

# ERACS2-Q-G05

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

1062 - 3222 199,5-825,6 kW



**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 R513A, 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.**

## Control



### 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.

## Refrigerant



## Versions

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

## 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 60°C, offering maximum versatility with respect to different plant engineering solutions

## Accessories

- 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

		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	
<b>PERFORMANCE</b>								
<b>COOLING ONLY (GROSS VALUE)</b>								
Cooling capacity	(1)	kW	210,0	248,3	302,3	329,4	380,3	425,2
Total power input	(1)	kW	74,78	88,09	105,5	113,5	134,1	149,7
EER	(1)	kW/kW	2,807	2,818	2,865	2,902	2,836	2,840
<b>COOLING ONLY (EN14511 VALUE)</b>								
Cooling capacity	(1)(2)	kW	209,3	247,4	301,3	328,2	379,0	424,2
EER	(1)(2)	kW/kW	2,770	2,780	2,830	2,860	2,800	2,810
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>								
Total heating capacity	(3)	kW	219,8	261,0	311,6	342,6	399,6	438,3
Total power input	(3)	kW	69,66	84,00	95,98	105,5	126,7	135,8
COP	(3)	kW/kW	3,154	3,107	3,246	3,247	3,154	3,228
<b>HEATING ONLY (EN14511 VALUE)</b>								
Total heating capacity	(2)(3)	kW	220,5	262,0	312,7	344,0	401,1	439,5
COP	(2)(3)	kW/kW	3,130	3,080	3,220	3,220	3,130	3,210
<b>COOLING WITH TOTAL HEAT RECOVERY</b>								
Cooling capacity	(4)	kW	208,6	248,1	304,6	329,4	381,4	427,5
Total power input	(4)	kW	63,13	75,25	90,73	96,42	115,9	126,9
Recovery heat exchanger capacity	(4)	kW	267,9	318,8	389,9	420,0	490,3	546,8
TER		kW/kW	7,553	7,539	7,657	7,774	7,522	7,678
<b>ENERGY EFFICIENCY</b>								
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>								
<b>Ambient refrigeration</b>								
Prated,c	(11)	kW	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-
Performance $\eta_s$	(11)(13)	%	-	-	-	-	-	-
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>								
PDesign	(5)	kW	157	213	221	244	285	314
SCOP	(5)(14)		3,36	3,20	3,40	3,47	3,35	3,49
Performance $\eta_s$	(5)(15)	%	131	125	133	136	131	137
Seasonal efficiency class	(16)		-	-	-	-	-	-
<b>EXCHANGERS</b>								
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>								
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
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>								
Water flow	(3)	l/s	10,61	12,60	15,04	16,54	19,29	21,16
Pressure drop	(3)	kPa	32,1	45,2	39,6	47,9	45,3	30,2
<b>REFRIGERANT CIRCUIT</b>								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	108	129	155	184	191	198
<b>NOISE LEVEL</b>								
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
<b>SIZE AND WEIGHT</b>								
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

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 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.
- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain R513A [GWP<sub>100</sub> 631] fluorinated greenhouse gases.

Certified data in EUROVENT

# ERACS2-Q-G05

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

1062 - 3222 199,5-825,6 kW

ERACS2-Q-G05 /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
<b>PERFORMANCE</b>								
<b>COOLING ONLY (GROSS VALUE)</b>								
Cooling capacity	(1)	kW	482,7	525,0	553,8	624,1	701,4	825,6
Total power input	(1)	kW	161,8	173,6	182,3	209,0	231,2	274,4
EER	(1)	kW/kW	2,983	3,024	3,038	2,986	3,034	3,009
<b>COOLING ONLY (EN14511 VALUE)</b>								
Cooling capacity	(1)(2)	kW	481,6	523,7	552,3	622,9	699,7	823,6
EER	(1)(2)	kW/kW	2,960	2,990	3,000	2,960	3,000	2,980
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>								
Total heating capacity	(3)	kW	496,9	546,8	576,4	617,8	718,5	833,8
Total power input	(3)	kW	154,8	165,5	175,5	185,2	215,7	249,9
COP	(3)	kW/kW	3,210	3,304	3,284	3,336	3,331	3,337
<b>HEATING ONLY (EN14511 VALUE)</b>								
Total heating capacity	(2)(3)	kW	498,1	548,3	578,1	619,0	720,4	835,9
COP	(2)(3)	kW/kW	3,190	3,280	3,260	3,320	3,310	3,320
<b>COOLING WITH TOTAL HEAT RECOVERY</b>								
Cooling capacity	(4)	kW	483,5	521,5	550,3	631,2	701,1	826,1
Total power input	(4)	kW	139,3	150,9	159,8	177,6	201,5	238,0
Recovery heat exchanger capacity	(4)	kW	614,5	663,4	700,5	798,1	890,5	1050
TER		kW/kW	7,882	7,853	7,829	8,046	7,901	7,882
<b>ENERGY EFFICIENCY</b>								
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>								
<b>Ambient refrigeration</b>								
Prated,c	(11)	kW	-	-	-	-	700	824
SEER	(11)(12)		-	-	-	-	4,12	4,11
Performance ηs	(11)(13)	%	-	-	-	-	162	161
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>								
PDesign	(5)	kW	362	391	357	400	-	-
SCOP	(5)(14)		3,42	3,54	3,55	3,55	-	-
Performance ηs	(5)(15)	%	134	139	139	139	-	-
Seasonal efficiency class	(16)		-	-	-	-	-	-
<b>EXCHANGERS</b>								
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>								
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
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>								
Water flow	(3)	l/s	23,99	26,39	27,82	29,82	34,68	40,25
Pressure drop	(3)	kPa	28,8	32,1	35,6	23,1	32,6	32,1
<b>REFRIGERANT CIRCUIT</b>								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	219	242	276	291	322	380
<b>NOISE LEVEL</b>								
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	101	101	101	102
<b>SIZE AND WEIGHT</b>								
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

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
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- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
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- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

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		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	
<b>PERFORMANCE</b>								
<b>COOLING ONLY (GROSS VALUE)</b>								
Cooling capacity	(1)	kW	204,9	241,0	293,8	321,8	369,3	413,6
Total power input	(1)	kW	73,65	88,06	107,2	113,3	135,7	149,9
EER	(1)	kW/kW	2,780	2,736	2,741	2,840	2,721	2,759
<b>COOLING ONLY (EN14511 VALUE)</b>								
Cooling capacity	(1)(2)	kW	204,3	240,1	292,9	320,6	368,1	412,6
EER	(1)(2)	kW/kW	2,750	2,700	2,710	2,800	2,690	2,730
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>								
Total heating capacity	(3)	kW	219,8	261,0	311,6	342,6	399,6	438,3
Total power input	(3)	kW	69,66	84,00	95,98	105,5	126,7	135,8
COP	(3)	kW/kW	3,154	3,107	3,246	3,247	3,154	3,228
<b>HEATING ONLY (EN14511 VALUE)</b>								
Total heating capacity	(2)(3)	kW	220,5	262,0	312,7	344,0	401,1	439,5
COP	(2)(3)	kW/kW	3,130	3,080	3,220	3,220	3,130	3,210
<b>COOLING WITH TOTAL HEAT RECOVERY</b>								
Cooling capacity	(4)	kW	208,6	248,1	304,6	329,4	381,4	427,5
Total power input	(4)	kW	63,13	75,25	90,73	96,42	115,9	126,9
Recovery heat exchanger capacity	(4)	kW	267,9	318,8	389,9	420,0	490,3	546,8
TER		kW/kW	7,553	7,539	7,657	7,774	7,522	7,678
<b>ENERGY EFFICIENCY</b>								
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>								
<b>Ambient refrigeration</b>								
Prated,c	(11)	kW	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-
Performance ηs	(11)(13)	%	-	-	-	-	-	-
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>								
PDesign	(5)	kW	157	213	221	244	285	314
SCOP	(5)(14)		3,36	3,20	3,40	3,47	3,35	3,49
Performance ηs	(5)(15)	%	131	125	133	136	131	137
Seasonal efficiency class	(16)		-	-	-	-	-	-
<b>EXCHANGERS</b>								
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>								
Water flow	(1)	l/s	9,797	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
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>								
Water flow	(3)	l/s	10,61	12,60	15,04	16,54	19,29	21,16
Pressure drop	(3)	kPa	32,1	45,2	39,6	47,9	45,3	30,2
<b>REFRIGERANT CIRCUIT</b>								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	101	129	156	184	197	221
<b>NOISE LEVEL</b>								
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
<b>SIZE AND WEIGHT</b>								
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

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 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.
- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

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ERACS2-Q-G05 /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
<b>PERFORMANCE</b>								
<b>COOLING ONLY (GROSS VALUE)</b>								
Cooling capacity	(1)	kW	468,7	513,4	541,3	603,9	683,8	799,5
Total power input	(1)	kW	169,5	174,5	184,7	214,7	234,7	285,9
EER	(1)	kW/kW	2,765	2,942	2,931	2,813	2,914	2,796
<b>COOLING ONLY (EN14511 VALUE)</b>								
Cooling capacity	(1)(2)	kW	467,7	512,2	539,9	602,8	682,2	797,7
EER	(1)(2)	kW/kW	2,740	2,920	2,900	2,790	2,890	2,770
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>								
Total heating capacity	(3)	kW	496,9	546,8	576,4	617,8	718,5	833,8
Total power input	(3)	kW	154,8	165,5	175,5	185,2	215,7	249,9
COP	(3)	kW/kW	3,210	3,304	3,284	3,336	3,331	3,337
<b>HEATING ONLY (EN14511 VALUE)</b>								
Total heating capacity	(2)(3)	kW	498,1	548,3	578,1	619,0	720,4	835,9
COP	(2)(3)	kW/kW	3,190	3,280	3,260	3,320	3,310	3,320
<b>COOLING WITH TOTAL HEAT RECOVERY</b>								
Cooling capacity	(4)	kW	483,5	521,5	550,3	631,2	701,1	826,1
Total power input	(4)	kW	139,3	150,9	159,8	177,6	201,5	238,0
Recovery heat exchanger capacity	(4)	kW	614,5	663,4	700,5	798,1	890,5	1050
TER		kW/kW	7,882	7,853	7,829	8,046	7,901	7,882
<b>ENERGY EFFICIENCY</b>								
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>								
<b>Ambient refrigeration</b>								
Prated,c	(11)	kW	-	-	-	-	682	798
SEER	(11)(12)		-	-	-	-	4,10	4,10
Performance ηs	(11)(13)	%	-	-	-	-	161	161
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>								
PDesign	(5)	kW	362	391	357	400	-	-
SCOP	(5)(14)		3,42	3,54	3,55	3,55	-	-
Performance ηs	(5)(15)	%	134	139	139	139	-	-
Seasonal efficiency class	(16)		-	-	-	-	-	-
<b>EXCHANGERS</b>								
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>								
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
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>								
Water flow	(3)	l/s	23,99	26,39	27,82	29,82	34,68	40,25
Pressure drop	(3)	kPa	28,8	32,1	35,6	23,1	32,6	32,1
<b>REFRIGERANT CIRCUIT</b>								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	230	236	276	288	322	368
<b>NOISE LEVEL</b>								
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	96	96	96	97
<b>SIZE AND WEIGHT</b>								
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

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 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.
- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

 The units highlighted in this publication contain R513A [GWP<sub>100</sub> 631] fluorinated greenhouse gases.

Certified data in EUROVENT

			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
<b>PERFORMANCE</b>								
<b>COOLING ONLY (GROSS VALUE)</b>								
Cooling capacity	(1)	kW	199,5	233,2	283,4	313,8	356,0	401,4
Total power input	(1)	kW	75,71	91,26	113,2	117,5	143,1	155,5
EER	(1)	kW/kW	2,635	2,554	2,504	2,671	2,488	2,581
<b>COOLING ONLY (EN14511 VALUE)</b>								
Cooling capacity	(1)(2)	kW	198,9	232,4	282,5	312,7	354,9	400,5
EER	(1)(2)	kW/kW	2,610	2,520	2,480	2,640	2,460	2,560
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>								
Total heating capacity	(3)	kW	213,3	253,5	303,9	333,4	389,1	426,1
Total power input	(3)	kW	67,43	81,70	93,71	102,5	123,5	132,0
COP	(3)	kW/kW	3,165	3,103	3,243	3,253	3,151	3,228
<b>HEATING ONLY (EN14511 VALUE)</b>								
Total heating capacity	(2)(3)	kW	214,0	254,5	304,9	334,7	390,5	427,2
COP	(2)(3)	kW/kW	3,140	3,080	3,220	3,220	3,130	3,210
<b>COOLING WITH TOTAL HEAT RECOVERY</b>								
Cooling capacity	(4)	kW	208,6	248,1	304,6	329,4	381,4	427,5
Total power input	(4)	kW	63,13	75,25	90,73	96,42	115,9	126,9
Recovery heat exchanger capacity	(4)	kW	267,9	318,8	389,9	420,0	490,3	546,8
TER		kW/kW	7,553	7,539	7,657	7,774	7,522	7,678
<b>ENERGY EFFICIENCY</b>								
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>								
<b>Ambient refrigeration</b>								
Prated,c	(11)	kW	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-
Performance ηs	(11)(13)	%	-	-	-	-	-	-
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>								
PDesign	(5)	kW	153	207	217	238	279	307
SCOP	(5)(14)		3,36	3,21	3,40	3,48	3,35	3,49
Performance ηs	(5)(15)	%	131	125	133	136	131	137
Seasonal efficiency class	(16)		-	-	-	-	-	-
<b>EXCHANGERS</b>								
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>								
Water flow	(1)	l/s	9,540	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
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>								
Water flow	(3)	l/s	10,30	12,24	14,67	16,09	18,78	20,57
Pressure drop	(3)	kPa	30,2	42,7	37,6	45,3	43,0	28,5
<b>REFRIGERANT CIRCUIT</b>								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	101	122	148	179	186	198
<b>NOISE LEVEL</b>								
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
<b>SIZE AND WEIGHT</b>								
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

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 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.
- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain R513A [GWP<sub>100</sub> 631] fluorinated greenhouse gases.

Certified data in EUROVENT

# ERACS2-Q-G05

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

1062 - 3222 199,5-825,6 kW

ERACS2-Q-G05 /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
<b>PERFORMANCE</b>								
<b>COOLING ONLY (GROSS VALUE)</b>								
Cooling capacity	(1)	kW	464,1	509,0	537,1	597,3	677,7	790,4
Total power input	(1)	kW	172,5	177,2	187,6	218,6	238,5	292,8
EER	(1)	kW/kW	2,690	2,872	2,863	2,732	2,842	2,699
<b>COOLING ONLY (EN14511 VALUE)</b>								
Cooling capacity	(1)(2)	kW	463,1	507,8	535,7	596,2	676,1	788,6
EER	(1)(2)	kW/kW	2,670	2,850	2,830	2,710	2,820	2,680
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>								
Total heating capacity	(3)	kW	490,7	541,1	569,7	605,5	710,1	823,6
Total power input	(3)	kW	153,4	164,0	174,0	183,4	213,8	247,7
COP	(3)	kW/kW	3,199	3,299	3,274	3,302	3,321	3,325
<b>HEATING ONLY (EN14511 VALUE)</b>								
Total heating capacity	(2)(3)	kW	491,9	542,5	571,3	606,7	711,9	825,6
COP	(2)(3)	kW/kW	3,180	3,280	3,250	3,290	3,300	3,310
<b>COOLING WITH TOTAL HEAT RECOVERY</b>								
Cooling capacity	(4)	kW	483,5	521,5	550,3	631,2	701,1	826,1
Total power input	(4)	kW	139,3	150,9	159,8	177,6	201,5	238,0
Recovery heat exchanger capacity	(4)	kW	614,5	663,4	700,5	798,1	890,5	1050
TER		kW/kW	7,882	7,853	7,829	8,046	7,901	7,882
<b>ENERGY EFFICIENCY</b>								
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>								
<b>Ambient refrigeration</b>								
Prated,c	(11)	kW	-	-	-	-	676	789
SEER	(11)(12)		-	-	-	-	4,10	4,11
Performance ηs	(11)(13)	%	-	-	-	-	161	161
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>								
PDesign	(5)	kW	363	390	359	400	-	-
SCOP	(5)(14)		3,44	3,55	3,57	3,56	-	-
Performance ηs	(5)(15)	%	135	139	140	139	-	-
Seasonal efficiency class	(16)		-	-	-	-	-	-
<b>EXCHANGERS</b>								
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>								
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
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>								
Water flow	(3)	l/s	23,69	26,12	27,50	29,23	34,28	39,76
Pressure drop	(3)	kPa	28,1	31,4	34,8	22,1	31,8	31,3
<b>REFRIGERANT CIRCUIT</b>								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	230	236	265	276	299	357
<b>NOISE LEVEL</b>								
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	92	92	92	93
<b>SIZE AND WEIGHT</b>								
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

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 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.
- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

 The units highlighted in this publication contain R513A [GWP<sub>100</sub> 631] fluorinated greenhouse gases.

Certified data in EUROVENT

ERACS2-Q-G05 /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
<b>PERFORMANCE</b>								
<b>COOLING ONLY (GROSS VALUE)</b>								
Cooling capacity	(1)	kW	454,5	500,5	528,4	583,9	665,4	772,4
Total power input	(1)	kW	174,0	176,8	187,8	221,1	239,6	299,1
EER	(1)	kW/kW	2,612	2,831	2,814	2,641	2,777	2,582
<b>COOLING ONLY (EN14511 VALUE)</b>								
Cooling capacity	(1)(2)	kW	453,5	499,4	527,1	582,9	663,9	770,7
EER	(1)(2)	kW/kW	2,590	2,810	2,790	2,620	2,750	2,560
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>								
Total heating capacity	(3)	kW	490,7	541,1	569,7	612,8	710,1	823,6
Total power input	(3)	kW	148,7	158,4	168,4	177,8	207,2	240,2
COP	(3)	kW/kW	3,300	3,416	3,383	3,447	3,427	3,429
<b>HEATING ONLY (EN14511 VALUE)</b>								
Total heating capacity	(2)(3)	kW	491,9	542,5	571,3	614,0	711,9	825,6
COP	(2)(3)	kW/kW	3,280	3,390	3,360	3,430	3,410	3,410
<b>COOLING WITH TOTAL HEAT RECOVERY</b>								
Cooling capacity	(4)	kW	483,5	521,5	550,3	631,2	701,1	826,1
Total power input	(4)	kW	139,3	150,9	159,8	177,6	201,5	238,0
Recovery heat exchanger capacity	(4)	kW	614,5	663,4	700,5	798,1	890,5	1050
TER		kW/kW	7,882	7,853	7,829	8,046	7,901	7,882
<b>ENERGY EFFICIENCY</b>								
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>								
<b>Ambient refrigeration</b>								
Prated,c	(11)	kW	-	-	527	583	664	771
SEER	(11)(12)		-	-	4,28	4,10	4,26	4,10
Performance ηs	(11)(13)	%	-	-	168	161	167	161
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>								
PDesign	(5)	kW	363	390	-	-	-	-
SCOP	(5)(14)		3,66	3,82	-	-	-	-
Performance ηs	(5)(15)	%	144	150	-	-	-	-
Seasonal efficiency class	(16)		-	-	-	-	-	-
<b>EXCHANGERS</b>								
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>								
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
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>								
Water flow	(3)	l/s	23,69	26,12	27,50	29,58	34,28	39,76
Pressure drop	(3)	kPa	28,1	31,4	34,8	22,7	31,8	31,3
<b>REFRIGERANT CIRCUIT</b>								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	213	236	269	276	313	368
<b>NOISE LEVEL</b>								
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	88	88	88	89
<b>SIZE AND WEIGHT</b>								
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

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 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.
- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain R513A [GWP<sub>100</sub> 631] fluorinated greenhouse gases.

Certified data in EUROVENT



# ERACS2-Q-G05

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

1062 - 3222 199,5-825,6 kW

ERACS2-Q-G05 /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
<b>PERFORMANCE</b>											
<b>COOLING ONLY (GROSS VALUE)</b>											
Cooling capacity	(1)	kW	204,3	247,2	293,3	319,4	366,3	472,5	509,5	541,3	611,3
Total power input	(1)	kW	69,43	80,30	103,8	109,1	132,7	158,5	169,6	176,3	201,4
EER	(1)	kW/kW	2,944	3,078	2,826	2,928	2,760	2,981	3,004	3,070	3,035
<b>COOLING ONLY (EN14511 VALUE)</b>											
Cooling capacity	(1)(2)	kW	203,7	246,3	292,4	318,3	365,1	471,4	508,3	539,9	610,1
EER	(1)(2)	kW/kW	2,910	3,030	2,790	2,890	2,730	2,950	2,980	3,040	3,010
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>											
Total heating capacity	(3)	kW	220,4	269,9	311,2	343,7	396,8	517,8	557,2	593,9	650,2
Total power input	(3)	kW	65,08	80,96	92,20	99,37	121,2	151,7	160,5	170,7	183,0
COP	(3)	kW/kW	3,386	3,332	3,375	3,458	3,274	3,413	3,472	3,479	3,553
<b>HEATING ONLY (EN14511 VALUE)</b>											
Total heating capacity	(2)(3)	kW	221,1	271,0	312,3	345,1	398,3	519,2	558,7	595,7	651,6
COP	(2)(3)	kW/kW	3,360	3,300	3,350	3,420	3,250	3,390	3,450	3,450	3,530
<b>COOLING WITH TOTAL HEAT RECOVERY</b>											
Cooling capacity	(4)	kW	208,6	248,1	304,6	329,4	381,4	483,5	521,5	550,3	631,2
Total power input	(4)	kW	63,13	75,25	90,73	96,42	115,9	139,3	150,9	159,8	177,6
Recovery heat exchanger capacity	(4)	kW	267,9	318,8	389,9	420,0	490,3	614,5	663,4	700,5	798,1
TER		kW/kW	7,553	7,539	7,657	7,774	7,522	7,882	7,853	7,829	8,046
<b>ENERGY EFFICIENCY</b>											
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>											
<b>Ambient refrigeration</b>											
Prated,c	(11)	kW	-	-	-	-	-	-	-	540	610
SEER	(11)(12)		-	-	-	-	-	-	-	4,36	4,20
Performance ηs	(11)(13)	%	-	-	-	-	-	-	-	172	165
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>											
PDesign	(5)	kW	156	188	221	242	283	367	374	-	-
SCOP	(5)(14)		3,74	3,42	3,60	3,81	3,56	3,75	3,78	-	-
Performance ηs	(5)(15)	%	146	134	141	149	139	147	148	-	-
Seasonal efficiency class	(16)		-	-	-	-	-	-	-	-	-
<b>EXCHANGERS</b>											
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>											
Water flow	(1)	l/s	9,771	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
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>											
Water flow	(3)	l/s	10,64	13,03	15,02	16,59	19,15	25,00	26,90	28,67	31,38
Pressure drop	(3)	kPa	32,3	48,4	39,5	48,2	44,7	31,3	33,3	37,8	25,5
<b>REFRIGERANT CIRCUIT</b>											
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	122	158	198	204	232	242	253	269	291
<b>NOISE LEVEL</b>											
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	89	89
<b>SIZE AND WEIGHT</b>											
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

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Plant (side) heat exchanger water (in/out) 40°C/45°C.
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 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.
- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain R513A [GWP<sub>100</sub> 631] fluorinated greenhouse gases.

Certified data in EUROVENT

**Dimensional drawing**

