950	1035	1590	1595	1620	1650	1970	2180	2515	2670	3130	3365	3510	3625	3700	

The manufacturer reserves the right to modify specifications without notice.

Updated on 10/01/2018

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) With option XV (expansion vessel kit)

- (7) Data referred to standard configuration WP (with pump P3)

- (8) SEPR: data comply with the European Regulation (EU) 2016/2281, referring to high temperature process chillers * for the configurations NT.NP, NT.WP and NT.PH the chiller width is 1105mm