

Precision Air Conditioning



EUROKLIMAT
Cooling System Solutions



“Some things can’t be
mass-produced.”

We believe in a job well done

When Euroklimat was founded in 1963, our mission was simple: to make the best air-conditioners in the world.

Today we have added more: efficiency maximization, energy saving and respect for the surrounding environment have become constant objectives of our everyday work.

Michele Bedin
CEO EUROKLIMAT







Our plants and quality management

Over 50 years of business

Since we set up business in 1963, the company's head offices have always been in Italy, near Milan. Today, our aim is to be a market leader in chillers with natural refrigerant (propane): by doing this, we are helping the industry to become more efficient, preserving natural resources and protecting the environment.

Organization in Italy

At our Italian plant spread over an area of 6,000 square metres, with a work force of 60 people, Euroklimat designs and produces refrigeration units, heat pumps and precision air conditioners that can be used both in industrial processes and traditional comfort applications.

Infinite quality

Euroklimat firmly believes that Customer Satisfaction is an indispensable factor for success. A priority objective to achieve this result is the constant improvement of our products, services and the relative production processes. This objective means involving all of the company's resources with planned, systematic activities for Quality; for this reason, our system complies with the international standard UNI EN ISO 9001:2015.

Organization in China

Our plant covers a surface of approximately 40,000 square metres, with over 450 people and includes a large test chamber and a sophisticated R&D laboratory, in addition to real production departments, where the performance of the units is measured before being placed on the market.







Precision Air Conditioning application



Equipment particularly suited to "controlling" civil and/or technological environments.

From air purity to internal thermo-hygrometric conditions, the different needs are treated specifically and overcome with flexible, easy-to-apply solutions, always using environmentally-friendly components.





Market demands



Euroklimat's responses

Elevated performance

Latest-generation technology

Reduced space

Optimised design

Precision control

Advanced electronics



Precision Air Conditioning references

German Space Operations Center | Germany

IBM | Austria

DHL | Milan

Parliament | Austria

Finnish Army | Finland

Business Center Preo8 | Russia

Data Center



Medium & Low density servers



Danish Technological Institute | Denmark

Angelantoni Group - Div. ATT & ALS | Italy

Kenosistec | Milan

Laboratories



Fca | Cassino

BMW | Munich

PSA Peugeot Citroën | France

Metrology labs



Intesa San Paolo | Milan

Aspesi | Milan

Unicredit Bank | Milan

Ambient air-conditioning



All the technology available for CRAC and CRAH

EC Fans

Up to **50%** energy saving compared to traditional motors.

Electronic Expansion Valve



The use of electronic valves means optimisation of the cooling circuit in all working conditions and consequently a significant saving in energy.



Modulating humidifiers

Immersed electrode humidifiers with a modulating capacity of the power offer precise humidity control.



Advanced control

Compatible with all major communication protocols for complete interfacing with modern supervision systems.



TREND



FREE-COOLING BLDC Compressor

The solutions available for energy saving mean operating costs can be reduced by over 65% compared to traditional systems.

High precision also in the design

100+ configurations

Versions with air flow upwards and downwards, direct expansion working, water or air condensation and chilled-water battery, in Dual-Cooling or Free-Cooling mode.



Reduced footprint

The design of the new Data Centers requires a reduction in the spaces for the conditioning units. This is why Euroklimat has dedicated particular attention to the design of the structure and the layout of the internal components, with the aim of reducing the unit's footprint as much as possible, thus offering a particularly interesting kW/m² ratio.

Full accessibility

All components are positioned rationally: in this way, the units don't require any particular clear spaces. All unit maintenance can be carried out from the front. If necessary, the panels can easily be removed, facilitating interventions by qualified personnel.

50+ accessories and full flexibility

The long list of accessories available covers all market needs, so you can always find the most appropriate solution for your application. Euroklimat's design flexibility also means it is possible to satisfy the most particular needs, such as supplies in assembly kits for the smallest of spaces.

Precision air conditioners with Plug Fan “EC” for technological applications





Precision Air Conditioning

Index

BXK - T/EC	As08 1E	↔	F061 2E	14
AXK - T/EC	As07 1E	↔	F069 2E	16
CWK - T/EC	As09 1W	↔	F090 1W	18
XWK - T/EC	C058 1W	↔	F0116 1W	20
OXYRED	Bx30 1W	↔	E096 1W	22

BXK - T/EC

As08 1E ↔ F061 2E

R410A
R410A | GWP=2.088

BLDC
compressor
available

PLUG FAN

"Tecno"
solutions

Direct expansion with remote air cooled condenser



Configuration

O - Upflow
U - Downflow

Operation

SF - Cooling only

Solution

T - Technological

Cooling Capacity 7 - 67,7 kW

Dual-cooling capacity 17,9 - 51,4 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange ("V" configuration).

Compressor

HERMETIC SCROLL type, complete with thermal protection. Antivibration mountings and oil charge are standard.

Fan

Fan units are new-generation; plug fan type with "EC" motor with electronic commutation in order to maximize energy savings and adjust the amount of air necessary.

Remote air cooled condenser

Remote air cooled condenser (CTK) available on request.

Refrigerant circuit

Liquid receiver, filter dryer, moisture-liquid sight glass, HP and LP pressure switches, solenoid valve, thermostatic expansion valve with external equalizer.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Electronic expansion valve
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Phase sequence relay
- Crankcase electrical heater
- Clock board

- LonWorks® interface electronic board
- ModBus® interface electronic board
- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Sound absorber plenum

BXK - T/EC

As08 1E ↔ F061 2E

Direct expansion with remote air cooled condenser

BXK Tecno EC		As08 1E	As09 1E	A012 1E	A014 1E	Bs17 1E	B018 1E	B020 1E	B022 1E	B024 1E
Total cooling capacity(1)	kW	7,0	9,1	10,9	11,8	16,1	17,4	20,1	22,6	25,1
Sensible cooling capacity(1)	kW	7,0	8,1	10,9	11,4	15,2	17,4	19,7	20,7	21,7
R Factor	-	1,00	0,89	1,00	0,97	0,94	1,00	0,98	0,92	0,86
Dual cooling - Tot. cap./Sens. cap.(3)	kW	-	-	-	-	-	17,9 / 15,4	17,9 / 15,4	17,9 / 15,4	17,9 / 15,4
Power supply	-					400V/3+N/50Hz +T				
Number of compressors	n°	1	1	1	1	1	1	1	1	1
Number of refrigerant circuits	n°	1	1	1	1	1	1	1	1	1
Compressors total power input(1)	kW	2,6	3,4	3,4	3,5	4,5	4,6	5,5	6,5	7,2
Compressors total current(1)	A	5,2	6,2	6,2	6,4	7,7	8,0	9,5	11,3	12,8
Air flow	m3/h	2300	2300	3300	3300	4200	5600	5600	5600	5600
External static pressure	Pa	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300
Fans quantity	n°	1	1	1	1	1	1	1	1	1
Fans power input	kW	0,4	0,4	0,8	0,8	0,9	1,2	1,2	1,2	1,2
Fans total current	A	0,8	0,8	1,3	1,3	1,5	1,9	1,9	1,9	1,9
Front sound pressure OVER(2)	dBA(A)	48	48	49	49	49	52	52	52	52
Front sound pressure UNDER(2)	dBA(A)	45	45	46	46	46	49	49	49	49
Discharge refrigerant pipe dimension	mm	1x016	1x016	1x016	1x016	1x016	1x016	1x016	1x016	1x018
Liquid refrigerant pipe dimension	mm	1x012	1x012	1x012	1x012	1x012	1x012	1x012	1x012	1x012
Combination with remote cond. CTK.E/ST	-	0040D	0040D	0040D	0050D	0050D	0050D	0080D	0080D	0080D
Combination with remote cond. CTK.E/LN	-	0040D	0040D	0050D	0050D	0080D	0080D	0100D	0100D	0100D

ELECTRIC COIL									
Stages of operation	n°	1	1	2	2	2	2	2	2
Power	kW	3,0	3,0	6,0	6,0	6,0	6,0	6,0	6,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	8,7	8,7	8,7

HUMIDIFIER									
Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3
Power	kW	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3
Absorbed current	A	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2

DIMENSIONS AND WEIGHT									
Lenght	mm	700	700	880	880	880	1140	1140	1140
Depth	mm	700	700	700	700	700	700	700	700
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	200	205	220	230	240	310	320	340

BXK Tecno EC		C029 1E	C032 1E	D035 2E	D039 2E	D043 2E	E051 2E	E058 2E	F061 2E	
Total cooling capacity(1)	kW	29,0	32,0	38,8	44,0	48,6	51,7	58,5	67,7	
Sensible cooling capacity(1)	kW	27,4	28,7	37,4	39,5	41,4	49,9	52,6	60,5	
R Factor	-	0,94	0,90	0,96	0,90	0,85	0,97	0,90	0,89	
Dual cooling - Tot. cap./Sens. cap.(3)	kW	24,1 / 21,2	24,1 / 21,2	31,3 / 27,6	31,3 / 27,6	31,3 / 27,6	44,9 / 38,7	44,9 / 38,7	51,4 / 44,3	
Power supply	-				400V/3+N/50Hz +T					
Number of compressors	n°	1	1	2	2	2	2	2	2	
Number of refrigerant circuits	n°	1	1	2	2	2	2	2	2	
Compressors total power input(1)	kW	8,3	9,6	11,1	13,0	13,0	14,3	16,6	19,2	
Compressors total current(1)	A	14,5	16,5	19,0	22,6	22,6	25,6	29,0	33,0	
Air flow	m3/h	8200	8200	10500	10500	10500	14000	14000	16000	
External static pressure	Pa	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	
Fans quantity	n°	2	2	2	2	2	3	3	3	
Fans power input	kW	1,8	1,8	2,2	2,2	2,2	3,3	3,3	3,6	
Fans total current	A	3,0	3,0	3,4	3,4	3,4	5,1	5,1	5,4	
Front sound pressure OVER(2)	dBA(A)	57	57	57	57	57	58	58	59	
Front sound pressure UNDER(2)	dBA(A)	54	54	54	54	54	55	55	56	
Discharge refrigerant pipe dimension	mm	1x022	1x022	2x016	2x016	2x016	2x018	2x022	2x022	
Liquid refrigerant pipe dimension	mm	1x016	1x016	2x012	2x012	2x012	2x016	2x016	2x016	
Combination with remote cond. CTK.E/ST	-	0120D	0120D	2x0050D	2x0050D	2x0080D	2x0100D	2x0120D	2x0150D	
Combination with remote cond. CTK.E/LN	-	0120D	0150D	2x0080D	2x0080D	2x0080D	2x0100D	2x0120D	2x0150D	

ELECTRIC COIL									
Stages of operation	n°	2	2	2	2	2	2	2	2
Power	kW	9,0	9,0	12,0	12,0	12,0	18,0	18,0	18,0
Absorbed current	A	13,0	13,0	17,4	17,4	17,4	26,0	26,0	26,0

HUMIDIFIER									
Capacity	kg/h	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	10 - 15
Power	kW	6,2	6,2	6,2	6,2	6,2	6,2	6,2	11,3
Absorbed current	A	8,7	8,7	8,7	8,7	8,7	8,7	8,7	16,2

DIMENSIONS AND WEIGHT									
Lenght	mm	1320	1320	1760	1760	1760	2200	2200	2640
Depth	mm	840	840	840	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	410	415	500	520	530	700	720	950

Note:

(1) Air inlet 24°C / 50% U.r. Condenser air temperature 35°C

(2) Data measured at 1m in open field conditions

(3) Air inlet 24°C / 50% U.r. - Water and Ethylenic Glycol 30% 12/7°C (13/7°C from size "D")

THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

AXK - T/EC

As07 1E ↔ F069 2E

R410A
R410A | GWP=2.088

BLDC
compressor
available

PLUG FAN

"Tecno"
solutions

Direct expansion with water cooled condenser



Configuration

O - Upflow
U - Downflow

Operation

SF - Cooling only

Solution

T - Technological

Cooling Capacity 7,9 - 74,5 kW

Free-cooling capacity 17,9 - 51,4 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange ("V" configuration).

Compressor

HERMETIC SCROLL type, complete with thermal protection. Antivibration mountings and oil charge are standard.

Fan

Fan units are new-generation; plug fan type with "EC" motor with electronic commutation in order to maximize energy savings and adjust the amount of air necessary.

Water cooled condenser

High efficiency plate heat exchanger made of AISI 316 stainless steel.

Refrigerant circuit

Filter dryer, moisture-liquid sight glass, HP and LP pressure switches, solenoid valve, thermostatic expansion valve with external equalizer.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Electronic expansion valve
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Phase sequence relay
- Crankcase electrical heater
- Clock board
- LonWorks® and ModBus® interface electronic board

- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Condensing pressure valve
- Sound absorber plenum
- Shell and tube Condenser
- CU/NI Shell and tube Condenser

AXK - T/EC

As07 1E ↔ F069 2E

Direct expansion with water cooled condenser

AXK Tecno EC		As07 1E	As09 1E	A012 1E	A014 1E	A016 1E	Bs19 1E	B020 1E	B023 1E	C026 1E
Total cooling capacity(1)	kW	7,9	10,4	12,0	12,9	16,4	18,7	22,7	25,5	28,2
Sensible cooling capacity(1)	kW	7,6	8,6	11,7	12,0	13,5	16,2	20,8	21,9	27,0
R Factor	-	0,96	0,83	0,98	0,93	0,82	0,87	0,92	0,86	0,96
Free cooling - Tot. cap./Sens. cap.(3)	kW	-	-	-	-	-	-	17,9 / 15,4	17,9 / 15,4	24,1 / 21,2
Power supply	-						400V/3+N/50Hz +T			
Number of compressors	n°	1	1	1	1	1	1	1	1	1
Number of refrigerant circuits	n°	1	1	1	1	1	1	1	1	1
Compressors total power input(1)	kW	2,4	2,7	2,7	2,8	3,6	3,7	4,4	5,1	5,7
Compressors total current(1)	A	5,0	5,4	5,4	5,5	6,8	6,8	7,9	9,4	10,6
Air flow	m3/h	2300	2300	3300	3300	3300	4200	5600	5600	8200
External static pressure	Pa	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300
Fans quantity	n°	1	1	1	1	1	1	1	1	2
Fans power input	kW	0,4	0,4	0,8	0,8	0,9	1,2	1,2	1,2	2,4
Fans total current	A	0,8	0,8	1,3	1,3	1,5	1,9	1,9	1,9	3,8
Front sound pressure OVER(2)	dB(A)	48	48	49	49	49	49	52	52	57
Front sound pressure UNDER(2)	dB(A)	45	45	46	46	46	46	49	49	54
IN-OUT diameter cond. water (CITY)	"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
IN-OUT diameter cond. water (TOWER)	"	¾"	¾"	1"	1"	1" ¼	1" ¼	1" ¼	1" ¼	1" ¼

ELECTRIC COIL									
Stages of operation	n°	1	1	2	2	2	2	2	2
Power	kW	3,0	3,0	6,0	6,0	6,0	6,0	6,0	6,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	8,7	8,7	13,0

HUMIDIFIER									
Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	5 - 8
Power	kW	2,3	2,3	2,3	2,3	2,3	2,3	2,3	6,2
Absorbed current	A	3,2	3,2	3,2	3,2	3,2	3,2	3,2	8,7

DIMENSIONS AND WEIGHT									
Lenght	mm	700	700	880	880	880	1140	1140	1320
Depth	mm	700	700	700	700	700	700	700	840
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	210	215	230	240	250	260	320	420

AXK Tecno EC		C029 1E	C033 1E	D042 2E	D047 2E	E048 2E	E053 2E	E058 2E	F069 2E
Total cooling capacity(1)	kW	31,7	35,6	44,2	49,4	51,9	57,5	64,4	74,5
Sensible cooling capacity(1)	kW	28,5	30,3	39,6	41,7	50,0	52,2	55,0	63,2
R Factor	-	0,90	0,85	0,90	0,84	0,96	0,91	0,85	0,85
Free cooling - Tot. cap./Sens. cap.(3)	kW	24,1 / 21,2	24,1 / 21,2	31,3 / 27,6	31,3 / 27,6	44,9 / 38,7	44,9 / 38,7	44,9 / 38,7	51,4 / 44,3
Power supply	-				400V/3+N/50Hz +T				
Number of compressors	n°	1	1	2	2	2	2	2	2
Number of refrigerant circuits	n°	1	1	2	2	2	2	2	2
Compressors total power input(1)	kW	6,6	7,7	8,8	10,3	10,3	11,4	13,3	15,3
Compressors total current(1)	A	12,0	13,7	15,8	18,8	18,8	21,2	24,0	27,4
Air flow	m3/h	8200	8200	10500	10500	14000	14000	14000	16000
External static pressure	Pa	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300
Fans quantity	n°	2	2	2	2	3	3	3	3
Fans power input	kW	1,8	1,8	2,2	2,2	3,3	3,3	3,3	3,6
Fans total current	A	3,0	3,0	3,4	3,4	5,1	5,1	5,1	5,4
Front sound pressure OVER(2)	dB(A)	57	57	57	57	58	58	58	59
Front sound pressure UNDER(2)	dB(A)	54	54	54	54	55	55	55	56
IN-OUT diameter cond. water (CITY)	"	¾"	¾"	1"	1"	1"	1"	1"	1" ¼
IN-OUT diameter cond. water (TOWER)	"	1" ¼	1" ¼	2"	2"	2"	2"	2"	2"

ELECTRIC COIL									
Stages of operation	n°	2	2	2	2	2	2	2	2
Power	kW	9,0	9,0	12,0	12,0	18,0	18,0	18,0	18,0
Absorbed current	A	13,0	13,0	17,4	17,4	26,0	26,0	26,0	26,0

HUMIDIFIER									
Capacity	kg/h	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	10 - 15
Power	kW	6,2	6,2	6,2	6,2	6,2	6,2	6,2	11,3
Absorbed current	A	8,7	8,7	8,7	8,7	8,7	8,7	8,7	16,2

DIMENSIONS AND WEIGHT									
Lenght	mm	1320	1320	1760	1760	2200	2200	2200	2640
Depth	mm	840	840	840	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	430	440	520	540	720	740	760	960

Note:

(1) Air inlet 24°C / 50% U.r. IN-OUT water condenser temperature = 30°C / 35°C

(2) Data measured at 1m in open field conditions

(3) Air inlet 24°C / 50% U.r. - Water and Ethylenic Glycol 30% 12/7°C (13/7°C from size "D")

THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

CWK - T/EC



As09 1W ↔ F090 1W

Chilled water units



Configuration

- O - Upflow
- U - Downflow

Operation

- SF - Cooling only

Solution

- T - Technological

Cooling Capacity 9 - 89 kW

Double Power capacity 6,6 - 51,4 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange ("V" configuration).

Fan

Fan units are new-generation; plug fan type with "EC" motor with electronic commutation in order to maximize energy savings and adjust the amount of air necessary.

Cooling circuit

3-way valve for the control of the chilled water flow and the air temperature.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Clock board
- LonWorks® interface electronic board

- ModBus® interface electronic board
- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Sound absorber plenum

CWK - T/EC

As09 1W ↔ F090 1W

Chilled water units

CWK Tecno EC		As09 1W	As12 1W	A018 1W	Bs24 1W	B032 1W	C044 1W	D055 1W	E070 1W	E076 1W	F090 1W
Total cooling capacity(1)	kW	9	12	18	23	32	44	55	71	76	89
Sensible cooling capacity(1)	kW	9	12	18	23	32	44	55	71	76	89
R Factor	-	1	1	1	1	1	1	1	1	1	1
Double Power - Tot. cap./Sens. cap.(3)	kW	6,6/5,9	8,5/7,4	9,8/8,6	13,4/11,5	17,9/15,4	24,1/21,2	31,3/27,6	44,9/38,7	49,0/42,4	51,4/44,3
Power supply	-							/3/50Hz +T			
Air flow	m3/h	2300	3200	5000	6000	8500	12000	15000	18600	21000	24000
External static pressure	Pa	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300	30 - 300
Fans quantity	n°	1	1	1	1	2	2	3	3	3	3
Fans power input	kW	0,4	0,8	1,2	1,3	2,4	2,6	3,3	3,6	4,1	5,4
Fans total current	A	0,8	1,3	1,9	2,0	3,8	4,0	5,1	5,4	6,3	8,4
Front sound pressure OVER(2)	dB(A)	52	52	53	53	56	60	66	67	69	70
Front sound pressure UNDER(2)	dB(A)	49	49	50	50	53	57	63	64	66	67
Cooling coil pressure drop	kPa	25	30	34	35	46	29	33	46	53	80
Water connections diameter	"	3/4"	3/4"	3/4"	1"	1"	1" 1/4	1" 1/2	1" 1/2	2"	2"

ELECTRIC COIL

Stages of operation	n°	1	1	2	2	2	2	2	2	2	2
Power	kW	3,0	3,0	6,0	6,0	6,0	9,0	12,0	18,0	18,0	18,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	13,0	17,4	26,0	26,0	26,0

HUMIDIFIER

Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	5 - 8	5 - 8	5 - 8	5 - 8	10 - 15
Power	kW	2,3	2,3	2,3	2,3	2,3	6,2	6,2	6,2	6,2	11,3
Absorbed current	A	3,2	3,2	3,2	3,2	3,2	8,7	8,7	8,7	8,7	16,2

DIMENSIONS AND WEIGHT

Lenght	mm	700	700	880	880	1140	1320	1760	2200	2200	2640
Depth	mm	485	485	485	700	700	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	140	150	175	235	275	300	440	550	570	750

Note:

- (1) Air inlet 24,0°C / 50% U.r. - IN-OUT chilled water temperature = 10°C / 15°C
 - (2) Data measured at 1m in open field conditions
 - (3) Air inlet 24°C / 50% U.r. - Water and Ethylenic Glycol 30% 12/7°C (13/7°C from size "D")
- THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

XWK - T/EC

C058 1W ↔ F0116 1W

Chilled water units



Configuration

U - Downflow

Operation

SF - Cooling only

Solution

T - Technological

Cooling Capacity 58 - 116 kW

Double Power capacity 35 - 69 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange ("V" configuration).

Fan

Fan units are new-generation; plug fan type with "EC" motor with electronic commutation in order to maximize energy savings and adjust the amount of air necessary. Fan is installed in a special frame positioned under the floor.

Cooling circuit

3-way valve for the control of the chilled water flow and the air temperature.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Clock board
- LonWorks® interface electronic board

- ModBus® interface electronic board
- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 600mm.) (standard)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Sound absorber plenum



PLUG FAN



"Tecno" solutions

XWK - T/EC

C058 1W ↔ F0116 1W

Chilled water units

XWK Tecno EC		C058 1W 1W	D071 1W	E086 1W	E096 1W	F0116 1W
Total cooling capacity(1)	kW	58	72	86	96	116
Sensible cooling capacity(1)	kW	58	72	86	96	116
R Factor	-	1	1	1	1	1
Double Power - Tot. cap./Sens. cap.(3)	kW	35 / 31	48 / 41	53 / 46	58 / 49	69 / 60
Power supply	-			400V/3+N/50Hz +T		
Air flow	m3/h	15600	22000	24000	26500	31000
External static pressure	Pa	20	20	20	20	20
Fans quantity	n°	1	2	2	2	2
Fans power input	kW	6,1	5,6	6,0	6,0	12,2
Fans total current	A	9,9	8,6	9,2	9,2	19,8
Front sound pressure (2)	dB(A)	64	64	66	67	66
Cooling coil pressure drop	kPa	55	62	78	81	95
Water connections diameter	"	1" 1/4	1" 1/2	2"	2"	2"

ELECTRIC COIL						
Stages of operation	n°	2	2	2	2	2
Power	kW	9,0	12,0	18,0	18,0	18,0
Absorbed current	A	13,0	17,4	26,0	26,0	26,0

HUMIDIFIER						
Capacity	kg/h	5 - 8	5 - 8	5 - 8	5 - 8	10 - 15
Power	kW	6,2	6,2	6,2	6,2	11,3
Absorbed current	A	8,7	8,7	8,7	8,7	16,2

DIMENSIONS AND WEIGHT						
Lenght	mm	1320	1760	2200	2200	2640
Depth	mm	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950
Operating weight	Kg	350	440	570	570	750

DIMENSIONS AND WEIGHT - Fan frame						
Lenght	mm	1320	1760	2200	2200	2640
Depth	mm	840	840	840	840	840
Height	mm	600	600	600	600	600
Operating weight	Kg	100	140	200	200	260

Note:

(1) Air inlet 24,0°C / 50% U.r. - IN-OUT chilled water temperature = 10°C / 15°C

(2) Data measured at 1m in open field conditions

(3) Air inlet 24°C / 50% U.r. - Water and Ethylenic Glycol 30% 13/7°C

THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.



PLUG FAN



"Tecno"
solutions

Configuration

U - Downflow

Operation

SP - Special

Solution

T - Technological

Cooling Capacity 11,2 - 89 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder. The aesthetic panelling is internally lined to reduce the noise level. The structure is completely watertight.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange.

Fan

Fan units are new-generation; plug fan type with "EC" motor with electronic commutation in order to maximize energy savings and adjust the amount of air necessary.

Cooling circuit

3-way valve for the control of the chilled water flow and the air temperature.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.

Special Unit

These units are suitable for operating in a nitrogen atmosphere to prevent the formation or propagation of fire.
Advanced electronic control is standard.

ACCESSORIES

- Dirty filters alarm
- Water on the bottom alarm
- Low air flow alarm
- Electric heating coil
- Modulating humidifier (water conductivity 350...750 µS/cm)

- Air suction plenum
- Remote control panel
- Clock board
- LonWorks® interface electronic board
- ModBus® interface electronic board

OXYRED

Bx30 1W ↔ E096 1W

Special chilled water units

OXYRED		Bx30 1W	C058 1W	E096 1W
Total cooling capacity(1)	kW	11,2	29	89
Sensible cooling capacity(1)	kW	11,2	29	89
R Factor	-	1	1	1
Power supply	-		400V/3+N/50Hz +T	
Air flow	m ³ /h	4000	9000	26000
External static pressure	Pa	30 - 200	30 - 200	30 - 200
Fans quantity	n°	1	2	3
Fans power input	kW	0,8	1,64	8,4
Fans total current	A	1,5	3,0	13,4
Front sound pressure (2)	dB(A)	47	53	66
Cooling coil pressure drop	kPa	38	51	86
Water connections diameter	"	3/4"	1"	2"

ELECTRIC COIL				
Stages of operation	n°	2	2	2
Power	kW	6,0	9,0	18,0
Absorbed current	A	8,7	13,0	26,0

HUMIDIFIER				
Capacity	kg/h	5 - 8	5 - 8	10 - 15
Power	kW	6,2	6,2	11,3
Absorbed current	A	8,7	8,7	16,2

DIMENSIONS AND WEIGHT				
Lenght	mm	880	1320	2200
Depth	mm	840	840	840
Height	mm	1950	1950	1950
Operating weight	Kg	280	360	700

Note:

(1) Air inlet 23,0°C / 45% U.r. - IN-OUT chilled water temperature = 10°C / 16°C

(2) Data measured at 1m in open field conditions

THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

Precision air conditioners for technological applications





Precision Air Conditioning

Index

BXK - T	As08 1E	↔	F061 2E	26
AXK - T	As07 1E	↔	F069 2E	28
CWK - T	As09 1W	↔	F090 1W	30

BXK - T

R410A
Refrigerant
R410A | GWP=2.088

Centrifugal
fan

"Tecno"
solutions

As08 1E ↔ F061 2E

Direct expansion with remote air cooled condenser



Configuration

O - Upflow
U - Downflow

Operation

SF - Cooling only

Solution

T - Technological

Cooling Capacity 7 - 67,7 kW

Dual-cooling capacity 17,9 - 51,4 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange ("V" configuration).

Compressor

HERMETIC SCROLL type, complete with thermal protection. Antivibration mountings and oil charge are standard.

Fan

Centrifugal type with two suctions, directly coupled to the motor which is of external rotor type and is fixed by vibration isolation mountings. The fans have forward curved blades.

Remote air cooled condenser

Remote air cooled condenser (CTK) available on request.

Refrigerant circuit

Liquid receiver, filter dryer, moisture-liquid sight glass, HP and LP pressure switches, solenoid valve, thermostatic expansion valve with external equalizer.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Electronic expansion valve
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Phase sequence relay
- Crankcase electrical heater
- Clock board
- LonWorks® interface electronic board
- ModBus® interface electronic board
- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Sound absorber plenum

Direct expansion with remote air cooled condenser

BXK Tecno		As08 1E	As09 1E	A012 1E	A014 1E	Bs17 1E	B018 1E	B020 1E	B022 1E	B024 1E
Total cooling capacity(1)	kW	7,0	9,1	10,9	11,8	16,1	17,4	20,1	22,6	25,1
Sensible cooling capacity(1)	kW	7,0	8,1	10,9	11,4	15,2	17,4	19,7	20,7	21,7
R Factor	-	1,00	0,89	1,00	0,97	0,94	1,00	0,98	0,92	0,86
Dual cooling - Tot. cap./Sens. cap.(3)	kW	-	-	-	-	-	17,9 / 15,4	17,9 / 15,4	17,9 / 15,4	17,9 / 15,4
Power supply	-					400V/3+N/50Hz +T				
Number of compressors	n°	1	1	1	1	1	1	1	1	1
Number of refrigerant circuits	n°	1	1	1	1	1	1	1	1	1
Compressors total power input(1)	kW	2,6	3,4	3,4	3,5	4,5	4,6	5,5	6,5	7,2
Compressors total current(1)	A	5,2	6,2	6,2	6,4	7,7	8,0	9,5	11,3	12,8
Air flow	m3/h	2300	2300	3300	3300	4200	5600	5600	5600	5600
External static pressure	Pa	80	80	80	80	150	125	125	125	125
Fans quantity	n°	1	1	1	1	1	2	2	2	2
Fans power input	kW	0,35	0,35	0,55	0,55	0,75	1,5	1,5	1,5	1,5
Fans total current	A	3,1	3,1	4,6	4,6	3,1	6,2	6,2	6,2	6,2
Front sound pressure OVER(2)	dB(A)	47	47	48	48	48	51	51	51	51
Front sound pressure UNDER(2)	dB(A)	44	44	45	45	45	48	48	48	48
Discharge refrigerant pipe dimension	mm	1x016	1x016	1x016	1x016	1x016	1x016	1x016	1x016	1x018
Liquid refrigerant pipe dimension	mm	1x012	1x012	1x012	1x012	1x012	1x012	1x012	1x012	1x012
Combination with remote cond. CTK.E/ST	-	0040D	0040D	0040D	0050D	0050D	0050D	0080D	0080D	0080D
Combination with remote cond. CTK.E/LN	-	0040D	0040D	0050D	0050D	0080D	0080D	0100D	0100D	0100D

ELECTRIC COIL									
Stages of operation	n°	1	1	2	2	2	2	2	2
Power	kW	3,0	3,0	6,0	6,0	6,0	6,0	6,0	6,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	8,7	8,7	8,7

HUMIDIFIER									
Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3
Power	kW	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3
Absorbed current	A	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2

DIMENSIONS AND WEIGHT									
Lenght	mm	700	700	880	880	880	1140	1140	1140
Depth	mm	700	700	700	700	700	700	700	700
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	200	205	220	230	240	310	320	325

BXK Tecno		C029 1E	C032 1E	D035 2E	D039 2E	D043 2E	E051 2E	E058 2E	F061 2E
Total cooling capacity(1)	kW	29,0	32,0	38,8	44,0	48,6	51,7	58,5	67,7
Sensible cooling capacity(1)	kW	27,4	28,7	37,4	39,5	41,4	49,9	52,6	60,5
R Factor	-	0,94	0,90	0,96	0,90	0,85	0,97	0,90	0,89
Dual cooling - Tot. cap./Sens. cap.(3)	kW	24,1 / 21,2	24,1 / 21,2	31,3 / 27,6	31,3 / 27,6	31,3 / 27,6	44,9 / 38,7	44,9 / 38,7	51,4 / 44,3
Power supply	-				400V/3+N/50Hz +T				
Number of compressors	n°	1	1	2	2	2	2	2	2
Number of refrigerant circuits	n°	1	1	2	2	2	2	2	2
Compressors total power input(1)	kW	8,3	9,6	11,1	13,0	13,0	14,3	16,6	19,2
Compressors total current(1)	A	14,5	16,5	19,0	22,6	22,6	25,6	29,0	33,0
Air flow	m3/h	8200	8200	10500	10500	10500	14000	14000	16000
External static pressure	Pa	125	125	155	155	155	140	140	140
Fans quantity	n°	2	2	3	3	3	4	4	4
Fans power input	kW	1,5	1,5	2,25	2,25	2,25	3,0	3,0	3,0
Fans total current	A	6,2	6,2	9,3	9,3	9,3	12,4	12,4	12,4
Front sound pressure OVER(2)	dB(A)	53	53	55	55	55	56	56	57
Front sound pressure UNDER(2)	dB(A)	50	50	52	52	52	53	53	54
Discharge refrigerant pipe dimension	mm	1x022	1x022	2x016	2x016	2x016	2x018	2x022	2x022
Liquid refrigerant pipe dimension	mm	1x016	1x016	2x012	2x012	2x012	2x016	2x016	2x016
Combination with remote cond. CTK.E/ST	-	0120D	0120D	2x0050D	2x0050D	2x0080D	2x0100D	2x0120D	2x0150D
Combination with remote cond. CTK.E/LN	-	0120D	0150D	2x0080D	2x0080D	2x0100D	2x0120D	2x0150D	

ELECTRIC COIL									
Stages of operation	n°	2	2	2	2	2	2	2	2
Power	kW	9,0	9,0	12,0	12,0	12,0	18,0	18,0	18,0
Absorbed current	A	13,0	13,0	17,4	17,4	17,4	26,0	26,0	26,0

HUMIDIFIER									
Capacity	kg/h	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	10 - 15
Power	kW	6,2	6,2	6,2	6,2	6,2	6,2	6,2	11,3
Absorbed current	A	8,7	8,7	8,7	8,7	8,7	8,7	8,7	16,2

DIMENSIONS AND WEIGHT									
Lenght	mm	1320	1320	1760	1760	1760	2200	2200	2640
Depth	mm	840	840	840	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	410	415	500	520	530	700	720	950

Note:

(1) Air inlet 24°C / 50% U.r. Condenser air temperature 35°C

(2) Data measured at 1m in open field conditions

(3) Air inlet 24°C / 50% U.r. - Water and Ethylenic Glycol 30% 12/7°C (13/7°C from size "D")

THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

AXK - T

As07 1E ↔ F069 2E

Direct expansion with water cooled condenser



R410A | GWP=2.088



Centrifugal fan



"Tecno" solutions

Configuration

O - Upflow
U - Downflow

Operation

SF - Cooling only

Solution

T - Technological

Cooling Capacity 7,9 - 74,5 kW

Free-cooling capacity 17,9 - 51,4 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange ("V" configuration).

Compressor

HERMETIC SCROLL type, complete with thermal protection. Antivibration mountings and oil charge are standard.

Fan

Centrifugal type with two suctions, directly coupled to the motor which is of external rotor type and is fixed by vibration isolation mountings. The fans have forward curved blades.

Water cooled condenser

High efficiency plate heat exchanger made of AISI 316 stainless steel.

Refrigerant circuit

Filter dryer, moisture-liquid sight glass, HP and LP pressure switches, solenoid valve, thermostatic expansion valve with external equalizer.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Electronic expansion valve
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Phase sequence relay
- Crankcase electrical heater
- Clock board
- LonWorks® and ModBus® interface electronic board

- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Condensing pressure valve
- Sound absorber plenum
- Shell and tube Condenser
- CU/NI Shell and tube Condenser

Direct expansion with water cooled condenser

AXK Tecno		As07 1E	As09 1E	A012 1E	A014 1E	A016 1E	Bs19 1E	B020 1E	B023 1E	C026 1E
Total cooling capacity(1)	kW	7,9	10,4	12,0	12,9	16,4	18,7	22,7	25,5	28,2
Sensible cooling capacity(1)	kW	7,6	8,6	11,7	12,0	13,5	16,2	20,8	21,9	27,0
R Factor	-	0,96	0,83	0,98	0,93	0,82	0,87	0,92	0,86	0,96
Free cooling - Tot. cap./Sens. cap.(3)	kW	-	-	-	-	-	-	17,9 / 15,4	17,9 / 15,4	24,1 / 21,2
Power supply	-						400V/3+N/50Hz +T			
Number of compressors	n°	1	1	1	1	1	1	1	1	1
Number of refrigerant circuits	n°	1	1	1	1	1	1	1	1	1
Compressors total power input(1)	kW	2,4	2,7	2,7	2,8	3,6	3,7	4,4	5,1	5,7
Compressors total current(1)	A	5,0	5,4	5,4	5,5	6,8	6,8	7,9	9,4	10,6
Air flow	m3/h	2300	2300	3300	3300	3300	4200	5600	5600	8200
External static pressure	Pa	80	80	80	80	80	150	125	125	125
Fans quantity	n°	1	1	1	1	1	1	2	2	2
Fans power input	kW	0,35	0,35	0,55	0,55	0,55	0,75	1,5	1,5	1,5
Fans total current	A	3,1	3,1	4,6	4,6	4,6	3,1	6,2	6,2	6,2
Front sound pressure OVER(2)	dB(A)	47	47	48	48	48	48	51	51	53
Front sound pressure UNDER(2)	dB(A)	44	44	45	45	45	45	48	48	50
IN-OUT diameter cond. water (CITY)	"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
IN-OUT diameter cond. water (TOWER)	"	3/4"	3/4"	1"	1"	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4

ELECTRIC COIL								
Stages of operation	n°	1	1	2	2	2	2	2
Power	kW	3,0	3,0	6,0	6,0	6,0	6,0	6,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	8,7	13,0

HUMIDIFIER								
Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3
Power	kW	2,3	2,3	2,3	2,3	2,3	2,3	2,3
Absorbed current	A	3,2	3,2	3,2	3,2	3,2	3,2	8,7

DIMENSIONS AND WEIGHT								
Lenght	mm	700	700	880	880	880	1140	1140
Depth	mm	700	700	700	700	700	700	840
Height	mm	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	210	215	230	240	250	260	320

AXK Tecno		C029 1E	C033 1E	D042 2E	D047 2E	E048 2E	E053 2E	E058 2E	F069 2E
Total cooling capacity(1)	kW	31,7	35,6	44,2	49,4	51,9	57,5	64,4	74,5
Sensible cooling capacity(1)	kW	28,5	30,3	39,6	41,7	50,0	52,2	55,0	63,2
R Factor	-	0,90	0,85	0,90	0,84	0,96	0,91	0,85	0,85
Free cooling - Tot. cap./Sens. cap.(3)	kW	24,1 / 21,2	24,1 / 21,2	31,3 / 27,6	31,3 / 27,6	44,9 / 38,7	44,9 / 38,7	44,9 / 38,7	51,4 / 44,3
Power supply	-				400V/3+N/50Hz +T				
Number of compressors	n°	1	1	2	2	2	2	2	2
Number of refrigerant circuits	n°	1	1	2	2	2	2	2	2
Compressors total power input(1)	kW	6,6	7,7	8,8	10,3	10,3	11,4	13,3	15,3
Compressors total current(1)	A	12,0	13,7	15,8	18,8	18,8	21,2	24,0	27,4
Air flow	m3/h	8200	8200	10500	10500	14000	14000	14000	16000
External static pressure	Pa	125	125	155	155	140	140	140	140
Fans quantity	n°	2	2	3	3	4	4	4	4
Fans power input	kW	1,5	1,5	2,25	2,25	3,0	3,0	3,0	3,0
Fans total current	A	6,2	6,2	9,3	9,3	12,4	12,4	12,4	12,4
Front sound pressure OVER(2)	dB(A)	53	53	55	55	56	56	56	57
Front sound pressure UNDER(2)	dB(A)	50	50	52	52	53	53	53	54
IN-OUT diameter cond. water (CITY)	"	3/4"	3/4"	1"	1"	1"	1"	1"	1 1/4"
IN-OUT diameter cond. water (TOWER)	"	1 1/4"	1 1/4"	2"	2"	2"	2"	2"	2"

ELECTRIC COIL								
Stages of operation	n°	2	2	2	2	2	2	2
Power	kW	9,0	9,0	12,0	12,0	18,0	18,0	18,0
Absorbed current	A	13,0	13,0	17,4	17,4	26,0	26,0	26,0

HUMIDIFIER								
Capacity	kg/h	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	10 - 15
Power	kW	6,2	6,2	6,2	6,2	6,2	6,2	11,3
Absorbed current	A	8,7	8,7	8,7	8,7	8,7	8,7	16,2

DIMENSIONS AND WEIGHT								
Lenght	mm	1320	1320	1760	1760	2200	2200	2200
Depth	mm	840	840	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	430	440	520	540	720	740	760

Note:

(1) Air inlet 24°C / 50% U.r. IN-OUT water condenser temperature = 30°C / 35°C

(2) Data measured at 1m in open field conditions

(3) Air inlet 24°C / 50% U.r. - Water and Ethylenic Glycol 30% 12/7°C (13/7°C from size "D")

THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

CWK - T

As09 1W ↔ F090 1W

Chilled water units



Centrifugal
fan



"Tecno"
solutions

Configuration

O - Upflow
U - Downflow

Operation

SF - Cooling only

Solution

T - Technological

Cooling Capacity 9 - 89 kW

Double Power capacity 6,6 - 51,4 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange ("V" configuration).

Fan

Centrifugal type with two suctions, directly coupled to the motor which is of external rotor type and is fixed by vibration isolation mountings. The fans have forward curved blades

Cooling circuit

3-way valve for the control of the chilled water flow and the air temperature.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Clock board
- LonWorks® interface electronic board

- ModBus® interface electronic board
- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Sound absorber plenum

CWK - T

As09 1W ↔ F090 1W

Chilled water units

CWK Tecno		As09 1W	As12 1W	A018 1W	Bs24 1W	B032 1W	C044 1W	D055 1W	E070 1W	E076 1W	F090 1W
Total cooling capacity(1)	kW	9	12	18	23	32	44	55	71	76	89
Sensible cooling capacity(1)	kW	9	12	18	23	32	44	55	71	76	89
R Factor	-	1	1	1	1	1	1	1	1	1	1
Double Power - Tot. cap./Sens. cap.(3)	kW	6,6/5,9	8,5/7,4	9,8/8,6	13,4/11,5	17,9/15,4	24,1/21,2	31,3/27,6	44,9/38,7	49,0/42,4	51,4/44,3
Power supply	-	230V/1/50Hz +T			400V/3+N/50Hz +T						
Air flow	m³/h	2300	3200	5000	6000	8500	12000	15000	18600	21000	24000
External static pressure	Pa	100	100	100	100	170	100	170	100	170	100
Fans quantity	n°	1	1	2	2	2	2	2	3	3	4
Fans power input	kW	0,3	0,5	0,8	0,8	1,2	1,4	2,4	2,3	3,3	2,8
Fans total current	A	3,6	3,6	3,6	3,6	5,0	7,0	11,0	10,8	16,2	14,0
Front sound pressure OVER(2)	dB(A)	51	51	52	52	55	58	64	65	67	68
Front sound pressure UNDER(2)	dB(A)	48	48	49	49	52	55	61	62	64	65
Cooling coil pressure drop	kPa	25	30	34	35	46	29	33	46	53	80
Water connections diameter	"	3/4"	3/4"	3/4"	1"	1"	1" 1/4	1" 1/2	1" 1/2	2"	2"

ELECTRIC COIL

Stages of operation	n°	1	1	2	2	2	2	2	2	2	2
Power	kW	3,0	3,0	6,0	6,0	6,0	9,0	12,0	18,0	18,0	18,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	13,0	17,4	26,0	26,0	26,0

HUMIDIFIER

Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	5 - 8	5 - 8	5 - 8	5 - 8	10 - 15
Power	kW	2,3	2,3	2,3	2,3	2,3	6,2	6,2	6,2	6,2	11,3
Absorbed current	A	3,2	3,2	3,2	3,2	3,2	8,7	8,7	8,7	8,7	16,2

DIMENSIONS AND WEIGHT

Lenght	mm	700	700	880	880	1140	1320	1760	2200	2200	2640
Depth	mm	485	485	485	700	700	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	140	150	175	235	275	300	440	550	570	750

Note:

- (1) Air inlet 24,0°C / 50% U.r. - IN-OUT chilled water temperature = 10°C / 15°C
 - (2) Data measured at 1m in open field conditions
 - (3) Air inlet 24°C / 50% U.r. - Water and Ethylenic Glycol 30% 12/7°C (13/7°C from size "D")
- THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

Air conditioners for comfort applications





Precision Air Conditioning

Index

BXK - K	As09 1E	↔	F097 4E	34
AXK - K	As09 1E	↔	F069 2E	36
CWK - K	As18 1W	↔	F180 1W	38

BXK - K

As09 1E ↔ F097 4E

Direct expansion with remote air cooled condenser



R410A | GWP=2.088



Centrifugal
fan



"Comfort"
Solution

Configuration

O - Upflow
U - Downflow

Operation

SF - Cooling only
PC - Heat pump (available on request)

Solution

K - Comfort

Cooling Capacity 9,5 - 96,8 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange.

Compressor

HERMETIC SCROLL type, complete with thermal protection. Antivibration mountings and oil charge are standard.

Fan

Centrifugal type with two suctions, directly coupled to the motor which is of external rotor type and is fixed by vibration isolation mountings. The fans have forward curved blades.

Remote air cooled condenser

Remote air cooled condenser (CTK) available on request.

Refrigerant circuit

Liquid receiver, filter dryer, moisture-liquid sight glass, HP and LP pressure switches, solenoid valve, thermostatic expansion valve with external equalizer.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Electronic expansion valve
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Phase sequence relay
- Crankcase electrical heater
- Clock board

- LonWorks® interface electronic board
- ModBus® interface electronic board
- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Sound absorber plenum

Direct expansion with remote air cooled condenser

BXK Comfort		As09 1E	As12 1E	A017 1E	A019 1E	Bs24 1E	B030 1E	B034 1E	C040 1E
Total cooling capacity(1)	kW	9,5	12,2	17,5	19,4	24,2	30,1	33,6	40,2
Sensible cooling capacity(1)	kW	7,9	9,0	13,6	14,4	18,3	23,5	24,8	30,7
Power supply	-				400V/3+N/50Hz +T				
Number of compressors	n°	1	1	1	1	1	1	1	1
Number of refrigerant circuits	n°	1	1	1	1	1	1	1	1
Compressors total power input(1)	kW	2,6	3	4,5	5,3	6,7	8,1	9,2	11,4
Compressors total current(1)	A	4,7	6,7	8,4	9,2	13	15,5	16,5	19,5
Air flow	m3/h	2300	2300	3300	3300	4200	5600	5600	8200
External static pressure	Pa	80	80	80	80	150	125	125	125
Fans quantity	n°	1	1	1	1	1	2	2	2
Fans power input	kW	0,35	0,35	0,55	0,55	0,75	1,5	1,5	1,5
Fans total current	A	3,1	3,1	4,6	4,6	3,1	6,2	6,2	6,2
Front sound pressure OVER(2)	dB(A)	52	52	53	53	53	56	56	56
Front sound pressure UNDER(2)	dB(A)	49	49	50	50	50	53	53	53
Discharge refrigerant pipe dimension	mm	1/016	1/016	1/016	1/016	1/018	1/022	1/022	1/022
Liquid refrigerant pipe dimension	mm	1/012	1/012	1/012	1/012	1/016	1/016	1/016	1/016
Combination with remote cond. CTK.E/ST	-	0040D	0040D	0050D	0050D	0080D	0120D	0120D	0150D
Combination with remote cond. CTK.E/LN	-	0040D	0050D	0080D	0080D	0100D	0120D	0150D	0180D

ELECTRIC COIL								
Stages of operation	n°	1	1	2	2	2	2	2
Power	kW	3,0	3,0	6,0	6,0	6,0	6,0	9,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	8,7	13,0

HUMIDIFIER								
Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	5 - 8	5 - 8
Power	kW	2,3	2,3	2,3	2,3	2,3	6,2	6,2
Absorbed current	A	3,2	3,2	3,2	3,2	3,2	8,7	8,7

DIMENSIONS AND WEIGHT								
Lenght	mm	700	700	880	880	880	1140	1140
Depth	mm	700	700	700	700	700	700	840
Height	mm	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	205	220	230	240	260	345	350

BXK Comfort	C046 2E	D058 2E	D064 2E	E070 2E	E080 2E	F085 2E	F097 4E
Total cooling capacity(1)	kW	45,7	58,3	64,0	70,4	80,3	84,7
Sensible cooling capacity(1)	kW	33,0	44,6	46,9	56,3	60,3	66,4
Power supply	-				400V/3+N/50Hz +T		
Number of compressors	n°	2	2	2	2	2	4
Number of refrigerant circuits	n°	1	2	2	2	2	2
Compressors total power input(1)	kW	13,9	16,1	18,4	18,6	23,2	23,4
Compressors total current(1)	A	23,7	31	33	33,2	39	39,2
Air flow	m3/h	8200	10500	10500	14000	14000	16000
External static pressure	Pa	125	155	155	140	140	140
Fans quantity	n°	2	3	3	4	4	4
Fans power input	kW	1,5	2,25	2,25	3,0	3,0	3,0
Fans total current	A	6,2	9,3	9,3	12,4	12,4	12,4
Front sound pressure OVER(2)	dB(A)	56	60	60	61	61	62
Front sound pressure UNDER(2)	dB(A)	53	57	57	58	58	59
Discharge refrigerant pipe dimension	mm	1/028	2/022	2/022	2/022	2/022	2/028
Liquid refrigerant pipe dimension	mm	1/018	2/016	2/016	2/016	2/016	2/018
Combination with remote cond. CTK.E/ST	-	0180D	2x0100D	2x0120D	2x0120D	2x0150D	2x0150D
Combination with remote cond. CTK.E/LN	-	0220D	2x0120D	2x0150D	2x0150D	2x0180D	2x0220D

ELECTRIC COIL								
Stages of operation	n°	2	2	2	2	2	2	2
Power	kW	9,0	12,0	12,0	18,0	18,0	18,0	18,0
Absorbed current	A	13,0	17,4	17,4	26,0	26,0	26,0	26,0

HUMIDIFIER								
Capacity	kg/h	5 - 8	5 - 8	5 - 8	10 - 15	10 - 15	10 - 15	10 - 15
Power	kW	6,2	6,2	6,2	11,3	11,3	11,3	11,3
Absorbed current	A	8,7	8,7	8,7	16,2	16,2	16,2	16,2

DIMENSIONS AND WEIGHT								
Lenght	mm	1320	1760	1760	2200	2200	2640	2640
Depth	mm	840	840	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	450	550	560	740	760	970	1000

Note:

(1) Air inlet 26,7°C / 50% U.r. Condenser air temperature 35°C

(2) Data measured at 1m in open field conditions

THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

AXK - K

As09 1E ↔ F069 2E

Direct expansion with water cooled condenser



Refrigerant
R410A | GWP=2.088



Centrifugal
fan



"Comfort"
Solution

Configuration

O - Upflow
U - Downflow

Operation

SF - Cooling only
PC - Heat pump (available on request)

Solution

K - Comfort

Cooling Capacity 9,5 - 95,7 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange.

Compressor

HERMETIC SCROLL type, complete with thermal protection. Antivibration mountings and oil charge are standard.

Fan

Centrifugal type with two suctions, directly coupled to the motor which is of external rotor type and is fixed by vibration isolation mountings. The fans have forward curved blades.

Water cooled condenser

High efficiency plate heat exchanger made of AISI 316 stainless steel.

Refrigerant circuit

Filter dryer, moisture-liquid sight glass, HP and LP pressure switches, solenoid valve, thermostatic expansion valve with external equalizer.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Electronic expansion valve
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Phase sequence relay
- Crankcase electrical heater
- Clock board
- LonWorks® and ModBus® interface electronic board

- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Condensing pressure valve
- Sound absorber plenum
- Shell and tube Condenser
- CU/NI Shell and tube Condenser

Direct expansion with water cooled condenser

AXK Comfort		As09 1E	As12 1E	A017 1E	A020 1E	Bs21 1E	Bs23 1E	Bs25 1E	B028 1E	B030 1E
Total cooling capacity(1)	kW	9,5	12,1	17,1	20,0	20,7	23,1	25,3	27,8	30,0
Sensible cooling capacity(1)	kW	7,9	8,9	13,4	14,6	16,8	17,8	18,7	22,6	23,5
Power supply	-					400V/3+N/50Hz +T				
Number of compressors	n°	1	1	1	1	1	1	1	1	1
Number of refrigerant circuits	n°	1	1	1	1	1	1	1	1	1
Compressors total power input(1)	kW	1,6	2,2	2,6	3,4	3,5	3,9	4,4	4,5	4,9
Compressors total current(1)	A	3,1	4,4	5,4	7,1	7,2	7,3	9,1	9,2	11,1
Air flow	m3/h	2300	2300	3300	3300	4200	4200	4200	5600	5600
External static pressure	Pa	80	80	80	80	150	150	150	125	125
Fans quantity	n°	1	1	1	1	1	1	1	2	2
Fans power input	kW	0,35	0,35	0,55	0,55	0,75	0,75	0,75	1,5	1,5
Fans total current	A	3,1	3,1	4,6	4,6	3,1	3,1	3,1	6,2	6,2
Front sound pressure OVER(2)	dB(A)	52	52	53	53	53	53	53	56	56
Front sound pressure UNDER(2)	dB(A)	49	49	50	50	50	50	50	53	53
IN-OUT diameter cond. water (CITY)	"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
IN-OUT diameter cond. water (TOWER)	"	1"	1"	1" ¼	1" ¼	1" ¼	1" ¼	1" ¼	1" ¼	1" ¼

ELECTRIC COIL									
Stages of operation	n°	1	1	2	2	2	2	2	2
Power	kW	3,0	3,0	6,0	6,0	6,0	6,0	6,0	6,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	8,7	8,7	8,7

HUMIDIFIER									
Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	5 - 8	5 - 8
Power	kW	2,3	2,3	2,3	2,3	2,3	2,3	6,2	6,2
Absorbed current	A	3,2	3,2	3,2	3,2	3,2	3,2	8,7	8,7

DIMENSIONS AND WEIGHT									
Lenght	mm	700	700	880	880	880	880	1140	1140
Depth	mm	700	700	700	700	700	700	700	700
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	215	225	250	260	260	270	280	340

AXK Comfort		B034 1E	C039 1E	C045 1E	D054 2E	D058 2E	D066 2E	E079 2E	F083 2E	F096 2E
Total cooling capacity(1)	kW	34,1	39,1	45,1	53,7	58,1	65,6	79,2	82,5	95,7
Sensible cooling capacity(1)	kW	25,1	30,3	32,8	42,7	44,4	47,5	59,8	65,6	70,8
Power supply	-				400V/3+N/50Hz +T					
Number of compressors	n°	1	1	1	2	2	2	2	2	2
Number of refrigerant circuits	n°	1	1	1	2	2	2	2	2	2
Compressors total power input(1)	kW	5,9	6,7	8,6	9,1	11,1	13,2	13,6	13,7	15,7
Compressors total current(1)	A	13,2	13,6	15,7	18,2	22,2	26,4	27,2	27,4	31,4
Air flow	m3/h	5600	8200	8200	10500	10500	10500	14000	14000	16000
External static pressure	Pa	125	125	125	155	155	155	140	140	140
Fans quantity	n°	2	2	2	3	3	3	4	4	4
Fans power input	kW	1,5	1,5	1,5	2,25	2,25	2,25	3,0	3,0	3,0
Fans total current	A	6,2	6,2	6,2	9,3	9,3	9,3	12,4	12,4	12,4
Front sound pressure OVER(2)	dB(A)	56	56	56	60	60	60	61	62	62
Front sound pressure UNDER(2)	dB(A)	53	53	53	57	57	57	58	59	59
IN-OUT diameter cond. water (CITY)	"	¾"	1"	1"	1"	1"	1"	1" ¼	1" ¼	1" ¼
IN-OUT diameter cond. water (TOWER)	"	1" ¼	1" ½	1" ½	2"	2"	2"	2"	2"	2" ½

ELECTRIC COIL									
Stages of operation	n°	2	2	2	2	2	2	2	2
Power	kW	6,0	9,0	9,0	12,0	12,0	12,0	18,0	18,0
Absorbed current	A	8,7	13,0	13,0	17,4	17,4	17,4	26,0	26,0

HUMIDIFIER									
Capacity	kg/h	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	10 - 15	10 - 15
Power	kW	6,2	6,2	6,2	6,2	6,2	6,2	11,3	11,3
Absorbed current	A	8,7	8,7	8,7	8,7	8,7	8,7	16,2	16,2

DIMENSIONS AND WEIGHT									
Lenght	mm	1140	1320	1320	1760	1760	1760	2200	2640
Depth	mm	700	840	840	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	360	440	450	530	540	550	750	980

Note:

(1) Air inlet 26,7°C / 50% U.r. IN-OUT water condenser temperature = 30°C / 35°C

(2) Data measured at 1m in open field conditions

THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

CWK - K

As18 1W ↔ F180 1W

Chilled water units



Configuration

O - Upflow
U - Downflow

Operation

SF - Cooling only

Solution

K - Comfort

Cooling Capacity 18 - 177 kW

Housing

Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.

Air heat exchanger

Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange.

Fan

Centrifugal type with two suctions, directly coupled to the motor which is of external rotor type and is fixed by vibration isolation mountings. The fans have forward curved blades

Cooling circuit

3-way valve for the control of the chilled water flow and the air temperature.

Filter

Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.

Electrical board

It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.

Control panel

The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms.
Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Contacts for smoke/fire alarm
- Upgrading electronic control (standard)
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Clock board
- LonWorks® interface electronic board

- ModBus® interface electronic board
- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Sound absorber plenum



Centrifugal
fan



"Comfort"
Solution

CWK - K

As18 1W ↔ F180 1W

Chilled water units

CWK Comfort		As18 1W	As24 1W	A034 1W	Bs44 1W	B064 1W	C090 1W	D110 1W	E140 1W	E150 1W	F180 1W
Total cooling capacity(1)	kW	18	24	36	45	64	88	109	140	146	177
Sensible cooling capacity(1)	kW	13	17	26	32	45	62	77	99	104	126
Power supply	-	230V/1/50Hz +T					400V/3+N/50Hz +T				
Air flow	m3/h	2300	3200	5000	6000	8500	12000	15000	18600	21000	24000
External static pressure	Pa	100	100	100	100	170	100	170	100	170	100
Fans quantity	n°	1	1	2	2	2	2	2	3	3	4
Fans power input	kW	0,3	0,5	0,8	0,8	1,2	1,4	2,4	2,3	3,3	2,8
Fans total current	A	3,6	3,6	3,6	3,6	5,0	7,0	11,0	10,8	16,2	14,0
Front sound pressure OVER(2)	dB(A)	51	51	52	52	55	58	64	64	65	68
Front sound pressure UNDER(2)	dB(A)	48	48	49	49	52	55	61	61	62	65
Cooling coil pressure drop	kPa	50	58	65	68	88	56	64	89	104	154
Water connections diameter	"	3/4"	3/4"	1"	1"	1"1/4	1"1/2	2"	2"	2"1/2	2"1/2

ELECTRIC COIL											
Stages of operation	n°	1	1	2	2	2	2	2	2	2	
Power	kW	3,0	3,0	6,0	6,0	6,0	9,0	12,0	18,0	18,0	18,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	13,0	17,4	26,0	26,0	26,0

HUMIDIFIER											
Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	5 - 8	5 - 8	5 - 8	10 - 15	10 - 15	10 - 15
Power	kW	2,3	2,3	2,3	2,3	6,2	6,2	6,2	11,3	11,3	11,3
Absorbed current	A	3,2	3,2	3,2	3,2	8,7	8,7	8,7	16,2	16,2	16,2

DIMENSIONS AND WEIGHT											
Lenght	mm	700	700	880	880	1140	1320	1760	2200	2200	2640
Depth	mm	485	485	485	700	700	840	840	840	840	840
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	140	150	175	235	275	300	440	550	570	750

Note:

(1) Air inlet 26,7°C / 50% U.r. - IN-OUT chilled water temperature = 7°C / 12°C

(2) Data measured at 1m in open field conditions

THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.

Remote air cooled condensers





Precision Air Conditioning

Index

CTK - E	0040D	↔	0450 D	42
CTK - C	0040 D	↔	0450 D	44

CTK - E

0040 D ↔ 0450 D

Remote air cooled condensers with axial fans



Refrigerant
R410A | GWP=2.088



Refrigerant
R407C | GWP=1.774



Axial fan

Configuration

B - Base

Operation

ST - Standard

LN - Low noise (with EC fans)

Solution

FV - Vertical air flow

FO - Horizontal air flow

Capacity 14 - 145 kW

Housing	Frame made of peralumina to ensure total mechanical and weathering resistance.
Air heat exchanger	Finned coil made with copper pipes and aluminium fins offering a high exchange surface area.
Fan	Low speed, axial-flow fans fitted with accident-prevention protective grille; directly coupled motor with built-in thermal cutout and IP 54 protection degree; aerodynamic housing and wing profile blades increase efficiency (LN Type with EC fans).
Electrical board	IP55 protection degree, complete with main isolator.
ACCESSORIES	<ul style="list-style-type: none">■ Modulating fan speed condensing control■ Special configuration with fan made in accordance with the ATEX directive for potentially explosive areas■ Anti-vibration mounts for vibration damping■ Grid battery protection. It protects the battery against accidental impacts during transport and operation.■ Pre-painted aluminum fins■ Copper/copper coil■ Housing in stainless steel (AISI 304 - AISI 316)■ Special treatment of the coils to high level of corrosion environments. Euroklimat offers a number of solutions including Electrofin®, Blygold®, Heresite® and many others. Contact Euroklimat for more information.■ Flooding condensing control■ Fans with EC motor

Remote air cooled condensers with axial fans

CTK.E	0040 D	0050 D	0080 D	0100 D	0120 D	0150 D	0180 D	0220 D	0300 D	0350 D	0400 D	0450 D
-------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

ST TYPE	Axial												
Nominal capacity(1)	kW	14,8	25,0	31,8	37,3	49,7	57,5	62,5	73,6	99,1	113,1	127,4	145,3
Indipendent gas circuit	n°	1	1	1	1	1	1	1	1	1	1	1	1
Total air flow	m3/h	4500	8000	9200	8700	15800	15200	18000	17200	27000	25500	36000	34000
Fans type	-												
Fans quantity	n°	1	1	1	1	2	2	2	2	3	3	4	4
Fans power input (tot.)	kW	0,30	0,68	0,68	0,68	1,36	1,36	1,36	1,36	1,89	1,89	2,52	2,52
Fans absorbed current (tot.)	A	1,3	3,1	3,1	3,1	6,2	6,2	6,2	6,2	9,0	9,0	12,0	12,0
Sound pressure(2)	dB(A)	59	63	68	68	66	66	71	71	73	73	74	74

LN TYPE	Axial												
Nominal capacity(1)	kW	12,0	20,5	26,0	30,1	41,9	44,9	52,0	58,5	81,7	91,3	105,2	118,0
Indipendent gas circuit	n°	1	1	1	1	1	1	1	1	1	1	1	1
Total air flow	m3/h	3500	6000	7000	6700	12400	11000	14000	13000	22300	21200	29200	27600
Fans type	-												
Fans quantity	n°	1	1	1	1	2	2	2	2	3	3	4	4
Fans power input (tot.)	kW	0,14	0,33	0,33	0,33	0,66	0,66	0,66	0,66	0,93	0,93	1,24	1,24
Fans absorbed current (tot.)	A	0,7	1,6	1,6	1,6	3,2	3,2	3,2	3,2	4,7	4,7	6,2	6,2
Sound pressure(2)	dB(A)	56	60	65	65	63	63	68	68	70	70	71	71

Power supply	V/ph/Hz + T	230V/1/50Hz
--------------	-------------	-------------

DIMENSIONS AND WEIGHT - ST Type - FO Solution													
Lenght (L)	mm	974	1124	1374	1374	1809	1809	2489	2489	3405	3405	4140	4140
Depth (P)	mm	660	660	660	660	755	755	755	755	780	780	780	780
Height (H)	mm	740	910	1110	1110	1110	1110	1110	1110	1130	1130	1130	1130
Shipping weight	Kg	46	56	80	95	133	152	163	191	190	220	235	275

DIMENSIONS AND WEIGHT - LN Type - FO Solution													
Lenght (L)	mm	974	1124	1374	1374	1809	1809	2489	2489	3405	3405	4140	4140
Depth (P)	mm	670	720	820	820	820	820	820	820	890	890	890	890
Height (H)	mm	740	910	1110	1110	1110	1110	1110	1110	1130	1130	1130	1130
Shipping weight	Kg	47	57	76	91	125	145	155	183	190	220	235	275

DIMENSIONS AND WEIGHT - ST Type - FV Solution													
Lenght (L)	mm	974	1124	1374	1374	1809	1809	2489	2489	3215	3215	3965	3965
Depth (P)	mm	790	962	1162	1162	1162	1162	1162	1162	1130	1130	1130	1130
Height (H)	mm	1015	1055	1055	1055	1155	1155	1155	1155	900	900	900	900
Shipping weight	Kg	49	59	83	98	136	155	166	194	190	220	235	275

DIMENSIONS AND WEIGHT - LN Type - FV Solution													
Lenght (L)	mm	974	1124	1374	1374	1809	1809	2489	2489	3215	3215	3965	3965
Depth (P)	mm	790	962	1162	1162	1162	1162	1162	1162	1130	1130	1130	1130
Height (H)	mm	1070	1120	1220	1220	1220	1220	1220	1220	900	900	900	900
Shipping weight	Kg	50	60	79	94	128	148	158	186	190	220	235	275

Note:

- (1) External air 35°C - Condensation temperature 52°C (Dew point)
 (2) Sound pressure measured at 5 m in open field conditions

CTK - C

0040 D ↔ 0450 D

Remote air cooled condensers with radial fans



Refrigerant
R410A | GWP=2.088



Refrigerant
R407C | GWP=1.774



PLUG FAN

Configuration

B - Base

Operation

ST - Standard

LN - Low noise

Solution

FV - Vertical air flow

FO - Horizontal air flow

Capacity 14 - 145 kW

Housing	Frame made of peraluman to ensure total mechanical and weathering resistance.
Air heat exchanger	Finned coil made with copper pipes and aluminium fins offering a high exchange surface area.
Fan	Fan units are new-generation; plug fan type with "EC" motor with electronic commutation in order to maximize energy savings and adjust the amount of air necessary to the environment.
Electrical board	IP55 protection degree, complete with main isolator.
ACCESSORIES	<ul style="list-style-type: none">■ Modulating fan speed condensing control■ Special configuration with fan made in accordance with the ATEX directive for potentially explosive areas■ Anti-vibration mounts for vibration damping■ Grid battery protection. It protects the battery against accidental impacts during transport and operation.■ Preprinted aluminum fins■ Copper/copper coil■ Housing in stainless steel (AISI 304 - AISI 316)■ Special treatment of the coils to high level of corrosion environments. Euroklimat offers a number of solutions including Electrofin®, Blygold®, Heresite® and many others. Contact Euroklimat for more information.

CTK - C

0040 D ↔ 0450 D

Remote air cooled condensers with radial fans

CTK.C	0040 D	0050 D	0080 D	0100 D	0120 D	0150 D	0180 D	0220 D	0300 D	0350 D	0400 D	0450 D
-------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

ST TYPE												
Nominal capacity(1)	kW	14,8	25,0	31,8	37,3	49,7	57,5	62,5	73,6	99,1	113,1	127,4
Indipendent gas circuit	n°	1	1	1	1	1	1	1	1	1	1	1
Total air flow	m3/h	4500	8000	9200	8700	15800	15200	18000	17200	27000	25500	36000
External static pressure	Pa	30-300	30-300	30-300	30-300	30-300	30-300	30-300	30-300	30-300	30-300	30-300
Fans type	-								Plug Fan			
Fans quantity	n°	1	1	1	1	2	2	2	2	3	3	4
Fans power input	kW	1,1	1,3	1,4	1,4	2,5	2,6	2,9	3,0	4,3	4,32	5,8
Sound pressure(2)	dB(A)	80	75	78	77	78	78	81	80	82	80	84

LN TYPE												
Nominal capacity(1)	kW	12,0	20,5	26,0	30,1	41,9	44,9	52,0	58,5	81,7	91,3	105,2
Indipendent gas circuit	n°	1	1	1	1	1	1	1	1	1	1	1
Total air flow	m3/h	3500	6000	7000	6700	12400	11000	14000	13000	22300	21200	29200
External static pressure	Pa	30-300	30-300	30-300	30-300	30-300	30-300	30-300	30-300	30-300	30-300	30-300
Fans type	-								Plug Fan			
Fans quantity	n°	1	1	1	1	2	2	2	2	3	3	4
Fans power input	kW	0,7	0,9	1,1	1,1	2,4	2,3	2,2	2,0	3,3	3,1	4,4
Sound pressure(2)	dB(A)	76	70	68	59	76	77	76	75	78	78	80

Power supply	V/ph/Hz + T	400/3/50
--------------	-------------	----------

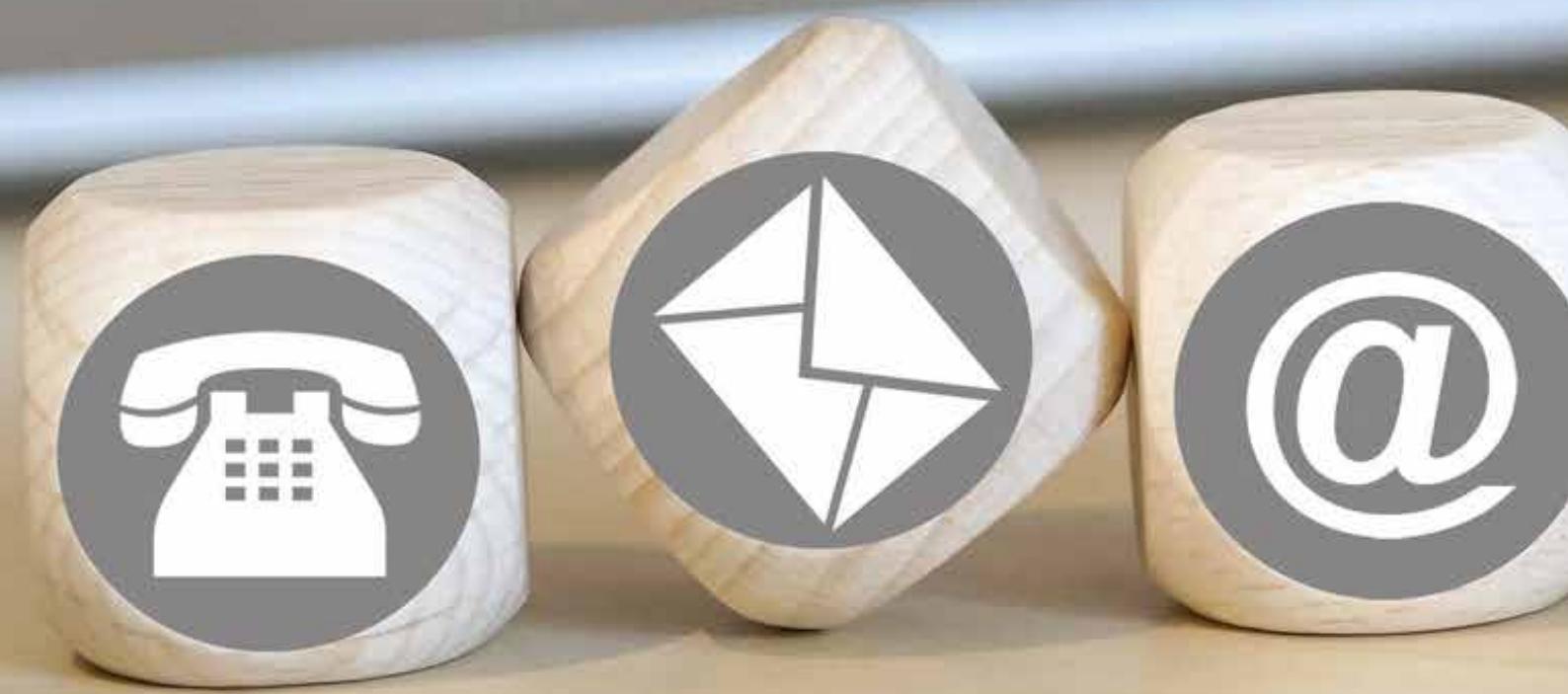
DIMENSIONS AND WEIGHT - ST/LN Type - FO Solution												
Lenght (L)	mm	974	1124	1374	1374	1809	1809	2489	2489	3289	3289	4389
Depth (P)	mm	830	950	1050	1050	1050	1050	1050	1050	1050	1050	1050
Height (H)	mm	740	910	1110	1110	1110	1110	1110	1110	1110	1110	1110
Shipping weight	Kg	62	104	107	122	175	194	216	244	296	381	426

DIMENSIONS AND WEIGHT - ST/LN Type - FV Solution												
Lenght (L)	mm	974	1124	1374	1374	1809	1809	2489	2489	3289	3289	4389
Depth (P)	mm	950	950	1050	1050	1050	1050	1050	1050	1050	1050	1050
Height (H)	mm	780	780	1150	1150	1150	1150	1150	1150	1150	1150	1150
Shipping weight	Kg	64	104	107	122	175	194	216	244	296	381	426

Note:

(1) External air 35°C - Condensation temperature 52°C (Dew point)

(2) Sound pressure measured at 1 m in open field conditions



Support and assistance



Webservice – web portal 24/7

Planned and designed for the specific competences, "webservice" is a web portal that enables customers or support

centres to access the detailed documentation for each single machine: the construction drawing, electric diagram, list of spare parts, order confirmation, instructions manual, declaration of conformity and much more.

The information is consequently always available and up-to-date, also when you are physically at the site of installation.

Eurokey – Product selection software

In Euroklimat's vast product range, this programme can search for, select and offer the appliance required to satisfy all needs.

The endless options are extremely flexible: from silenced machines to heat recovery, from the simplest calculation with nominal conditions to more complex dimensioning ascribing the specific values of use, one click is all it takes to access clear, analytical answers.

After-sales service

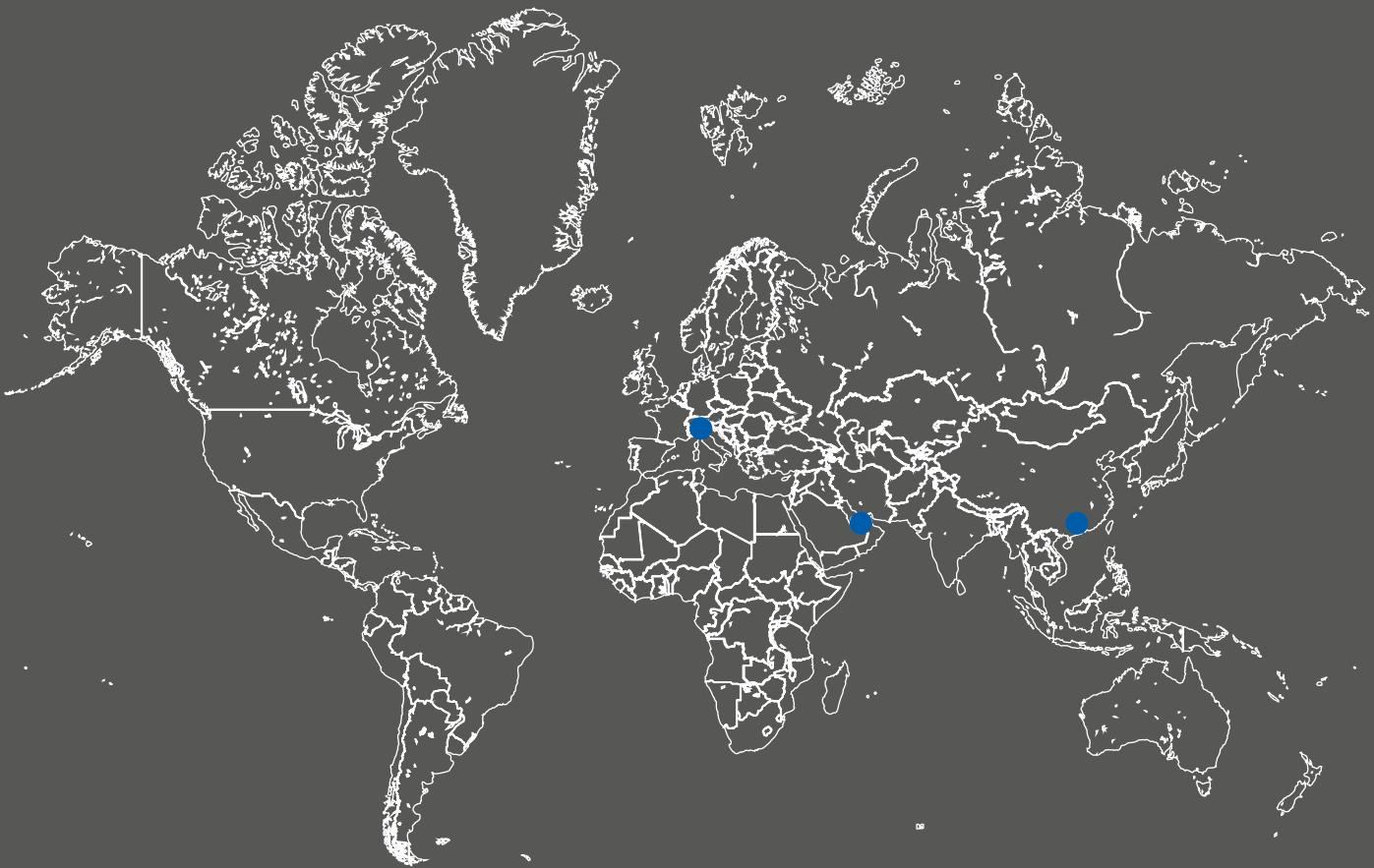
Our organisation includes an office dedicated to after-sales technical support that is able to offer a great number of services, such as:

- On-line technical service
- Spare parts service
- Technical intervention in situ
- Scheduled maintenance service
- Customer training courses
- External support centre training courses

Spare parts warehouse

The internal warehouse is divided into a central warehouse, which supplies the assembly lines, and the spare parts warehouse that can guarantee almost immediate availability of all "critical" components.





EUROKLIAMAT SpA

Factory Italy

Via Liguria, 8
27010 Siziano (PV) Italy

T +39 038 2610282

info@euroklimat.it
www.euroklimat.it

Guangdong Euroklimat Air-Conditioning & Refrigeration Co., Ltd.

Factory China

Euroklimat Industrial Park,
Huangjiang, Dongguan, Guangdong, China

T +86 0769 8366 0888 ext. 8260

info@euroklimat.it
www.euroklimat.com.cn

EUROKLIAMAT - FZCO

Dubai

High Bay Office 24, Dubai Silicon Oasis, UAE
PO Box 28178, DUBAI, UAE

T + 971 4 3423152

info@ek-me.com
www.ek-me.com

