

ERACS2-Q 1062 - 3222

INTEGRA unit for 4-pipe systems, air source for outdoor installation
199-826 kW



Version

CA	Class A of efficiency
LN-CA	Low Noise, Class A of efficiency
SL-CA	Super Low noise version, Class A of efficiency
XL-CA	eXtra Low noise version, Class A of efficiency
XL-CA-E	eXtra Low noise, Class A enhanced

Features

UNIQUE PROPOSAL

Unit designed to satisfy the cold and the hot side requirements simultaneously, for 4-pipe systems without any particular operation mode setting

ENERGY SAVING

Energy saving guaranteed by the advanced operation's logic. The best operation mode is set completely automatically and independently by the unit's controller, in order to minimize the absorbed energy whatever the cooling and/or heating demand might be

WIDE OPERATING RANGE

Unit's operation guaranteed with external air temperature down to -10 °C during winter and up to 46 °C during summer.

VERSION 'XL-CA-E' AVAILABLE

Exclusive Premium version. Together for the first time, the lowest noise level on the market and the maximum efficiency in each operating mode.

HOT WATER SUPPLY

Supply of hot water in use up to 55°C, offering maximum versatility with respect to different plant engineering solutions

Accessory

- Hydronic group
- VPF (Variable Primary Flow) kit: variable flow pumps with on board regulation
- Electronic expansion valve
- Set-up for remote connectivity with ModBus/Echelon protocol cards

Multi-purpose outdoor unit for use in 4-pipe systems for the simultaneous production of chilled and hot water by means of two independent hydronic circuits.

These units are able to satisfy the demand for hot and cold water simultaneously through a system that does not require seasonal switching and is therefore a valid alternative to traditional plants with chiller and boiler. Each circuit works with a semi-hermetic screw compressor using R134a, two shell and tubes heat exchangers shared by both circuits, a cold heat exchanger on plant's side that acts as an evaporator in the production of cold water, a heat exchanger on plant's side that works as a condenser in the production of hot water, and a source side coil heat exchanger that works as either condenser or evaporator as required by the loads.

Controls

W3000SE Large

The controller W3000 large offers the latest control and functions specially developed for these units.

The keypad is generously sized with full operating status display. The controls and detailed LCD make access to machine settings easy and safe. These resources permit to directly act on the unit settings through a multilevel menu, available in several languages.

The diagnostics includes full management of alarms with black-box functions and alarm record for better analysis of unit performance.

For multi-units plants a special device to coordinate and manage all the resources is available as an option; energy metering device is even possible as an option. Supervision is easy through Climaveneta devices or with various options for interfacing to ModBus, Bacnet, Echelon LonTalk protocols.

Compatibility with remote keyboard (management up to 10 units). Clock available with programming of operation (standard 4 days and 10 time bands).

Temperature regulation managed on the two water circuits, with a proportional logic referred to the return water temperatures. This allows to satisfy simultaneously the different heating- and cooling requests, with no need of mode changeover.

Exclusive self-adaptive defrost logic, monitoring multiple operational- and ambient parameters, which allows to reduce the number and duration of the defrost cycles, with a benefit for the overall energy efficiency.



ERACS2-Q / CA			1062	1162	1362	1562	1762	1962
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1)	kW	210	248	302	329	380	425
Total power input	(1)	kW	72,1	84,8	101	109	129	144
EER	(1)	kW/kW	2,91	2,93	2,98	3,01	2,95	2,95
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	209	247	301	328	379	424
EER	(1)(2)	kW/kW	2,88	2,89	2,94	2,97	2,91	2,92
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3)	kW	218	258	308	339	396	434
Total power input	(3)	kW	67,0	80,7	92,2	101	122	131
COP	(3)	kW/kW	3,25	3,20	3,35	3,35	3,25	3,32
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(2)(3)	kW	218	259	310	340	397	435
COP	(2)(3)	kW/kW	3,23	3,17	3,32	3,32	3,23	3,31
COOLING WITH TOTAL HEAT RECOVERY								
Cooling capacity	(4)	kW	209	248	305	329	381	428
Total power input	(4)	kW	60,6	72,2	87,1	92,5	111	122
Recovery heat exchanger capacity	(4)	kW	266	316	386	416	486	542
TER		kW/kW	7,83	7,81	7,93	8,06	7,80	7,97
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(11)	kW	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-
Performance ηs	(11)(13)	%	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(5)	kW	155	210	219	241	282	311
SCOP	(5)(14)		3,41	3,21	3,45	3,53	3,40	3,54
Performance ηs	(5)(15)	%	133	125	135	138	133	139
Seasonal efficiency class	(5)		-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	10,04	11,88	14,46	15,75	18,19	20,33
Pressure drop	(1)	kPa	28,8	40,2	36,6	43,4	40,3	27,9
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3)	l/s	10,51	12,47	14,89	16,37	19,10	20,95
Pressure drop	(3)	kPa	31,5	44,3	38,8	46,9	44,4	29,6
REFRIGERANT CIRCUIT								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	83,0	97,0	132	132	160	167
NOISE LEVEL								
Sound Pressure	(6)	dB(A)	65	65	65	66	66	66
Sound power level in cooling	(7)(8)	dB(A)	97	97	97	98	99	99
Sound power level in heating	(7)(9)	dB(A)	97	97	97	98	99	99
SIZE AND WEIGHT								
A	(10)	mm	4610	4610	5610	5610	6610	6610
B	(10)	mm	2220	2220	2220	2220	2220	2220
H	(10)	mm	2150	2420	2430	2430	2430	2430
Operating weight	(10)	kg	3600	3870	4620	5040	5520	5670

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
 - 2 Values in compliance with EN14511-3:2013.
 - 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
 - 4 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
 - 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
 - 6 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
 - 7 Sound power on the basis of measurements made in compliance with ISO 9614.
 - 8 Sound power level in cooling, outdoors.
 - 9 Sound power level in heating, outdoors.
 - 10 Unit in standard configuration/execution, without optional accessories.
 - 11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
 - 12 Seasonal space heating energy index
 - 13 Seasonal energy efficiency of the space cooling
 - 14 Seasonal performance coefficient
 - 15 Seasonal space heating energy efficiency
- The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.

ERACS2-Q / CA			2022	2222	2422	2622	2722	3222
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1)	kW	483	525	554	624	701	826
Total power input	(1)	kW	156	167	176	201	222	264
EER	(1)	kW/kW	3,10	3,14	3,16	3,10	3,15	3,13
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	482	524	552	623	700	824
EER	(1)(2)	kW/kW	3,07	3,11	3,12	3,08	3,12	3,10
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3)	kW	492	541	571	615	711	826
Total power input	(3)	kW	149	159	169	178	207	240
COP	(3)	kW/kW	3,31	3,41	3,38	3,46	3,43	3,44
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(2)(3)	kW	493	543	572	616	713	828
COP	(2)(3)	kW/kW	3,29	3,38	3,36	3,44	3,41	3,42
COOLING WITH TOTAL HEAT RECOVERY								
Cooling capacity	(4)	kW	484	522	550	631	701	826
Total power input	(4)	kW	134	145	153	170	193	228
Recovery heat exchanger capacity	(4)	kW	609	658	694	791	883	1041
TER		kW/kW	8,18	8,14	8,12	8,35	8,19	8,17
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(11)	kW	-	-	-	-	700	824
SEER	(11)(12)		-	-	-	-	4,17	4,20
Performance ηs	(11)(13)	%	-	-	-	-	164	165
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(5)	kW	359	387	353	398	-	-
SCOP	(5)(14)		3,48	3,60	3,60	3,61	-	-
Performance ηs	(5)(15)	%	136	141	141	141	-	-
Seasonal efficiency class	(5)		-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	23,09	25,11	26,49	29,84	33,54	39,48
Pressure drop	(1)	kPa	26,7	29,0	32,3	23,1	30,5	30,9
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3)	l/s	23,75	26,13	27,55	29,67	34,34	39,85
Pressure drop	(3)	kPa	28,2	31,4	34,9	22,8	31,9	31,5
REFRIGERANT CIRCUIT								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	210	240	250	254	312	360
NOISE LEVEL								
Sound Pressure	(6)	dB(A)	66	68	68	68	68	69
Sound power level in cooling	(7)(8)	dB(A)	99	101	101	101	101	102
Sound power level in heating	(7)(9)	dB(A)	99	101	0	0	0	0
SIZE AND WEIGHT								
A	(10)	mm	6300	7200	7200	7200	8400	9700
B	(10)	mm	2260	2260	2260	2260	2260	2260
H	(10)	mm	2350	2350	2350	2350	2350	2350
Operating weight	(10)	kg	7580	8060	8160	8600	9160	11380

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
 - 2 Values in compliance with EN14511-3:2013.
 - 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
 - 4 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
 - 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
 - 6 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
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 - 9 Sound power level in heating, outdoors.
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 - 13 Seasonal energy efficiency of the space cooling
 - 14 Seasonal performance coefficient
 - 15 Seasonal space heating energy efficiency
- The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.

ERACS2-Q / LN-CA			1062	1162	1362	1562	1762	1962
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1)	kW	205	241	294	322	369	414
Total power input	(1)	kW	70,8	84,6	103	109	130	144
EER	(1)	kW/kW	2,89	2,85	2,86	2,96	2,83	2,87
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	204	240	293	321	368	413
EER	(1)(2)	kW/kW	2,86	2,81	2,82	2,92	2,80	2,85
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3)	kW	218	258	308	339	396	434
Total power input	(3)	kW	67,0	80,7	92,2	101	122	131
COP	(3)	kW/kW	3,25	3,20	3,35	3,35	3,25	3,32
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(2)(3)	kW	218	259	310	340	397	435
COP	(2)(3)	kW/kW	3,23	3,17	3,32	3,32	3,23	3,31
COOLING WITH TOTAL HEAT RECOVERY								
Cooling capacity	(4)	kW	209	248	305	329	381	428
Total power input	(4)	kW	60,6	72,2	87,1	92,5	111	122
Recovery heat exchanger capacity	(4)	kW	266	316	386	416	486	542
TER		kW/kW	7,83	7,81	7,93	8,06	7,80	7,97
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(11)	kW	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-
Performance ηs	(11)(13)	%	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(5)	kW	155	210	219	241	282	311
SCOP	(5)(14)		3,41	3,21	3,45	3,53	3,40	3,54
Performance ηs	(5)(15)	%	133	125	135	138	133	139
Seasonal efficiency class	(5)		-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	9,80	11,52	14,05	15,39	17,66	19,78
Pressure drop	(1)	kPa	27,4	37,9	34,5	41,4	38,0	26,4
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3)	l/s	10,51	12,47	14,89	16,37	19,10	20,95
Pressure drop	(3)	kPa	31,5	44,3	38,8	46,9	44,4	29,6
REFRIGERANT CIRCUIT								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	83,0	97,0	132	132	160	167
NOISE LEVEL								
Sound Pressure	(6)	dB(A)	58	59	59	60	59	59
Sound power level in cooling	(7)(8)	dB(A)	90	91	91	92	92	92
Sound power level in heating	(7)(9)	dB(A)	91	92	92	93	93	93
SIZE AND WEIGHT								
A	(10)	mm	4610	4610	5610	5610	6610	6610
B	(10)	mm	2220	2220	2220	2220	2220	2220
H	(10)	mm	2150	2420	2430	2430	2430	2430
Operating weight	(10)	kg	3600	3870	4620	5040	5520	5670

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
 - 2 Values in compliance with EN14511-3:2013.
 - 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
 - 4 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
 - 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
 - 6 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
 - 7 Sound power on the basis of measurements made in compliance with ISO 9614.
 - 8 Sound power level in cooling, outdoors.
 - 9 Sound power level in heating, outdoors.
 - 10 Unit in standard configuration/execution, without optional accessories.
 - 11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
 - 12 Seasonal space heating energy index
 - 13 Seasonal energy efficiency of the space cooling
 - 14 Seasonal performance coefficient
 - 15 Seasonal space heating energy efficiency
- The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.

ERACS2-Q / LN-CA			2022	2222	2422	2622	2722	3222
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1)	kW	469	513	541	604	684	799
Total power input	(1)	kW	163	168	177	206	225	274
EER	(1)	kW/kW	2,88	3,06	3,05	2,93	3,03	2,91
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	468	512	540	603	682	798
EER	(1)(2)	kW/kW	2,86	3,03	3,02	2,91	3,01	2,89
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3)	kW	492	541	571	615	711	826
Total power input	(3)	kW	149	159	169	178	207	240
COP	(3)	kW/kW	3,31	3,41	3,38	3,46	3,43	3,44
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(2)(3)	kW	493	543	572	616	713	828
COP	(2)(3)	kW/kW	3,29	3,38	3,36	3,44	3,41	3,42
COOLING WITH TOTAL HEAT RECOVERY								
Cooling capacity	(4)	kW	484	522	550	631	701	826
Total power input	(4)	kW	134	145	153	170	193	228
Recovery heat exchanger capacity	(4)	kW	609	658	694	791	883	1041
TER		kW/kW	8,18	8,14	8,12	8,35	8,19	8,17
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(11)	kW	-	-	-	-	682	798
SEER	(11)(12)		-	-	-	-	4,13	4,13
Performance ηs	(11)(13)	%	-	-	-	-	162	162
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(5)	kW	359	387	353	398	-	-
SCOP	(5)(14)		3,48	3,60	3,60	3,61	-	-
Performance ηs	(5)(15)	%	136	141	141	141	-	-
Seasonal efficiency class	(5)		-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	22,42	24,55	25,89	28,88	32,70	38,23
Pressure drop	(1)	kPa	25,1	27,7	30,8	21,6	29,0	29,0
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3)	l/s	23,75	26,13	27,55	29,67	34,34	39,85
Pressure drop	(3)	kPa	28,2	31,4	34,9	22,8	31,9	31,5
REFRIGERANT CIRCUIT								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	210	240	250	254	312	360
NOISE LEVEL								
Sound Pressure	(6)	dB(A)	60	62	62	62	62	63
Sound power level in cooling	(7)(8)	dB(A)	93	95	95	95	95	96
Sound power level in heating	(7)(9)	dB(A)	94	96	0	0	0	0
SIZE AND WEIGHT								
A	(10)	mm	6300	7200	7200	7200	8400	9700
B	(10)	mm	2260	2260	2260	2260	2260	2260
H	(10)	mm	2350	2350	2350	2350	2350	2350
Operating weight	(10)	kg	7580	8060	8160	8600	9160	11380

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
 - 2 Values in compliance with EN14511-3:2013.
 - 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
 - 4 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
 - 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
 - 6 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
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- The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.

ERACS2-Q / SL-CA			1062	1162	1362	1562	1762	1962
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1)	kW	199	233	283	314	356	401
Total power input	(1)	kW	72,7	87,6	109	113	137	149
EER	(1)	kW/kW	2,74	2,66	2,61	2,78	2,59	2,69
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	199	232	282	313	355	400
EER	(1)(2)	kW/kW	2,71	2,63	2,58	2,75	2,57	2,67
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3)	kW	211	251	301	330	385	422
Total power input	(3)	kW	64,8	78,4	89,9	98,4	119	127
COP	(3)	kW/kW	3,26	3,20	3,35	3,35	3,25	3,33
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(2)(3)	kW	212	252	302	331	387	423
COP	(2)(3)	kW/kW	3,24	3,18	3,32	3,32	3,22	3,31
COOLING WITH TOTAL HEAT RECOVERY								
Cooling capacity	(4)	kW	209	248	305	329	381	428
Total power input	(4)	kW	60,6	72,2	87,1	92,5	111	122
Recovery heat exchanger capacity	(4)	kW	266	316	386	416	486	542
TER		kW/kW	7,83	7,81	7,93	8,06	7,80	7,97
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(11)	kW	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-
Performance ηs	(11)(13)	%	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(5)	kW	152	205	215	236	276	304
SCOP	(5)(14)		3,42	3,21	3,45	3,54	3,40	3,55
Performance ηs	(5)(15)	%	134	126	135	138	133	139
Seasonal efficiency class	(5)		-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	9,54	11,15	13,55	15,00	17,02	19,20
Pressure drop	(1)	kPa	26,0	35,4	32,1	39,4	35,3	24,8
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3)	l/s	10,19	12,12	14,52	15,93	18,59	20,36
Pressure drop	(3)	kPa	29,6	41,9	36,9	44,4	42,1	27,9
REFRIGERANT CIRCUIT								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	83,0	97,0	132	132	160	167
NOISE LEVEL								
Sound Pressure	(6)	dB(A)	54	55	55	56	55	55
Sound power level in cooling	(7)(8)	dB(A)	86	87	87	88	88	88
Sound power level in heating	(7)(9)	dB(A)	87	88	88	89	89	89
SIZE AND WEIGHT								
A	(10)	mm	4610	4610	5610	5610	6610	6610
B	(10)	mm	2220	2220	2220	2220	2220	2220
H	(10)	mm	2150	2420	2430	2430	2430	2430
Operating weight	(10)	kg	3600	3870	4620	5040	5520	5670

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
 - 2 Values in compliance with EN14511-3:2013.
 - 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
 - 4 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
 - 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
 - 6 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
 - 7 Sound power on the basis of measurements made in compliance with ISO 9614.
 - 8 Sound power level in cooling, outdoors.
 - 9 Sound power level in heating, outdoors.
 - 10 Unit in standard configuration/execution, without optional accessories.
 - 11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
 - 12 Seasonal space heating energy index
 - 13 Seasonal energy efficiency of the space cooling
 - 14 Seasonal performance coefficient
 - 15 Seasonal space heating energy efficiency
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ERACS2-Q / SL-CA			2022	2222	2422	2622	2722	3222
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1)	kW	464	509	537	597	678	790
Total power input	(1)	kW	166	170	180	210	229	281
EER	(1)	kW/kW	2,80	2,99	2,98	2,85	2,96	2,81
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	463	508	536	596	676	789
EER	(1)(2)	kW/kW	2,78	2,96	2,95	2,83	2,93	2,79
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3)	kW	486	536	564	605	703	815
Total power input	(3)	kW	147	158	167	176	205	238
COP	(3)	kW/kW	3,30	3,40	3,38	3,44	3,42	3,43
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(2)(3)	kW	487	537	566	607	705	818
COP	(2)(3)	kW/kW	3,28	3,38	3,35	3,42	3,40	3,41
COOLING WITH TOTAL HEAT RECOVERY								
Cooling capacity	(4)	kW	484	522	550	631	701	826
Total power input	(4)	kW	134	145	153	170	193	228
Recovery heat exchanger capacity	(4)	kW	609	658	694	791	883	1041
TER		kW/kW	8,18	8,14	8,12	8,35	8,19	8,17
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(11)	kW	-	-	-	-	676	789
SEER	(11)(12)		-	-	-	-	4,11	4,13
Performance ηs	(11)(13)	%	-	-	-	-	161	162
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(5)	kW	359	386	356	400	-	-
SCOP	(5)(14)		3,49	3,60	3,62	3,62	-	-
Performance ηs	(5)(15)	%	137	141	142	142	-	-
Seasonal efficiency class	(5)		-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	22,19	24,34	25,68	28,56	32,41	37,80
Pressure drop	(1)	kPa	24,6	27,3	30,3	21,1	28,5	28,3
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3)	l/s	23,45	25,86	27,23	29,23	33,94	39,36
Pressure drop	(3)	kPa	27,5	30,8	34,1	22,1	31,2	30,7
REFRIGERANT CIRCUIT								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	210	240	250	254	312	360
NOISE LEVEL								
Sound Pressure	(6)	dB(A)	56	58	58	58	58	59
Sound power level in cooling	(7)(8)	dB(A)	89	91	91	91	91	92
Sound power level in heating	(7)(9)	dB(A)	90	92	0	0	0	0
SIZE AND WEIGHT								
A	(10)	mm	6300	7200	7200	7200	8400	9700
B	(10)	mm	2260	2260	2260	2260	2260	2260
H	(10)	mm	2350	2350	2350	2350	2350	2350
Operating weight	(10)	kg	7670	8150	8250	8690	9260	11480

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
 - 2 Values in compliance with EN14511-3:2013.
 - 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
 - 4 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
 - 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
 - 6 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
 - 7 Sound power on the basis of measurements made in compliance with ISO 9614.
 - 8 Sound power level in cooling, outdoors.
 - 9 Sound power level in heating, outdoors.
 - 10 Unit in standard configuration/execution, without optional accessories.
 - 11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
 - 12 Seasonal space heating energy index
 - 13 Seasonal energy efficiency of the space cooling
 - 14 Seasonal performance coefficient
 - 15 Seasonal space heating energy efficiency
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ERACS2-Q / XL-CA			2022	2222	2422	2622	2722	3222
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1)	kW	454	500	528	584	665	772
Total power input	(1)	kW	167	169	180	212	230	287
EER	(1)	kW/kW	2,73	2,95	2,94	2,76	2,90	2,70
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	454	499	527	583	664	771
EER	(1)(2)	kW/kW	2,71	2,93	2,91	2,74	2,87	2,67
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3)	kW	486	536	564	607	703	815
Total power input	(3)	kW	143	152	161	170	199	230
COP	(3)	kW/kW	3,41	3,53	3,50	3,56	3,54	3,54
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(2)(3)	kW	487	537	566	608	705	818
COP	(2)(3)	kW/kW	3,39	3,50	3,47	3,54	3,52	3,52
COOLING WITH TOTAL HEAT RECOVERY								
Cooling capacity	(4)	kW	484	522	550	631	701	826
Total power input	(4)	kW	134	145	153	170	193	228
Recovery heat exchanger capacity	(4)	kW	609	658	694	791	883	1041
TER		kW/kW	8,18	8,14	8,12	8,35	8,19	8,17
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(11)	kW	-	-	527	583	664	771
SEER	(11)(12)		-	-	4,38	4,13	4,36	4,13
Performance ηs	(11)(13)	%	-	-	172	162	171	162
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(5)	kW	359	386	-	-	-	-
SCOP	(5)(14)		3,73	3,89	-	-	-	-
Performance ηs	(5)(15)	%	146	153	-	-	-	-
Seasonal efficiency class	(5)		-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	21,73	23,93	25,27	27,92	31,82	36,94
Pressure drop	(1)	kPa	23,6	26,4	29,4	20,2	27,4	27,1
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3)	l/s	23,45	25,86	27,23	29,29	33,94	39,36
Pressure drop	(3)	kPa	27,5	30,8	34,1	22,2	31,2	30,7
REFRIGERANT CIRCUIT								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	210	240	250	254	312	360
NOISE LEVEL								
Sound Pressure	(6)	dB(A)	52	54	54	54	54	55
Sound power level in cooling	(7)(8)	dB(A)	85	87	87	87	87	88
Sound power level in heating	(7)(9)	dB(A)	86	88	0	0	0	0
SIZE AND WEIGHT								
A	(10)	mm	6300	7200	7200	7200	8400	9700
B	(10)	mm	2260	2260	2260	2260	2260	2260
H	(10)	mm	2350	2350	2350	2350	2350	2350
Operating weight	(10)	kg	7790	8260	8350	8790	9340	11580

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
 - 2 Values in compliance with EN14511-3:2013.
 - 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
 - 4 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
 - 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
 - 6 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
 - 7 Sound power on the basis of measurements made in compliance with ISO 9614.
 - 8 Sound power level in cooling, outdoors.
 - 9 Sound power level in heating, outdoors.
 - 10 Unit in standard configuration/execution, without optional accessories.
 - 11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
 - 12 Seasonal space heating energy index
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ERACS2-Q / XL-CA-E		1062	1162	1362	1562	1762	2022	2222	2422	2622	
Power supply	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	
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	kW	204	247	293	319	366	473	510	541	611
Total power input	(1)	kW	66,6	77,0	99,5	105	127	152	163	169	193
EER	(1)	kW/kW	3,07	3,21	2,95	3,06	2,88	3,11	3,14	3,20	3,17
COOLING ONLY (EN14511 VALUE)											
Cooling capacity	(1)(2)	kW	204	246	292	318	365	471	508	540	610
EER	(1)(2)	kW/kW	3,03	3,16	2,91	3,01	2,85	3,08	3,11	3,17	3,14
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)											
Total heating capacity	(3)	kW	218	267	308	340	393	513	552	588	644
Total power input	(3)	kW	62,4	77,6	88,4	95,2	116	145	154	164	176
COP	(3)	kW/kW	3,50	3,44	3,49	3,57	3,38	3,52	3,58	3,59	3,67
HEATING ONLY (EN14511 VALUE)											
Total heating capacity	(2)(3)	kW	219	268	309	342	394	514	553	590	645
COP	(2)(3)	kW/kW	3,47	3,41	3,46	3,54	3,35	3,50	3,56	3,56	3,65
COOLING WITH TOTAL HEAT RECOVERY											
Cooling capacity	(4)	kW	209	248	305	329	381	484	522	550	631
Total power input	(4)	kW	60,6	72,2	87,1	92,5	111	134	145	153	170
Recovery heat exchanger capacity	(4)	kW	266	316	386	416	486	609	658	694	791
TER		kW/kW	7,83	7,81	7,93	8,06	7,80	8,18	8,14	8,12	8,35
ENERGY EFFICIENCY											
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)											
Ambient refrigeration											
Prated,c	(11)	kW	-	-	-	-	-	-	-	540	610
SEER	(11)(12)		-	-	-	-	-	-	-	4,45	4,29
Performance ηs	(11)(13)	%	-	-	-	-	-	-	-	175	169
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)											
PDesign	(5)	kW	155	186	219	239	280	363	371	-	-
SCOP	(5)(14)		3,81	3,48	3,67	3,88	3,64	3,81	3,85	-	-
Performance ηs	(5)(15)	%	149	136	144	152	142	150	151	-	-
Seasonal efficiency class	(5)		-	-	-	-	-	-	-	-	-
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN REFRIGERATION											
Water flow	(1)	l/s	9,77	11,82	14,03	15,28	17,52	22,60	24,37	25,89	29,23
Pressure drop	(1)	kPa	27,2	39,8	34,4	40,8	37,4	25,5	27,3	30,8	22,1
HEAT EXCHANGER USER SIDE IN HEATING											
Water flow	(3)	l/s	10,53	12,90	14,87	16,43	18,96	24,75	26,63	28,38	31,07
Pressure drop	(3)	kPa	31,6	47,5	38,7	47,2	43,8	30,6	32,6	37,1	25,0
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Refrigerant charge		kg	97,0	116	132	132	167	248	254	282	286
NOISE LEVEL											
Sound Pressure	(6)	dB(A)	53	54	54	54	54	53	55	55	55
Sound power level in cooling	(7)(8)	dB(A)	85	86	86	87	87	86	88	88	88
Sound power level in heating	(7)(9)	dB(A)	86	87	87	88	88	87	89	0	0
SIZE AND WEIGHT											
A	(10)	mm	4610	5610	5610	6610	6610	8400	9300	9300	9300
B	(10)	mm	2220	2220	2220	2220	2220	2260	2260	2260	2260
H	(10)	mm	2420	2430	2430	2430	2430	2350	2350	2350	2350
Operating weight	(10)	kg	3900	4490	4830	5590	5730	8510	8720	8890	9400

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
 - 2 Values in compliance with EN14511-3:2013.
 - 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
 - 4 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
 - 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
 - 6 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
 - 7 Sound power on the basis of measurements made in compliance with ISO 9614.
 - 8 Sound power level in cooling, outdoors.
 - 9 Sound power level in heating, outdoors.
 - 10 Unit in standard configuration/execution, without optional accessories.
 - 11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
 - 12 Seasonal space heating energy index
 - 13 Seasonal energy efficiency of the space cooling
 - 14 Seasonal performance coefficient
 - 15 Seasonal space heating energy efficiency
- The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.

