

EKV BS

140-1-1 ↔ 300-2-2

R134a

Refrigerant
R134a | GWP=1.300



Screw
Compressor



Shell & Tube
exchanger



Axial
fan



Braze plate
heat exchanger



*From 220-2-2 to 300-2-2 only for full inverter configurations

Air-Cooled Liquid Chillers with screw compressors

Standard efficiency



Solution

B - Base

Version

ST - Standard
LN - Low Noise

Equipment

AS - Standard equipment
DS - Desuperheater

Cooling capacity 320 - 666 kW

Structure	Structure specifically designed for outdoor installation. Basement and frame in galvanised shaped sheet steel with a suitable thickness. All parts are polyester-powder painted to assure total weather resistance (RAL 7035 standard colour, others on request).
Compressor	Semi-Hermetic compact screw compressor with step-less capacity control system. The sophisticated three-stage oil separation system minimises oil dragging towards the system. Fitted on rubber antivibration mounts and complete with oil charge.
Fan	Low speed, axial-flow fans fitted with accident-prevention protective grille; directly coupled motor with built-in thermal cut-out and IP 54 protection degree; aerodynamic housing and wing profile blades increase efficiency and decrease noise level.
Air heat exchanger	Microchannel Microchannel technology increases the primary to secondary surface area ratio and reduces the tube's air shadow to provide maximum heat exchange through our condensers. Due to their small hydraulic diameter, microchannel aluminium tubes transfer heat more efficiently than the traditional round copper tubes.
Water heat exchanger	Plate-type (Desuperheater) Made of AISI 316 steel complete with water differential pressure switch. Shell covered with closed-cell neoprene anti-condensate material. Shell & tubes evaporator All extremely efficient with low refrigerant charge and very stable operating performance due to excellent refrigerant distribution, thermally insulated by vapour-proof closed cell.
Electrical board	Switchboard made according to standards IEC 204-1/EN60204-1, complete with contactor and protection for compressor and fans. Main isolator and door interlock safety device.
Control	The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms with the possibility to connect to BMS.
Refrigerant circuit	Filter dryer, moisture-liquid sight glass, electronic expansion valve, HP and LP pressure sensors and safety valve.

MAIN ACCESSORIES

- Spring vibration isolation
- Modulating fan speed condensing control (phase-cut)
- Soft start
- Compressor suction/discharge intercepting valve
- Remote control panel
- Max and min voltage relay
- Refrigerant gas HP and LP pressure gauges
- Electromechanical flow switch
- Pumping group, 1 pump
- Additional stand-by water pump

» For the complete list of accessories please see pages 32-33-34

EKV BS Business

Technical data

EKV BS Business		140-1-1	160-1-1	160-2-2	180-2-2	200-2-2	220-2-2	250-2-2	280-2-2	290-2-2	300-2-2	
Cooling mode (BS/ST/AS/PH/SS configuration)												
Cooling capacity (1)	[kW]	320,1	367,5	348,8	384,9	399,0	467,5	521,0	578,5	629,8	665,6	
Compressors power input (total) (1)	[kW]	96,2	117,4	112,1	130,7	148,4	150,2	182,1	215,2	204,3	223,3	
EER (1)	-	3,03	2,89	2,87	2,74	2,53	2,87	2,67	2,54	2,86	2,78	
SEPR	-	5,33	5,13	5,13	5,09	5,01	5,51	5,51	5,50	5,51	5,52	
Compliance with Regulation 2016/2281 implementing Directive 2009/125/EC												
"Ecodesign" compliance for process applications (SEPR)	-	✓	✓	✓	✓	✓	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	
"Ecodesign" compliance for comfort applications (SEER)	-	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	
Desuperheater (optional - BS/ST/DS/PH/SS configuration)												
Heating capacity (2)	[kW]	47,5	56,8	62,8	77,1	89,3	83,8	100,3	123,2	109,2	115,8	
Heat exchanger water flow (2)	[m ³ /h]	8,2	9,8	10,8	13,1	15,2	14,4	17,3	21,1	18,9	20,0	
Heat exchanger pressure drop (water side) (2)	[kPa]	12	12	16	19	25	22	17	19	15	13	
Refrigerant circuit												
Refrigerant - GWP	-	R134a - 1300										
Number of refrigerant circuits	N°	1					2					
Compressor type - quantity	- / N°	SCREW - 1					SCREW - 2					
Fans type - quantity	- / N°	Axial - 6					Axial - 8			Axial - 10		
Total air flow (1)	[m ³ /h]	118.500					158.000			197.400		
Evaporator water flow (1)	[m ³ /h]	55,1	63,2	60,0	66,2	68,7	80,4	89,6	99,5	108,3	114,5	
Evaporator pressure drop (water side) (1)	[kPa]	52	66	49	58	62	53	64	77	47	52	
Expansion valve type	-	Electronic										
Electrical data												
Power supply (main - auxiliary services)	-	400/3/50 - 24/1/50 and 230/1/50										
Maximum absorbed power without pump	[kW]	140,9	163,0	159,0	169,1	200,8	223,0	261,4	279,3	283,9	309,7	
Maximum absorbed current (full load)	[A]	249	310,6	317,6	331,6	359,6	396,8	432,8	478,8	488	550	
Locked rotor current - LRA without pump	[A]	615	464	546	585	614	651	765	845	854	916	
Hydronic kit - 100 kPa useful head (optional)												
Pump type	-	Centrifugal										
Pump motor nominal power	[kW]	4	4	4	4	5,5	5,5	5,5	7,5	7,5	9,2	
Water connections												
Size	[pollici]	4"					5"			6"		
Noise levels ⁽³⁾												
Total sound power (ST version)	[db(A)]	97	97	98	98	99	99	100	100	102	102	
Total sound pressure (ST version) - at a distance of 10 m	[db(A)]	65	65	66	66	67	67	68	68	70	70	
Total sound power (LN version)	[db(A)]	93	93	94	94	95	95	96	96	98	98	
Total sound pressure (LN version) - at a distance of 10 m	[db(A)]	61	61	62	62	63	63	64	64	66	66	
Dimensioni e pesi												
Length	[mm]	4.015	4.015	4.015	4.015	4.015	5.135	5.135	5.135	6.255	6.255	
Width	[mm]	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280	
Height (versions ST - LN)	[mm]	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	
Operating weight - BS/ST/AS/**/ version	[Kg]	3.220	3.280	3.425	3.485	3.975	4.625	4.775	5.065	5.555	6.315	
Operating weight - BS/ST/DS/**/ version	[Kg]	3.255	3.320	3.485	3.550	4.040	4.690	4.845	5.145	5.635	6.400	
Operating weight - BS/LN/AS/EC/** version	[Kg]	3.310	3.370	3.525	3.585	4.095	4.755	4.915	5.215	5.715	6.495	
Operating weight - BS/LN/DS/EC/** version	[Kg]	3.345	3.410	3.585	3.650	4.160	4.820	4.985	5.295	5.795	6.580	

Reference conditions:

- (1) Condenser air intake temperature = 35 °C - Evaporator user fluid temperature IN/OUT = 12/7 °C - User fluid: water - Condensing coil: Microchannel
- (2) Plate heat exchanger user fluid temperature IN/OUT = 40/45 °C - Condenser air intake temperature = 35 °C - Evaporator user fluid temperature IN/OUT = 12/7 °C - User fluid: water - Condensing coil: Microchannel
- (3) Sound power level in compliance with ISO 3744 - Sound pressure level (average) at 10 meter distance, unit in a free field on a reflective surface; non-binding value obtained from the sound power level.
- (4) Only for full inverter configurations

Compliance with "EcoDesign"

The units indicated with ✓ comply with the Commission Regulation (EU) 2016/2281 implementing the European Directive 2009/125/EC. Important information relating to each model are published on our website www.euroklimat.it

EKV BS

320-2-2 ↔ 630-3-3

R134a

Refrigerant
R134a | GWP=1.300



Screw
Compressor



Shell & Tube
exchanger



Axial
fan



Braze plate
heat exchanger

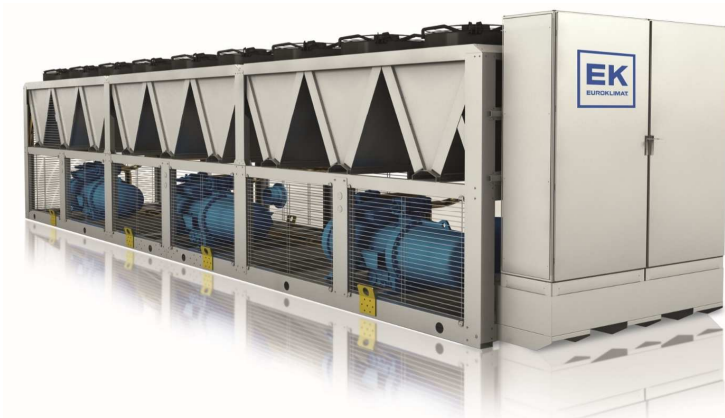


*Only for double inverter configurations

SEPR*

Air-Cooled Liquid Chillers with screw compressors

Standard efficiency



Solution

B - Base

Version

ST - Standard

LN - Low Noise

Equipment

AS - Standard equipment

DS - Desuperheater

Cooling capacity 712 - 1308 kW

Structure

Structure specifically designed for outdoor installation. Basement and frame in galvanised shaped sheet steel with a suitable thickness. All parts are polyester-powder painted to assure total weather resistance (RAL 7035 standard colour, others on request).

Compressor

Semi-Hermetic compact screw compressor with step-less capacity control system. The sophisticated three-stage oil separation system minimises oil dragging towards the system. Fitted on rubber antivibration mounts and complete with oil charge.

Fan

Low speed, axial-flow fans fitted with accident-prevention protective grille; directly coupled motor with built-in thermal cut-out and IP 54 protection degree; aerodynamic housing and wing profile blades increase efficiency and decrease noise level.

Air heat exchanger

Microchannel

Microchannel technology increases the primary to secondary surface area ratio and reduces the tube's air shadow to provide maximum heat exchange through our condensers. Due to their small hydraulic diameter, microchannel aluminium tubes transfer heat more efficiently than the traditional round copper tubes.

Water heat exchanger

Plate-type (Desuperheater)

Made of AISI 316 steel complete with water differential pressure switch. Shell covered with closed-cell neoprene anti-condensate material.

Shell & tubes evaporator

All extremely efficient with low refrigerant charge and very stable operating performance due to excellent refrigerant distribution, thermally insulated by vapour-proof closed cell.

Electrical board

Switchboard made according to standards IEC 204-1/EN60204-1, complete with contactor and protection for compressor and fans. Main isolator and door interlock safety device.

Control

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms with the possibility to connect to BMS.

Refrigerant circuit

Filter dryer, moisture-liquid sight glass, electronic expansion valve, HP and LP pressure sensors and safety valve.

MAIN ACCESSORIES

- Spring vibration isolation
- Modulating fan speed condensing control (phase-cut)
- Soft start
- Compressor suction/discharge intercepting valve
- Remote control panel
- Max and min voltage relay
- Refrigerant gas HP and LP pressure gauges
- Electromechanical flow switch
- Pumping group, 1 pump
- Additional stand-by water pump

» For the complete list of accessories please see pages 32-33-34

EKV BS Business

Technical data

EKV BS Business		320-2-2	340-2-2	360-2-2	420-2-2	450-2-2	480-2-2	560-2-2	620-2-2	540-3-3	630-3-3
Cooling mode (BS/ST/AS/PH/SS configuration)											
Cooling capacity (1)	[kW]	702,2	774,7	798,8	883,6	968,7	1001,0	1085,0	1139,0	1203,0	1327,0
Compressors power input (total) (1)	[kW]	242,2	250,4	268,6	324,0	328,1	343,4	377,5	402,9	403,5	486,3
EER (1)	-	2,72	2,87	2,78	2,58	2,76	2,74	2,69	2,66	2,78	2,58
SEPR	-	5,52	5,61	5,80	5,51	5,51	5,50	5,53	5,53	5,84	5,51
Compliance with Regulation 2016/2281 implementing Directive 2009/125/EC											
"Ecodesign" compliance for process applications (SEPR)	-	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾
"Ecodesign" compliance for comfort applications (SEER)	-	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Desuperheater (optional - BS/ST/DS/PH/SS configuration)											
Heating capacity (2)	[kW]	127,4	128,2	139,9	173,7	165,9	174,4	191,5	205,2	210,3	260,5
Heat exchanger water flow (2)	[m ³ /h]	21,9	22,1	24,1	30,0	28,8	30,3	33,3	35,9	36,3	45,0
Heat exchanger pressure drop (water side) (2)	[kPa]	15	16	19	20	18	20	16	19	19	20
Refrigerant circuit											
Refrigerant - GWP	-	R134a - 1300									
Number of refrigerant circuits	N°	2								3	
Compressor type - quantity	- / N°	SCREW - 2								SCREW - 3	
Fans type - quantity	- / N°	Axial - 10	Axial - 12			Axial - 14		Axial - 16		Axial - 18	
Total air flow (1)	[m ³ /h]	197400	236800			276000		315500		355000	
Evaporator water flow (1)	[m ³ /h]	120,8	133,2	137,4	152,0	166,6	172,1	186,6	195,9	206,9	228,2
Evaporator pressure drop (water side) (1)	[kPa]	57	32	34	40	38	40	36	39	39	46
Expansion valve type	-	Electronic									
Electrical data											
Power supply (main - auxiliary services)	-	400/3/50 - 24/1/50 and 230/1/50									
Maximum absorbed power without pump	[kW]	335,4	362,9	385,7	437,8	456,0	469,5	530,4	551,9	578,5	656,8
Maximum absorbed current (full load)	[A]	612	653,2	685,2	767,2	847,4	918,4	1022	1054	1028	1151
Locked rotor current - LRA without pump	[A]	765	803	835	997	1070	1141	1353	1369	1178	1381
Hydronic kit - 100 kPa useful head (optional)											
Pump type	-	Centrifugal									
Pump motor nominal power	[kW]	9,2	11	11	11	11	11	15	15	15	18,4
Water connections											
Size	[pollici]	6"						8"			
Noise levels (3)											
Total sound power (ST version)	[db(A)]	102	103	103	103	104	104	105	105	106	106
Total sound pressure (ST version) - at a distance of 10 m	[db(A)]	70	71	71	71	72	72	73	73	74	74
Total sound power (LN version)	[db(A)]	98	99	99	99	100	100	101	101	102	102
Total sound pressure (LN version) - at a distance of 10 m	[db(A)]	66	67	67	67	68	68	69	69	70	70
Dimensioni e pesi											
Length	[mm]	6.255	7.375	7.375	7.375	8.495	8.495	9.615	9.615	10.735	10.735
Width	[mm]	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280
Height (versions ST - LN)	[mm]	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560
Operating weight - BS/ST/AS/**/ version	[Kg]	6.415	6.965	7.000	7.160	7.905	8.415	8.820	8.910	9.645	9.845
Operating weight - BS/ST/DS/**/ version	[Kg]	6.500	7.060	7.095	7.265	8.025	8.535	8.950	9.040	9.800	10.020
Operating weight - BS/LN/AS/EC/** version	[Kg]	6.595	7.160	7.200	7.370	8.135	8.655	9.070	9.160	9.915	10.125
Operating weight - BS/LN/DS/EC/** version	[Kg]	6.680	7.255	7.295	7.475	8.255	8.775	9.200	9.290	10.070	10.300

Reference conditions:

- Condenser air intake temperature = 35 °C - Evaporator user fluid temperature IN/OUT = 12/7 °C - User fluid: water - Condensing coil: Microchannel
- Plate heat exchanger user fluid temperature IN/OUT = 40/45 °C - Condenser air intake temperature = 35 °C - Evaporator user fluid temperature IN/OUT = 12/7 °C - User fluid: water - Condensing coil: Microchannel
- Sound power level in compliance with ISO 3744 - Sound pressure level (average) at 10 meter distance, unit in a free field on a reflective surface; non-binding value obtained from the sound power level.
- Only for full inverter configurations

Compliance with "EcoDesign"

The units indicated with ✓ comply with the Commission Regulation (EU) 2016/2281 implementing the European Directive 2009/125/EC. Important information relating to each model are published on our website www.euroklimat.it

EKV BS Business

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 140-1-1	35,0	49,3	320,1	320,1	3,07	12,0	7,0
	33,0	45,1	308,6	308,6	3,27	11,8	7,0
	31,0	47,4	296,8	296,8	3,48	11,6	7,0
	29,0	49,0	285,2	285,2	3,68	11,4	7,0
	27,0	52,9	273,7	273,7	3,94	11,3	7,0
	25,0	56,5	261,9	261,9	4,20	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 160-1-1	35,0	49,3	368,0	368,0	2,94	12,0	7,0
	33,0	45,1	354,8	354,8	3,12	11,8	7,0
	31,0	47,4	341,1	341,1	3,31	11,6	7,0
	29,0	49,0	327,9	327,9	3,53	11,4	7,0
	27,0	52,9	314,6	314,6	3,79	11,3	7,0
	25,0	56,5	301,0	301,0	4,02	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 160-2-2	35,0	49,3	349,2	349,2	2,90	12,0	7,0
	33,0	45,1	336,7	336,7	3,08	11,8	7,0
	31,0	47,4	323,7	323,7	3,25	11,6	7,0
	29,0	49,0	311,2	311,2	3,51	11,4	7,0
	27,0	52,9	298,6	298,6	3,77	11,3	7,0
	25,0	56,5	285,7	285,7	3,97	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 180-2-2	35,0	49,3	385,4	385,4	2,78	12,0	7,0
	33,0	45,1	371,6	371,6	2,97	11,8	7,0
	31,0	47,4	357,4	357,4	3,20	11,6	7,0
	29,0	49,0	343,5	343,5	3,44	11,4	7,0
	27,0	52,9	329,7	329,7	3,65	11,3	7,0
	25,0	56,5	315,5	315,5	3,92	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);

Ambient design temperature: 35 °C;

User fluid: water;

Load profile: Process.

Notes:

EWT: Evaporator entering water temperature

LWT: Evaporator leaving water temperature



EKV BS Business

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 200-2-2	35,0	49,3	399,5	399,5	2,56	12,0	7,0
	33,0	45,1	385,1	385,1	2,75	11,8	7,0
	31,0	47,4	370,4	370,4	2,97	11,6	7,0
	29,0	49,0	356,0	356,0	3,18	11,4	7,0
	27,0	52,9	341,6	341,6	3,43	11,3	7,0
	25,0	56,5	326,8	326,8	3,76	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 220-2-2	35,0	49,3	548,1	548,1	3,15	12,0	7,0
	33,0	45,1	528,3	528,3	3,34	11,8	7,0
	31,0	47,4	508,1	508,1	3,53	11,6	7,0
	29,0	49,0	488,3	488,3	3,74	11,4	7,0
	27,0	52,9	468,6	468,6	3,95	11,3	7,0
	25,0	56,5	448,3	448,3	4,18	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 250-2-2	35,0	49,3	607,3	607,3	2,90	12,0	7,0
	33,0	45,1	585,5	585,5	3,16	11,8	7,0
	31,0	47,4	563,0	563,0	3,34	11,6	7,0
	29,0	49,0	541,2	541,2	3,61	11,4	7,0
	27,0	52,9	519,3	519,3	3,88	11,3	7,0
	25,0	56,5	496,9	496,9	4,14	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);

Ambient design temperature: 35 °C;

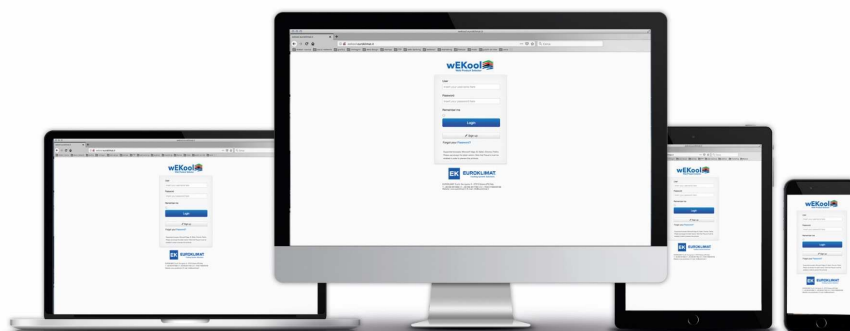
User fluid: water;

Load profile: Process.

Notes:

EWT: Evaporator entering water temperature

LWT: Evaporator leaving water temperature



EKV BS Business

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 280-2-2	35,0	49,3	667,6	667,6	2,72	12,0	7,0
	33,0	45,1	643,6	643,6	2,96	11,8	7,0
	31,0	47,4	618,9	618,9	3,17	11,6	7,0
	29,0	49,0	594,9	594,9	3,44	11,4	7,0
	27,0	52,9	570,8	570,8	3,74	11,3	7,0
	25,0	56,5	546,1	546,1	4,05	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 290-2-2	35,0	49,3	727,3	727,3	3,08	12,0	7,0
	33,0	45,1	701,1	701,1	3,31	11,8	7,0
	31,0	47,4	674,2	674,2	3,54	11,6	7,0
	29,0	49,0	648,0	648,0	3,81	11,4	7,0
	27,0	52,9	621,8	621,8	4,09	11,3	7,0
	25,0	56,5	594,9	594,9	4,39	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 300-2-2	35,0	49,3	767,8	767,8	2,99	12,0	7,0
	33,0	45,1	740,2	740,2	3,21	11,8	7,0
	31,0	47,4	711,8	711,8	3,43	11,6	7,0
	29,0	49,0	684,1	684,1	3,71	11,4	7,0
	27,0	52,9	656,5	656,5	4,01	11,3	7,0
	25,0	56,5	628,1	628,1	4,25	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 320-2-2	35,0	49,3	808,4	808,4	2,92	12,0	7,0
	33,0	45,1	779,3	779,3	3,16	11,8	7,0
	31,0	47,4	749,4	749,4	3,33	11,6	7,0
	29,0	49,0	720,3	720,3	3,53	11,4	7,0
	27,0	52,9	691,2	691,2	3,83	11,3	7,0
	25,0	56,5	661,2	661,2	4,06	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);

Ambient design temperature: 35 °C;

User fluid: water;

Load profile: Process.

Notes:

EWT: Evaporator entering water temperature

LWT: Evaporator leaving water temperature



EKV BS Business

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 340-2-2	35,0	49,3	896,5	896,5	3,09	12,0	7,0
	33,0	45,1	864,2	864,2	3,30	11,8	7,0
	31,0	47,4	831,1	831,1	3,46	11,6	7,0
	29,0	49,0	798,8	798,8	3,63	11,4	7,0
	27,0	52,9	766,5	766,5	3,98	11,3	7,0
	25,0	56,5	733,3	733,3	4,25	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 360-2-2	35,0	49,3	923,4	923,4	2,98	12,0	7,0
	33,0	45,1	890,2	890,2	3,26	11,8	7,0
	31,0	47,4	856,0	856,0	3,43	11,6	7,0
	29,0	49,0	822,8	822,8	3,64	11,4	7,0
	27,0	52,9	789,5	789,5	3,99	11,3	7,0
	25,0	56,5	755,4	755,4	4,24	11,1	7,0

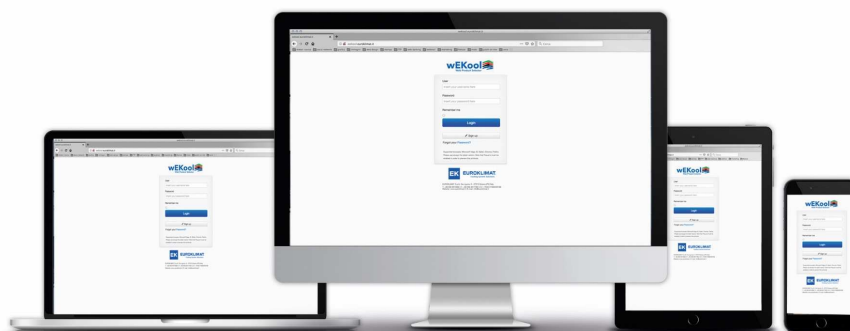
Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 420-2-2	35,0	49,3	1016,1	1016,1	2,74	12,0	7,0
	33,0	45,1	979,5	979,5	2,97	11,8	7,0
	31,0	47,4	941,9	941,9	3,16	11,6	7,0
	29,0	49,0	905,4	905,4	3,34	11,4	7,0
	27,0	52,9	868,8	868,8	3,55	11,3	7,0
	25,0	56,5	831,2	831,2	3,86	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);
 Ambient design temperature: 35 °C;
 User fluid: water;
 Load profile: Process.

Notes:

EWT: Evaporator entering water temperature
LWT: Evaporator leaving water temperature



EKV BS Business

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 450-2-2	35,0	49,3	1114,4	1114,4	2,96	12,0	7,0
	33,0	45,1	1074,3	1074,3	3,17	11,8	7,0
	31,0	47,4	1033,1	1033,1	3,35	11,6	7,0
	29,0	49,0	993,0	993,0	3,53	11,4	7,0
	27,0	52,9	952,8	952,8	3,72	11,3	7,0
	25,0	56,5	911,6	911,6	3,95	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 480-2-2	35,0	49,3	1151,6	1151,6	2,92	12,0	7,0
	33,0	45,1	1110,2	1110,2	3,13	11,8	7,0
	31,0	47,4	1067,6	1067,6	3,32	11,6	7,0
	29,0	49,0	1026,1	1026,1	3,51	11,4	7,0
	27,0	52,9	984,6	984,6	3,73	11,3	7,0
	25,0	56,5	942,0	942,0	3,95	11,1	7,0

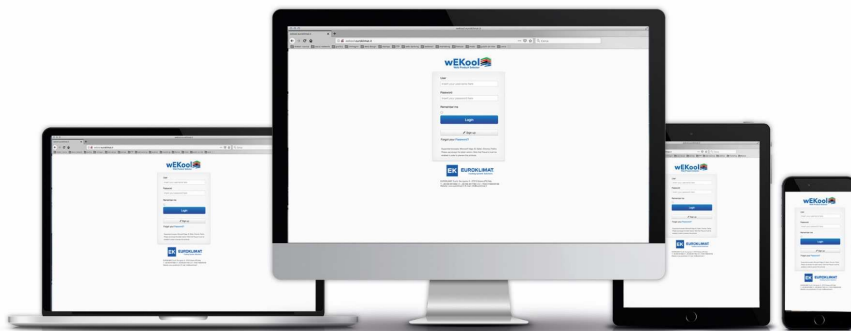
Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 560-2-2	35,0	49,3	1256,0	1256,0	2,89	12,0	7,0
	33,0	45,1	1210,8	1210,8	3,11	11,8	7,0
	31,0	47,4	1164,3	1164,3	3,30	11,6	7,0
	29,0	49,0	1119,1	1119,1	3,52	11,4	7,0
	27,0	52,9	1073,9	1073,9	3,77	11,3	7,0
	25,0	56,5	1027,4	1027,4	4,05	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);
 Ambient design temperature: 35 °C;
 User fluid: water;
 Load profile: Process.

Notes:

EWT: Evaporator entering water temperature
 LWT: Evaporator leaving water temperature



EKV BS Business

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 620-2-2	35,0	49,3	1318,3	1318,3	2,85	12,0	7,0
	33,0	45,1	1270,9	1270,9	3,06	11,8	7,0
	31,0	47,4	1222,2	1222,2	3,23	11,6	7,0
	29,0	49,0	1174,6	1174,6	3,43	11,4	7,0
	27,0	52,9	1127,2	1127,2	3,65	11,3	7,0
	25,0	56,5	1078,4	1078,4	3,86	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 540-3-3	35,0	49,3	1388,5	1388,5	2,99	12,0	7,0
	33,0	45,1	1338,5	1338,5	3,23	11,8	7,0
	31,0	47,4	1287,1	1287,1	3,41	11,6	7,0
	29,0	49,0	1237,1	1237,1	3,68	11,4	7,0
	27,0	52,9	1187,1	1187,1	3,94	11,3	7,0
	25,0	56,5	1135,8	1135,8	4,26	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV BS A BS/ST/AS/PH/SS 630-3-3	35,0	49,3	1522,0	1522,0	2,74	12,0	7,0
	33,0	45,1	1467,2	1467,2	2,96	11,8	7,0
	31,0	47,4	1410,9	1410,9	3,12	11,6	7,0
	29,0	49,0	1356,1	1356,1	3,35	11,4	7,0
	27,0	52,9	1301,3	1301,3	3,59	11,3	7,0
	25,0	56,5	1245,0	1245,0	3,81	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);
 Ambient design temperature: 35 °C;
 User fluid: water;
 Load profile: Process.

Notes:

EWT: Evaporator entering water temperature
LWT: Evaporator leaving water temperature



Euroklima has developed an online software called "wEKool" that allows you to select the chiller model closest to the project conditions.
 For more information, please contact your sales representative.



EKV HE

100-1-1 ↔ 250-2-2

R134a

Refrigerant
R134a | GWP=1.300



Screw
Compressor



Shell & Tube
exchanger



Axial
fan



Braze plate
heat exchanger



SEPR



SEER*

*For unit 220-2-2 and 250-2-2 only for full inverter configurations

Air-Cooled Liquid Chillers with screw compressors

Standard efficiency



Solution

B - Base

Version

ST - Standard

LN - Low Noise

Equipment

AS - Standard equipment

DS - Desuperheater

Cooling capacity 229 - 573 kW

Structure

Structure specifically designed for outdoor installation. Basement and frame in galvanised shaped sheet steel with a suitable thickness. All parts are polyester-powder painted to assure total weather resistance (RAL 7035 standard colour, others on request).

Compressor

Semi-Hermetic compact screw compressor with step-less capacity control system. The sophisticated three-stage oil separation system minimises oil dragging towards the system. Fitted on rubber antivibration mounts and complete with oil charge.

EC Fan

Premium-Axial-Fans with bionical shaped blades and high efficient EC (Electronically Commutated) external rotor motors, sealed in protection IP 54 and thermal class THCL 155. The motor efficiency class complies with IE4.

Air heat exchanger

Microchannel

Microchannel technology increases the primary to secondary surface area ratio and reduces the tube's air shadow to provide maximum heat exchange through our condensers. Due to their small hydraulic diameter, microchannel aluminium tubes transfer heat more efficiently than the traditional round copper tubes.

Water heat exchanger

Plate-type (Desuperheater)

Made of AISI 316 steel complete with water differential pressure switch. Shell covered with closed-cell neoprene anti-condensate material.

Shell & tubes evaporator

All extremely efficient with low refrigerant charge and very stable operating performance due to excellent refrigerant distribution, thermally insulated by vapour-proof closed cell.

Electrical board

Switchboard made according to standards IEC 204-1/EN60204-1, complete with contactor and protection for compressor and fans. Main isolator and door interlock safety device.

Control

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms with the possibility to connect to BMS.

Refrigerant circuit

Filter dryer, moisture-liquid sight glass, electronic expansion valve, HP and LP pressure sensors and safety valve.

MAIN ACCESSORIES

- Spring vibration isolation
- Modulating fan speed condensing control (phase-cut)
- Soft start
- Compressor suction/discharge intercepting valve
- Remote control panel
- Max and min voltage relay
- Refrigerant gas HP and LP pressure gauges
- Electromechanical flow switch
- Pumping group, 1 pump
- Additional stand-by water pump

» For the complete list of accessories please see pages 32-33-34

EKV HE High Efficiency

Technical data

EKV HE High Efficiency		100-1-1	110-1-1	125-1-1	140-2-2	160-2-2	180-2-2	200-2-2	220-2-2	250-2-2	
Cooling mode (BS/ST/AS/PH/SS configuration)											
Cooling capacity (1)	[kW]	229,0	256,3	299,4	349,0	382,8	426,3	458,3	507,9	572,8	
Compressors power input (total) (1)	[kW]	56,0	70,1	83,7	88,0	103,0	118,8	114,7	145,4	170,9	
EER (1)	-	3,41	3,14	3,15	3,38	3,23	3,18	3,42	3,09	3,01	
SEPR	-	174,50	161,40	164,70	179,70	162,70	179,00	179,50	180,40	179,80	
Compliance with Regulation 2016/2281 implementing Directive 2009/125/EC											
"Ecodesign" compliance for process applications (SEPR)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
"Ecodesign" compliance for comfort applications (SEER)	-	✓	✓	✓	✓	✓	✓	✓	✓ ⁽⁴⁾	✓ ⁽⁴⁾	
Desuperheater (optional - BS/ST/DS/PH/SS configuration)											
Heating capacity (2)	[kW]	24,3	31,7	38,4	41,0	48,8	60,4	54,6	75,1	86,0	
Heat exchanger water flow (2)	[m ³ /h]	4,2	5,5	6,7	7,1	8,7	10,4	9,5	13,0	14,8	
Heat exchanger pressure drop (water side) (2)	[kPa]	9	8	9	8	11	13	11	18	10	
Refrigerant circuit											
Refrigerant - GWP	-	R134a - 1300									
Number of refrigerant circuits	N°	1			2						
Compressor type - quantity	- / N°	SCREW - 1			SCREW - 2						
Fans type - quantity	- / N°	Axial (EC) - 6			Axial (EC) - 8			Axial (EC) - 10			
Total air flow (1)	[m ³ /h]	135.600	137.400		183.200			229.000			
Evaporator water flow (1)	[m ³ /h]	39,4	44,1	51,5	60,0	65,9	73,3	78,8	87,4	98,5	
Evaporator pressure drop (water side) (1)	[kPa]	29	35	46	32	37	45	27	32	40	
Expansion valve type	-	Elettronical									
Electrical data											
Power supply (main - auxiliary services)	-	400/3/50 - 24/1/50 and 230/1/50									
Maximum absorbed power without pump	[kW]	96,2	127,9	137,1	152,5	170,0	180,1	186,3	249,7	267,4	
Maximum absorbed current (full load)	[A]	181	208,8	226,8	288,4	328,4	342,4	352	408	449	
Locked rotor current - LRA without pump	[A]	434	463	559	461	556	595	605	662	815	
Hydronic kit - 100 kPa useful head (optional)											
Pump type	-	Centrifugal									
Pump motor nominal power	[kW]	3	3	3	4	4	5,5	5,5	5,5	7,5	
Water connections											
Size	[pollici]	4"			5"			6"			
Noise levels (3)											
Total sound power (ST version)	[db(A)]	96	96	97	97	98	98	99	99	101	
Total sound pressure (ST version) - at a distance of 10 m	[db(A)]	64	64	65	65	66	66	67	67	69	
Total sound power (LN version)	[db(A)]	92	92	93	93	94	94	95	95	97	
Total sound pressure (LN version) - at a distance of 10 m	[db(A)]	60	60	61	61	62	62	63	63	65	
Dimensioni e pesi											
Length	[mm]	4.015	4.015	4.015	5.135	5.135	5.135	6.255	6.255	6.255	
Width	[mm]	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280	
Height (versions ST - LN)	[mm]	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	
Operating weight - BS/ST/AS/**/ version	[Kg]	3.000	3.060	3.200	3.315	3.765	4.315	4.525	4.795	5.185	
Operating weight - BS/ST/DS/**/ version	[Kg]	3.030	3.090	3.235	3.375	3.825	4.380	4.590	4.860	5.265	
Operating weight - BS/LN/AS/EC/** version	[Kg]	3.090	3.140	3.290	3.405	3.875	4.435	4.655	4.935	5.335	
Operating weight - BS/LN/DS/EC/** version	[Kg]	3.120	3.170	3.325	3.465	3.935	4.500	4.720	5.000	5.415	

Reference conditions:

- (1) Condenser air intake temperature = 35 °C - Evaporator user fluid temperature IN/OUT = 12/7 °C - User fluid: water - Condensing coil: Microchannel
- (2) Plate heat exchanger user fluid temperature IN/OUT = 40/45 °C - Condenser air intake temperature = 35 °C - Evaporator user fluid temperature IN/OUT = 12/7 °C - User fluid: water - Condensing coil: Microchannel
- (3) Sound power level in compliance with ISO 3744 - Sound pressure level (average) at 10 meter distance, unit in a free field on a reflective surface; non-binding value obtained from the sound power level.
- (4) Only for full inverter configurations

Compliance with "EcoDesign"

The units indicated with ✓ comply with the Commission Regulation (EU) 2016/2281 implementing the European Directive 2009/125/EC. Important information relating to each model are published on our website www.euroklimat.it

EKV HE

270-1-1 ↔ 420-2-2

R134a

Refrigerant
R134a | GWP=1.300



Screw
Compressor



Shell & Tube
exchanger



Axial
fan



Braze plate
heat exchanger



SEPR



SEER*

*Only for full inverter configurations

Air-Cooled Liquid Chillers with screw compressors

Standard efficiency



Solution

B - Base

Version

ST - Standard

LN - Low Noise

Equipment

AS - Standard equipment

DS - Desuperheater

Cooling capacity 636 - 1041 kW

Structure

Structure specifically designed for outdoor installation. Basement and frame in galvanised shaped sheet steel with a suitable thickness. All parts are polyester-powder painted to assure total weather resistance (RAL 7035 standard colour, others on request).

Compressor

Semi-Hermetic compact screw compressor with step-less capacity control system. The sophisticated three-stage oil separation system minimises oil dragging towards the system. Fitted on rubber antivibration mounts and complete with oil charge.

EC Fan

Premium-Axial-Fans with bionical shaped blades and high efficient EC (Electronically Commutated) external rotor motors, sealed in protection IP 54 and thermal class THCL 155. The motor efficiency class complies with IE4.

Air heat exchanger

Microchannel

Microchannel technology increases the primary to secondary surface area ratio and reduces the tube's air shadow to provide maximum heat exchange through our condensers. Due to their small hydraulic diameter, microchannel aluminium tubes transfer heat more efficiently than the traditional round copper tubes.

Water heat exchanger

Plate-type (Desuperheater)

Made of AISI 316 steel complete with water differential pressure switch. Shell covered with closed-cell neoprene anti-condensate material.

Shell & tubes evaporator

All extremely efficient with low refrigerant charge and very stable operating performance due to excellent refrigerant distribution, thermally insulated by vapour-proof closed cell.

Electrical board

Switchboard made according to standards IEC 204-1/EN60204-1, complete with contactor and protection for compressor and fans. Main isolator and door interlock safety device.

Control

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms with the possibility to connect to BMS.

Refrigerant circuit

Filter dryer, moisture-liquid sight glass, electronic expansion valve, HP and LP pressure sensors and safety valve.

MAIN ACCESSORIES

- Spring vibration isolation
- Modulating fan speed condensing control (phase-cut)
- Soft start
- Compressor suction/discharge intercepting valve
- Remote control panel
- Max and min voltage relay
- Refrigerant gas HP and LP pressure gauges
- Electromechanical flow switch
- Pumping group, 1 pump
- Additional stand-by water pump

» For the complete list of accessories please see pages 32-33-34

EKV HE High Efficiency

Technical data

EKV HE High Efficiency		270-2-2	280-2-2	290-2-2	300-2-2	320-2-2	340-2-2	360-2-2	390-2-2	420-2-2	
Cooling mode (BS/ST/AS/PH/SS configuration)											
Cooling capacity (1)	[kW]	640,3	668,1	698,3	756,7	815,2	855,6	878,3	980,1	1041,0	
Compressors power input (total) (1)	[kW]	177,4	187,4	182,5	201,9	221,2	234,8	255,6	272,3	291,3	
EER (1)	-	3,20	3,18	3,33	3,31	3,29	3,22	3,07	3,19	3,20	
SEPR	-	182,40	179,60	180,70	184,60	180,00	181,90	179,40	180,70	179,10	
Compliance with Regulation 2016/2281 implementing Directive 2009/125/EC											
Ecodesign compliance for process applications (SEPR)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Ecodesign compliance for comfort applications (SEER)	-	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾	
Desuperheater (optional - BS/ST/DS/PH/SS configuration)											
Heating capacity (2)	[kW]	84,3	90,7	82,9	88,4	98,9	104,2	117,1	119,4	129,4	
Heat exchanger water flow (2)	[m ³ /h]	14,6	15,6	14,4	15,3	17,1	17,9	20,3	20,6	22,3	
Heat exchanger pressure drop (water side) (2)	[kPa]	10	11	10	8	10	11	14	10	12	
Refrigerant circuit											
Refrigerant - GWP	-	R134a - 1300									
Number of refrigerant circuits	N°	2									
Compressor type - quantity	- / N°	2									
Fans type - quantity	- / N°	SCREW - 2									
Total air flow (1)	[m ³ /h]	Axial (EC) - 12			Axial (EC) - 14			Axial (EC) - 16		Axial (EC) - 18	
Evaporator water flow (1)	[m ³ /h]	110,1	114,9	120,1	130,1	140,2	147,1	151,0	168,6	179,0	
Evaporator pressure drop (water side) (1)	[kPa]	23	24	21	25	28	24	25	70	78	
Expansion valve type	-	Electronical									
Electrical data											
Power supply (main - auxiliary services)	-	400/3/50 - 24/1/50 and 230/1/50									
Maximum absorbed power without pump	[kW]	282,7	291,3	297,5	319,7	341,9	377,5	407,0	427,4	441,6	
Maximum absorbed current (full load)	[A]	477	499,6	509,2	571,2	633,2	674,8	706,8	757,4	798,4	
Locked rotor current - LRA without pump	[A]	843	866	875	937	786	825	857	987	1028	
Hydronic kit - 100 kPa useful head (optional)											
Pump type	-	Centrifugal									
Pump motor nominal power	[kW]	7,5	7,5	9,2	8	11	11	11	11	11	
Water connections											
Size	[pollici]	6"					8"				
Noise levels (3)											
Total sound power (ST version)	[db(A)]	101	101	102	102	102	103	103	104	104	
Total sound pressure (ST version) - at a distance of 10 m	[db(A)]	69	69	70	70	70	71	71	72	72	
Total sound power (LN version)	[db(A)]	97	97	98	98	98	99	99	100	100	
Total sound pressure (LN version) - at a distance of 10 m	[db(A)]	65	65	66	66	66	67	67	68	68	
Dimensioni e pesi											
Length	[mm]	7.375	7.375	8.495	8.495	8.495	9.615	9.615	10.735	10.735	
Width	[mm]	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280	2.280	
Height (versions ST - LN)	[mm]	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	2.535 - 2.560	
Operating weight - BS/ST/AS/**/** version	[Kg]	5.930	6.020	6.585	6.615	6.765	7.470	7.950	8.345	8.425	
Operating weight - BS/ST/DS/**/** version	[Kg]	6.010	6.100	6.665	6.700	6.850	7.565	8.045	8.450	8.530	
Operating weight - BS/LN/AS/EC/** version	[Kg]	6.090	6.190	6.765	6.805	6.965	7.690	8.170	8.575	8.655	
Operating weight - BS/LN/DS/EC/** version	[Kg]	6.170	6.270	6.845	6.890	7.050	7.785	8.265	8.680	8.760	

Reference conditions:

- (1) Condenser air intake temperature = 35 °C - Evaporator user fluid temperature IN/OUT = 12/7 °C - User fluid: water - Condensing coil: Microchannel
- (2) Plate heat exchanger user fluid temperature IN/OUT = 40/45 °C - Condenser air intake temperature = 35 °C - Evaporator user fluid temperature IN/OUT = 12/7 °C - User fluid: water - Condensing coil: Microchannel
- (3) Sound power level in compliance with ISO 3744 - Sound pressure level (average) at 10 meter distance, unit in a free field on a reflective surface; non-binding value obtained from the sound power level.
- (4) Only for full inverter configurations

Compliance with "EcoDesign"

The units indicated with ✓ comply with the Commission Regulation (EU) 2016/2281 implementing the European Directive 2009/125/EC. Important information relating to each model are published on our website www.euroklimat.it

EKV HE High Efficiency

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 100-1-1	35,0	49,3	229,3	229,3	3,44	12,0	7,0
	33,0	45,1	221,0	221,0	3,70	11,8	7,0
	31,0	47,4	212,6	212,6	3,89	11,6	7,0
	29,0	49,0	204,3	204,3	4,22	11,4	7,0
	27,0	52,9	196,1	196,1	4,52	11,3	7,0
	25,0	56,5	187,6	187,6	4,82	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE B BS/ST/AS/EC/SS 110-1-1	35,0	49,3	256,6	256,6	3,17	12,0	7,0
	33,0	45,1	247,4	247,4	3,42	11,8	7,0
	31,0	47,4	237,9	237,9	3,70	11,6	7,0
	29,0	49,0	228,7	228,7	3,97	11,4	7,0
	27,0	52,9	219,4	219,4	4,26	11,3	7,0
	25,0	56,5	209,9	209,9	4,54	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 125-1-1	35,0	49,3	299,8	299,8	3,19	12,0	7,0
	33,0	45,1	289,0	289,0	3,39	11,8	7,0
	31,0	47,4	277,9	277,9	3,62	11,6	7,0
	29,0	49,0	267,1	267,1	3,88	11,4	7,0
	27,0	52,9	256,3	256,3	4,17	11,3	7,0
	25,0	56,5	245,2	245,2	4,47	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);

Ambient design temperature: 35 °C;

User fluid: water;

Load profile: Process.

Notes:

EWT: Evaporator entering water temperature

LWT: Evaporator leaving water temperature



EKV HE High Efficiency

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 140-2-2	35,0	49,3	349,3	349,3	3,41	12,0	7,0
	33,0	45,1	336,8	336,8	3,58	11,8	7,0
	31,0	47,4	323,8	323,8	3,82	11,6	7,0
	29,0	49,0	311,3	311,3	4,11	11,4	7,0
	27,0	52,9	298,7	298,7	4,39	11,3	7,0
	25,0	56,5	285,8	285,8	4,64	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 160-2-2	35,0	49,3	383,2	383,2	3,27	12,0	7,0
	33,0	45,1	369,4	369,4	3,44	11,8	7,0
	31,0	47,4	355,2	355,2	3,61	11,6	7,0
	29,0	49,0	341,4	341,4	3,84	11,4	7,0
	27,0	52,9	327,6	327,6	4,08	11,3	7,0
	25,0	56,5	313,4	313,4	4,37	11,1	7,0

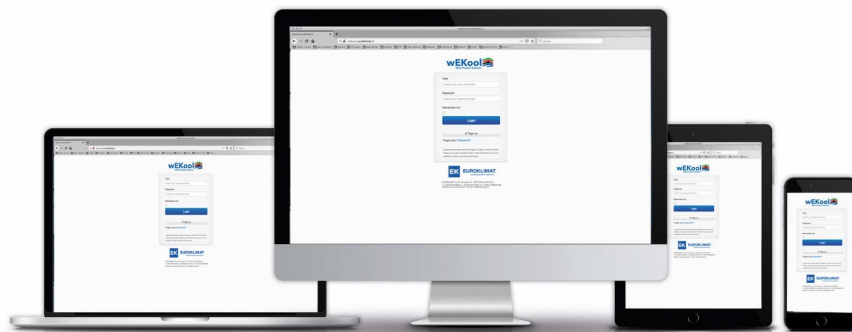
Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 180-2-2	35,0	49,3	426,7	426,7	3,22	12,0	7,0
	33,0	45,1	411,4	411,4	3,41	11,8	7,0
	31,0	47,4	395,6	395,6	3,67	11,6	7,0
	29,0	49,0	380,2	380,2	3,95	11,4	7,0
	27,0	52,9	364,9	364,9	4,21	11,3	7,0
	25,0	56,5	349,1	349,1	4,48	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);
 Ambient design temperature: 35 °C;
 User fluid: water;
 Load profile: Process.

Notes:

EWT: Evaporator entering water temperature
 LWT: Evaporator leaving water temperature



EKV HE High Efficiency

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 200-2-2	35,0	49,3	458,7	458,7	3,45	12,0	7,0
	33,0	45,1	442,1	442,1	3,61	11,8	7,0
	31,0	47,4	425,2	425,2	3,87	11,6	7,0
	29,0	49,0	408,7	408,7	4,13	11,4	7,0
	27,0	52,9	392,2	392,2	4,39	11,3	7,0
	25,0	56,5	375,2	375,2	4,62	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 220-2-2	35,0	49,3	508,3	508,3	3,11	12,0	7,0
	33,0	45,1	490,0	490,0	3,28	11,8	7,0
	31,0	47,4	471,2	471,2	3,45	11,6	7,0
	29,0	49,0	452,9	452,9	3,64	11,4	7,0
	27,0	52,9	434,6	434,6	3,85	11,3	7,0
	25,0	56,5	415,8	415,8	4,13	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 250-2-2	35,0	49,3	573,3	573,3	3,05	12,0	7,0
	33,0	45,1	552,7	552,7	3,20	11,8	7,0
	31,0	47,4	531,4	531,4	3,35	11,6	7,0
	29,0	49,0	510,8	510,8	3,54	11,4	7,0
	27,0	52,9	490,2	490,2	3,78	11,3	7,0
	25,0	56,5	469,0	469,0	4,10	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);

Ambient design temperature: 35 °C;

User fluid: water;

Load profile: Process.

Notes:

EWT: Evaporator entering water temperature

LWT: Evaporator leaving water temperature



EKV HE High Efficiency

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 270-2-2	35,0	49,3	640,7	640,7	3,22	12,0	7,0
	33,0	45,1	617,6	617,6	3,38	11,8	7,0
	31,0	47,4	593,9	593,9	3,56	11,6	7,0
	29,0	49,0	570,9	570,9	3,74	11,4	7,0
	27,0	52,9	547,8	547,8	3,89	11,3	7,0
	25,0	56,5	524,1	524,1	4,17	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 280-2-2	35,0	49,3	668,5	668,5	3,20	12,0	7,0
	33,0	45,1	644,4	644,4	3,38	11,8	7,0
	31,0	47,4	619,7	619,7	3,57	11,6	7,0
	29,0	49,0	595,6	595,6	3,76	11,4	7,0
	27,0	52,9	571,6	571,6	3,95	11,3	7,0
	25,0	56,5	546,8	546,8	4,20	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 290-2-2	35,0	49,3	698,7	698,7	3,36	12,0	7,0
	33,0	45,1	673,5	673,5	3,53	11,8	7,0
	31,0	47,4	647,7	647,7	3,73	11,6	7,0
	29,0	49,0	622,5	622,5	3,92	11,4	7,0
	27,0	52,9	597,4	597,4	4,10	11,3	7,0
	25,0	56,5	571,5	571,5	4,39	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);
 Ambient design temperature: 35 °C;
 User fluid: water;
 Load profile: Process.

Notes:

EWT: Evaporator entering water temperature
LWT: Evaporator leaving water temperature



EKV HE High Efficiency

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 300-2-2	35,0	49,3	757,1	757,1	3,33	12,0	7,0
	33,0	45,1	729,9	729,9	3,51	11,8	7,0
	31,0	47,4	701,9	701,9	3,71	11,6	7,0
	29,0	49,0	674,6	674,6	3,90	11,4	7,0
	27,0	52,9	647,4	647,4	4,10	11,3	7,0
	25,0	56,5	619,3	619,3	4,38	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 320-2-2	35,0	49,3	815,9	815,9	3,31	12,0	7,0
	33,0	45,1	786,5	786,5	3,48	11,8	7,0
	31,0	47,4	756,3	756,3	3,67	11,6	7,0
	29,0	49,0	727,0	727,0	3,87	11,4	7,0
	27,0	52,9	697,6	697,6	3,98	11,3	7,0
	25,0	56,5	667,4	667,4	4,19	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 340-2-2	35,0	49,3	856,1	856,1	3,24	12,0	7,0
	33,0	45,1	825,2	825,2	3,40	11,8	7,0
	31,0	47,4	793,6	793,6	3,56	11,6	7,0
	29,0	49,0	762,7	762,7	3,75	11,4	7,0
	27,0	52,9	731,9	731,9	3,86	11,3	7,0
	25,0	56,5	700,3	700,3	4,07	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);

Ambient design temperature: 35 °C;

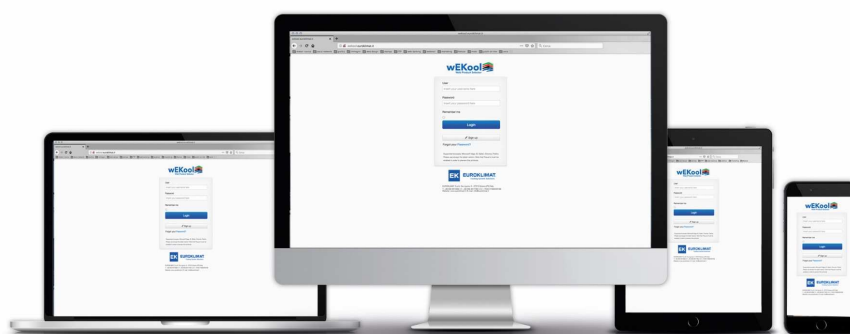
User fluid: water;

Load profile: Process.

Notes:

EWT: Evaporator entering water temperature

LWT: Evaporator leaving water temperature



EKV HE High Efficiency

Performance tables by model

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 360-2-2	35,0	49,3	878,8	878,8	3,09	12,0	7,0
	33,0	45,1	847,1	847,1	3,30	11,8	7,0
	31,0	47,4	814,6	814,6	3,50	11,6	7,0
	29,0	49,0	783,0	783,0	3,69	11,4	7,0
	27,0	52,9	751,4	751,4	3,81	11,3	7,0
	25,0	56,5	718,8	718,8	4,08	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 390-2-2	35,0	49,3	980,9	980,9	3,25	12,0	7,0
	33,0	45,1	945,6	945,6	3,43	11,8	7,0
	31,0	47,4	909,3	909,3	3,62	11,6	7,0
	29,0	49,0	874,0	874,0	3,79	11,4	7,0
	27,0	52,9	838,7	838,7	3,93	11,3	7,0
	25,0	56,5	802,4	802,4	4,18	11,1	7,0

Model	Ambient temperature	Ambient relative humidity	Load	Capacity	EER	EWT	LWT
	[°C]	[%]	[kW]	[kW]	[-]	[°C]	[°C]
EKV HE A BS/ST/AS/EC/SS 420-2-2	35,0	49,3	1041,8	1041,8	3,25	12,0	7,0
	33,0	45,1	1004,3	1004,3	3,44	11,8	7,0
	31,0	47,4	965,8	965,8	3,63	11,6	7,0
	29,0	49,0	928,3	928,3	3,84	11,4	7,0
	27,0	52,9	890,8	890,8	4,00	11,3	7,0
	25,0	56,5	852,2	852,2	4,27	11,1	7,0

Reference conditions:

Meteorological data reference place: Strasbourg (FR);
 Ambient design temperature: 35 °C;
 User fluid: water;
 Load profile: Process.

Notes:

EWT: Evaporator entering water temperature
LWT: Evaporator leaving water temperature



Euroklimat has developed an online software called "wEKool" that allows you to select the chiller model closest to the project conditions.

For more information, please contact your sales representative.

