Water cooled chillers and heat pumps
With scroll compressors

R-134a

R-407C

RWE/PWE... K/Ka Series - 1 and 2 circuits from 6 to 393 kW

- Indoor installation
- Compact dimensions
- Wide range of options

Water cooled chillers and heat pumps

scroll compressors

water cooled unit

only cooling and heat pump units

units available in low noise versions

EMICON
AIR CONDITIONING AND INDUSTRIAL APPLICATION

Water cooled chillers and heat pumps with scroll compressors

The water cooled chillers and heat pumps of **RWE / PWE series** are designed for indoor installation and are particularly suitable for small and medium sized air conditioning systems, in residential and commercial applications. They are made of a housing in painted steel plate, for 61-901 K and 151-601 Ka sizes. They are all available with 1 or 2 refrigerant circuits. Thanks to their compact dimensions and to the several options available, these units are particularly easy to install in small spaces. They are completely assembled and tested in the factory and supplied with refrigerant and non-freezing oil charge. Therefore, once on site, the units only need to be positioned and electrically and hydraulically connected.

For heat pump units, the cycle inversion is on water side (and not on refrigerant side) to be realized at customer's care during installation.

Available versions

- RWE/PWE ...K with R407C ecological refrigerant charge
- RWE/PWE ...Ka with R134a ecological refrigerant charge

Operation limits

- EVAPORATOR (OUT): from 5 to 15°C
- CONDENSER (OUT): from 30 to 50°C for R407C
  from 30 to 55°C for R134a

Main components

Strong and compact frame, with a housing made of galvanized and RAL 7035 painted steel plate for 61-901 K and 151-601 K sizes, while for the other sizes it is made of bended and RAL 7035 coloured steel profiles, supporting all the main components, installed at sight.

High-efficiency **scroll compressor** (EER 3.37 under ARI conditions), with low sound level, internal heat protection, installed on rubber vibration dampers, supplied with crankcase heater when necessary. Higher capacity units are equipped with two scroll compressors in tandem.

Weld-brazed plate **evaporator** and **condenser** in AISI 316 stainless steel, with pipes and patented manifold so to reach a high heat exchange coefficient. Its design allows a uniform water distribution, compatibly with pressure drops. The exchanger is provided with close-cell insulating material.

Cooling circuit composed of thermostatic expansion valve, dehydrating filter, sight glass, safety device, antifreeze thermostat, high and low pressure switches.

Electric board in compliance with CE norms, contained in a suitable partition protected by the hinged internal safety panel, provided with protection fuses and safety transformer. In case of hydraulic kit on board (for sizes 61-901 K and 151-601 Ka), the electrical control of the pump group is provided.

Unit management **microprocessor** installed on the external panel, easily accessible, complete with compressors hour counter.

References

- Hypo Bank Zentrale – Innsbruck (Austria)
- Caserma Carabinieri – Mascali, Catania (Italy)
- Centre de Biologie – Lille (France)
- Università di Innsbruck (Austria)
- Collegio S. Carlo – Milano (Italy)
- BASF – Ludwigshafen (Germany)
- Swarosky Wattens – BBB Haus – Tirol (Austria)
- Hotel Chalet – Shabla (Bulgaria)
- Hotel Marconi – Milano (Italy)
- Klinik "Beau Site" – Berna (Switzerland)
- Landeskrankenhaus – Villach (Germany)
- Klinik "Linde" – Biel (Switzerland)
- Royal Homeopatic Hospital (U.K.)
- Historiches Museum – Berna (Switzerland)
- Fiera Basilea (Switzerland)
- Piscina Comunale – Quartiere Santella, Brindisi (Italy)

Available options

A - Amperometer: Electrical device for measuring the intensity of electrical current absorbed by the unit (not available for sizes 61-901 K and 151-601 Ka).

AE - Electrical power supply different from standard: mainly, 230V three-phase, 460V three-phase. Frequency 50/60 Hz.

CF - Soundproofed compressors cabinet with standard material: Insulation of compressors by a cabinet made of extruded anodized aluminium profiles, with panels in aluminium alloy, coated with soundproofing material and vibration dampers under compressors.

CFU - Soundproofed compressors cabinet with bituminous rubber coated material: Insulation of compressors by a cabinet made of extruded anodized aluminium profiles, with panels in aluminium alloy, coated with bituminous rubber soundproofing material and vibration dampers under compressors, mufflers on compressors discharge pipes.

CI - Soundproofing jacket on compressors: made of soundproofing material, wrapped all around compressors so to further reduce the overall sound level of the unit. (Not available for sizes 61-901 K and 151-601 Ka).

CL - Soundproofing insulation with standard material: insulation of the compressor housing by means of soundproofing material. (For sizes 61-901 K and 151-601 Ka).

CM - Soundproofing insulation with bituminous rubber material: insulation of the compressor housing by means of bituminous rubber coated material. (For sizes 61-901 K and 151-601 Ka).

CS - Compressors inrush counter: Electromechanical device positioned inside the electrical board, recording the total inrush starts of compressors.

HG - Hot gas by-pass: mechanical device for modulating cooling capacity, preventing frequent compressor' stops. (Only for 1-circuit unit).

IE - Fumigated wooden crate packing: available on request for critical transports, so to assure a suitable protection to the unit. (Not available for sizes 61-901 K and 151-601 Ka).

IH - RS 485 serial interface: electronic card to be connected to microprocessor, to allow communication between the units and a Carel supervision system. It is possible to fully control the unit from remote. For connection to other supervision systems, the protocol of the controlled parameters is available on request.

IM - Seawood packing: fumigated seawood case and protection bag with hygroscopic salts, suitable for long sea transports.

IR - Packing with fumigated wooden pallet and transparent film: minimal packing made of wooden pallet and transparent film wrapped all around the unit. (Not available for sizes 61-901 K and 151-601 Ka).

MF - Phase monitor: electronic device controlling the correct sequence and/or the eventual lack of one of the 3 phases, switching off the unit if necessary.

MP - Oversized microprocessor: compared to the standard microprocessor, it allows a multi-language display reading, a more detailed description of parameters, the possibility to manage up to 8 units, to manage non standard communication protocols, a better access to the program. (Not available for sizes 61-901 K and 151-601 Ka).

MT - High and low pressure gauges for measuring circuit pressure for sizes 61-901 K and 151-601 Ka, standard for other sizes.

MV - Buffer tank of suitable capacity complete with expansion vessel, safety valve, water gauge, water charge and discharge valves, air purging valves (only for sizes 61-901 K and 151-601 Ka).

P1 - Single pump group: chilled water pump group composed of single pump, expansion vessel, safety valve, water gauge, water charge and discharge valves, air purging valves, electrical control of the pump. The pump is of 2 pole centrifugal packaged type. (Only for sizes 61-901 K and 151-601 Ka).

P1H - Higher available pressure pump group: chilled water higher available pressure pump group composed of single pump, expansion vessel, safety valve, water gauge, water charge and discharge valves, air purging valves, electrical control of the pump. The pump is of 2 pole centrifugal packaged type. (Only for sizes 61-901 K and 151-601 Ka).

PA - Rubber-type vibration dampers: bell-shaped vibration dampers supports for insulating the unit (supplied in kit), made of base and bell in galvanized steel and natural rubber mixture.

PF - Safety water flow switch: installed on evaporator, it switches off the unit in case of lack of water flow rate through the evaporator.

PM - Spring-type vibration dampers: spring-type vibration dampers support, for insulating the unit (supplied in kit), mainly indicated for installation in difficult and aggressive environments. Made of two steel plates containing a suitable quantity of harmonic steel springs. (Not available for sizes 61-901 K and 151-601 Ka).

PQ - Remote microprocessor: remote terminal, allowing to display the temperature and humidity values detected by probes, the alarm digital inputs, the outputs and the remote ON/OFF of the unit, to change and program of the parameters, the sound signal and the display of the present alarms.

RA - Anti-freeze heater on evaporator: electrical heater installed on the evaporator, in order to prevent freezing and provided with thermostat.

RL - Compressors overload relays: electromechanical protection devices against compressor's overload.

RP - Partial heat recovery (about 20%) of the condensing heat, by means of a refrigerant/water plate exchanger (desuperheater), always in series to the compressors. It is requested when you need to produce sanitary water, by recovering condensing heat capacity. (Not available for sizes 61-901 K and 151-601 Ka).

RT - Total heat recovery (100%) of the condensing heat, by means of a refrigerant/water plate exchanger, always in series to the compressors. It is requested when you need to produce sanitary water, by recovering condensing heat capacity, and /or for dehumidification. (Not available for sizes 61-901 K and 151-601 Ka).

RV - Personalized frame painting in RAL colour (Only for sizes 61-901 K and 151-601 Ka).

SN - Main switch: manual switch of lock-door type, switching off the unit. (Only for sizes 61-901 K and 151-601 Ka).

V - Voltmeter: Electrical device measuring the electrical tension in the power supply of the unit (Not available for sizes 61-901 K and 151-601 Ka).

VB - Brine version: unit suitable for working with evaporator outlet water temperatures lower than 0°C. A 20 mm evaporator insulation will be provided.

VP - Pressostatic valve: it is placed on condenser and controls the water flow rate according to the unit condensing pressure. (Only for sizes 61-901 K and 151-601 Ka).

VS - Solenoid valve: electromagnetic solenoid valve on each cooling circuit to prevent refrigerant migrations and consequent flooding of compressors.

R407C - 1 circuit - With Housing

MODEL RWE		61 K	111 K	171 K	201 K	221 K	251 K	301 K	381 K	461 K	501 K	571 K	751 K	901 K
Cooling capacity	kW	5.9	10.8	16.5	19.3	20.9	24.8	29.4	37.8	45.3	49.3	57.0	74.6	87.2
Nominal input power	kW	1.2	2.1	2.9	3.4	4.6	5.6	6.2	8.4	9.9	11.1	12.7	16.9	19.6
EER		4.92	5.14	5.69	5.68	4.54	4.43	4.74	4.50	4.57	4.44	4.49	4.41	4.45
Heating capacity	kW	7.1	12.8	19.3	22.7	25.5	30.4	35.7	46.3	55.1	60.4	69.7	91.4	106.9
Evaporator	n.	1												
Circuits	n.	1												
Water flow	m³/h	1.0	1.8	2.8	3.3	3.6	4.3	5.1	6.5	7.8	8.5	9.8	12.8	15.0
Pressure drop	kPa	24	69	46	61	59	61	55	64	41	21	20	25	27
Water cooled condenser	n.	1												
Water flow	m³/h	1.2	2.2	3.4	3.9	4.4	5.3	6.2	8.0	9.6	10.5	12.1	15.9	18.5
Pressure drop	kPa	26	31	37	44	46	52	53	58	84	22	25	23	24
MODELLO PWE		**61 K**	**111 K**	**171 K**	**201 K**	**221 K**	**251 K**	**301 K**	**381 K**	**461 K**	**501 K**	**571 K**	**751 K**	**901 K**
Cooling capacity	kW	5.2	9.4	14.6	17.2	18.7	22.3	26.3	33.7	40.4	44.3	51.3	66.7	77.6
Nominal input power	kW	1.5	2.7	3.6	4.3	5.7	6.7	7.9	10.4	12.6	13.9	15.9	21.0	24.8
COP		3.47	3.48	4.06	4.00	3.28	3.33	3.33	3.24	3.21	3.19	3.23	3.18	3.13
Heating capacity	kW	6.7	12.1	18.2	21.5	24.4	29.0	34.2	44.1	53.0	58.2	67.2	87.7	102.4
Evaporator	n.	1												
Circuits	n.	1												
Water flow	m³/h	0.9	1.6	2.5	2.9	3.2	3.8	4.5	5.8	6.9	7.6	8.8	11.5	13.4
Pressure drop	kPa	22	62	41	55	55	57	51	59	39	20	19	24	25
Water cooled condenser	n.	1												
Water flow	m³/h	1.2	2.1	3.2	3.7	4.3	5.1	6.0	7.7	9.2	10.1	11.7	15.3	17.9
Pressure drop	kPa	20	24	30	36	37	43	44	47	68	18	21	19	20
Scroll compressors	n.	1									2			
Standard capacity steps	%	0 / 100									0 / 50 / 100			
Sound pressure level	dB(A)	58	59	58	58	60	60	61	61	62	62	63	63	64
Dimensions														
Length	mm	800	800	800	800	800	800	800	800	800	1600	1600	1600	1600
Width	mm	500	500	500	500	500	500	500	500	500	750	750	750	750
Height	mm	960	960	960	960	960	960	960	960	960	960	960	960	960
Transport weight	kg	119	126	142	145	189	199	204	231	247	339	345	406	434
Power supply	V / ph / Hz	230 / 1 / 50 + N + T	400 / 3 / 50 + N + T											

R134a - 1 circuit - With Housing

MODEL RWE		151 Ka	181 Ka	211 Ka	271 Ka	311 Ka	351 Ka	421 Ka	521 Ka	601 Ka
Cooling capacity	kW	14.6	17.6	20.3	26.7	30.2	34.5	41.4	51.6	58.9
Nominal input power	kW	3.2	3.8	4.4	5.8	6.6	7.6	8.9	11.7	13.7
EER		4.56	4.63	4.61	4.60	4.57	4.54	4.65	4.41	4.30
Heating capacity	kW	17.8	21.4	24.7	32.6	36.8	42.1	4.65	63.3	72.6
Evaporator	n.	1								
Circuits	n.	1								
Water flow	m³/h	2.5	3.0	3.5	4.6	5.2	5.9	7.1	8.9	10.1
Pressure drop	kPa	58	52	54	70	59	27	22	21	27
Water cooled condenser	Tipo	1								
Water flow	m³/h	3.1	3.7	4.0	5.7	6.4	7.3	8.7	11.0	12.50
Pressure drop	kPa	24	37	38	29	25	19	21	31	27
MODELLO PWE		**151 Ka**	**181 Ka**	**211 Ka**	**271 Ka**	**311 Ka**	**351 Ka**	**421 Ka**	**521 Ka**	**601 Ka**
Cooling capacity	kW	13.2	15.9	18.4	24.2	27.3	31.6	37.5	47.0	53.5
Nominal input power	kW	4.0	4.7	5.4	7.3	8.3	9.6	11.3	14.5	17.0
COP		3.30	3.38	3.41	3.32	3.29	3.29	3.32	3.24	3.15
Heating capacity	kW	17.2	20.6	23.8	31.5	35.6	41.2	48.8	61.5	70.5
Evaporator	n.	1								
Circuits	n.	1								
Water flow	m³/h	2.3	2.7	3.2	4.1	4.7	5.4	6.4	8.1	9.2
Pressure drop	kPa	55	49	51	67	56	25	21	21	26
Water cooled condenser	n.	1								
Water flow	m³/h	3.0	3.6	4.1	5.5	6.2	7.2	8.5	10.7	12.3
Pressure drop	kPa	20	31	32	24	21	17	17	26	22
Scroll compressors	n.	1					2			
Standard capacity steps	%	0 / 100					0 / 50 / 100			
Sound pressure level	dB(A)	56	57	57	58	58	59	59	60	60
Dimensions										
Length	mm	800	800	800	800	800	1600	1600	1600	1600
Width	mm	500	500	500	500	500	750	750	750	750
Height	mm	960	960	960	960	960	960	960	960	960
Transport weight	kg	175	185	193	212	227	315	312	368	389
Power supply	V / ph / Hz	400 / 3 / 50 + N + T								

- RWE: Operating conditions: evaporator water temperature 7/12°C; condenser water temperature 30/35°C
- PWE: Operating conditions: evaporator water temperature 7/12°C; condenser water temperature 40/45°C
- Sound pressure level at 1 m in open field (ISO 3744)
- Unit weight including oil and refrigerant charge

R407C - 1 circuit - Tandem Compressors

MODEL RWE		541 K	631 K	761 K	931 K	1201 K	1501 K	1901 K
Cooling capacity	kW	54.3	62.9	77.1	94.8	125.0	158.0	196.0
Nominal input power	kW	11.8	13.4	17.1	19.9	27.0	33.7	40.3
EER		4.60	4.69	4.51	4.76	4.63	4.69	4.86
Heating capacity	kW	66.1	76.3	94.2	115.0	152.0	191.0	237.0
Evaporator	n.	1						
Circuits	n.	1						
Water flow	m³/h	9.3	10.8	13.3	16.3	21.5	27.2	33.7
Pressure drop	kPa	40	43	33	39	38	41	43
Water cooled condenser	n.	1						
Water flow	m³/h	11.4	13.1	16.2	19.8	26.1	32.9	40.8
Pressure drop	kPa	57	61	47	40	54	58	68
MODELLO PWE		**541 K**	**631 K**	**761 K**	**931 K**	**1201 K**	**1501 K**	**1901 K**
Cooling capacity	kW	48.4	56.0	68.6	84.4	111.0	140.0	175.0
Nominal input power	kW	14.6	16.6	21.2	24.6	33.5	41.8	50.0
COP		3.32	3.37	3.24	3.43	3.31	3.35	3.50
Heating capacity	kW	63.0	72.6	89.8	109.0	144.5	181.8	225.0
Evaporator	n.	1						
Circuits	n.	1						
Water flow	m³/h	8.3	9.6	11.8	14.5	19.1	24.1	30.1
Pressure drop	kPa	32	34	26	31	30	32	34
Water cooled condenser	n.	1						
Water flow	m³/h	10.8	12.5	15.4	18.7	24.9	31.3	38.7
Pressure drop	kPa	52	55	43	36	49	53	62
Scroll compressors	n.	2 (1 tandem)						
Standard capacity steps	%	0 / 50 / 100						
Sound pressure level	dB(A)	70	70	70	72	75	77	79
Dimensions								
Length	mm	1500	1500	1500	1500	1500	1500	1500
Width	mm	750	750	750	750	750	750	750
Height	mm	1600	1600	1600	1600	1800	1800	1800
Transport weight	kg	505	521	555	603	715	795	881
Power supply	V / ph / Hz	400 / 3 / 50 + N + T						

R407C - 2 circuit - Single Compressors

MODEL RWE		442 K	532 K	612 K	762 K	922 K	1262 K	1552 K	1912 K
Cooling capacity	kW	45.3	55.1	62.7	77.4	94.4	126.0	158.0	195.0
Nominal input power	kW	9.7	11.6	13.5	16.9	20.1	27.0	33.6	40.6
EER		4.67	4.75	4.64	4.58	4.69	4.67	4.70	4.80
Heating capacity	kW	55.0	66.7	76.2	94.3	114.5	153.0	191.6	235.6
Evaporator	n.	2					1		
Circuits	n.	2							
Water flow	m³/h	7.8	9.5	10.8	13.3	16.2	21.7	27.2	33.5
Pressure drop	kPa	27	29	38	37	40	38	42	49
Water cooled condenser	n.	2					1		
Water flow	m³/h	9.4	11.5	13.1	16.2	19.7	26.3	32.9	40.5
Pressure drop	kPa	38	41	53		56	46		56
MODELLO PWE		**442 K**	**532 K**	**612 K**	**762 K**	**922 K**	**1262 K**	**1552 K**	**1912 K**
Cooling capacity	kW	40.3	49.1	55.8	68.9	84.0	112.0	141.0	174.0
Nominal input power	kW	12.0	14.4	16.7	20.9	24.9	33.5	41.7	50.3
COP		3.36	3.41	3.34	3.30	3.37	3.34	3.38	3.46
Heating capacity	kW	52.3	63.5	72.5	89.8	108.9	145.5	182.7	224.3
Evaporator	n.	2					1		
Circuits	n.	2							
Water flow	m³/h	6.9	8.4	9.6	11.8	14.4	19.3	24.2	29.9
Pressure drop	kPa	21	23	30	30	32	30	34	39
Water cooled condenser	n.	2					1		
Water flow	m³/h	9.0	10.9	12.5	15.4	18.7	25.3	31.4	38.6
Pressure drop	kPa	34	37	48	48	51	41	42	51
Scroll compressors	n.	2							
Standard capacity steps	%	0 / 50 / 100							
Sound pressure level	dB(A)	70	70	74	76	73	77	77	77
Dimensions									
Length	mm	1500	1500	1500	1500	1500	1500	1500	1500
Width	mm	750	750	750	750	750	750	750	750
Height	mm	1600	1600	1600	1600	1600	1800	1800	1800
Transport weight	kg	496	516	525	545	596	721	795	859
Power supply	V / ph / Hz	400 / 3 / 50 + N + T							

- RWE: Operating conditions: evaporator water temperature 7/12°C; condenser water temperature 30/35°C
- PWE: Operating conditions: evaporator water temperature 7/12°C; condenser water temperature 40/45°C
- Sound pressure level at 1 m in open field (ISO 3744)
- Unit weight including oil and refrigerant charge

R407C - 2 circuit - Tandem Compressors

MODEL RWE		892 K	1082 K	1212 K	1512 K	1852 K	2462 K	3102 K	3822 K
Cooling capacity	kW	90.4	108.0	125.0	155.0	190.0	250.0	315.0	393.0
Nominal input power	kW	19.3	23.7	27.0	33.8	40.4	54.0	67.4	80.6
EER		4.68	4.56	4.63	4.58	4.70	4.63	4.67	4.87
Heating capacity	kW	109.7	131.7	152.0	188.8	230.4	304.0	382.4	473.6
Evaporator	n.	1					2		
Circuits	n.	2							
Water flow	m³/h	15.5	18.6	21.5	26.7	32.7	43.0	54.2	67.6
Pressure drop	kPa	41	44	46	48	38	38	41	43
Water cooled condenser	n.	1					2		
Water flow	m³/h	18.9	22.6	26.1	32.5	39.6	52.3	65.8	81.5
Pressure drop	kPa	35	41	45	54	54	54	58	68
MODELLO PWE		**892 K**	**1082 K**	**1212 K**	**1512 K**	**1852 K**	**2462 K**	**3102 K**	**3822 K**
Cooling capacity	kW	80.4	97.0	111.0	138.0	169.0	223.0	281.0	350.0
Nominal input power	kW	24.0	29.4	33.5	41.9	50.1	67.0	83.6	100.0
COP		3.35	3.30	3.31	3.29	3.37	3.33	3.36	3.50
Heating capacity	kW	104.4	126.4	144.5	179.9	219.1	290.0	364.6	450.0
Evaporator	n.	1					2		
Circuits	n.	2							
Water flow	m³/h	13.8	16.6	19.1	23.7	29.7	38.4	48.3	60.2
Pressure drop	kPa	32	35	37	38	30	30	32	34
Water cooled condenser	n.	1					2		
Water flow	m³/h	17.9	21.6	24.8	30.9	37.7	49.9	62.7	77.4
Pressure drop	kPa	32	37	41	41	48	49	53	62
Scroll compressors	n.	4 (2 tandem)							
Standard capacity steps	%	0 / 25 / 50 / 75 / 100							
Sound pressure level	dB(A)	70	70	74	76	73	77	77	77
Dimensions									
Length	mm	2500	2500	2500	2500	3000	3000	3000	3000
Width	mm	750	750	750	750	750	750	750	750
Height	mm	1800	1800	1800	1800	1800	1800	1800	1800
Transport weight	kg	862	884	916	956	1096	1338	1498	1670
Power supply	V / ph / Hz	400 / 3 / 50 + N + T							

R134a - 1 circuit - Tandem Compressors

MODEL RWE		341 Ka	401 Ka	491 Ka	591 Ka	711 Ka	971 Ka	1201 Ka
Cooling capacity	kW	35.6	41.5	50.4	60.1	80.3	99.0	124.0
Nominal input power	kW	8.1	9.2	11.3	13.5	17.5	22.0	27.1
EER		4.39	4.51	4.46	4.45	4.59	4.50	4.57
Heating capacity	kW	43.7	50.7	61.7	73.6	97.8	121.0	151.1
Evaporator	n.	1						
Circuits	n.	1						
Water flow	m³/h	6.1	7.1	8.7	10.3	13.8	17.0	21.3
Pressure drop	kPa	23	24	28	28	20	24	25
Water cooled condenser	n.	1						
Water flow	m³/h	7.5	8.7	10.6	12.7	16.8	20.8	26.0
Pressure drop	kPa	70	62	65	71	51	62	70
MODELLO PWE		**341 Ka**	**401 Ka**	**491 Ka**	**591 Ka**	**711 Ka**	**971 Ka**	**1201 Ka**
Cooling capacity	kW	32.0	37.4	45.3	54.1	72.3	89.1	112.0
Nominal input power	kW	10.0	11.4	14.1	16.8	21.7	27.3	33.6
COP		3.20	3.28	3.21	3.22	3.33	3.26	3.33
Heating capacity	kW	42.0	48.8	59.4	70.9	94.0	116.4	145.6
Evaporator	n.	1						
Circuits	n.	1						
Water flow	m³/h	5.5	6.4	7.8	9.3	12.4	15.3	19.3
Pressure drop	kPa	18	19	22	22	16	19	20
Water cooled condenser	n.	1						
Water flow	m³/h	7.2	8.4	10.2	12.2	16.2	20.0	25.0
Pressure drop	kPa	65	57	61	66	47	57	65
Scroll compressors	n.	2 (1 tandem)						
Standard capacity steps	%	0 / 50 / 100						
Sound pressure level	dB(A)	70	70	72	72	75	77	79
Dimensions								
Length	mm	1500	1500	1500	1500	1500	1500	1500
Width	mm	750	750	750	750	750	750	750
Height	mm	1600	1600	1600	1600	1800	1800	1800
Transport weight	kg	498	514	528	579	699	763	833
Power supply	V / ph / Hz	400 / 3 / 50 + N + T						

- RWE: Operating conditions: evaporator water temperature 7/12°C; condenser water temperature 30/35°C
- PWE: Operating conditions: evaporator water temperature 7/12°C; condenser water temperature 40/45°C
- Sound pressure level at 1 m in open field (ISO 3744)
- Unit weight including oil and refrigerant charge

R134a - 2 circuit - Single Compressors

MODEL RWE		282 Ka	352 Ka	402 Ka	492 Ka	592 Ka	772 Ka	972 Ka	1222 Ka
Cooling capacity	kW	29.1	36.0	41.2	50.7	60.8	79.3	99.5	125.0
Nominal input power	kW	6.7	8.1	9.3	11.3	13.4	17.5	21.8	27.0
EER		4.34	4.51	4.43	4.48	4.54	4.53	4.56	4.63
Heating capacity	kW	35.8	44.1	50.5	62.0	74.2	96.8	121.3	152.0
Evaporator	n.	2							
Circuits	n.	2							
Water flow	m³/h	5.01	6.21	7.09	8.7	10.5	13.6	17.1	21.5
Pressure drop	kPa	18	17	22	25	23	32	29	31
Water cooled condenser	n.	2							
Water flow	m³/h	6.15	7.58	8.68	10.7	12.8	16.6	20.9	26.1
Pressure drop	kPa	50	39	51	48	50	46	43	54
MODELLO PWE		**282 Ka**	**352 Ka**	**402 Ka**	**492 Ka**	**592 Ka**	**772 Ka**	**972 Ka**	**1222 Ka**
Cooling capacity	kW	26.2	32.5	37.0	45.6	54.7	71.4	89.6	112.0
Nominal input power	kW	8.3	9.9	11.5	14.0	16.7	21.8	27.0	33.5
COP		3.16	3.28	3.22	3.26	3.28	3.28	3.32	3.34
Heating capacity	kW	34.5	42.4	48.5	59.6	71.4	93.2	116.6	145.5
Evaporator	n.	2							
Circuits	n.	2							
Water flow	m³/h	4.5	5.6	6.4	7.8	9.4	12.3	15.4	19.3
Pressure drop	kPa	14	14	18	20	19	26	24	25
Water cooled condenser	n.	2							
Water flow	m³/h	5.9	7.3	8.3	10.2	12.3	16.0	20.1	25.0
Pressure drop	kPa	46	36	47	44	47	42	40	50
Scroll compressors	n.	2							
Standard capacity steps	%	0 / 50 / 100							
Sound pressure level	dB(A)	69	69	70	72	72	75	77	79
Dimensions									
Length	mm	1500	1500	1500	1500	1500	1500	1500	1500
Width	mm	750	750	750	750	750	750	750	750
Height	mm	1600	1600	1600	1600	1600	1800	1800	1800
Transport weight	kg	488	500	510	532	584	683	757	821
Power supply	V / ph / Hz	400 / 3 / 50 + N + T							

R134a - 2 circuit - Tandem Compressors

MODEL RWE		572 Ka	702 Ka	802 Ka	992 Ka	1192 Ka	1522 Ka	1952 Ka	2442 Ka
Cooling capacity	kW	58.0	71.0	83.0	101.0	121.0	161.0	198.0	250.0
Nominal input power	kW	13.2	16.2	18.6	22.6	27.1	35.0	44.0	53.5
EER		4.39	4.38	4.46	4.47	4.46	4.60	4.5	4.67
Heating capacity	kW	71.2	87.4	101.7	123.9	148.1	196.0	242.0	303.5
Evaporator	n.	2		1			2		
Circuits	n.	2							
Water flow	m³/h	9.9	12.2	14.3	17.4	20.8	27.7	34.1	43.0
Pressure drop	kPa	27	23	26	30	29	20	24	26
Water cooled condenser	n.	2		1			2		
Water flow	m³/h	12.2	15.0	17.5	21.3	25.5	33.7	41.6	52.2
Pressure drop	kPa	35	41	45	45	45	54	58	68
MODELLO PWE		**572 Ka**	**702 Ka**	**802 Ka**	**992 Ka**	**1192 Ka**	**1522 Ka**	**1952 Ka**	**2442 Ka**
Cooling capacity	kW	52.2	64.0	75.0	91.0	109.0	145.0	178.0	225.0
Nominal input power	kW	16.3	20.1	23.0	28.1	33.6	43.4	54.6	66.4
COP		3.20	3.18	3.26	3.24	3.24	3.34	3.26	3.39
Heating capacity	kW	68.5	84.1	98.0	119.1	142.6	188.4	232.6	291.4
Evaporator	n.	2		1			2		
Circuits	n.	2							
Water flow	m³/h	8.9	11.0	12.9	15.7	18.7	24.9	30.6	38.7
Pressure drop	kPa	22	18	21	25	24	16	19	21
Water cooled condenser	n.	2		1			2		
Water flow	m³/h	11.8	14.4	16.8	20.5	24.5	32.4	40.0	50.1
Pressure drop	kPa	43	65	47	41	48	47	57	50
Scroll compressors	n.	4 (2 tandem)							
Standard capacity steps	%	0 / 25 / 50 / 75 / 100							
Sound pressure level	dB(A)	72	73	73	75	75	78	80	82
Dimensions									
Length	mm	2500	2500	2500	2500	3000	3000	3000	3000
Width	mm	750	750	750	750	750	750	750	750
Height	mm	1800	1800	1800	1800	1800	1800	1800	1800
Transport weight	kg	835	865	903	930	1033	1306	1434	1575
Power supply	V / ph / Hz	400 / 3 / 50 + N + T							

- RWE: Operating conditions: evaporator water temperature 7/12°C; condenser water temperature 30/35°C
- PWE: Operating conditions: evaporator water temperature 7/12°C; condenser water temperature 40/45°C
- Sound pressure level at 1 m in open field (ISO 3744)
- Unit weight including oil and refrigerant charge

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