



## EKWBA

Heat pump

## EKWXA

Cooling only



AIR-COOLED WATER CHILLERS < 40 kW  
Axial fans

## Maximum versatility with ultra-compact units

Compact chillers designed to be installed outdoor, either on terraces or on the ground.

### MAIN FEATURES

- Cooling capacities ranging from 22.4 to 38.7 kW
- Heating capacities ranging from 25 to 40.3 kW
- R-410A refrigerant
- EER: up to 3.10
- COP: up to 3.21
- Scroll-type compressor for the whole range
- Option for integrated hydraulic kit
- A single cooling circuit with a scroll compressor
- Cooling condensation control and evaporation control in the heat pump by means of a two-speed fan
- Compatible with the Hydrofan system (option)
- Alarm indication signal
- Remote run/stop
- Second set point.

### AVAILABLE VERSIONS

- Heat pump
- Cooling only

### ADVANTAGES

- High energy efficiency
- Multiple possible configuration and accessories
- Ultra-compact units with optional hydraulic kit included in the unit
- Units will be delivered completely finished and tested, with the appropriate load of R-410A refrigerant for their correct operation

### APPLICATIONS

- Compact units designed to be installed outdoor, either on roofs, terraces or on the ground
- Their multiple acoustic possible configuration and the option of incorporating the hydraulic kit offers great installation and operating versatility and can be adapted to each specific project

### CONTROLLER

Standard controller: LCX



See regulation and control on page 200.

**EKWXA/EKWXA SERIES**

MODEL		801.1	1001.1	1201.1	1501.1
<b>COOLING MODE</b>					
COOLING CAPACITY	kW	22.4	26.3	30.4	38.7
Compressor absorbed power	kW	5.8	7.6	7.9	11.5
Nominal compressor amps	A	14.9	15.9	18	23
Water temperature (inlet)	°C	12	12	12	12
Water temperature (outlet)	°C	7	7	7	7
Evaporator water flow	m <sup>3</sup> /h	3.9	4.5	5.2	6.7
Evaporator pressure drop	Kpa	24.7	32.9	27.1	45
Outside air temperature	°C	35	35	35	35
<b>ENERGY EFFICIENCY RATES</b>					
EER		3.1	2.92	3.1	2.89
<b>HEATING MODE</b>					
Heating Capacity	kW	25.2	29.3	33.7	40.3
Compressor absorbed power	kW	6.5	7.8	8.6	11.6
Nominal compressor amps	A	15	16.1	18.2	23.2
Water temperature (inlet)	°C	39.4	39.4	39.5	39.8
Water temperature (outlet)	°C	45	45	45	45
Outside air temperature	°C	7	7	7	7
<b>ENERGY EFFICIENCY RATES</b>					
COP coefficient		3.21	3.2	3.2	2.99
<b>REFRIGERANT</b>					
Number of circuits		1	1	1	1
Gas type		R-410A	R-410A	R-410A	R-410A
Refrigerant charge (without options)	kg	8.2	8.4	9	9.2
<b>COMPRESSORS</b>					
Type		scroll	scroll	scroll	scroll
Number of compressors		1	1	1	1
Number of power stages		1	1	1	1
Max. running amps	A	18.7	20.1	23.1	29.3
Locked rotor amps	A	145	145	155	205
<b>FANS</b>					
Type		axial	axial	axial	axial
Number of fans		1	1	1	1
Nominal airflow	m <sup>3</sup> /h	16,700	16,700	19,500	19,500
Absorbed power	kW	1.4	1.4	1.9	1.9
Nominal amps	A	2.9	2.9	3.5	3.5
<b>EVAPORATOR</b>					
Quantity		1	1	1	1
Water volume	l	2.3	2.9	3.4	3.4
Minimum water flow	m <sup>3</sup> /h	2.4	2.8	3.3	4.2
Maximum water flow	m <sup>3</sup> /h	6.4	7.5	8.7	11.1
Anti-freeze	%	0	0	0	0
Fouling factor	m <sup>2</sup> K/kW	0.044	0.044	0.044	0.044
<b>ELECTRICAL WIRING</b>					
Supply voltage	V/Hz-/Phase	400 / 3 / 50	400 / 3 / 50	400 / 3 / 50	400 / 3 / 50
Nominal amps (cooling)	A	17.8	18.8	21.6	26.6
<b>WATER CONNECTIONS</b>					
Type		Groove - Victaulic type			
External diameter	(")	1 1/2	1 1/2	1 1/2	1 1/2
<b>NOISE LEVEL</b>					
Noise level	dB(A)	79.7	79.9	79.9	80.5
Sound pressure (5 m)	dB(A)	58.2	58.4	58.4	59.1
<b>DIMENSIONS</b>					
Length	mm	1,200	1,200	1,200	1,200
Width	mm	1,050	1,050	1,050	1,050
Height	mm	1,470	1,470	1,470	1,470
NET WEIGHT	kg	312	340	348	354

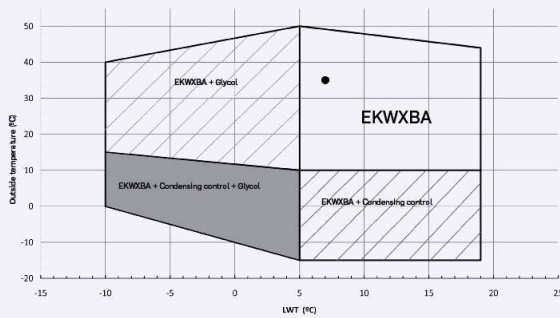
## OPERATING LIMITS

The table below specifies the chiller running limits for the plate exchangers.

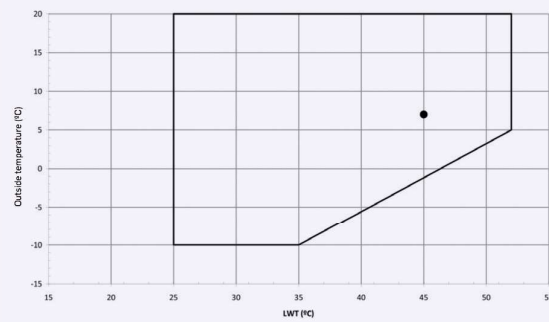
### EKWXB/EA/SERIES

OPERATING LIMITS		801.1	1001.1	1201.1	1501.1
Nominal water flow	m <sup>3</sup> /h	3,9	4,5	5,2	6,7
Evaporator nominal pressure drop	Kpa	30	42	62	45
Minimum water flow	m <sup>3</sup> /h	2,4	2,8	3,3	4,2
Maximum water flow	m <sup>3</sup> /h	6,4	7,5	8,7	11,1
Minimum water volume	l	54	63	73	93
Water thermal expansion coefficient (7-50 °C)	°C			0,01233	
Water thermal expansion coefficient (7-55 °C)	°C			0,014554	
Maximum water volume (7-50 °C)	°C			619	
Maximum water volume (7-55 °C)	°C			525	

### COOLING ONLY



### HEAT PUMP



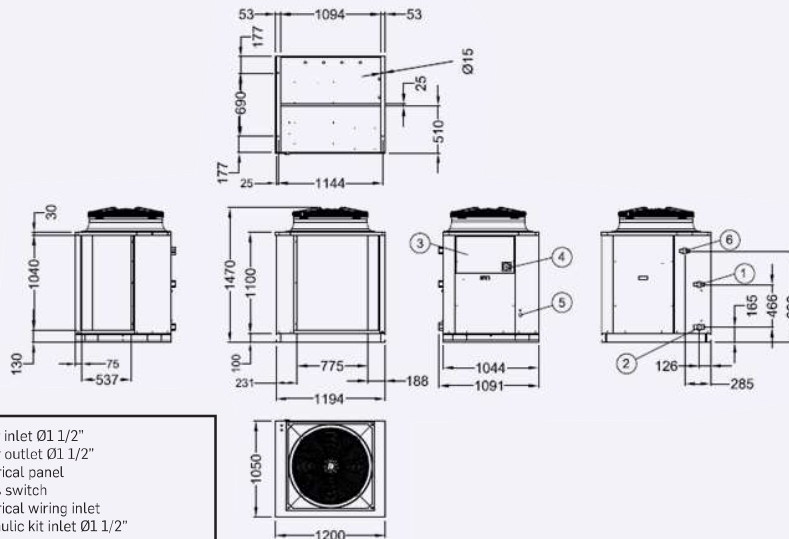
### NOISE LEVELS | Measured in free field, directivity 2 and at 1.5 metres from the ground.

SOUND PRESSURE LEVELS dB(A)	801.1	1001.1	1201.1	1501.1
1 m	72,2	72,4	72,4	73,1
2 m	66,2	66,4	66,4	67
5 m	58,2	58,4	58,4	59,1
10 m	52,2	52,4	52,4	53,1

Note: the sound pressure level depends on the conditions of the installation and, therefore, is only given as a general indication. Values obtained according to standard ISO 3744.

## DIMENSIONS

MODELS 801.1 - 1501.1





# EKWXB

Heat pump

# EKWXA

Cooling only

NEW



AIR-COOLED WATER CHILLERS < 230 kW  
Axial fans

## Maximum versatility with medium capacity ultra-compact units

The KRONO 2 water-chillers are compact, designed to be installed outdoor, either on terraces or on the ground.

### MAIN FEATURES

- Cooling capacities ranging from 48 to 227.7 kW
- Heating capacities ranging from 51 to 255.8 kW
- R-410A refrigerant
- EER: up to 3.13
- COP: up to 3.31
- Option for integrated hydraulic kit
- Scroll-type compressors specially designed to be applied on the heat pump
- A single cooling circuit with two scroll compressors in tandem assembly
- Cooling condensation control and evaporation control in the heat pump by means of two-speed fans
- Compatible with the Hydrofan system (option)
- Alarm indication signal
- Remote run/stop
- Second set point
- Scheduling function

### ADVANTAGES

- High energy efficiency
- Multiple possible configuration and accessories
- Option of partial heat recovery system
- Ultra-compact units with optional hydraulic kit included in the unit
- Units will be delivered completely finished and tested, with the appropriate load of R-410A refrigerant for their correct operation

### APPLICATIONS

- Compact units designed to be installed outdoor, either on roofs, terraces or on the ground.
- Their multiple acoustic possible configuration and the option of incorporating the hydraulic kit offers great installation and operating versatility and can be adapted to each specific project

### AVAILABLE VERSIONS

- Heat pump
- Cooling only

### CONTROLLER

Standard controller:  
MCX



See regulation and control on page 200.

## EKWXB / EKWA SERIES

MODEL		1601.2	2001.2	2401.2	2501.2	3001.2	3501.2	4001.2	4501.2	5002.4*	6002.4*	7002.4*	8002.4*	9002.4*
<b>COOLING MODE</b>														
COOLING CAPACITY	kW	48.1	53.7	68	71.4	77.4	98	110.8	120.2	136.9	149.2	189.4	211.6	227.7
Compressor absorbed power	kW	13.3	15.6	18.6	20.4	23.2	28.4	32.8	37.3	38.9	44.1	54	62.2	70.4
Nominal compressor amps	A	27	30.1	35.1	38.9	42.2	49.3	56.2	64.2	73.8	80.8	95.2	108	122.6
Water temperature (inlet)	°C	12	12	12	12	12	12	12	12	12	12	12	12	12
Water temperature (outlet)	°C	7	7	7	7	7	7	7	7	7	7	7	7	7
Evaporator water flow	m³/h	8.3	9.2	11.7	12.3	13.3	16.8	19	20.6	23.5	25.6	32.5	36.3	39.1
Evaporator pressure drop	Kpa	22.4	27.5	27.5	30.4	35.6	29.1	31.9	38.2	28.3	33.3	29.4	32.3	38.7
Outside air temperature	°C	35	35	35	35	35	35	35	35	35	35	35	35	35
<b>ENERGY EFFICIENCY RATES</b>														
EER		2.96	2.9	3.03	2.95	2.9	3.07	2.98	2.88	3.02	2.96	3.13	3.01	2.90
<b>HEATING MODE</b>														
Heating Capacity	kW	51.1	57.8	71.3	75.7	83.1	108.3	122.5	133.2	143.2	157.6	201.9	233.7	255.8
Compressor absorbed power	kW	13.6	16	19.6	21.3	24.4	29	33.7	37.9	41.1	46.2	56.5	65.3	72.8
Nominal compressor amps	A	27.2	30.4	35.6	39.3	42.7	50.2	57.4	65	76.7	83.8	98.5	111.9	125.7
Water temperature (inlet)	°C	39.7	39.6	39.8	39.7	39.6	39.5	39.5	39.5	39.7	39.7	39.6	39.4	39.3
Water temperature (outlet)	°C	45	45	45	45	45	45	45	45	45	45	45	45	45
Outside air temperature	°C	7	7	7	7	7	7	7	7	7	7	7	7	7
<b>ENERGY EFFICIENCY RATES</b>														
COP coefficient		3.09	3.05	3.04	3.01	2.94	3.31	3.22	3.15	2.94	2.93	3.17	3.15	3.13
<b>REFRIGERANT</b>														
Number of circuits		1	1	1	1	1	1	1	1	2	2	2	2	2
Gas type		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
Refrigerant charge (without options)	kg	13	13.5	15.5	16	16.5	26	27	28.5	31.0	33.0	52.0	54.0	57.0
<b>COMPRESSORS</b>														
Type		scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll
Number of compressors		2	2	2	2	2	2	2	2	4	4	4	4	4
Number of power stages		3	3	3	3	3	3	3	3	6	6	6	6	6
Max. running amps	A	15.3+18.7	15.3+23.1	20.1+25.3	20.1+29.3	25.3+29.3	30+40	40+40	40+47	119.2	130.2	156.2	178.2	196.6
Locked rotor amps	A	165	170	190	225	235	255	265	310	288.2	300.7	334.7	362.1	416.3
<b>FANS</b>														
Type		axial	axial	axial	axial	axial	axial	axial	axial	axial	axial	axial	axial	axial
Number of fans		2	2	2	2	2	2	3	3	4	4	4	6	6
Nominal airflow	m³/h	33,200	33,200	38,700	38,700	38,700	46,000	52,700	52,700	94,300	94,300	91,100	104,700	104,700
Absorbed power (each fan)	kW	1.5	1.5	1.9	1.9	1.9	1.9	1.4	1.4	1.6	1.6	1.6	1.3	1.3
Nominal amps (each fan)	A	2.9	2.9	3.5	3.5	3.5	3.5	2.9	2.9	3.2	3.2	3.2	2.6	2.6
<b>EVAPORATOR</b>														
Quantity		1	1	1	1	1	1	1	1	2	2	2	2	2
Water volume	l	6	6	7	7	7	8.4	8.4	8.4	14	14	16.8	16.8	16.8
Minimum water flow	m³/h	5.2	5.8	7.3	7.7	8.3	10.5	11.9	12.9	14.7	16.1	20.4	22.8	24.5
Maximum water flow	m³/h	13.8	15.4	19.5	20.5	22.2	28.1	31.8	34.5	39.3	42.8	54.3	60.7	65.3
Anti-freeze	%	0	0	0	0	0	0	0	0	0	0	0	0	0
Fouling factor	m² K/kW	0,044	0,044	0,044	0,044	0,044	0,044	0,044	0,044	0,044	0,044	0,044	0,044	0,044
<b>ELECTRICAL WIRING</b>														
Supply voltage	V/Hz-/Phase	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	400/3/50	400/3/50	400/3/50	400/3/50
Nominal amps (cooling)	A	32,8	35,9	42,3	46,1	49,4	56,5	64,9	72,9	86,3	93,3	107,7	123,6	138,2
<b>WATER CONNECTIONS</b>														
Type		Groove - Victaulic type												
External diameter	(")	2	2	2	2	2	2	2	2	2 1/2	2 1/2	3	3	3
<b>NOISE LEVEL</b>														
Noise level	dB(A)	82.6	82.7	83	83.2	83.3	86.2	87.4	87.4	86.2	86.3	89.2	90.5	90.5
Sound pressure (5 m)	dB(A)	61.1	61.3	61.5	61.7	61.8	64.8	65.9	65.9	64.7	64.8	67.8	69.0	69.0
<b>DIMENSIONS</b>														
Length	mm	2,215	2,215	2,215	2,215	2,215	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200
Width	mm	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	2,250	2,250	2,250	2,250	2,250
Height	mm	1,510	1,510	1,510	1,510	1,510	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150
NET WEIGHT	kg	540	543	597	599	606	950	952	997	1,476	1,486	1,720	1,753	1,759

\* Next models: 5002.4, 6002.4, 7002.4, 8002.4 and 9002.4

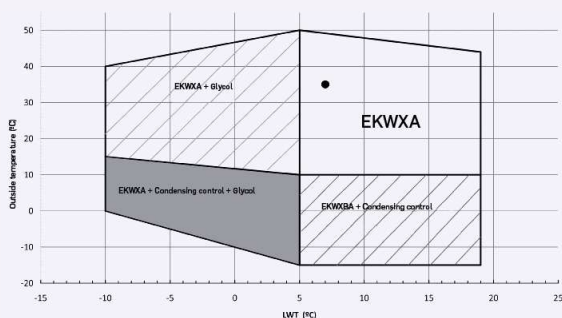
## OPERATING LIMITS

The table below specifies the chiller running limits for the plate exchangers.

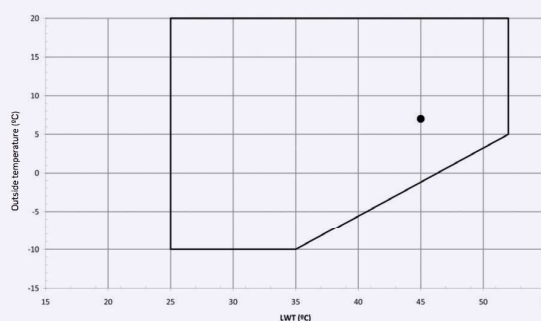
### EKWXA / EKWXA SERIES

OPERATING LIMITS		1601.2	2001.2	2401.2	2501.2	3001.2	3501.2	4001.2	4501.2	
Nominal water flow	m <sup>3</sup> /h	8,3	9,2	11,7	12,3	13,3	16,8	19	20,6	
Evaporator nominal pressure drop	Kpa	22	24	26	26	32	29	32	38	
Minimum water flow	m <sup>3</sup> /h	5,2	5,8	7,3	7,7	8,3	10,5	11,9	12,9	
Maximum water flow	m <sup>3</sup> /h	13,8	15,4	19,5	20,5	22,2	29,1	31,8	34,5	
Minimum water volume	l	115	129	163	171	185	235	266	288	
Water thermal expansion coefficient (7-50 °C)	°C	0,01233								
Water thermal expansion coefficient (7-55 °C)	°C	0,01454								
Maximum water volume (7-50 °C)	°C	928					1290			
Maximum water volume (7-55 °C)	°C	787					1094			

### COOLING ONLY



### HEAT PUMP



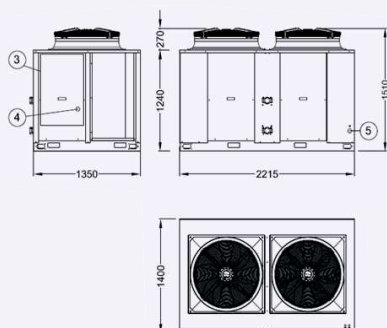
NOISE LEVELS | Measured in free field, directivity 2 and at 1.5 metres from the ground.

SOUND PRESSURE LEVELS dB(A)	1601.2	2001.2	2401.2	2501.2	3001.2	3501.2	4001.2	4501.2
1 m	75,1	75,2	75,5	75,7	75,8	78,8	79,9	79,9
2 m	69,1	69,2	69,5	69,7	69,8	72,7	73,9	73,9
5 m	61,1	61,3	61,5	61,7	61,8	64,8	65,9	65,9
10 m	55,1	55,2	55,5	55,7	55,8	55,8	59,9	59,9

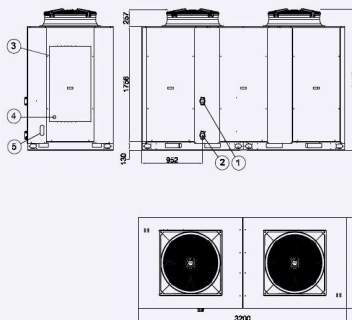
Note: the sound pressure level depends on the conditions of the installation and, therefore, is only given as a general indication. Values obtained according to standard ISO 3744.

## DIMENSIONS

MODELS 1601.1 - 3001.1



MODEL 3501.2



MODELS 4001.2 - 4501.2

