

SAHU

Water-cooled non-reversible heat pump for indoor installation
Air flow from 1500 to 15000 m³/h



*units out of the scope of Eurovent certification



Cool & heat



Horizontal



Vertical



Water



INTELLIAIR



ErP
compliant

- ✓ available in version for 2 and 4-pipe systems with or without on-board control;
- ✓ available in direct expansion version for connection to Clivet VRF and mini VRF systems;
- ✓ standard with self-bearing sandwich paneling thickness 40mm;
- ✓ centrifugal fans with belt / pulley transmission and IE2 type with inverter, IE3 engines settable at high pressure for air distribution through ducting;
- ✓ settable with EC plug fans (IE4) with high pressure (standard with on-board control);
- ✓ 4 or 6 row water coil or 4-row direct expansion coil;
- ✓ wide choice of accessories (mixing chamber, filters, bases, antivibration mounts, etc);
- ✓ electric heater section with different power
- ✓ remote and centralized system monitoring through INTELLIAIR

Versions and configurations

VOLTAGE:

400T supply voltage 400/3~/50

VERSION:

- SAHU H Horizontal air handling unit with centrifugal fan
- SAHU V Vertical air handling unit with centrifugal fan
- SAHU H EC Horizontal air handling unit with EC plug fan
- SAHU V EC Vertical air handling unit with EC plug fan

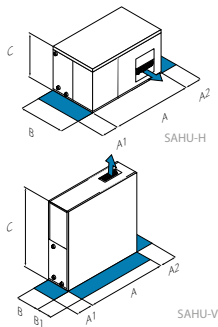
MAIN COIL:

- C4 4-row water coil
 - C6 6-row water coil
 - E4 4-row direct expansion coil
- ATTACCHI ACQUA:**
- DX Water fittings to the right
 - SX Water fittings to the left

BATTERIA SECONDARIA AD ACQUA CALDA:

- Hot water coil: not required (Standard)
- CH1 1-row hot water secondary coil
- CH2 2-row hot water secondary coil

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

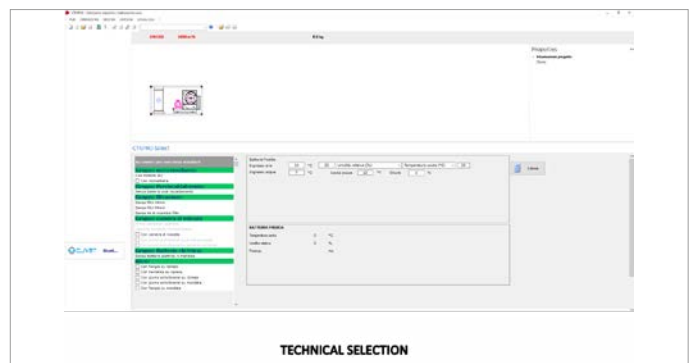
Size	SAHU H / SAHU H_EC	1	2	3	4	5	6	7	8
A - Length	mm	780	880	1120	1280	1500	1720	1890	2510
B - Width	mm	1100	1100	1100	1300	1350	1350	1350	1350
C - Height	mm	530	530	530	590	660	750	900	900
A1	mm	500	500	500	500	500	500	500	500
A2	mm	500	500	500	500	500	500	500	500
HC4 Weight	kg	78	85	98	134	167	202	274	330
HC6 Weight	kg	81	88	102	141	176	215	292	353
HE4 Weight	kg	78	84	97	133	165	199	270	326
H_EC C4 Weight	kg	57	63	74	101	132	163	211	268
H_EC C6 Weight	kg	60	66	78	108	141	176	229	291
H_EC E4 Weight	kg	57	62	73	100	130	160	207	264

Size	SAHU V / SAHU V_EC	1	2	3	4	5	6	7	8
A - Length	mm	780	880	1120	1280	1500	1720	1890	2510
B - Width	mm	530	530	530	590	660	750	900	900
C - Height	mm	1100	1100	1100	1300	1350	1570	1870	1950
A1	mm	500	500	500	500	500	500	500	500
A2	mm	500	500	500	500	500	500	500	500
B1	mm	1000	1000	1000	1000	1000	1000	1000	1000
VC4 Weight	kg	84	91	105	142	177	217	318	386
VC6 Weight	kg	87	94	109	149	186	230	336	409
VE4 Weight	kg	84	90	104	141	175	214	314	382
V_EC C4 Weight	kg	63	69	81	109	142	178	255	328
V_EC C6 Weight	kg	66	72	85	116	151	191	273	351
V_EC E4 Weight	kg	63	68	80	108	140	175	251	324

The above mentioned data are referred to standard units for the constructive configurations indicated. The weight indicated refer to unit without water/gas inside of the coil.

Selection Software

The CTAPRO air handling units selection software allows to size the units and to have immediately the complete technical offer with executive drawings and technical data sheets.



Technical data

Size		SAHU	1	2	3	4	5	6	7	8
Air flow rate		m ³ /h	1500	2090	2890	4020	5580	7750	10770	15000
C4	Cooling capacity	(1) kW	8,5	11,5	15,7	22,7	32,4	42,9	60,5	83,0
C4	Sensible capacity	(1) kW	6,2	8,5	11,7	16,6	23,4	31,7	44,3	61,1
C4	Water flow-rate	(1) l/s	0,4	0,5	0,8	1,1	1,5	2,0	2,9	4,0
C6	Cooling capacity	(1) kW	10,3	13,8	19,4	26,6	37,9	50,3	70,9	99,2
C6	Sensible capacity	(1) kW	7,3	10,0	13,9	19,2	27,1	36,5	51,2	71,4
C6	Water flow-rate	(1) l/s	0,5	0,7	0,9	1,3	1,8	2,4	3,4	4,7
E4	Cooling capacity	(2) kW	7,3	10,1	15,5	22,2	30,9	42,3	59,1	82,3
E4	Sensible capacity	(2) kW	5,8	8,0	11,6	16,5	22,9	31,4	43,8	60,9
C4	Heating capacity	(3) kW	9,6	13,1	18,0	24,5	35,6	48,6	67,7	93,8
C4	Water flow-rate	(3) l/s	0,5	0,6	0,9	1,2	1,7	2,3	3,3	4,5
C6	Heating capacity	(3) kW	10,9	14,9	20,6	28,7	40,1	54,9	76,5	106,7
C6	Water flow-rate	(3) l/s	0,5	0,7	1,0	1,4	1,9	2,6	3,7	5,2
MAX power input (IE3 - CFG C&P)		(4) kW	0,8	1,1	1,1	2,2	3,0	4,0	5,5	7,5
MAX power input (IE4 - EC PLUG FAN)		kW	1,1	1,1	1,1	1,1	1,9	2,9	3,3	5,0
Power supply		V/n°/Hz	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Sound pressure level		(5) dB(A)	74	79	85	80	85	84	83	92

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

(1) HYDRONIC SAHU Cooling: Exchanger inlet water 7°C (temperature differential 5°C) Ambient air 27°C D.B. / 19°C W.B. - ESP = 0 Pa

(2) DIRECT EXPANSION SAHU Cooling: Indoor temperature 27°C D.B. / 19°C W.B. Evaporating

temperature 8°C / Condensing temperature 46°C - ESP = 0 Pa - R410A

(3) HYDRONIC SAHU Heating: Exchanger inlet water 45°C (temperature differential 5°C), Ambient air 20°C D.B., 50% U.R., ESP = 0 Pa

Accessories

FS4	Frame with G4 efficiency filters, thickness 48 mm	MBXX	Mixing chamber with dampers
FS5	Frame with M5 efficiency filters, thickness 98 mm	AFMX	Antivibration mount for mixing chamber damper
FS6	Frame with M6 efficiency filters, thickness 98 mm	AFRX	Return antivibration mount for basic unit
FS7	Frame with F7 efficiency filters, thickness 98 mm	AFSX	Supply antivibration mount for basic unit
FS8	Frame with F8 efficiency filters, thickness 98 mm	DARX	Return damper for basic unit
FS9	Frame with F9 efficiency filters, thickness 98 mm	FLRX	Return flange for basic unit
FS45	Frame with G4 efficiency filters, thickness 48 mm + M5 th. 98 mm	FLSX	Supply flange for basic unit
FS46	Frame with G4 efficiency filters, thickness 48 mm + M6 th. 98 mm	EC1X	Electric coil version 1
FS47	Frame with G4 efficiency filters, thickness 48 mm + F7 th. 98 mm	EC2X	Electric coil version 2
FS48	Frame with G4 efficiency filters, thickness 48 mm + F8 th. 98 mm	FTB	Box with terminal block for centrifugal fan wires
FS49	Frame with G4 efficiency filters, thickness 48 mm + F8 th. 98 mm	ETB	Box with terminal block for EC plug fan wires
BAH	Base for horizontal basic unit H=120 mm	KT4X	Spare filters - G4 th. 48 mm
BAV	Base for vertical basic unit H=120 mm	KT5X	Spare filters - M5 th. 98 mm
BAMX	Base for mixing chamber H=120 mm	KT6X	Spare filters - M6 th. 98 mm
		KT7X	Spare filters - F7 th. 98 mm
		KT8X	Spare filters - F8 th. 98 mm
		KT9X	Spare filters - F9 th. 98 mm

Accessories whose code ends with "X" are supplied separately

For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.