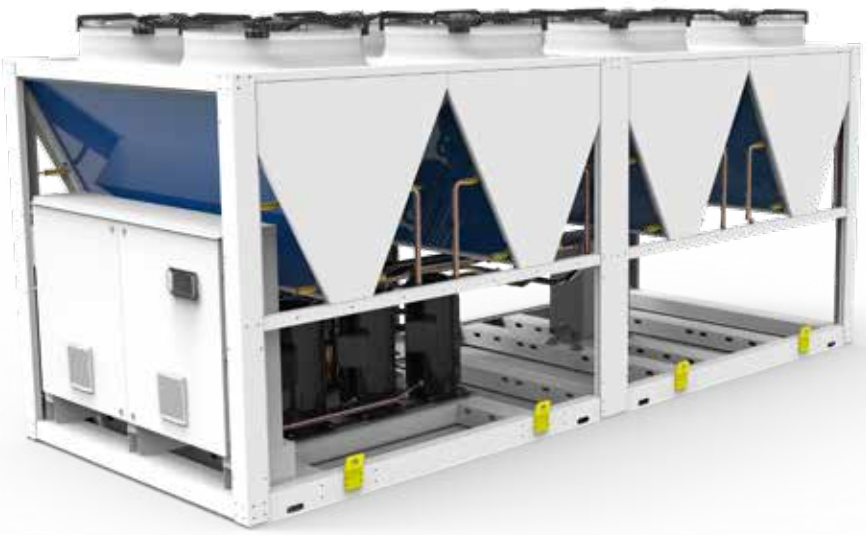
ERAE N MC HE Kc/Kr

AIR COOLED CHILLERS FOR OUTDOOR INSTALLATION
WITH SCROLL COMPRESSORS AND AXIAL FANS

Cooling capacity from 83 to 636 kW



Packaged air cooled chillers of ERAE N MC HE Kc/Kr series are suitable for outdoor installation and can be used to cool pure fluid solutions for air conditioning or in industrial applications.
Multiscroll technology allows to reach great efficiency improvements at part load, if compared to the other traditional systems for cooling capacity control.

All the units are totally factory assembled and tested, following specific quality procedures. Besides they are totally hydraulic, cooling and electrical connected permitting a quick installation once on site. Before the test the cooling circuits of each unit are subjected to a pressure test and then charged with Refrigerant R410A or R454B and non-freezing oil.

So, once on site, the units must be only positioned and electrically and hydraulically connected.

Units CE certified in compliance with the European regulation 2016/2281 ERP 2021.

MAIN COMPONENTS

STRUCTURE
Realized with frame made up of hot galvanized steel sheet and RAL 7035 painted, suitable to resist to atmospheric agents. Compressors and main components are easily accessible and suitably placed in the technical room.

COMPRESSORS
With R410a refrigerant, operating on one single circuit or on two independent circuits in either tandem or trio version. The compressors are installed on rubber isolation dampers, provided with direct-start motors cooled by suction gas and fitted with both overload protection and crankcase heaters. They are charged with polyester oil and the terminal board is IP54. The on-board microprocessor automatically controls the individual compressors to regulate the cooling capacity.

EVAPORATOR
Of "single" or "dual" circuit type, with high thickness close cell insulation and UV ray-proof. The max operating pressure limits are 6 bar for water side and 45 bar for refrigerant side. The evaporator is also equipped with safety water flow switch switching off the unit in case of low water flow through the evaporator.

COILS
Totally made up of aluminum alloy to grant a perfect and continuous contact among tubes and fins optimizing the thermal exchange and reducing dimensions.
The high passivation degree of the used alloy, besides the peculiar assembling way, avoids the possibility to have galvanic corrosion phenomena. On demand it is also possible to provide the units installed in particularly aggressive environments with surface treatments against exchangers environmental corrosion.

FANS
With external rotor directly coupled to a three-phase electronically commutated motor (EC) they have the possibility of a continuous regulation of the speed by means of a 0-10V signal completely managed by the microprocessor. Aluminum blades with wings profile are suitably designed to avoid any turbulence in the air detachment zone, granting in this way the max efficiency with the minimum noise level. The fan is equipped with galvanized steel protection grid painted after the construction. Thanks to a more accurate adjustment of air flow, they allow operation of the unit with external temperature down to -20 °C.

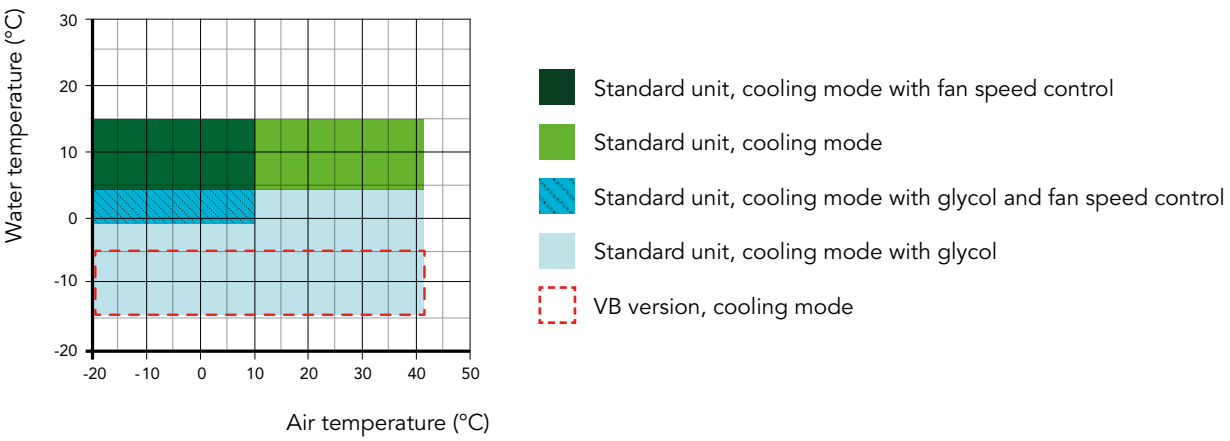
FANS WITH INVERTER (SIZES 3102÷6602)
With 6-poles electrical motor with external rotor directly coupled to the impeller and driven by a V/F inverter system which controls the condensation temperature. Aluminum blades with wings profile are suitably designed to avoid any turbulence in the air detachment zone, granting in this way the max efficiency with the minimum noise level. The fan is equipped with galvanized steel protection grid painted after the construction. The fan motors are of totally closed type and have got a protection factor IP54 and protection winding-flooded thermostat.

COOLING CIRCUIT
Each provided with a shut-off valve for refrigerant charge, antifreeze sensor, shut-off valves on liquid lines, sight glass, dehydrating filter, high-pressure safety device on high pressure refrigerant side and electronic thermostatic expansion valve, as well as high and low pressure switches and gauges.

ELECTRICAL BOARD
In compliance with CE Norms, contained in a suitable section protected by internal safety panel, provided with a lock-door main switch. Inside all the control and protection components are suitably placed, together with terminal board and auxiliaries. Microprocessor and relevant display are also placed inside the electrical cabinet.

MICROPROCESSOR
For unit management installed inside the electrical cabinet, with double evaporator in/out control of the chilled water temperature, as well as control of working parameters and equalization of compressors working hours, failures auto-detection system, alarm log, start and set point timeslot programming, possibility of remote management and supervision by enabling standard communication protocols management.

OPERATING RANGE



ACCESSORIES

ERAE N MC HE Kc		8010	10010	13010	15010	16510	17010	21020	24020	27020
Amperometer	A	o	o	o	o	o	o	o	o	o
Electrical power supply different than standard	AE	o	o	o	o	o	□	□	□	□
Soundproofed compressors cabinet with higher thickness material	CFU	o	o	o	o	o	o	o	o	o
Compressors inrush counter	CS	o	o	o	o	o	o	o	o	o
Axial fans with electronic commutated motor	EC	•	•	•	•	•	o	•	•	•
Condensing coil protection grid	GP	o	o	o	o	o	o	o	o	o
Anti-intrusion grid	GP1	o	o	o	o	o	o	o	o	o
Victaulic insulation on pump side	I1	o	o	o	o	o	--	--	--	--
Victaulic insulation buffer tank side	I2	o	o	o	o	o	--	--	--	--
RS 485 Serial interface	IH	o	o	o	o	o	o	o	o	o
LON Protocol serial interface	IH-LON	o	o	o	o	o	o	o	o	o
Seawood packing	IM	o	o	o	o	o	o	o	o	o
TCP/IP Protocol serial interface	IWG	o	o	o	o	o	o	o	o	o
Phase monitor	MF	o	o	o	o	o	o	o	o	o
Buffer tank module	MV	o	o	o	o	o	o	o	o	o
Pump group	P1	o	o	o	o	o	o	o	o	o
Pump + tank	P1+MV	o	o	o	o	o	o	o	o	o
Higher available pressure pump group	P1H	o	o	o	o	o	o	o	o	o
Higher available pressure pump group + tank	P1H+MV	o	o	o	o	o	o	o	o	o
Double pump group	P2	o	o	o	o	o	o	o	o	o
Double pump group + tank	P2+MV	o	o	o	o	o	o	o	o	o
Higher available pressure double pump group	P2H	o	o	o	o	o	o	o	o	o
Higher available pressure double pump group + tank	P2H+MV	o	o	o	o	o	o	o	o	o
Rubber-type vibration dampers	PA	o	o	o	o	o	o	o	o	o
Anti-corrosive protection of the condensing coils	PCP	o	o	o	o	o	o	o	o	o
Spring-type vibration dampers	PM	o	o	o	o	o	o	o	o	o
Remote display	PQ	o	o	o	o	o	o	o	o	o
In-line twin pump group (only one working)	PT	o	o	o	o	o	o	o	o	o
In-line twin pump group (only one working) + tank	PT+MV	o	o	o	o	o	o	o	o	o
Anti-freeze heater on evaporator	RA	o	o	o	o	o	o	o	o	o
Shut-off valve on compressors discharge side	RD	o	o	o	o	o	o	o	o	o
Power factor correction system cosfi ≥0,9	RF	o	o	o	o	o	o	o	o	o
Shut-off valve on compressors suction side	RH	o	o	o	o	o	o	o	o	o
Compressor overload relays	RL	o	o	o	o	o	o	o	o	o
Partial heat recovery	RP	o	o	o	o	o	o	o	o	o
Total heat recovery	RT	o	o	o	o	o	o	o	o	o
Electronic thermostatic valve	TE	•	•	•	•	•	•	•	•	•
Voltmeter	V	o	o	o	o	o	o	o	o	o
Brine Version	VB	o	o	o	o	o	o	o	o	o
Solenoid valve	VS	o	o	o	o	o	o	o	o	o

• Standard, o Optional, -- Not available

ERAE N MC HE Kc		31020	35020	40020	44020	51020	56020	63020	66020
Amperometer	A	o	o	o	o	o	o	o	o
Electrical power supply different than standard	AE	□	□	□	□	□	□	□	□
Soundproofed compressors cabinet with higher thickness material	CFU	o	o	o	o	o	o	o	o
Compressors inrush counter	CS	o	o	o	o	o	o	o	o
Axial fans with electronic commutated motor	EC	o	o	o	o	o	o	o	o
Condensing coil protection grid	GP	o	o	o	o	o	o	o	o
Anti-intrusion grid	GP1	o	o	o	o	o	o	o	o
Victaulic insulation on pump side	I1	--	--	--	--	--	--	--	--
Victaulic insulation buffer tank side	I2	--	--	--	--	--	--	--	--
RS 485 Serial interface	IH	o	o	o	o	o	o	o	o
LON Protocol serial interface	IH-LON	o	o	o	o	o	o	o	o
Seawood packing	IM	o	o	o	o	o	o	o	o
TCP/IP Protocol serial interface	IWG	o	o	o	o	o	o	o	o
Phase monitor	MF	o	o	o	o	o	o	o	o
Buffer tank module	MV	o	o	o	o	o	o	o	o
Pump group	P1	o	o	o	o	o	o	o	o
Pump + tank	P1+MV	o	o	o	o	o	o	o	o
Higher available pressure pump group	P1H	o	o	o	o	o	o	o	o
Higher available pressure pump group + tank	P1H+MV	o	o	o	o	o	o	o	o
Double pump group	P2	o	o	o	o	o	o	o	o
Double pump group + tank	P2+MV	o	o	o	o	o	o	o	o
Higher available pressure double pump group	P2H	o	o	o	o	o	o	o	o
Higher available pressure double pump group + tank	P2H+MV	o	o	o	o	o	o	o	o
Rubber-type vibration dampers	PA	o	o	o	o	o	o	o	o
Anti-corrosive protection of the condensing coils	PCP	o	o	o	o	o	o	o	o
Spring-type vibration dampers	PM	o	o	o	o	o	o	o	o
Remote display	PQ	o	o	o	o	o	o	o	o
In-line twin pump group (only one working)	PT	o	o	o	o	o	o	o	o
In-line twin pump group (only one working) + tank	PT+MV	o	o	o	o	o	o	o	o
Anti-freeze heater on evaporator	RA	o	o	o	o	o	o	o	o
Shut-off valve on compressors discharge side	RD	o	o	o	o	o	o	o	o
Power factor correction system cosfi ≥0,9	RF	o	o	o	o	o	o	o	o
Shut-off valve on compressors suction side	RH	o	o	o	o	o	o	o	o
Compressor overload relays	RL	o	o	o	o	o	o	o	o
Partial heat recovery	RP	o	o	o	o	o	o	o	o
Total heat recovery	RT	o	o	o	o	o	o	o	o
Electronic thermostatic valve	TE	•	•	•	•	•	•	•	•
Voltmeter	V	o	o	o	o	o	o	o	o
Brine Version	VB	o	o	o	o	o	o	o	o
Solenoid valve	VS	o	o	o	o	o	o	o	o

• Standard, o Optional, -- Not available

ERAE N MC HE Kr		8010	10010	13010	15010	16510	17010	21020	24020	27020
Amperometer	A	o	o	o	o	o	o	o	o	o
Electrical power supply different than standard	AE	o	o	o	o	o	□	□	□	□
Soundproofed compressors cabinet with higher thickness material	CFU	o	o	o	o	o	o	o	o	o
Compressors inrush counter	CS	o	o	o	o	o	o	o	o	o
Refrigerant leak detector	DR	o	o	o	o	o	o	o	o	o
Axial fans with electronic commutated motor	EC	•	•	•	•	•	o	•	•	•
Condensing coil protection grid	GP	o	o	o	o	o	o	o	o	o
Anti-intrusion grid	GP1	o	o	o	o	o	o	o	o	o
Victaulic insulation on pump side	I1	o	o	o	o	o	--	--	--	--
Victaulic insulation buffer tank side	I2	o	o	o	o	o	--	--	--	--
RS 485 Serial interface	IH	o	o	o	o	o	o	o	o	o
LON Protocol serial interface	IH-LON	o	o	o	o	o	o	o	o	o
Seawood packing	IM	o	o	o	o	o	o	o	o	o
TCP/IP Protocol serial interface	IWG	o	o	o	o	o	o	o	o	o
Phase monitor	MF	o	o	o	o	o	o	o	o	o
Buffer tank module	MV	o	o	o	o	o	o	o	o	o
Pump group	P1	o	o	o	o	o	o	o	o	o
Pump + tank	P1+MV	o	o	o	o	o	o	o	o	o
Higher available pressure pump group	P1H	o	o	o	o	o	o	o	o	o
Higher available pressure pump group + tank	P1H+MV	o	o	o	o	o	o	o	o	o
Double pump group	P2	o	o	o	o	o	o	o	o	o
Double pump group + tank	P2+MV	o	o	o	o	o	o	o	o	o
Higher available pressure double pump group	P2H	o	o	o	o	o	o	o	o	o
Higher available pressure double pump group + tank	P2H+MV	o	o	o	o	o	o	o	o	o
Rubber-type vibration dampers	PA	o	o	o	o	o	o	o	o	o
Anti-corrosive protection of the condensing coils	PCP	o	o	o	o	o	o	o	o	o
Spring-type vibration dampers	PM	o	o	o	o	o	o	o	o	o
Remote display	PQ	o	o	o	o	o	o	o	o	o
In-line twin pump group (only one working)	PT	o	o	o	o	o	o	o	o	o
In-line twin pump group (only one working) + tank	PT+MV	o	o	o	o	o	o	o	o	o
Anti-freeze heater on evaporator	RA	o	o	o	o	o	o	o	o	o
Shut-off valve on compressors discharge side	RD	o	o	o	o	o	o	o	o	o
Power factor correction system cosfi ≥0,9	RF	o	o	o	o	o	o	o	o	o
Shut-off valve on compressors suction side	RH	o	o	o	o	o	o	o	o	o
Compressor overload relays	RL	o	o	o	o	o	o	o	o	o
Partial heat recovery	RP	o	o	o	o	o	o	o	o	o
Total heat recovery	RT	o	o	o	o	o	o	o	o	o
Electronic thermostatic valve	TE	•	•	•	•	•	•	•	•	•
Voltmeter	V	o	o	o	o	o	o	o	o	o
Brine Version	VB	o	o	o	o	o	o	o	o	o
Solenoid valve	VS	o	o	o	o	o	o	o	o	o

• Standard, o Optional, -- Not available

ERAE N MC HE Kr		31020	35020	40020	44020	51020	56020	63020	66020
Amperometer	A	o	o	o	o	o	o	o	o
Electrical power supply different than standard	AE	□	□	□	□	□	□	□	□
Soundproofed compressors cabinet with higher thickness material	CFU	o	o	o	o	o	o	o	o
Compressors inrush counter	CS	o	o	o	o	o	o	o	o
Refrigerant leak detector	DR	o	o	o	o	o	o	o	o
Axial fans with electronic commutated motor	EC	o	o	o	o	o	o	o	o
Condensing coil protection grid	GP	o	o	o	o	o	o	o	o
Anti-intrusion grid	GP1	o	o	o	o	o	o	o	o
Victaulic insulation on pump side	I1	--	--	--	--	--	--	--	--
Victaulic insulation buffer tank side	I2	--	--	--	--	--	--	--	--
RS 485 Serial interface	IH	o	o	o	o	o	o	o	o
LON Protocol serial interface	IH-LON	o	o	o	o	o	o	o	o
Seawood packing	IM	o	o	o	o	o	o	o	o
TCP/IP Protocol serial interface	IWG	o	o	o	o	o	o	o	o
Phase monitor	MF	o	o	o	o	o	o	o	o
Buffer tank module	MV	o	o	o	o	o	o	o	o
Pump group	P1	o	o	o	o	o	o	o	o
Pump + tank	P1+MV	o	o	o	o	o	o	o	o
Higher available pressure pump group	P1H	o	o	o	o	o	o	o	o
Higher available pressure pump group + tank	P1H+MV	o	o	o	o	o	o	o	o
Double pump group	P2	o	o	o	o	o	o	o	o
Double pump group + tank	P2+MV	o	o	o	o	o	o	o	o
Higher available pressure double pump group	P2H	o	o	o	o	o	o	o	o
Higher available pressure double pump group + tank	P2H+MV	o	o	o	o	o	o	o	o
Rubber-type vibration dampers	PA	o	o	o	o	o	o	o	o
Anti-corrosive protection of the condensing coils	PCP	o	o	o	o	o	o	o	o
Spring-type vibration dampers	PM	o	o	o	o	o	o	o	o
Remote display	PQ	o	o	o	o	o	o	o	o
In-line twin pump group (only one working)	PT	o	o	o	o	o	o	o	o
In-line twin pump group (only one working) + tank	PT+MV	o	o	o	o	o	o	o	o
Anti-freeze heater on evaporator	RA	o	o	o	o	o	o	o	o
Shut-off valve on compressors discharge side	RD	o	o	o	o	o	o	o	o
Power factor correction system cosfi ≥0,9	RF	o	o	o	o	o	o	o	o
Shut-off valve on compressors suction side	RH	o	o	o	o	o	o	o	o
Compressor overload relays	RL	o	o	o	o	o	o	o	o
Partial heat recovery	RP	o	o	o	o	o	o	o	o
Total heat recovery	RT	o	o	o	o	o	o	o	o
Electronic thermostatic valve	TE	•	•	•	•	•	•	•	•
Voltmeter	V	o	o	o	o	o	o	o	o
Brine Version	VB	o	o	o	o	o	o	o	o
Solenoid valve	VS	o	o	o	o	o	o	o	o

• Standard, o Optional, -- Not available

TECHNICAL DATA

ERAE N MC HE Kc		8010	10010	13010	15010	16510	17010	21020	24020	27020
Cooling capacity	kW	82,6	105,0	135,0	148,0	169,0	165,0	210,0	239,0	268,0
Total input power	kW	24,3	32,4	42,0	46,7	55,1	48,9	65,6	73,5	88,6
Nominal input current	A	46,7	58,5	72,5	80,4	93,7	89,0	117,9	127,5	151,3
EER	W/W	3,40	3,24	3,21	3,17	3,07	3,37	3,20	3,25	3,02
SEER	W/W	4,72	4,80	4,91	4,70	4,76	4,77	4,89	4,83	4,83
Circuits	n°	1	1	1	1	1	1	2	2	2
Compressors	n°	2	2	2	2	2	2	4	4	4
Refrigerant data R410A										
Refrigerant charge	kg	12	13	16,7	17	18	26	31	35	38
Global warming potential (GWP)	-	2088	2088	2088	2088	2088	2088	2088	2088	2088
Equivalent CO_2 charge	t	25,8	26,6	34,9	35,8	36,8	54,3	64,7	73,1	79,3
Fans (1)										
Quantity	n°	2	2	3	3	3	2	4	4	4
Total air flow	m^3/h	36831	40592	58269	60440	63280	70890	86647	90367	94231
Total power input	kW	1,9	2,5	3,5	3,9	4,5	4,9	5,6	6,4	7,1
Total input current	A	3,3	4,2	6,0	6,6	7,3	12,5	9,0	9,9	10,9
Evaporator (2)										
Quantity	n°	1	1	1	1	1	1	1	1	1
Water flow	m^3/h	14,2	18,2	23,3	25,5	29,1	28,4	36,2	41,1	109,0
Pressure drop	kPa	35,7	31,6	58,1	42,2	38,1	14,9	29,8	25,1	57,4
Weight										
Transport weight	kg	1000	1090	1538	1696	1809	1598	1871	1977	1988
Operating weight	kg	1008	1100	1550	1710	1825	1609	1894	2004	2027
Dimensions										
Length	mm	2590	2590	3630	3630	3630	2680	2680	2680	2680
Width	mm	1370	1370	1370	1370	1370	2260	2260	2260	2260
Height	mm	2570	2570	2570	2570	2570	2470	2470	2470	2470
Sound data										
Total LWA (3)	dB(A)	86,5	88,5	90,8	92,0	91,8	91,0	91,0	93,0	94,0
Total SPL 10m (4)	dB(A)	56,0	58,0	60,1	61,4	61,1	58,9	58,9	61,0	61,9
Power supply										
Voltage/phase/frequency	V/ph/Hz	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50	400/3/50	400/3/50	400/3/50	400/3/50
General electrical data										
Maximum input power	[kW]	39,9	48,8	65,8	71,0	79,9	73,5	97,6	105	126
Maximum input current	[A]	75,4	90,0	114,7	125,1	142,3	136,4	183,2	191,6	225,2
Inrush current	[A]	215,4	328,9	359,3	369,7	467,7	461,8	422,1	430,5	469,8

(1) Ambient air temperature 35°C / H.R 50%
(2) Fluid: Water - In/out Temperature: 12/7°C
(3) Sound power level in accordance with ISO 3744.
(4) Sound pressure level at 10m from the unit in free field conditions, in accordance with ISO 3744

ERAE N MC HE Kc		31020	35020	40020	44020	51020	56020	63020	66020
Cooling capacity	kW	303,0	319,0	393,0	431,0	500,0	539,0	591,0	636,0
Total input power	kW	94,2	101,0	124,0	135,0	162,0	179,0	191,0	209,0
Nominal input current	A	167,4	177,0	217,2	243,3	288,2	313,3	338,1	363,9
EER	W/W	3,22	3,16	3,17	3,19	3,09	3,01	3,09	3,04
SEER	W/W	4,79	4,87	4,68	4,59	4,77	4,75	4,67	4,63
Circuits	n°	2	2	2	2	2	2	2	2
Compressors	n°	4	4	4	4	6	6	6	6
Refrigerant data R410A									
Refrigerant charge	kg	44	49	56	63	74	80	89	94
Global warming potential (GWP)	-	2088	2088	2088	2088	2088	2088	2088	2089
Equivalent CO_2 charge	t	91,9	102,3	116,9	131,5	154,5	167,0	185,8	196,4
Fans (1)									
Quantity	n°	6	6	6	8	8	8	10	10
Total air flow	m^3/h	120222	122666	157730	197033	209537	210955	256230	263467
Total power input	kW	7,9	8,3	11,9	13,3	15,7	15,9	18,3	20,0
Total input current	A	18,8	18,8	26,5	35,5	35,3	35,3	44,2	44,2
Evaporator (2)									
Quantity	n°	1	1	1	1	1	1	1	1
Water flow	m^3/h	52,1	54,9	67,6	74,1	86,1	92,8	102,0	109,0
Pressure drop	kPa	36,8	40,3	44,0	54,8	46,3	50,4	59,5	57,4
Weight									
Transport weight	kg	2473	2478	2579	2988	3422	3488	3941	3952
Operating weight	kg	2519	2526	2639	3054	3502	3579	4037	4054
Dimensions									
Length	mm	4020	4020	4020	5360	5360	5360	6700	6700
Width	mm	2260	2260	2260	2260	2260	2260	2260	2260
Height	mm	2470	2470	2470	2470	2470	2470	2470	2470
Sound data									
Total LWA (3)	dB(A)	94,0	94,0	96,0	98,0	96,0	98,0	98,0	100,0
Total SPL 10m (4)	dB(A)	62,2	61,7	63,3	65,6	63,4	65,7	65,6	67,2
Power supply									
Voltage/phase/frequency	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
General electrical data									
Maximum input power	[kW]	136	143	177	200	236	254	277	295
Maximum input current	[A]	251,4	265,0	326,9	371,6	433,6	468,0	512,7	547,1
Inrush current	[A]	496,0	590,4	652,3	697,0	678,2	793,4	838,1	872,5

(1) Ambient air temperature 35°C / H.R 50%
(2) Fluid: Water - In/out Temperature: 12/7°C
(3) Sound power level in accordance with ISO 3744.
(4) Sound pressure level at 10m from the unit in free field conditions, in accordance with ISO 3744

ERAE N MC HE Kr		8010	10010	13010	15010	16510	17010	21020	24020	27020
Cooling capacity	kW	81,9	106,0	134,0	146,0	167,0	163,0	214,0	244,0	271,0
Total input power	kW	23,3	32,1	42,2	46,1	53,7	48,0	63,8	74,5	87,2
Nominal input current	A	44,8	57,9	73,9	80,6	95,2	87,7	116,0	129,0	145,0
EER	W/W	3,52	3,30	3,18	3,17	3,11	3,40	3,35	3,28	3,11
SEER	W/W	5,19	5,26	4,99	4,86	4,91	4,93	5,46	5,13	5,01
Circuits	n°	1	1	1	1	1	1	2	2	2
Compressors	n°	2	2	2	2	2	2	4	4	4
Refrigerant data R454B										
Refrigerant charge	kg	12	13	17	17	18	26	31	35	38
Global warming potential (GWP)	-	466	466	466	466	466	466	466	466	466
Equivalent CO_2 charge	t	5,6	6,1	7,9	7,9	8,4	12,1	14,4	16,3	17,7
Fans (1)										
Quantity	n°	2	2	3	3	3	4	4	4	4
Total air flow	m^3/h	38280	42614	55446	57105	58172	69095	84797	88997	90542
Total power input	kW	2,32	3,18	3,99	4,35	4,60	5,37	6,28	7,20	7,56
Total input current	A	4,0	5,3	10,0	9,97	9,92	12,9	10,2	11,4	11,9
Evaporator (2)										
Quantity	n°	1	1	1	1	1	1	1	1	1
Water flow	m^3/h	14,11	18,28	23,07	25,20	28,74	28,02	36,88	42,02	46,61
Pressure drop	kPa	33,1	39,1	59,2	54,4	55,9	53,4	29,2	25,2	30,6
Weight										
Transport weight	kg	1000	1090	1538	1696	1809	1598	1871	1977	1988
Operating weight	kg	1008	1100	1550	1710	1825	1609	1894	2004	2027
Dimensions										
Length	mm	2590	2590	3630	3630	3630	2680	2680	2680	2680
Width	mm	1370	1370	1370	1370	1370	2260	2260	2260	2260
Height	mm	2570	2570	2570	2570	2570	2470	2470	2470	2470
Sound data										
Total LWA (3)	dB(A)	86	88	91	92	92	91	91	93	94
Total SPL 10m (4)	dB(A)	54	56	59	60	60	59	59	61	62
Power supply										
Voltage/phase/frequency	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
General electrical data										
Maximum input power	[kW]	38,6	52,3	60,2	70,2	80,7	72,6	105,0	112,0	121,0
Maximum input current	[A]	63,8	97,6	119,0	130,0	180,0	173,0	195,0	241,0	230,0
Inrush current	[A]	233	296	357	368	418	411	393	439	467

(1) Ambient air temperature 35°C / H.R 50%
(2) Fluid: Water - In/out Temperature: 12/7°C
(3) Sound power level in accordance with ISO 3744.
(4) Sound pressure level at 10m from the unit in free field conditions, in accordance with ISO 3744

ERAE N MC HE Kr		31020	35020	40020	44020	51020	56020	63020	66020
Cooling capacity	kW	303,0	323,0	380,0	433,0	497,0	540,0	593,0	641,0
Total input power	kW	90,5	97,9	116,0	128,0	155,0	170,0	181,0	195,0
Nominal input current	A	160,0	175,0	205,0	235,0	265,0	294,0	323,0	351,0
EER	W/W	3,35	3,30	3,28	3,38	3,21	3,18	3,28	3,29
SEER	W/W	5,21	5,39	5,12	4,86	4,93	4,94	4,95	4,89
Circuits	n°	2	2	2	2	2	2	2	2
Compressors	n°	4	4	4	4	6	6	6	6
Refrigerant data R454B									
Refrigerant charge	kg	44	49	56	63	74	80	89	94
Global warming potential (GWP)	-	466	466	466	466	466	466	466	466
Equivalent CO_2 charge	t	20,5	22,8	26,1	29,4	34,5	37,3	41,5	43,8
Fans (1)									
Quantity	n°	6	6	6	8	8	8	10	10
Total air flow	m^3/h	110275	113650	147305	185601	195796	201722	240371	246191
Total power input	kW	8,03	8,84	11,4	15,4	16,0	16,4	19,7	20,1
Total input current	A	19,9	19,9	26,8	36,1	35,8	35,8	44,9	44,7
Evaporator (2)									
Quantity	n°	1	1	1	1	1	1	1	1
Water flow	m^3/h	52,10	55,64	65,39	74,43	85,58	92,84	102,1	110,2
Pressure drop	kPa	36,1	40,6	38,6	48,8	44,3	47,0	55,6	53,8
Weight									
Transport weight	kg	2473	2478	2579	2988	3422	3488	3941	3952
Operating weight	kg	2519	2526	2639	3054	3502	3579	4037	4054
Dimensions									
Length	mm	4020	4020	4020	5360	5360	5360	6700	6700
Width	mm	2260	2260	2260	2260	2260	2260	2260	2260
Height	mm	2470	2470	2470	2470	2470	2470	2470	2470
Sound data									
Total LWA (3)	dB(A)	94	94	96	98	96	98	98	100
Total SPL 10m (4)	dB(A)	62	62	63	66	63	66	66	67
Power supply									
Voltage/phase/frequency	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
General electrical data									
Maximum input power	[kW]	140,0	141,0	174,0	200,0	227,0	248,0	574,0	295,0
Maximum input current	[A]	260,0	337,0	356,0	465,0	380,0	479,0	588,0	688,0
Inrush current	[A]	498	575	594	703	617	717	826	926

(1) Ambient air temperature 35°C / H.R 50%
(2) Fluid: Water - In/out Temperature: 12/7°C
(3) Sound power level in accordance with ISO 3744.
(4) Sound pressure level at 10m from the unit in free field conditions, in accordance with ISO 3744