



Unit listed on
www.eurovent-certification.com



ErP
compliant

ELFOEnergy Duct Medium

Water chiller

WSA-XEE: cooling only

WSN-XEE: reversible heat pump

Air cooled

Indoor installation

Capacity from 34 to 99 kW

ELFOEnergy Duct Medium water chillers and heat pumps are indoor units with ducted condensation.

■ Versatility:

different combinations of inlet and outlet plug fans enable to connect easily the unit to the air ducts and to have high available head;

■ High energy efficiency:

ELFOEnergy Duct Medium besides being in Eurovent efficiency class A at full load grants high seasonal power efficiency thanks to the innovative cooling circuit optimized for partial;

■ Easy installation:

the units are very compact and are supplied on request with high efficiency pumps on board; therefore the available space for other purposes is increased and the installations costs are reduced.

functions and features



Cooling only
(WSA-XEE)



Heat pump
(WSN-XEE)



Air cooled



Indoor
installation



R-410A



Hermetic
Scroll

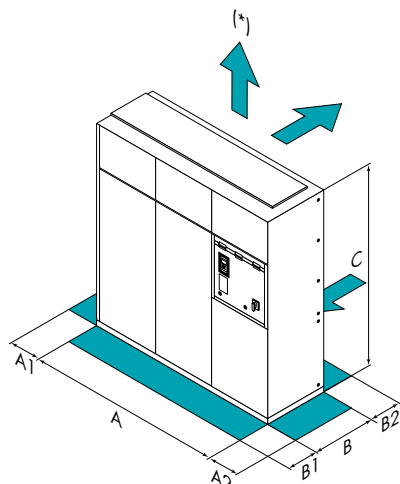


Electronically
commutated
Plug Fan



Electronic
expansion
valve

dimensions and clearances



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

(*) Optional

SIZE – WSA-XEE

		182	222	262	302	352
A - Length	mm	1874	1874	2650	2650	2650
B - Width	mm	780	780	780	780	780
C - Height	mm	1996	1996	1996	1996	1996
A1	mm	100	100	100	100	100
A2	mm	500	500	500	500	500
B1	mm	1000	1000	1000	1000	1000
B2	mm	1300	1300	1300	1300	1300
Operating weight	kg	572	578	676	711	810

SIZE – WSN-XEE

		122	162	182	222	262	302	352	402
A - Length	mm	1450	1450	1874	1874	2650	2650	2650	2650
B - Width	mm	780	780	780	780	780	780	780	780
C - Height	mm	1996	1996	1996	1996	1996	1996	1996	1996
A1	mm	100	100	100	100	100	100	100	100
A2	mm	500	500	500	500	500	500	500	500
B1	mm	1000	1000	1000	1000	1000	1000	1000	1000
B2	mm	1300	1300	1300	1300	1300	1300	1300	1300
Operating weight	kg	501	555	620	626	732	770	874	904

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.

versions and configurations

LOW TEMPERATURE:

- Low temperature: not required (Standard)
- B** Water low temperature

ENERGY RECOVERY:

- Energy recovery: not required (Standard)
- D** Partial energy recovery

CONFIGURATION:

- EV** Vertical air expulsion (Standard)
- EO** Horizontal exhaust air

technical data

SIZE – WSA-XEE			182	222	262	302	352			
▶ Cooling capacity (EN14511:2018)	(1)	kW	49,3	58,3	67,5	78,6	89,8			
Total power input (EN14511:2018)	(1)	kW	17,6	21,4	24,7	27,9	32,1			
EER (EN 14511:2018)	(1)	-	2,81	2,72	2,74	2,81	2,79			
SEER	(5)	-	3,81	3,80	3,82	3,81	3,80			
Refrigeration circuits		Nr			1					
No. of compressors		Nr			2					
Type of compressors		-			SCROLL					
Standard airflow		l/s	5000	5000	6667	7500	7500			
Max external static pressure		Pa	450	450	570	450	420			
Water flow-rate (User Side)		l/s	2,36	2,79	3,23	3,75	4,29			
Standard power supply		V			400/3~/50					
Sound power in the duct	(4)	dB(A)	80	81	79	82	84			
Sound pressure level	(2)	dB(A)	62	62	61	63	66			
SIZE – WSN-XEE			122	162	182	222	262	302	352	402
▶ Cooling capacity (EN14511:2018)	(1)	kW	33,9	41,0	47,6	54,5	64,5	75,0	86,3	98,9
Total power input (EN14511:2018)	(1)	kW	15,9	17,7	20,5	24,9	27,5	31,5	37,4	41,6
EER (EN 14511:2018)	(1)	-	2,13	2,32	2,32	2,19	2,35	2,38	2,31	2,38
SEER	(5)	-	2,63	3,10	3,17	3,08	3,36	3,31	3,32	3,40
▶ Heating capacity (EN14511:2018)	(3)	kW	41,0	48,3	59,0	68,0	80,0	92,4	103	112
Total power input (EN14511:2018)	(3)	kW	13,3	15,5	18,7	21,4	25,1	28,7	32,6	36,8
COP (EN 14511:2018)	(3)	-	3,09	3,12	3,16	3,17	3,19	3,22	3,17	3,05
Refrigeration circuits		Nr				1				
No. of compressors		Nr				2				
Type of compressors		-				SCROLL				
Standard airflow		l/s	4444	4444	5000	5000	6667	7500	7500	7500
Max external static pressure		Pa	510	510	390	390	570	390	390	390
Water flow-rate (User Side)		l/s	1,62	1,96	2,28	2,61	3,08	3,57	4,12	4,72
Standard power supply		V				400/3~/50				
Sound power in the duct	(4)	dB(A)	84	84	87	87	84	87	87	87
Sound pressure level	(2)	dB(A)	61	61	62	62	63	63	67	68
DIRECTIVE ERP (ENERGY RELATED PRODUCTS)										
ErP Energy Class - AVERAGE Climate - W35		-	A+	A+	A+	A++	A+	A+	-	-
SCOP - AVERAGE Climate - W35	(5)	-	3,25	3,31	3,51	3,94	3,75	3,36	3,50	3,80

- (1) Data calculated in compliance with Standard EN 14511:2018 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Entering external exchanger air temperature = 35°C
- (2) Sound levels refer to standard units (no accessories) at full load. The sound pressure is measured at 1 m from the external surface of the ducted unit operating in an open field. (Standard UNI EN ISO 9614-2); Data referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor air temperature = 35°C; Static available pressure 120 Pa; Please note that when the unit is installed in conditions different from nominal test conditions (e.g. near walls or obstacles in general), the sound levels may undergo substantial variations.
- (3) Data calculated in compliance with Standard EN 14511:2018 referred to the following conditions: Internal exchanger water temperature = 40/45°C, entering external exchanger air temperature = 7°C D.B. / 6°C W.B.

- (4) Sound power measured in accordance with UNI EN ISO 9614 and Eurovent 8/1 standards for ducted unit with available pressure equal to 120 Pa.
- (5) Data calculated according to the EN 14825:2016 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

accessories

1PUB	Low static pressure single pump	MHP	High and low pressure gauges
1PUA	High static pressure single pump	SDV	Cutoff valve on compressor supply and return
1PUHE	High efficiency single inverter pump for primary circuit.	SCP4	Set-point compensation with 0-10 V signal
✓ IFWX	Steel mesh strainer on the water side	SPC2	Set-point compensation with outdoor air temperature probe
ABU	Flush hydraulic connections	✓ CSVX	Couple of manually operated shut-off valves
CCCA	Copper / aluminium condenser coil with acrylic lining	MF2	Multi-function phase monitor
✓ AMRX	Rubber antivibration mounts	CONTA2	Energy meter
PGFC	Finned coil protection grill	ECS	ECOSHARE function for the automatic management of a group of units
CMSC9	Serial communication module for Modbus supervisor	✓ RCMRX	Remote control via microprocessor control
CMSC10	Serial communication module for LonWorks supervisor	✓ PSX	Mains power supply
CMSC11	Serial communication module for BACnet-IP supervisor	STSOL	Additional lifting brackets
PFCC	Power factor correction capacitors (cosφ > 0.95)	WSN-XEE only:	
SFSTR	Disposal for inrush current reduction	OHE	Limit extension kit in heating up to -10°C (W.B.)
FANQE	Electrical panel ventilation	✓ VACSUX	User side DHW switching valve

Key to symbols and notes

- ✓ Accessories separately supplied.

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

Data contained in this document are not binding and may be changed by the Manufacturer without notice

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