

IT COOLING

CLOSE CONTROL AIR CONDITIONERS

# W-ACCURATE LEGACY

## CHILLED WATER

**HIGH PRECISION  
AIR CONDITIONERS,  
FROM 7 TO 211 kW**

**3 Versions available**

- ▶ Single chilled water coil
- ▶ Double chilled water coil
- ▶ High temperature



# w-ACCURATE LEGACY

## CHILLED WATER

UNPARALLELED  
EFFICIENCY

## ENGINEERED TO SATISFY THE MOST CHALLENGING IT INFRASTRUCTURE EFFICIENCY NEEDS

The overall growth of data exchange inside modern data centers necessarily results in a higher localized power load density, also known as 'hot spots'. The greatest challenge for the new

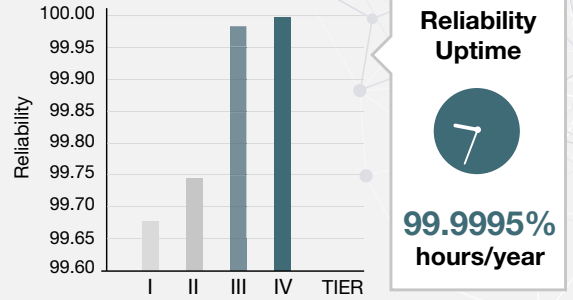
w-ACCURATE LEGACY range is to achieve perfect heat removal, ensuring the highest energy efficiency and reliable operations throughout the data center.



## OUR MISSION: THE PERFECT MATCH BETWEEN EFFICIENCY AND RELIABILITY

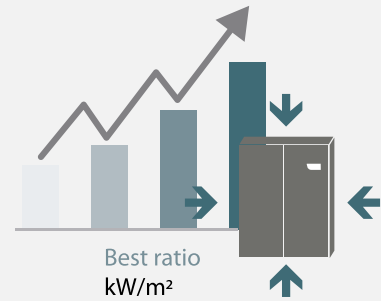
Nowadays efficiency is no longer considered to be just saving energy in respect to the single unit, but it takes into account the system's PERFORMANCE, COMPLETE RELIABILITY and MODULARITY over the years.

By offering w-ACCURATE LEGACY as a solution to technological cooling problems, the company has put great effort in the use of well-known high quality components such as the EC PUL fans installed as standard in all units, together with a perfect integration of the units with the BMS (building management systems).



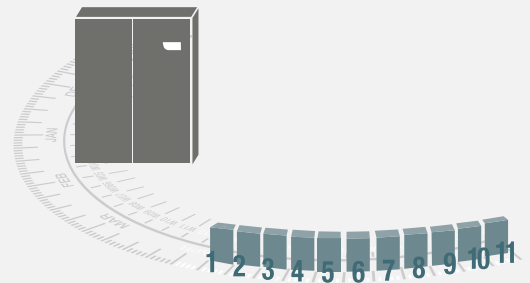
## PERFECT ENERGY MANAGEMENT

It is well known that set loads (W/m2) in technological applications are continuously increasing. The increase in data exchange is in fact generating greater heat loads that are usually localized in 'hot spots'. This requires better performance from the air conditioning system that should, however, take up as little space as possible. In this sense, w-ACCURATE LEGACY as the air conditioner with the best supplied power/footprint ratio in the market. Because space is value.



## CUSTOMER-ORIENTED APPROACH

w-ACCURATE LEGACY range features 360° versatility, both as concerns capacities (from 6 to 235 kW), as well as configurations thanks to 5 different cooling solutions. When even this is not enough, the 45-year experience of the Climaveneta IT Cooling brand is key to ensuring tailor-made solutions dedicated to specific application requirements.



## THE INNOVATIVE HEAT RECOVERY SYSTEM



The heat generated by powerful computer servers is a precious energy source; why do we waste it? This thermal energy can be recovered and reused if necessary, turning it into a precious economic asset.

Through innovative heat recovery, the SMART THERMAL ENERGY MANAGEMENT SYSTEM, Climaveneta IT Cooling products synergistically match both the cooling sources of the data center with the heating requirements inside the building, by moving the heat from the data center to other office areas. A forward-looking system that combines perfect comfort with zero energy waste, improving the energy class rating of the building and providing large annual energy savings.



# TECHNOLOGICAL CHOICES

## New EC PUL fans



Specifically designed for high precision air conditioners, the new EC PUL (Polymeric ULtralight) fans of w-ACCURATE LEGACY feature a new compact design and an innovative blade geometry resulting in more air flow rate and reduced operating costs.

In addition to the incredible performance of the EC motor, the advantages compared to standard EC fans are:

- ✓ Reduced ventilation costs
- ✓ -25% power absorption
- ✓ +20% efficiency (calculated considering the same operating point)

## Advanced unit control

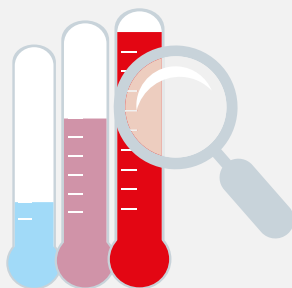
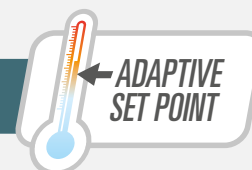


w-ACCURATE LEGACY features a new intelligent electronic heart to keep constant control over all the operating and environmental parameters of the site.

Designed and developed internally, the new control is highly configurable according to specific user requirements, ensuring:

- ✓ Automatic restart from blackout
- ✓ Integrated management system up to 10 units (LAN)
- ✓ ACTIVE REDUNDANCY management
- ✓ Full BMS compatibility (Ethernet, Bacnet, SNMP, Modbus, TCP/IP, LON)
- ✓ BLACK BOX for predictive analysis
- ✓ DEW POINT control
- ✓ ADAPTIVE SET POINT management
- ✓ ACTIVE FREE COOLING management

## Adaptive set point



Thanks to an advanced algorithm called ADS (Adaptive Set Point), all the indoor w-ACCURATE LEGACY units instantaneously detect the real thermal load within the data center. This information is therefore conveyed to the outdoor chillers, improving their operation.

The energy consumption decreases considerably by a precise management of 4 variables:

- ✓ Dynamic chiller set point variation
- ✓ Dynamic chiller water flow variation (only with inverter pumps)
- ✓ Adoption of the free cooling mode (when possible)
- ✓ Adoption of the ACTIVE REDUNDANCY system to better exploit stand-by chillers

# W-ACCURATE LEGACY

## w-AV 2 2-Section air conditioner

### Conceived to run your data center at peak efficiency

The new w-AV 2 air air conditioners have been specifically developed to answer the high efficiency requirements of server rooms. They feature 2 independent modules; the first one containing a coil usually located over the floor, and the second module located under the floor that contains the fan section.

This efficient and versatile solution matches even the most diverse design requirements of medium-large data centers.



## Active Redundancy

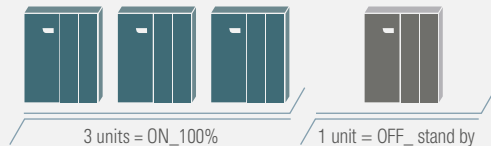
**Active**  
Redundancy

### The perfect match between reliability, efficiency, and lowest TCO

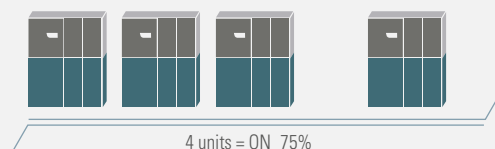
The reliability inside a data center, usually ensured by the adoption of back-up units (N+1, N+2, etc.), now shows a new definition.

The w-ACCURATE LEGACY units, thanks to its innovative EC PUL fans and an advanced algorithm to balance the heat loads among the units (including those units that usually remain on stand-by), achieve a real ACTIVE REDUNDANCY, thus combining concepts that have always been colliding such as reliability, efficiency and Total Cost of Ownership.

#### PASSIVE REDUNDANCY



#### ACTIVE REDUNDANCY



## Active Free Cooling

**Active**  
FreeCooling

Perfectly in line with an eco-friendly strategy to deliver premium efficiency levels, w-ACCURATE LEGACY adopts an advanced free cooling system to exploit the cooling potential of outdoor air to cool the data center.

This technology is available as:

- ✓ **DIRECT Free Cooling** (savings up to 90%)  
Through the use of a plenum with modulating dampers, the outdoor air is recovered and reused inside the data center after temperature and humidity control.
- ✓ **INDIRECT Free Cooling** (savings up to 60%)  
Using the water as exchange fluid, which is moved by an outdoor Climaveneta brand chiller.

8500 -8000 hours



Annual energy savings up to 90% compared to a traditional system

7500 -7000 hours



Annual energy savings up to 35% compared to a traditional system

6500 -5500 hours



Annual energy savings up to 20% compared to a traditional system

Average operating hours of one unit in direct free cooling mode inside a data center requiring 1MW cooling capacity working 24/7



## COOLING MODES

All-round flexibility as a service offered for any type of system.

### Chilled water units

#### w-AV / w-AV 2

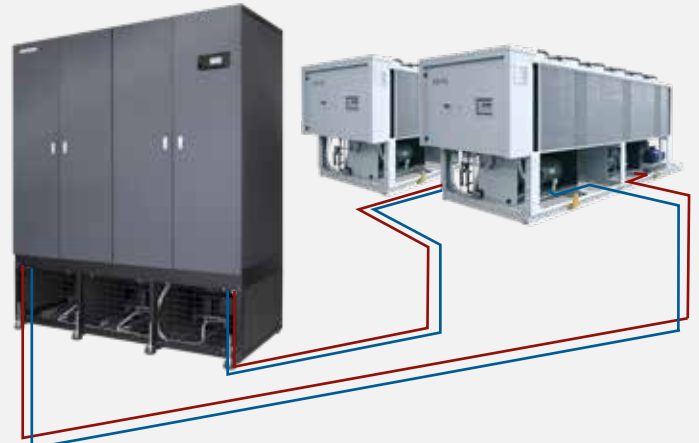


w-AV S/ w-AV 2S  
w-AV HD/S  
w-AV HD/K

Chilled water air conditioners using water coming from a chiller as a means to transfer heat. The liquid flow in the unit's water coil is managed by an internal 2 or 3-way valve.

### Chilled water units with double chilled water coil

#### w-AV DF /w-AV 2DF



w-AV DF  
w-AV 2DF

These units are provided as standard with two water circuits that never work simultaneously, as they are one in 100% back up to the other. Such circuits are connected to two different chiller lines completely independent of one another.

The Dual Coil version is the perfect solution for those systems where RELIABILITY, SAFETY and REDUNDANCY are at utmost importance.

## MANAGEMENT AND CONTROL SYSTEMS

In a policy of 'total communication', w-ACCURATE LEGACY presents several interconnection solutions with the latest BMS systems.



### Data Center Manager

#### Group device

DATA CENTER MANAGER is a centralized management system that ensures a smart communication between indoor chilled water units and the outdoor chillers.

The device manages the outdoor units according to the inlet and outlet temperature registered by the probes and by request of the indoor unit.

#### Main features:

- ✓ All-in-one solution for an easy installation
- ✓ Management of up to 8 units (with the same or different power ratings), on 2-pipe systems
- ✓ 8.4" touch-screen display
- ✓ Some units can be given priority
- ✓ Possibility of choosing the number of units on standby - dynamic standby
- ✓ Evenly distributes operating hours of each unit

# W-ACCURATE LEGACY

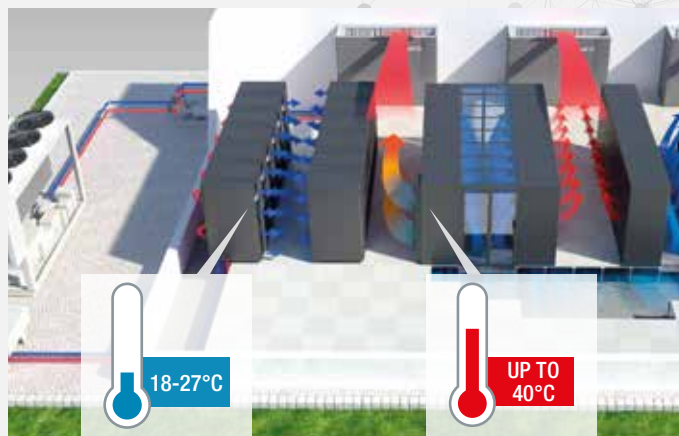
## FOR HIGH TEMPERATURE ENVIRONMENTS

w-AV / w-AV HD/K High density version for high temperature environments

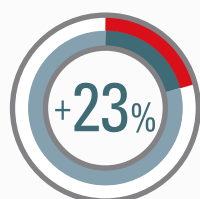
### w-AV HD/K

The need to achieve increasingly greater efficiency and lower TCO values, has led to an increase in the inlet air temperature of up to 27°C (ASHRAE, 'Thermal Guidelines for Data Processing Environments') and a consequent increase of the respective discharge temperatures.

Specially developed to handle inlet temperatures of up to 40°C and higher chilled water temperature, w-AV HD K series is the winning answer for environments with hot and cold aisles.



## KEY BENEFITS



**+23 CHILLER  
COOLING CAPACITY**



**+16% BETTER  
CHILLER EFFICIENCY**

### ClimaPRO DCO

clima  
**PRO DCO**

• PERFORMANCE • RELIABILITY • OPTIMISATION • DATA CENTER • OPTIMISER



#### Chiller plant control and data center optimisation system

ClimaPRO DCO ensures perfect HVAC plant room control by managing each single component involved in the production and distribution of the thermal and cooling energy.

According to the actual efficiency values of the units, this advanced management system optimally balances the unit loads, regulates the operating set-points and dynamically manages the water flow of the entire system.

ClimaPRO DCO can be integrated to a BMS system or it can be completely independent.

#### Main features

- ✓ Acquisition of real-time data from the plant
- ✓ Measurement of energy indices for the units and the entire system
- ✓ Control and management of each single unit or at a plant room level
- ✓ Active Optimization based on real time data measurement
- ✓ Detailed energy reporting and customized analysis
- ✓ Chart building for trend analysis

# AIRFLOW CONFIGURATIONS

## The OVER versions

with air discharge from the top usually take the air from the front, rear or bottom side of the unit, whilst they deliver the cold air from the top through air passages, false ceilings and plenums.

### w-AV

#### OVER

#### Ideal application

Data center dimensions: small-medium



Airflow: OVER, air discharged from the top, frontal air intake

Raised floor: absent  
Room Height < 3m



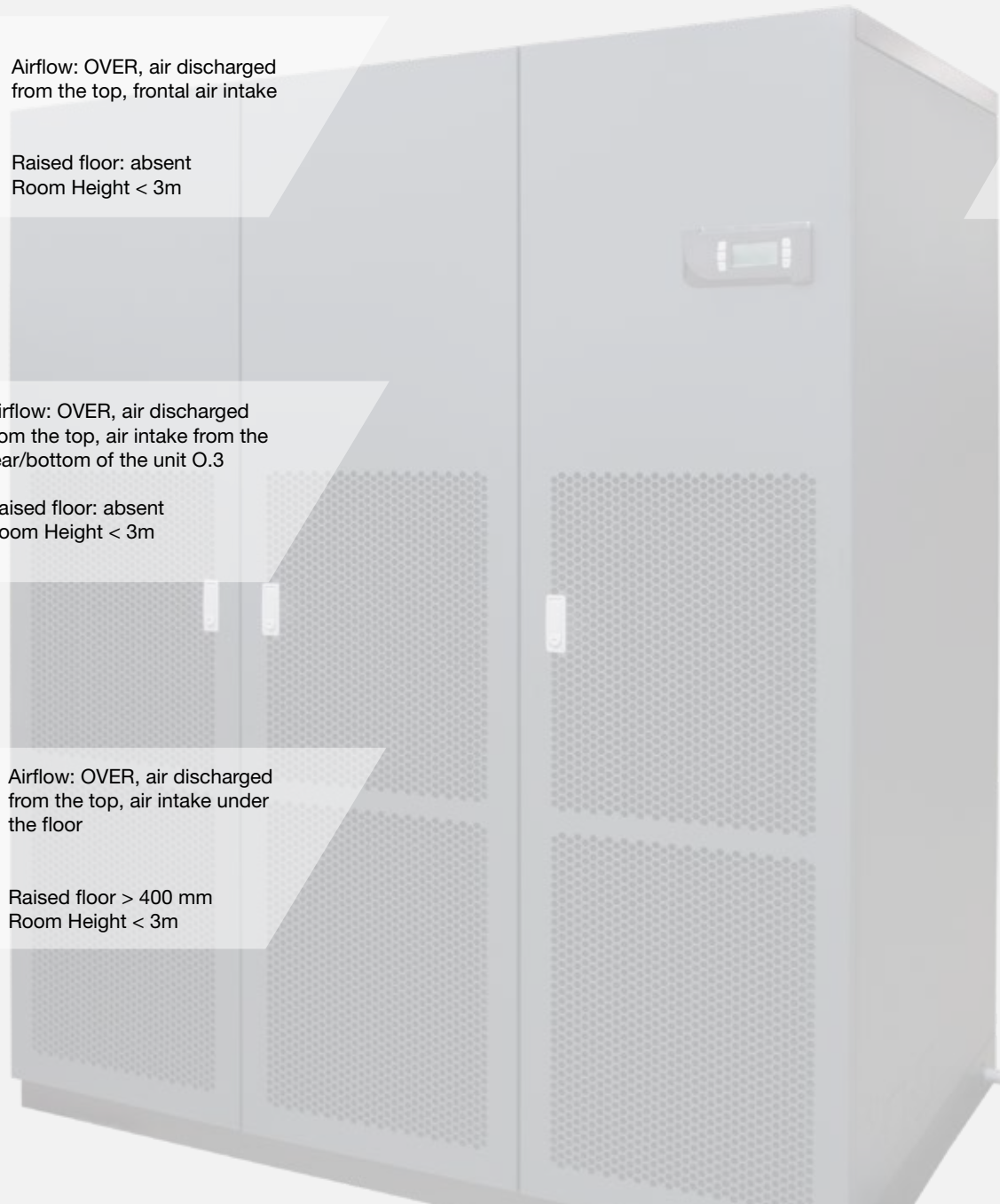
Airflow: OVER, air discharged from the top, air intake from the rear/bottom of the unit O.3

Raised floor: absent  
Room Height < 3m



Airflow: OVER, air discharged from the top, air intake under the floor

Raised floor > 400 mm  
Room Height < 3m





# W-ACCURATE LEGACY

## The UNDER versions

with air discharge from the bottom usually take the air from the top of the unit, directly from the environment or through air passages or plenums. The cold air delivery is on the bottom of the unit, under the raised floor.

### w-AV

#### UNDER

#### Ideal application

Data center dimensions: small-medium



Airflow: UNDER, air discharged from the bottom under the floor with air intake from the top

Raised floor > 400 mm  
Room Height < 3m



Airflow: UNDER, air discharged from the bottom and air intake from the top-rear

Raised floor > 400mm  
Room Height < 3m

### w-AV 2

#### 2-Sections UNDER

#### Ideal application

Data center dimensions: medium-large, very large



Airflow: UNDER, air discharged from the bottom (fan section under the floor) with air intake from the top

Raised floor > 600 mm  
Room Height < 3m



Airflow: UNDER, air discharged from the bottom (fan section above the floor) with air intake from the top

Raised floor ≤ 600mm  
Room Height > 3m



Airflow: UNDER, air discharged from the frontal bottom side (fan section above the floor) with air intake from the top

Raised floor: absent  
Room Height > 3m



Airflow: UNDER, air discharged from the bottom-rear side (fan section under the floor) and air intake from the top-rear

Raised floor > 600mm  
Room Height < 3m



# W-ACCURATE LEGACY

High precision chilled water air conditioners, from 6,7 to 213 kW

## Single Section Close control air conditioners

### w-AV S

w-AV-OVER			007 E0	013 E1	021 E2	032 E3	045 E3P	053 E4	072 E5	081 E6	100 E7	120 E8	138 E9
Frame			E0	E1	E2	E3	E3P	E4	E5	E6	E7	E8	E9
Power supply	V/ph/Hz		230/1/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
<b>PERFORMANCE</b>													
Total cooling capacity gross	(1)	kW	6,70	13,3	21,4	31,8	45,8	52,8	72,5	80,7	100	121	141
Sensible cooling capacity gross	(1)	kW	5,82	11,7	19,4	29,9	42,1	49,8	64,6	76,1	94,0	111	130
Fans power input	(1)	kW	0,12	0,34	0,79	1,53	1,81	2,15	2,57	3,14	3,98	5,66	5,84
SHR	(2)		0,87	0,88	0,91	0,94	0,92	0,94	0,89	0,94	0,94	0,92	0,92
Fluid flow	(1)	l/s	0,32	0,63	1,02	1,52	2,19	2,53	3,47	3,86	4,79	5,79	6,76
Total pressure drop (Coil + Valve)	(1)	kPa	43,1	29,4	78,0	64,6	57,6	55,1	74,8	52,4	54,4	84,6	77,6
<b>FANS</b>													
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity	N°		1	1	1	1	1	1	2	2	2	3	3
Air flow	(3)	m³/h	1800	2900	4920	7800	10800	13100	16350	20000	24200	28300	33100
<b>NOISE LEVEL</b>													
Sound Power		dB(A)	78	82	91	92	96	96	97	97	98	102	99
Sound Pressure	(4)	dB(A)	59	62	71	72	76	76	77	76	77	81	78
<b>SIZE AND WEIGHT</b>													
A	(3)	mm	655	650	785	1085	1085	1305	1630	1875	2175	2499	2899
B	(3)	mm	445	675	675	775	930	930	930	930	930	930	930
H	(3)	mm	1680	1925	1925	1925	1925	1980	1980	1980	1980	1980	1980
Weight	(3)	kg	150	203	239	302	321	345	428	483	535	598	679

#### Notes:

1 Indoor conditions (in) 24°C - R.H. 50%; Water temperature (in/out) 7°C/12°C; ESP= 20Pa.

2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.

3 Unit in standard configuration/execution, without optional accessories.

4 Average sound pressure level, at a distance of 2m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.

w-AV-UNDER			007 E0	013 E1	021 E2	032 E3	045 E3P	053 E4	072 E5
Frame			E0	E1	E2	E3	E3P	E4	E5
Power supply	V/ph/Hz		230/1/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
<b>PERFORMANCE</b>									
Total cooling capacity gross	(1)	kW	6,70	13,3	21,4	31,8	45,8	52,8	72,5
Sensible cooling capacity gross	(1)	kW	5,82	11,7	19,4	29,9	42,1	49,8	64,6
Fans power input	(1)	kW	0,12	0,34	0,79	1,53	1,81	2,15	2,57
SHR	(2)		0,87	0,88	0,91	0,94	0,92	0,94	0,89
Fluid flow	(1)	l/s	0,32	0,63	1,02	1,52	2,19	2,53	3,47
Total pressure drop (Coil + Valve)	(1)	kPa	43,1	29,4	78,0	64,6	57,6	55,1	74,8
<b>FANS</b>									
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity	N°		1	1	1	1	1	1	2
Air flow	(3)	m³/h	1800	2900	4920	7800	10800	13100	16350
<b>NOISE LEVEL</b>									
Sound Power		dB(A)	78	82	91	92	96	96	97
Sound Pressure	(4)	dB(A)	59	62	71	72	76	76	77
<b>SIZE AND WEIGHT</b>									
A	(3)	mm	655	650	785	1085	1085	1305	1630
B	(3)	mm	445	675	675	775	930	930	930
H	(3)	mm	1680	1925	1925	1925	1925	1980	1980
Weight	(3)	kg	150	216	257	325	329	379	470

## w-AV S

w-AV-UNDER			081 E6	100 E7	120 E8	138 E9	160 E10	215 E10
Frame			E6	E7	E8	E9	E10	E10
Power supply	V/ph/Hz		400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
<b>PERFORMANCE</b>								
Total cooling capacity gross	(1)	kW	80,7	100	121	140	163	213
Sensible cooling capacity gross	(1)	kW	76,1	94,0	111	128	144	169
Fans power input	(1)	kW	3,14	3,98	5,66	6,09	6,44	6,44
SHR	(2)		0,94	0,94	0,92	0,91	0,88	0,79
Fluid flow	(1)	l/s	3,86	4,79	5,79	6,68	7,80	10,2
Total pressure drop (Coil + Valve)	(1)	kPa	52,4	54,4	84,6	75,9	111	118
<b>FANS</b>								
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity		N°	2	2	3	3	3	3
Air flow	(3)	m³/h	20000	24200	28300	33100	37150	37150
<b>NOISE LEVEL</b>								
Sound Power		dB(A)	97	98	102	102	101	101
Sound Pressure	(4)	dB(A)	76	77	81	81	80	80
<b>SIZE AND WEIGHT</b>								
A	(3)	mm	1875	2175	2499	2899	3510	3510
B	(3)	mm	930	930	930	930	930	930
H	(3)	mm	1980	1980	1980	1980	1980	1980
Weight	(3)	kg	531	589	660	753	900	970

**Notes:**

1 Indoor conditions (in) 24°C - R.H. 50%; Water temperature (in/out) 7°C/12°C; ESP= 20Pa.

2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.

3 Unit in standard configuration/execution, without optional accessories.

4 Average sound pressure level, at a distance of 2m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.

## w-AV HD S

w-AV HD S-UNDER			015	024	041	048	060	072	090	110	122	146
Frame			E1	E2	E3	E3P	E4	E5	E6	E7	E8	E9
Power supply	V/ph/Hz		400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
<b>PERFORMANCE</b>												
Total cooling capacity gross	(1)	kW	14,7	24,2	38,2	47,3	59,8	71,0	89,9	111	125	145
Sensible cooling capacity gross	(1)	kW	12,7	21,1	32,7	40,8	52,0	62,5	78,2	95,2	106	124
Fans power input	(1)	kW	0,33	0,89	1,43	1,80	2,23	2,96	3,64	3,81	4,88	5,67
SHR	(2)		0,86	0,87	0,86	0,86	0,87	0,88	0,87	0,86	0,85	0,86
Fluid flow	(1)	l/s	0,70	1,15	1,83	2,26	2,86	3,39	4,30	5,30	5,99	6,91
Total pressure drop (Coil + Valve)	(1)	kPa	25,6	59,8	69,2	54,5	65,3	36,4	60,0	94,6	79,8	73,2
<b>FANS</b>												
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity		N°	1	1	1	1	1	2	2	2	3	3
Air flow	(3)	m³/h	3250	5560	8300	10500	13600	16800	20500	24300	26500	31500
<b>NOISE LEVEL</b>												
Sound Power		dB(A)	83	93	93	94	97	97	98	98	101	101
Sound Pressure	(4)	dB(A)	63	73	73	74	77	77	77	77	80	80
<b>SIZE AND WEIGHT</b>												
A	(3)	mm	650	785	1085	1085	1305	1630	1875	2175	2499	2899
B	(3)	mm	675	675	775	930	930	930	930	930	930	930
H	(3)	mm	1925	1925	1925	1925	1980	1980	1980	1980	1980	1980
Weight	(3)	kg	216	257	325	329	379	470	531	589	660	753

**Notes:**

1 Indoor conditions (in) 24°C - R.H. 50%; Water temperature (in/out) 7°C/12°C; ESP= 20Pa.

2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.

3 Unit in standard configuration/execution, without optional accessories.

4 Average sound pressure level, at a distance of 2m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.

High precision chilled  
water air conditioners,  
from 14,7 to 227 kW

## APPLICATION HIGH CW

## w-AV HD K

w-AV HD K-UNDER			015	024	041	048	060	072	090	110	122	146	170
Frame			E1	E2	E3	E3P	E4	E5	E6	E7	E8	E9	E10
Power supply	V/ph/Hz		400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
<b>PERFORMANCE</b>													
Total cooling capacity gross	(1)	kW	14,3	23,2	35,9	44,9	57,8	71,7	87,9	102	113	133	169
Sensible cooling capacity gross	(1)	kW	14,3	23,2	35,9	44,9	57,8	71,7	87,9	102	113	133	169
Fans power input	(1)	kW	0,31	0,91	1,46	1,88	2,35	3,11	3,68	4,03	5,04	5,90	6,93
SHR	(2)		1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Fluid flow	(1)	l/s	0,43	0,70	1,08	1,35	1,73	2,15	2,63	3,07	3,40	3,99	5,08
Total pressure drop (Coil + Valve)	(1)	kPa	19,0	11,5	15,8	20,0	16,6	17,9	19,4	14,3	18,4	19,1	32,4
<b>FANS</b>													
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity	N°		1	1	1	1	1	2	2	2	3	3	3
Air flow	(3)	m³/h	3150	5500	8300	10500	13600	16800	20500	24300	26500	31500	39600
<b>NOISE LEVEL</b>													
Sound Power		dB(A)	83	92	93	94	97	97	98	98	101	101	102
Sound Pressure	(4)	dB(A)	63	72	73	74	77	77	77	77	80	80	81
<b>SIZE AND WEIGHT</b>													
A	(3)	mm	650	785	1085	1085	1305	1630	1875	2175	2499	2899	3510
B	(3)	mm	675	675	775	930	930	930	930	930	930	930	930
H	(3)	mm	1925	1925	1925	1925	1980	1980	1980	1980	1980	1980	1980
Weight	(3)	kg	220	261	332	330	385	478	540	598	669	764	930

**Notes:**

1 Indoor conditions (in) 35°C - R.H. 30%; Water temperature (in/out) 18°C/26°C; ESP= 20Pa.

2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.

3 Unit in standard configuration/execution, without optional accessories.

4 Average sound pressure level, at a distance of 2m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.

## APPLICATION MEDIUM CW

## w-AV HD K

w-AV HD K-UNDER			015	024	041	048	060	072	090	110	122	146	170
Frame			E1	E2	E3	E3P	E4	E5	E6	E7	E8	E9	E10
Power supply	V/ph/Hz		400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
<b>PERFORMANCE</b>													
Total cooling capacity gross	(1)	kW	15,3	24,8	38,6	48,2	62,1	76,8	94,7	111	122	144	183
Sensible cooling capacity gross	(1)	kW	15,3	24,8	38,6	48,2	62,1	76,8	94,7	111	122	144	183
Fans power input	(1)	kW	0,31	0,91	1,46	1,88	2,35	3,11	3,68	4,03	5,04	5,90	6,93
SHR	(2)		1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Fluid flow	(1)	l/s	0,73	1,19	1,85	2,31	2,97	3,68	4,53	5,30	5,84	6,89	8,74
Total pressure drop (Coil + Valve)	(1)	kPa	51,4	31,8	43,2	55,4	45,5	49,8	52,7	40,5	51,3	54,9	92,1
<b>FANS</b>													
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity	N°		1	1	1	1	1	2	2	2	3	3	3
Air flow	(3)	m³/h	3150	5500	8300	10500	13600	16800	20500	24300	26500	31500	39600
<b>NOISE LEVEL</b>													
Sound Power		dB(A)	83	92	93	94	97	97	98	98	101	101	102
Sound Pressure	(4)	dB(A)	67	76	77	78	80	80	81	81	83	83	84
<b>SIZE AND WEIGHT</b>													
A	(3)	mm	650	785	1085	1085	1305	1630	1875	2175	2499	2899	3510
B	(3)	mm	675	675	775	930	930	930	930	930	930	930	930
H	(3)	mm	1925	1925	1925	1925	1980	1980	1980	1980	1980	1980	1980
Weight	(3)	kg	220	261	332	330	385	478	540	598	669	764	930

**Notes:**

1 Indoor conditions (in) 26°C - R.H. 40%; Water temperature (in/out) 10°C/15°C; ESP= 20Pa.

2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.

3 Unit in standard configuration/execution, without optional accessories.

4 Average sound pressure level, at a distance of 1m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.



# W-ACCURATE LEGACY



## 2-Section Close Control Air Conditioners

### w-AV 2S

w-AV 2S-UNDER			065	088	096	127	148	173	226	
Frame			E4	E5	E6	E7	E8	E9	E10	
Power supply			V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	
<b>PERFORMANCE</b>										
Total cooling capacity gross	(1)	kW	58,2	89,2	97,9	127	149	175	227	
Sensible cooling capacity gross	(1)	kW	47,8	69,9	78,8	104	121	144	182	
Fans power input	(1)	kW	2,40	4,50	4,80	6,60	6,30	7,00	8,70	
SHR	(2)		0,82	0,78	0,80	0,82	0,81	0,82	0,80	
Fluid flow	(1)	l/s	2,78	4,27	4,68	6,07	7,15	8,37	10,9	
Total pressure drop (Coil + Valve)	(1)	kPa	56,0	85,2	65,2	65,3	95,3	94,3	84,5	
<b>FANS</b>										
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	
Quantity			N°	1	2	2	3	3	3	4
Air flow			(3) m³/h	13950	19700	23000	30000	34000	41000	52000
<b>NOISE LEVEL</b>										
Sound Power			dB(A)	85	87	88	89	90	90	90
Sound Pressure			(4) dB(A)	64	66	67	68	69	68	68
<b>SIZE AND WEIGHT</b>										
A			(3) mm	1305	1630	1875	2175	2499	2899	3510
B			(3) mm	930	930	930	930	930	930	930
H			(3) mm	2580	2580	2580	2580	2580	2580	2580
Weight			(3) kg	410	520	595	695	795	910	1103

#### Notes:

- 1 Indoor conditions (in) 24°C - R.H. 50%; Water temperature (in/out) 7°C/12°C; ESP= 20Pa.  
 2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.  
 3 Unit in standard configuration/execution, without optional accessories.

4 Average sound pressure level, at a distance of 2m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.

### w-AV 2K

w-AV 2K-UNDER			080	108	128	154	180	210	280	
Frame			E4	E5	E6	E7	E8	E9	E10	
Power supply			V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	
<b>PERFORMANCE</b>										
Total cooling capacity gross	(1)	kW	57,8	86,8	103	125	146	173	225	
Sensible cooling capacity gross	(1)	kW	57,8	86,8	103	125	146	173	225	
Fans power input	(1)	kW	2,40	4,50	4,80	6,60	6,30	7,00	8,70	
SHR	(2)		1,00	1,00	1,00	1,00	1,00	1,00	1,00	
Fluid flow	(1)	l/s	2,76	4,15	4,92	5,97	6,97	8,27	10,8	
Total pressure drop (Coil + Valve)	(1)	kPa	46,5	35,1	52,2	45,6	64,4	26,7	49,1	
<b>FANS</b>										
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	
Quantity			N°	1	2	2	3	3	3	4
Air flow			(3) m³/h	13800	19700	23000	29000	33300	40100	51700
<b>NOISE LEVEL</b>										
Sound Power			dB(A)	85	80	78	82	80	85	85
Sound Pressure			(4) dB(A)	68	62	60	64	62	67	66
<b>SIZE AND WEIGHT</b>										
A			(3) mm	1305	1630	1875	2175	2499	2899	3510
B			(3) mm	930	930	930	930	930	930	930
H			(3) mm	2580	2580	2580	2580	2580	2580	2580
Weight			(3) kg	435	585	635	750	850	975	1103

#### Notes:

- 1 Indoor conditions (in) 26°C - R.H. 40%; Water temperature (in/out) 10°C/15°C; ESP= 20Pa.  
 2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.  
 3 Unit in standard configuration/execution, without optional accessories.

4 Average sound pressure level, at a distance of 1m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.



# w-ACCURATE LEGACY

High precision chilled water air conditioners, from 14,7 to 243 kW

Single & 2-Section with double chilled water coil

## w-AV DF

w-AV DF-OVER			013 E1	021 E2	032 E3	045 E3P	053 E4	072 E5	081 E6	100 E7	120 E8	138 E9
Power supply	V/ph/Hz		400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
<b>PERFORMANCE</b>												
Total cooling capacity gross	(1) kW		13,3	22,6	31,8	45,8	52,8	72,5	80,7	100	121	141
Sensible cooling capacity gross	(1) kW		11,7	19,9	29,9	42,1	49,8	64,6	76,1	94,0	111	130
Fans power input	(1) kW		0,32	0,99	1,81	2,14	2,56	3,10	3,74	4,82	6,72	6,91
SHR	(2)		0,88	0,88	0,94	0,92	0,94	0,86	0,94	0,94	0,92	0,92
Fluid flow	(1) l/s		0,63	1,08	1,52	2,19	2,53	3,47	3,86	4,79	5,79	6,76
Total pressure drop (Coil + Valve)	(1) kPa		16,3	48,1	34,7	33,4	22,8	49,9	21,6	35,9	57,4	40,5
<b>FANS</b>												
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity	N°		1	1	1	1	1	2	2	2	3	3
Air flow	(3) m³/h		2900	4920	7800	10800	13100	16350	20000	24200	28300	33100
<b>NOISE LEVEL</b>												
Sound Power	dB(A)		82	90	92	95	96	97	97	98	102	99
Sound Pressure	(4) dB(A)		62	70	72	75	76	77	76	77	81	78
<b>SIZE AND WEIGHT</b>												
A	(3) mm		650	785	1085	1085	1305	1630	1875	2175	2499	2899
B	(3) mm		675	675	775	930	930	930	930	930	930	930
H	(3) mm		1925	1925	1925	1925	1980	1980	1980	1980	1980	1980
Weight	(3) kg		223	262	335	364	397	492	557	624	699	805

w-AV DF-UNDER			013 E1	021 E2	032 E3	045 E3P	053 E4	072 E5	081 E6	100 E7	120 E8	138 E9	160 E10
Power supply	V/ph/Hz		400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
<b>PERFORMANCE</b>													
Total cooling capacity gross	(1) kW		13,3	22,6	31,8	45,8	52,8	72,5	80,7	100	121	141	163
Sensible cooling capacity gross	(1) kW		11,7	19,9	29,9	42,1	49,8	64,6	76,1	94,0	111	130	144
Fans power input	(1) kW		0,32	0,99	1,81	2,14	2,56	3,10	3,74	4,82	6,72	7,14	7,66
SHR	(2)		0,88	0,88	0,94	0,92	0,94	0,89	0,94	0,94	0,92	0,92	0,88
Fluid flow	(1) l/s		0,63	1,08	1,52	2,19	2,53	3,47	3,86	4,79	5,79	6,76	7,80
Total pressure drop (Coil + Valve)	(1) kPa		16,3	48,1	34,7	33,4	22,8	49,9	21,6	35,9	57,4	40,5	61,8
<b>FANS</b>													
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity	N°		1	1	1	1	1	2	2	2	3	3	3
Air flow	(3) m³/h		2900	4920	7800	10800	13100	16350	20000	24200	28300	33100	37150
<b>NOISE LEVEL</b>													
Sound Power	dB(A)		82	90	92	95	96	97	97	98	102	102	102
Sound Pressure	(4) dB(A)		62	70	72	75	76	77	76	77	81	81	81
<b>SIZE AND WEIGHT</b>													
A	(3) mm		650	785	1085	1085	1305	1630	1875	2175	2499	2899	3510
B	(3) mm		675	675	775	930	930	930	930	930	930	930	930
H	(3) mm		1925	1925	1925	1925	1980	1980	1980	1980	1980	1980	1980
Weight	(3) kg		236	280	358	372	431	534	605	678	671	879	1052

### Notes:

1 Indoor conditions (in) 24°C - R.H. 50%; Water temperature (in/out) 7°C/12°C; ESP= 20Pa.

2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.

3 Unit in standard configuration/execution, without optional accessories.

4 Average sound pressure level, at a distance of 2m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.

## w-AV 2DF

w-AV 2DF-UNDER			065	088	096	127	148	173	226
Power supply		V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
<b>PERFORMANCE</b>									
Total cooling capacity gross	(1)	kW	63,5	96,6	105	137	159	189	243
Sensible cooling capacity gross	(1)	kW	56,2	82,3	92,7	121	139	166	212
Fans power input	(1)	kW	2,13	5,18	4,80	7,72	7,32	8,43	10,1
SHR	(2)		0,89	0,85	0,88	0,88	0,87	0,88	0,87
Fluid flow	(1)	l/s	3,03	4,62	5,01	6,53	7,61	9,02	11,6
Total pressure drop (Coil + Valve)	(1)	kPa	19,6	54,7	22,1	40,3	60,3	43,0	77,6
<b>FANS</b>									
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity		N°	1	2	2	3	3	3	4
Air flow	(3)	m <sup>3</sup> /h	13950	19700	23000	30000	34000	41000	52000
<b>NOISE LEVEL</b>									
Sound Power		dB(A)	86	87	88	89	89	89	90
Sound Pressure	(4)	dB(A)	65	66	67	68	68	67	68
<b>SIZE AND WEIGHT</b>									
A	(3)	mm	1305	1630	1875	2175	2499	2899	3510
B	(3)	mm	930	930	930	930	930	930	930
H	(3)	mm	2580	2580	2580	2580	2580	2580	2580
Weight	(3)	kg	487	584	669	784	896	1036	1253

**Notes:**

1 Indoor conditions (in) 24°C - R.H. 50%; Water temperature (in/out) 7°C/12°C; ESP= 20Pa.

2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.

3 Unit in standard configuration/execution, without optional accessories.

4 Average sound pressure level, at a distance of 2m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.



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