

COOLING SYSTEM DATASHEET

SOETECK · ROOM PRECISION AIR CONDITIONING

Soetack Chilled Water Room Precision Air Conditioner (W Series)

Chilled water room-level precision cooling, 24–265.8 kW, upflow or downflow, 18 models

SKU ST-CWRC

Soetack



HUMIDIFYING CAPACITY

10 kg/h (all...

POWER SUPPLY OPTION

**1
380-415V/50-6...**

AIR SUPPLY MODE

Front / Side /...

PRICE

On request

REQUEST A QUOTATION ONLINE

serverinvest.com/product/soetack-chilled-water-room-cooling-precision-air...



01 Product overview

The Soetec W Series is a family of chilled water precision air conditioners for room-level cooling of data centres, telecom equipment rooms, laboratories, industrial clean production areas and medical spaces. Each unit is connected to a building or plant chilled water loop and holds temperature and humidity within tight limits around the clock, adjusting output to the actual heat generated by servers and network gear.

Eighteen frame sizes are available, from W-030 to W-200, each in an upflow (UC) or downflow (DC) version for raised-floor or top-discharge layouts. With 7/12 °C water the total capacity ranges from 38.2 kW to 265.8 kW; warmer water at 10/15 °C or 13/18 °C is also supported, with published capacities from 24 kW upward. All ratings are fully sensible (SHR 100%) at the 28 °C/40% RH return air reference condition, so the capacity goes into removing IT heat rather than dehumidifying.

Design details

Backward-inclined EC centrifugal fans modulate airflow steplessly (9,230–38,500 m³/h) for lower energy use and noise.

A large V-shaped coil improves air distribution and heat exchange.

Top, bottom (fan sunk into the floor void), front-top and ducted supply arrangements are possible.

Standard 2-way valves with 3-way valves optional; electrode humidifier, PTC reheat and G4 filters fitted.

Drawer-type electrical box on slide rails for service; options include condensate pump, water leak detection and dual power feed.

Key components come from established suppliers, and...

HIGHLIGHTS

- 18 models from W-030 to W-200, upflow (UC) or downflow (DC)
- Total capacity 38.2–265.8 kW at 7/12 °C chilled water
- 100% sensible heat ratio across the range
- Backward-curved EC fans and large V-shaped coil
- Electrode humidifier, PTC reheat and G4 filtration
- MTBF of at least 100,000 hours for key components

KEY SPECIFICATIONS

Air supply mode	Front / Side / Down
Refrigerant	R410A
Fan type	ZIEHL-ABEGG EC fan
SHR	1
Rating conditions	28 °C / 40% RH return air; standard ESP 20 Pa
Valves	2-way standard, 3-way optional
SHR	100 % (all models)
Fan type	EC/AC (all models)
Heating type	PTC (all models)
Humidifier type	Electrode (all models)
Filter rating	G4 (all models)
Depth	990 mm (all models)



02 Full specifications

GENERAL

Air supply mode	Front / Side / Down
Refrigerant	R410A
Fan type	ZIEHL-ABEGG EC fan
SHR	1
Rating conditions	28 °C / 40% RH return air; standard ESP 20 Pa
Valves	2-way standard, 3-way optional

MODELS W-030 TO W-110

Models (upflow UC / downflow DC)	W-030UC / W-030DC · W-040UC / W-040DC · W-050UC / W-050DC · W-060UC / W-060DC · W-070UC / W-070DC · W-080UC / W-080DC · W-090UC / W-090DC · W-100UC / W-100DC · W-110UC / W-110DC
Total capacity, 7/12 °C water	W-030: 38.2 kW · W-040: 50.8 kW · W-050: 62.8 kW · W-060: 76.2 kW · W-070: 89.6 kW · W-080: 100.4 kW · W-090: 113.2 kW · W-100: 124 kW · W-110: 137.6 kW
Total capacity, 10/15 °C water	W-030: 30.2 kW · W-040: 39.0 kW · W-050: 48.0 kW · W-060: 56.2 kW · W-070: 68.8 kW · W-080: 78.0 kW · W-090: 86.4 kW · W-100: 95.2 kW · W-110: 104.8 kW
Total capacity, 13/18 °C water	W-030: 24 kW · W-040: 31 kW · W-050: 38 kW · W-060: 44 kW · W-070: 55 kW · W-080: 62 kW · W-090: 68 kW · W-100: 75.6 kW · W-110: 83 kW
SHR	100 % (all models)
Airflow	W-030: 9230 m³/h · W-040: 9610 m³/h · W-050: 10230 m³/h · W-060: 11260 m³/h · W-070: 17100 m³/h · W-080: 20500 m³/h · W-090: 18700 m³/h · W-100: 21360 m³/h · W-110: 23300 m³/h
Fan type	EC/AC (all models)
Heating capacity	W-030: 6 kW · W-040: 6 kW · W-050: 6 kW · W-060: 6 kW · W-070: 9 kW · W-080: 9 kW · W-090: 9 kW · W-100: 9 kW · W-110: 9 kW
Heating type	PTC (all models)
Humidifying capacity	W-030: 8 kg/h · W-040: 8 kg/h · W-050: 8 kg/h · W-060: 8 kg/h · W-070: 10 kg/h · W-080: 10 kg/h · W-090: 10 kg/h · W-100: 10 kg/h · W-110: 10 kg/h
Humidifier type	Electrode (all models)
Filter rating	G4 (all models)
Weight	W-030: 303 kg · W-040: 312 kg · W-050: 333 kg · W-060: 352 kg · W-070: 492 kg · W-080: 502 kg · W-090: 512 kg · W-100: 522 kg · W-110: 539 kg
Width	W-030: 925 mm · W-040: 925 mm · W-050: 925 mm · W-060: 925 mm · W-070: 1675 mm · W-080: 1675 mm · W-090: 1675 mm · W-100: 1675 mm · W-110: 1825 mm
Depth	990 mm (all models)
Height	1975 mm (all models)
Power supply option 1	380-415V/50-60Hz/3P (all models)
FLA option 1	W-030: 22.2 A · W-040: 22.2 A · W-050: 22.2 A · W-060: 22.4 A · W-070: 38.8 A · W-080: 38.8 A · W-090: 38.8 A · W-100: 38.8 A · W-110: 39.2 A
Power supply option 2	460V/60Hz/3P (all models)
FLA option 2	W-030: 18.4 A · W-040: 18.4 A · W-050: 18.4 A · W-060: 18.5 A · W-070: 32.0 A · W-080: 32.0 A · W-090: 32.0 A · W-100: 32.0 A · W-110: 32.3 A
Power supply option 3	200-230V/60Hz/3P (all models)

FLA option 3	W-030: 40.2 A · W-040: 40.2 A · W-050: 40.2 A · W-060: 40.6 A · W-070: 75.7 A · W-080: 75.7 A · W-090: 75.7 A · W-100: 75.7 A · W-110: 76.4 A
Water connection	W-030: 32 mm · W-040: 32 mm · W-050: 42 mm · W-060: 42 mm · W-070: 42 mm · W-080: 42 mm · W-090: 54 mm · W-100: 54 mm · W-110: 54 mm
Drain connection	20 mm (all models)
Water inlet connection	3/4"G (all models)
Water flow	W-030: 1.4 l/s · W-040: 1.6 l/s · W-050: 2.2 l/s · W-060: 2.6 l/s · W-070: 3.3 l/s · W-080: 3.7 l/s · W-090: 4.1 l/s · W-100: 4.5 l/s · W-110: 5.0 l/s
Water pressure drop	W-030: 49.6 kPa · W-040: 55.0 kPa · W-050: 63.0 kPa · W-060: 57.3 kPa · W-070: 57.2 kPa · W-080: 73.6 kPa · W-090: 63.2 kPa · W-100: 77.8 kPa · W-110: 85.3 kPa

MODELS W-120 TO W-200

Models (upflow UC / downflow DC)	W-120UC / W-120DC · W-130UC / W-130DC · W-140UC / W-140DC · W-150UC / W-150DC · W-160UC / W-160DC · W-170UC / W-170DC · W-180UC / W-180DC · W-190UC / W-190DC · W-200UC / W-200DC
Total capacity, 7/12 °C water	W-120: 147.2 kW · W-130: 159.6 kW · W-140: 177.2 kW · W-150: 184.2 kW · W-160: 199.8 kW · W-170: 208.2 kW · W-180: 221.4 kW · W-190: 233.4 kW · W-200: 265.8 kW
Total capacity, 10/15 °C water	W-120: 113.5 kW · W-130: 121.2 kW · W-140: 134.0 kW · W-150: 141.0 kW · W-160: 151.8 kW · W-170: 159.6 kW · W-180: 171.0 kW · W-190: 177.6 kW · W-200: 201.0 kW
Total capacity, 13/18 °C water	W-120: 99.2 kW · W-130: 95.2 kW · W-140: 104.0 kW · W-150: 111.6 kW · W-160: 120.0 kW · W-170: 126.6 kW · W-180: 135.6 kW · W-190: 139.2 kW · W-200: 156.0 kW
SHR	100 % (all models)
Airflow	W-120: 25960 m ³ /h · W-130: 25030 m ³ /h · W-140: 26120 m ³ /h · W-150: 31680 m ³ /h · W-160: 33120 m ³ /h · W-170: 35460 m ³ /h · W-180: 39100 m ³ /h · W-190: 36010 m ³ /h · W-200: 38500 m ³ /h
Fan type	EC/AC (all models)
Heating capacity	W-120: 9 kW · W-130: 9 kW · W-140: 9 kW · W-150: 12 kW · W-160: 12 kW · W-170: 12 kW · W-180: 12 kW · W-190: 12 kW · W-200: 12 kW
Heating type	PTC (all models)
Humidifying capacity	10 kg/h (all models)
Humidifier type	Electrode (all models)
Filter rating	G4 (all models)
Weight	W-120: 553 kg · W-130: 562 kg · W-140: 585 kg · W-150: 772 kg · W-160: 792 kg · W-170: 812 kg · W-180: 822 kg · W-190: 842 kg · W-200: 852 kg
Width	W-120: 1825 mm · W-130: 1825 mm · W-140: 1825 mm · W-150: 2500 mm · W-160: 2725 mm · W-170: 2725 mm · W-180: 2725 mm · W-190: 2725 mm · W-200: 2725 mm
Depth	990 mm (all models)
Height	1975 mm (all models)
Power supply option 1	380-415V/50-60Hz/3P (all models)
FLA option 1	W-120: 39.2 A · W-130: 39.2 A · W-140: 39.2 A · W-150: 47.3 A · W-160: 47.3 A · W-170: 47.9 A · W-180: 47.9 A · W-190: 47.9 A · W-200: 47.9 A
Power supply option 2	460V/60Hz/3P (all models)
FLA option 2	W-120: 32.3 A · W-130: 32.3 A · W-140: 32.3 A · W-150: 39.1 A · W-160: 39.1 A · W-170: 39.6 A · W-180: 39.6 A · W-190: 39.6 A · W-200: 39.6 A
Power supply option 3	200-230V/60Hz/3P (all models)
FLA option 3	W-120: 76.4 A · W-130: 76.4 A · W-140: 76.4 A · W-150: 91.3 A · W-160: 91.3 A · W-170: 92.4 A · W-180: 92.4 A · W-190: 92.4 A · W-200: 92.4 A

Water connection	W-120: 54 mm · W-130: 54 mm · W-140: 54 mm · W-150: 67 mm · W-160: 67 mm · W-170: 67 mm · W-180: 67 mm · W-190: 67 mm · W-200: 67 mm
Drain connection	20 mm (all models)
Water inlet connection	3/4"G (all models)
Water flow	W-120: 5.4 l/s · W-130: 5.7 l/s · W-140: 6.1 l/s · W-150: 6.7 l/s · W-160: 7.2 l/s · W-170: 7.5 l/s · W-180: 8.1 l/s · W-190: 8.3 l/s · W-200: 8.9 l/s
Water pressure drop	W-120: 99.9 kPa · W-130: 77.8 kPa · W-140: 80.1 kPa · W-150: 74.1 kPa · W-160: 76.5 kPa · W-170: 84.1 kPa · W-180: 97.8 kPa · W-190: 71.5 kPa · W-200: 74.1 kPa

03 Engineered, delivered & supported by ServerInvest

Engineering & sizing

Selected and sized against your real IT load, room and redundancy targets.

Installation

Delivery, installation and commissioning by our engineers across Europe.

Certified processes

ISO 9001, ISO 14001 and ISO 27001 certified project delivery.

Service & support

Maintenance, spare parts and support from a single partner.



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