



اطلالات فني | TECHNICAL DATA

PERFORMANCES		Model	663/F4**	683/F6	773/F6	793/F8	863/F8	873/F10	883/F10	893/F12
NOMINAL COOLING CAPACITY (1)	ECO.M2(3)	kW	242	286	362	490	531	615	680	768
TOTAL NOMINAL ABSORBED POWER (1)		kW	65.20	67.20	96.96	122.26	139.96	150.96	181.44	198.60
EER (1)		kW/kW	3.28	3.59	3.30	3.52	3.39	3.58	3.35	3.42
NOMINAL WATER FLOW		m3/h	41.54	49.25	62.31	84.26	91.38	105.82	116.90	132.13
AIR TEMPERATURE FOR 100% FREE COOLING CAPACITY		*C	-1.30	0.70	-1.22	-1.35	-2.20	-1.00	-2.00	-1.30
MECHANICAL MODE PRESSURE DROPS (4) (6) (7)		kPa	28	58	79	72	57	67	52	75
FREE COOLING MODE PRESSURE DROPS (5)		kPa	103	102	149	132	126	136	133	131
HYDRAULIC SECTION										
WATER FLOW RANGE (7)	P3 (2)	m3/h	30+80	30+80	44+88	54+108	64+129	75+149	83+166	79+159
MAXIMUM PUMP ABSORBED POWER (OPTION WP OR DP)		kW	10.2	10.2	16.2	16.2	24.9	24.9	24.9	24.9
MAXIMUM PUMP ABSORBED CURRENT (OPTION WP OR DP)	P5 (2)	A	17.4	17.4	26.6	26.6	42.2	42.2	42.2	42.2
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)		kW	19.9	19.9	19.9	31.9	39.1	39.1	39.1	NA
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)	P5 (2)	A	32.7	32.7	32.7	53.5	65.6	65.6	65.6	NA
HYDRAULIC CONNECTIONS (VICTAULIC)		DN	100	100	100	125	125	150	150	150
FAN SECTION (AXIAL)										
FANS	EC	nr.	4	6	6	8	8	10	10	12
CONDENSER COIL		nr.	4	6	6	8	8	10	10	12
MAXIMUM FANS ABSORBED POWER	EC	kW	8.44	12.66	12.66	16.88	16.88	21.10	21.70	26.04
MAXIMUM FANS ABSORBED CURRENT		A	14.08	21.12	21.12	28.16	28.16	35.20	35.80	42.96
TOTAL AIR FLOW	EC	m3/h	70984	106476	106476	141968	141968	177460	177460	212952
TOTAL ELECTRIC DATA										
MAXIMUM ABSORBED CURRENT (F.L.A) (7)	A	A	147.6	195.4	271.4	355.2	341.2	403.0	431.0	474.8
MAXIMUM PEAK CURRENT (L.R.A) (7)		A	436.8	543.7	666.7	929.6	904.6	1074.5	1234.5	1343.4
MAXIMUM PEAK CURRENT WITH SOFT START (L.R.A) (7)		A	369.2	461.5	569.7	792.4	769.6	914.3	1045.9	1138.8
NOISE DATA										
SOUND PRESSURE FOR STANDARD CONFIGURATION (7) (8)	dB(A)	dB(A)	63.5	64.9	64.9	65.3	68.1	69.5	68.5	69.0
SOUND PRESSURE FOR LOW NOISE CONFIGURTION (7) (8)		dB(A)	61.0	62.5	62.5	63.4	65.0	66.2	65.6	66.2
SOUND PRESSURE FOR SUPER LOW NOISE CONFIGURTION (7) (8)		dB(A)	59.3	60.8	60.8	61.4	63.7	65.0	64.2	64.7
DIMENSIONS AND WEIGHT										
LENGTH	mm	mm	2910	4600	4600	5900	5900	7200	7200	8500
WIDTH		mm	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT	mm	mm	2500	2500	2500	2500	2500	2500	2500	2500
WEIGHT EMPTY FOR STANDARD CONFIGURATION (4)		kg	3050	3200	4000	4300	4500	5250	5400	6300
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (4)	kg	3150	3330	4150	4470	4700	5500	5650	6580	

The manufacturer reserves the right to modify specifications without notice

Data referred to:

- 1) Data referred to Inlet/Outlet water temperature = +12/7 °C, ambient temperature = +35°C (2) Available pressure can be calculated from Hilema Online Selection Software
- (3) SEPR: data comply with the European Regulation (EU) 2016/2281, referring to high temperature process chillers in the configuration with brazed plate or shell and tube evaporator and without pump. Any added option that modify cooling capacity or absorbed power of the chiller will not be considered in the SEPR value
- (4) Pressure drops taken in account: evaporator, valves, piping
- (5) Pressure drops taken in account: evaporator, valves, piping, free-cooling coil
- (6) Data referred to standard chiller configuration as indicated in frigorific section, with different evaporator this data can change
- (7) Data referred to standard chiller configuration NP (chiller without pump) and considering EC fans
- (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.

**Model 663-693 is the only one equipped with brazed plate evaporators instead of shell and tube in order to obtain a compact design

***Model 983/F24 and 993/F24 are designed with 3 independent refrigerant circuits and 3 compressors each one with 50-75-100 partition steps



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PERFORMANCES		Model	963/F14	973/F14	983/F16	993/F16	9103/F18	9113/F18	973/F24***	983/F24***
NOMINAL COOLING CAPACITY (1)	ECO.M2(3)	kW	912	1029	1185	1306	1410	1509	1546	1730
TOTAL NOMINAL ABSORBED POWER (1)		kW	236.00	268.00	320.00	368.00	412.96	454.00	381.96	480.66
EER (1)		kW/kW	3.42	3.45	3.34	3.24	3.12	3.06	3.56	3.25
NOMINAL WATER FLOW		m3/h	158.88	177.03	203.74	224.70	242.51	259.52	285.85	297.63
AIR TEMPERATURE FOR 100% FREE COOLING CAPACITY		°C	-1.50	-2.80	-2.80	-4.00	-3.50	-4.40	-6.00	-6.80
MECHANICAL MODE PRESSURE DROPS (4) (6) (7)		kPa	81	78	87	84	97	110	90	112
FREE COOLING MODE PRESSURE DROPS (5)		kPa	139	148	158	165	176	199	143	172
HYDRAULIC SECTION										
WATER FLOW RANGE (7)		m3/h	102+203	117+233	147+295	150+300	150+300	150+300	155+320	160+325
MAXIMUM PUMP ABSORBED POWER (OPTION WP OR DP)	P3 (2)	kW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAXIMUM PUMP ABSORBED CURRENT (OPTION WP OR DP)		A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (2)	kW	NA	NA	NA	NA	NA	NA	NA	NA
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	NA	NA	NA	NA	NA	NA	NA	NA
HYDRAULIC CONNECTIONS (VICTAULIC)		DN	150	150	200	200	200	200	200	200
FAN SECTION (AXIAL)										
FANS		nr.	14	14	16	16	18	18	24	24
CONDENSER COIL		nr.	14	14	16	16	18	18	12	12
MAXIMUM FANS ABSORBED POWER	EC	kW	30.38	30.38	34.72	34.72	39.06	39.06	51.60	51.60
MAXIMUM FANS ABSORBED CURRENT		A	50.12	50.12	57.28	57.28	64.44	64.44	85.44	85.44
TOTAL AIR FLOW		m3/h	248444	248444	283936	283936	319428	319428	412608	412608
TOTAL ELECTRIC DATA										
MAXIMUM ABSORBED CURRENT (F.L.A) (7)		A	614.6	674.6	702.4	782.4	896.2	1024.2	1023.6	1053.6
MAXIMUM PEAK CURRENT (L.R.A) (7)		A	1796.3	1914.3	2320.2	2558.2	3127.1	3582.1	2243.8	2655.8
MAXIMUM PEAK CURRENT WITH SOFT START (L.R.A) (7)		A	1523.5	1625.9	1949.6	2152.4	2623.1	3008.1	1955.4	2285.2
NOISE DATA										
SOUND PRESSURE FOR STANDARD CONFIGURATION (7) (8)		dB(A)	69.9	70.1	70.9	71.6	72.3	72.8	71.3	72.1
SOUND PRESSURE FOR LOW NOISE CONFIGURATION (7) (8)		dB(A)	67.0	67.1	67.8	68.3	69.0	69.3	67.7	68.3
SOUND PRESSURE FOR SUPER LOW NOISE CONFIGURATION (7) (8)		dB(A)	65.6	65.7	66.5	67.1	67.8	68.3	66.7	67.4
DIMENSIONS AND WEIGHT										
LENGTH		mm	9800	9800	11100	11100	12790	12790	12880	12880
WIDTH		mm	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT		mm	2500	2500	2500	2500	2500	2500	2500	2500
WEIGHT EMPTY FOR STANDARD CONFIGURATION (7)		kg	7100	7250	8000	9200	9400	10100	11300	11600
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (7)		kg	7400	7600	8350	9600	9800	10500	11800	12100

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Data referred to:

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- (3) SEPR: data comply with the European Regulation (EU) 2016/2281, referring to high temperature process chillers in the configuration with brazed plate or shell and tube evaporator and without pump. Any added option that modify cooling capacity or absorbed power of the chiller will not be considered in the SEPR value
- (4) Pressure drops taken in account: evaporator, valves, piping
- (5) Pressure drops taken in account: evaporator, valves, piping, free-cooling coil
- (6) Data referred to standard chiller configuration as indicated in frigorific section, with different evaporator this data can change
- (7) Data referred to standard chiller configuration NP (chiller without pump) and considering EC fans
- (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.

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***Model 983/F24 and 993/F24 are designed with 3 independent refrigerant circuits and 3 compressors each one with 50-75-100 partition steps



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PERFORMANCES		Model	663/F4**	683/F6	773/F6	793/F8	863/F8	873/F10	883/F10	893/F12
NOMINAL COOLING CAPACITY (1)	ECO.M1(3)	kW	242	-	365	489	536	613	665	767
TOTAL NOMINAL ABSORBED POWER (1)		kW	64.54	-	96.42	127.76	145.18	157.12	184.78	200.92
EER (1)		kW/kW	3.31	-	3.34	3.38	3.31	3.44	3.22	3.38
NOMINAL WATER FLOW		m3/h	41.54	-	62.70	84.07	92.18	105.43	114.33	131.93
AIR TEMPERATURE FOR 100% FREE COOLING CAPACITY		°C	-1.26	-	-1.26	-1.35	-2.26	-1.39	-2.20	-1.80
MECHANICAL MODE PRESSURE DROPS (4) (6) (7)	NE.M1(3)	kPa	28	-	80	72	58	67	51	74
FREE COOLING MODE PRESSURE DROPS (5)		kPa	92	-	140	133	127	134	127	129
NOMINAL COOLING CAPACITY (9)		kW	284	-	437	582	610	719	771	906
TOTAL NOMINAL ABSORBED POWER (9)		kW	64.8	-	99.1	129.6	141.8	157.7	182.0	203.8
EER (9)		kW/kW	3.88	-	3.91	3.97	3.84	4.02	3.78	3.94
NOMINAL WATER FLOW (9)	NE.M1(3)	m3/h	34.90	-	53.70	71.50	74.90	88.30	94.70	111.30
AIR TEMPERATURE FOR 100% FREE COOLING CAPACITY		°C	5.00	-	4.83	4.80	4.23	5.00	4.15	4.39
MECHANICAL MODE PRESSURE DROPS (4) (6) (7)		kPa	21	-	77	71	54	64	50	54
FREE COOLING MODE PRESSURE DROPS (5)		kPa	91	-	146	139	127	135	130	119
HYDRAULIC SECTION										
WATER FLOW RANGE (7)	P3 (2)	m3/h	30+80	-	43+86	52+103	52+103	72+144	79+158	82+163
MAXIMUM PUMP ABSORBED POWER (OPTION WP OR DP)		kW	10.2	-	16.2	16.2	24.9	24.9	24.9	24.9
MAXIMUM PUMP ABSORBED CURRENT (OPTION WP OR DP)		A	17.4	-	26.6	26.6	42.2	42.2	42.2	42.2
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (2)	kW	19.9	-	19.9	31.9	39.1	39.1	39.1	NA
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	32.7	-	32.7	53.5	65.6	65.6	65.6	NA
HYDRAULIC CONNECTIONS (VICTAULIC)		DN	100	-	100	125	125	150	150	150
FAN SECTION (AXIAL)										
FANS	EC	nr.	4	-	6	8	8	10	10	12
CONDENSER COIL		nr.	4	-	6	8	8	10	10	12
MAXIMUM FANS ABSORBED POWER		kW	8.44	-	12.66	16.88	16.88	21.10	21.70	26.04
MAXIMUM FANS ABSORBED CURRENT		A	14.08	-	21.12	28.16	28.16	35.20	35.80	42.96
TOTAL AIR FLOW		m3/h	70984	-	106476	141968	141968	177460	177460	212952
TOTAL ELECTRIC DATA										
MAXIMUM ABSORBED CURRENT (F.L.A) (7)		A	231.6	-	347.4	391.2	483.2	531.0	559.0	666.8
MAXIMUM PEAK CURRENT (L.R.A) (7)		A	666.8	-	925.7	1150.6	1258.6	1384.5	1493.5	1638.4
MAXIMUM PEAK CURRENT WITH SOFT START (L.R.A) (7)		A	565.2	-	788.5	973.2	1070.0	1179.9	1270.7	1402.2
NOISE DATA										
SOUND PRESSURE FOR STANDARD CONFIGURATION (7) (8)		dB(A)	65.0	-	64.8	69.3	68.3	68.8	69.6	69.9
SOUND PRESSURE FOR LOW NOISE CONFIGURTION (7) (8)		dB(A)	61.9	-	62.5	65.8	65.1	65.8	66.3	66.8
SOUND PRESSURE FOR SUPER LOW NOISE CONFIGURTION (7) (8)		dB(A)	60.6	-	60.7	64.8	63.8	64.4	65.1	65.5
DIMENSIONS AND WEIGHT										
LENGTH		mm	2910	-	4800	5900	5900	7200	7200	8500
WIDTH		mm	2210	-	2210	2210	2210	2210	2210	2210
HEIGHT		mm	2500	-	2500	2500	2500	2500	2500	2500
WEIGHT EMPTY FOR STANDARD CONFIGURATION (4)		kg	3050	-	4000	4300	4500	5250	5400	6300
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (4)		kg	3150	-	4150	4470	4700	5500	5650	6580

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Data referred to:

- (1) Data referred to Inlet/Outlet water temperature = +12/7 °C, ambient temperature = +35°C
- (2) Available pressure can be calculated from Hilema Online Selection Software
- (3) SEPR: data comply with the European Regulation (EU) 2016/2281, referring to high temperature process chillers in the configuration with brazed plate or shell and tube evaporator and without pump. Any added option that modify cooling capacity or absorbed power of the chiller will not be considered in the SEPR value (4) Pressure drops taken in account: evaporator, valves, piping, free-cooling coil
- (5) Pressure drops taken in account: evaporator, valves, piping, free-cooling coil
- (6) Data referred to standard chiller configuration as indicated in frigorific section, with different evaporator this data can change
- (7) Data referred to standard chiller configuration NP (chiller without pump) and considering EC fans
- (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.
- (9) Data referred to Inlet/Outlet water temperature = +22/15 °C, ambient temperature = +35°C

**Model 663 is the only one equipped with brazed plate evaporators instead of shell and tube in order to obtain a compact design

***Model 963/F24 and 993/F24 are designed with 3 independent refrigerant circuits and 3 compressors each one with 50-75-100 partition steps



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PERFORMANCES		Model	963/F14	973/F14	983/F16	993/F16	9103/F18	9113/F18	973/F24***	983/F24***
NOMINAL COOLING CAPACITY (1)	ECO.M1(3),	kW	906	1011	1165	1301	1410	-	1546	1708
TOTAL NOMINAL ABSORBED POWER (1)		kW	235.14	275.34	313.32	364.14	416.48	-	396.33	466.05
EER (1)		kW/kW	3.41	3.31	3.35	3.26	3.10	-	3.45	3.30
NOMINAL WATER FLOW		m3/h	155.87	173.87	200.37	223.71	242.51	-	285.85	293.76
AIR TEMPERATURE FOR 100% FREE COOLING CAPACITY		°C	-1.95	-3.10	-3.20	-4.52	-3.50	-	-4.90	-6.60
MECHANICAL MODE PRESSURE DROPS (4) (6) (7)	NEM1(3)	kPa	80	75	85	83	97	-	90	109
FREE COOLING MODE PRESSURE DROPS (5)		kPa	137	141	153	163	176	-	141	169
NOMINAL COOLING CAPACITY (9)		kW	1053	1175	1362	1518	1663	-	1781	1989
TOTAL NOMINAL ABSORBED POWER (9)		kW	233.0	280.0	314.0	372.0	428.0	-	401.0	471.0
EER (9)		kW/kW	4.00	3.79	3.91	3.73	3.56	-	3.94	3.81
NOMINAL WATER FLOW (9)	NEM1(3)	m3/h	129.40	144.40	167.30	186.50	204.30	-	218.80	244.40
AIR TEMPERATURE FOR 100% FREE COOLING CAPACITY		°C	4.39	3.05	2.87	1.26	2.30	-	0.90	0.00
MECHANICAL MODE PRESSURE DROPS (4) (6) (7)		kPa	71	53	77	76	90	-	63	77
FREE COOLING MODE PRESSURE DROPS (5)		kPa	143	129	156	170	183	-	118	141
HYDRAULIC SECTION										
WATER FLOW RANGE (7)	P3 (2)	m3/h	108+195	108+195	123+247	144+287	154+307	-	185+370	185+370
MAXIMUM PUMP ABSORBED POWER (OPTION WP OR DP)		P3 (2)	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
MAXIMUM PUMP ABSORBED CURRENT (OPTION WP OR DP)		P3 (2)	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (2)	P5 (2)	NA	NA	NA	NA	NA	-	NA	NA
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		P5 (2)	NA	NA	NA	NA	NA	-	NA	NA
HYDRAULIC CONNECTIONS (VICTAULIC)		DN	150	150	200	200	200	-	200	200
FAN SECTION (AXIAL)										
FANS	EC	nr.	14	14	16	16	18	-	24	24
CONDENSER COIL		nr.	14	14	16	16	18	-	12	12
MAXIMUM FANS ABSORBED POWER		kW	30.38	30.38	34.72	34.72	39.06	-	51.60	51.60
MAXIMUM FANS ABSORBED CURRENT		A	50.12	50.12	57.28	57.28	64.44	-	85.44	85.44
TOTAL AIR FLOW		m3/h	248444	248444	283936	283936	319428	-	412608	412608
TOTAL ELECTRIC DATA										
MAXIMUM ABSORBED CURRENT (F.L.A) (7)		A	794.6	894.6	962.4	962.4	1202.2	-	1353.6	1443.6
MAXIMUM PEAK CURRENT (L.R.A) (7)		A	2374.3	2641.3	3171.2	3171.2	3705.1	-	3080.8	3636.8
MAXIMUM PEAK CURRENT WITH SOFT START (L.R.A) (7)		A	2003.7	2235.5	2667.2	2667.2	3131.1	-	2675.0	3132.8
NOISE DATA										
SOUND PRESSURE FOR STANDARD CONFIGURATION (7) (8)		dB(A)	70.8	71.5	72.2	72.2	72.8	-	72.8	73.6
SOUND PRESSURE FOR LOW NOISE CONFIGURTION (7) (8)		dB(A)	67.5	68.0	68.7	68.7	69.3	-	68.9	69.4
SOUND PRESSURE FOR SUPER LOW NOISE CONFIGURTION (7) (8)		dB(A)	66.3	67.0	67.7	67.7	68.3	-	68.2	68.8
DIMENSIONS AND WEIGHT										
LENGTH		mm	9800	9800	11100	11100	12790	-	12880	12880
WIDTH		mm	2210	2210	2210	2210	2210	-	2210	2210
HEIGHT		mm	2500	2500	2500	2500	2500	-	2500	2500
WEIGHT EMPTY FOR STANDARD CONFIGURATION (7)		kg	7100	7250	8000	9200	9400	-	11300	11600
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (7)		kg	7400	7600	8350	9600	9800	-	11800	12100

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Data referred to:

- (1) Data referred to Inlet/Outlet water temperature = +12/7 °C, ambient temperature = +35°C
- (2) Available pressure can be calculated from Hilema Online Selection Software
- (3) SEPR: data comply with the European Regulation (EU) 2016/2281, referring to high temperature process chillers in the configuration with brazed plate or shell and tube evaporator and without pump. Any added option that modify cooling capacity or absorbed power of the chiller will not be considered in the SEPR value (4) Pressure drops taken in account: evaporator, valves, piping
- (5) Pressure drops taken in account: evaporator, valves, piping, free-cooling coil
- (6) Data referred to standard chiller configuration as indicated in frigorific section, with different evaporator this data can change
- (7) Data referred to standard chiller configuration NP (chiller without pump) and considering EC fans
- (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.
- (9) Data referred to Inlet/Outlet water temperature = +22/15 °C, ambient temperature = +35°C

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***Model 963/F24 and 993/F24 are designed with 3 independent refrigerant circuits and 3 compressors each one with 50-75-100 partition steps