

Water chiller

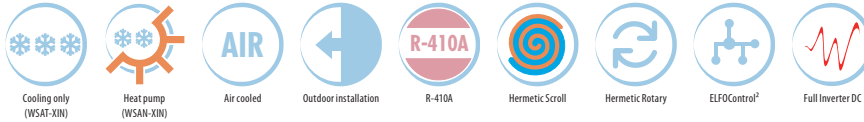
WSAN-XIN: reversible heat pump
 WSAT-XIN: cooling only
 Air cooled
 Outdoor installation
Capacity from 4 to 53 kW

DC Inverter

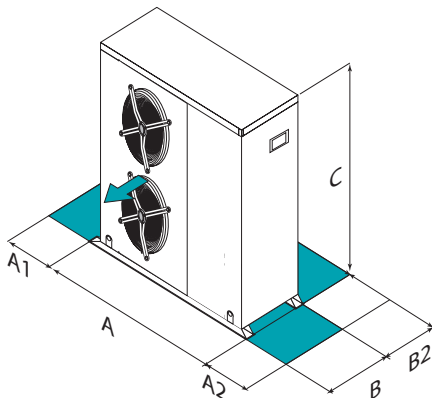


Unit listed on
www.eurovent-certification.com

functions and features



dimensions and clearances



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

ELFOEnergy Extended Inverter

- ▶ **SEASONAL EFFICIENCY:** Guaranteed by DC Inverter technology applied to the compressor, which can modulate its speed to the energy needs required. This solution allows a further reduction in consumption and a significant improvement of the seasonal efficiency.
- ▶ **ADVANCED TECHNOLOGY:** Clivet's continuous improving has allowed to realize ELFOEnergy Extended Inverter with special design features: Hydrophilic battery for a guarantee of efficiency in all conditions, electronic expansion valve to optimize the operation of the cooling circuit with DC inverter compressor, water kit to simplify the hydronic circuit and make it easier to maintain. The unit can be equipped with a DC Inverter circulator (optional), providing further energy savings through the modulation of water flow depending on the building thermal load and pressure drop.
- ▶ **MAXIMUM SILENCE:** ELFOEnergy Extended Inverter is at the top of its class, thanks to the optimized profile of the fan, and through the modulation of the fan and compressor depending on the external conditions and building thermal load.
- ▶ **COMPACT SIZE:** The continued research in product industrialization, has allowed to realize a very compact unit, a decisive factor to meet the requirements of flexibility to suit the characteristics of each building.

Size – WSAT-XIN		21	31	41	51	71	81	91	101	121	131	141	151	161	171	
PRM	A - Length	mm	942	942	942	1087	1087	1731	1731	1731	1731	1731	1731	-	-	-
PRM	B - Width	mm	433	433	433	445	445	724	724	724	724	724	724	-	-	-
PRM	C - Height	mm	992	992	992	1234	1234	1137	1137	1137	1517	1517	1517	-	-	-
PRM	A1	mm	400	400	400	400	400	400	400	400	400	400	400	-	-	-
PRM	A2	mm	600	600	600	600	600	600	600	600	600	600	600	-	-	-
PRM	B2	mm	400	400	400	400	400	400	400	400	400	400	400	-	-	-
EXC	A - Length	mm	942	942	942	1087	1087	1731	1731	1731	1731	1341	1341	1341	1341	1341
EXC	B - Width	mm	433	433	433	445	445	724	724	724	724	1159	1159	1159	1146	1146
EXC	C - Height	mm	992	992	992	1234	1234	1137	1137	1137	1517	1520	1520	1520	1770	1770
EXC	A1	mm	400	400	400	400	400	400	400	400	1000	1000	1000	1000	1000	1000
EXC	A2	mm	600	600	600	600	600	600	600	600	1000	1000	1000	1000	1000	1000
EXC	B2	mm	400	400	400	400	400	400	400	400	1000	1000	1000	1000	1000	1000
PRM	Operating weight	kg	112	116	124	170	175	230	230	230	300	300	300	-	-	-
EXC	Operating weight	kg	112	116	124	170	175	230	230	230	300	290	300	320	390	390

Size – WSAN-XIN		21	31	41	51	71	81	91	101	121	131	141	151	161	171	
PRM	A - Length	mm	942	942	942	1087	1087	1731	1731	1731	1731	1731	1731	-	-	-
PRM	B - Width	mm	433	433	433	445	445	724	724	724	724	724	724	-	-	-
PRM	C - Height	mm	992	992	992	1234	1234	1137	1137	1137	1517	1517	1517	-	-	-
PRM	A1	mm	400	400	400	400	400	400	400	400	400	400	400	-	-	-
PRM	A2	mm	600	600	600	600	600	600	600	600	600	600	600	-	-	-
PRM	B2	mm	400	400	400	400	400	400	400	400	400	400	400	-	-	-
EXC	A - Length	mm	942	942	942	1087	1087	1731	1731	1731	1731	1341	1341	1341	1341	1341
EXC	B - Width	mm	433	433	433	445	445	724	724	724	724	1159	1159	1159	1146	1146
EXC	C - Height	mm	992	992	992	1234	1234	1137	1137	1137	1517	1520	1520	1520	1770	1770
EXC	A1	mm	400	400	400	400	400	400	400	400	1000	1000	1000	1000	1000	1000
EXC	A2	mm	600	600	600	600	600	600	600	600	1000	1000	1000	1000	1000	1000
EXC	B2	mm	400	400	400	400	400	400	400	400	1000	1000	1000	1000	1000	1000
PRM	Operating weight	kg	112	116	124	170	175	240	240	240	310	310	310	-	-	-
EXC	Operating weight	kg	112	116	124	170	175	240	240	240	310	300	310	330	400	400

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.
 PRM Premium
 EXC Excellence

versions and configurations

VERSION:

- ▶ **PRM** Premium (sizes 21=141 only, Standard)
- ▶ **EXC** Excellence

VOLTAGE:

- ▶ **400TN** Supply voltage 400/3/50+N (sizes 51=171 only, Standard)
- ▶ **230M** Supply voltage 230/1/50 (sizes 21=71)

technical data

Size – WSAT-XIN		21	31	41	51	71	81	91	101	121	131	141	151 ^(*)	161 ^(*)	171 ^(*)
Unit for radiant panels															
A35/W18															
▶ Cooling capacity	kW	4,25	6,33	8,07	10,3	13,0	16,0	18,8	21,0	26,5	29,5	33,1	40,5	47,6	52,9
Total power input	kW	1,14	1,75	2,18	2,83	3,52	4,22	5,11	5,94	7,12	7,95	9,32	10,3	12,0	13,9
EER (EN 14511:2013) - PRM	-	3,71	3,62	3,71	3,65	3,70	3,78	3,67	3,53	3,72	3,71	3,55	-	-	-
EER (EN 14511:2013) - EXC	-	3,97	3,77	3,85	3,80	3,81	4,12	3,86	3,65	4,23	3,96	4,03	3,92	3,97	3,80
Terminal units															
A35/W7															
▶ Cooling capacity	kW	4,39	5,64	8,01	10,1	13,1	15,5	17,5	19,6	25,3	27,8	30,6	36,4	43,2	48,1
Total power input	kW	1,65	2,11	2,99	3,88	5,22	5,53	6,53	8,03	9,57	10,8	12,8	12,2	14,4	16,4
EER (EN 14511:2013) - PRM	-	2,66	2,68	2,68	2,61	2,50	2,81	2,68	2,44	2,64	2,58	2,38	-	-	-
EER (EN 14511:2013) - EXC	-	2,79	2,77	2,75	2,69	2,55	2,99	2,78	2,50	2,91	3,13	3,18	2,99	3,00	2,93
ESEER	-	3,83	3,70	3,88	4,08	4,12	4,33	4,39	4,50	4,23	4,36	4,39	3,88	3,80	3,75
Water flow-rate (User Side)	(1) l/s	0,20	0,25	0,37	0,47	0,61	0,73	0,82	0,93	1,19	1,32	1,45	1,72	2,05	2,28
Useful pump discharge head	(1) kPa	52	46	48	44	44	70	65	60	55	48	38	136	117	102
Standard power supply	V	230/1/50	230/1/50	230/1/50	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N
Sound Pressure Level (10m)	dB(A)	32	32	32	37	38	40	40	41	40	41	42	56	59	59
Min. entering air temperature	°C	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Max. leaving water temperature	°C	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Size – WSAN-XIN															
Unit for radiant panels															
A7/W35															
▶ Heating capacity	kW	5,41	6,81	8,70	11,9	14,3	16,5	18,4	19,6	23,8	26,4	30,3	37,2	43,9	50,2
Total power input	kW	1,35	1,71	2,22	2,98	3,61	4,44	4,99	5,22	6,64	7,19	8,31	9,79	11,5	13,4
COP (EN 14511:2013) - PRM	-	4,00	3,98	3,93	3,98	3,96	3,72	3,70	3,76	3,58	3,67	3,65	-	-	-
COP (EN 14511:2013) - EXC	-	4,19	4,12	4,09	4,05	4,07	4,08	3,95	3,91	4,13	4,08	3,95	3,80	3,80	3,74
A35/W18															
▶ Cooling capacity	kW	4,25	6,34	8,07	10,3	13,0	15,9	17,6	19,4	25,4	28,3	32,1	39,8	45,4	50,9
Total power input	kW	1,14	1,74	2,16	2,82	3,50	4,53	4,88	5,52	7,41	8,27	9,60	10,6	11,9	13,8
EER (EN 14511:2013) - PRM	-	3,73	3,65	3,73	3,67	3,72	3,52	3,62	3,53	3,43	3,43	3,34	-	-	-
EER (EN 14511:2013) - EXC	-	3,73	3,64	3,82	3,62	3,76	3,83	3,82	3,65	3,90	3,69	3,91	3,77	3,82	3,68
Terminal units															
A7/W45															
▶ Heating capacity	kW	5,19	6,54	8,25	11,5	13,8	16,2	18,5	20,4	25,8	28,2	31,5	36,7	43,0	49,3
Total power input	kW	1,66	2,09	2,65	3,64	4,42	5,43	6,23	7,17	8,91	9,81	11,4	11,5	13,6	15,7
COP (EN 14511:2013) - PRM	-	3,12	3,14	3,11	3,15	3,12	2,98	2,97	2,85	2,89	2,88	2,77	-	-	-
COP (EN 14511:2013) - EXC	-	3,24	3,23	3,21	3,19	3,19	3,21	3,14	2,93	3,21	3,17	3,23	3,20	3,17	3,14
A35/W7															
▶ Cooling capacity	kW	3,88	5,24	6,11	8,84	11,7	15,5	16,8	19,5	24,0	26,6	29,1	38,2	43,6	49,2
Total power input	kW	1,52	2,04	2,32	3,35	4,45	5,91	6,37	8,37	10,3	11,5	13,4	14,4	16,2	19,1
EER (EN 14511:2013) - PRM	-	2,55	2,57	2,63	2,64	2,63	2,62	2,64	2,33	2,33	2,32	2,18	-	-	-
EER (EN 14511:2013) - EXC	-	2,58	2,55	2,61	2,57	2,57	2,79	2,77	2,38	2,56	2,74	2,67	2,66	2,69	2,58
ESEER	-	3,82	3,71	3,47	4,06	4,43	4,17	4,36	4,30	3,84	4,03	4,23	3,69	3,66	3,55
Radiators															
A7/W55															
▶ Heating capacity	kW	5,05	6,39	8,03	11,0	13,3	15,2	17,7	19,9	24,0	26,6	29,9	34,2	40,1	46,7
Total power input	kW	2,01	2,51	3,25	4,42	5,39	6,56	7,56	8,83	11,1	11,8	13,7	13,6	16,1	18,5
COP (EN 14511:2013) - PRM	-	2,52	2,55	2,47	2,50	2,47	2,31	2,34	2,25	2,17	2,25	2,18	-	-	-
COP (EN 14511:2013) - EXC	-	2,60	2,61	2,54	2,53	2,52	2,46	2,44	2,31	2,35	2,39	2,55	2,51	2,49	2,52
Water flow-rate (User Side)	(1) l/s	0,18	0,25	0,29	0,42	0,55	0,73	0,82	0,92	1,14	1,26	1,38	1,81	2,07	2,34
Useful pump discharge head	(1) kPa	54	48	59	51	57	70	67	60	59	51	43	131	116	98
Standard power supply	V	230/1/50	230/1/50	230/1/50	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N
Sound Pressure Level (10m)	dB(A)	32	32	32	37	38	40	40	41	40	41	42	56	59	59
Min inlet air temperature (D.B.)	°C	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Max. leaving water temperature	°C	60	60	60	60	60	60	60	60	60	60	60	60	60	60

Notes

(*) Dati referred to Excellence version

(1) User side entering/leaving water temperature 12/7 °C, external exchanger entering air 35°C

Performances according to EN 14511:2013

A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.

A7/W45 internal exchanger water 40/45°C; external air temperature 7°C D.B./ 6°C W.B.

A7/W55 internal exchanger water 45/55°C; external air temperature 7°C D.B./ 6°C W.B.

A35/W18 internal exchanger water 23/18°C; external air temperature 35°C

A35/W7 internal exchanger water 12/7°C; external air temperature 35°C

accessories

- ▶ **AMRX** Rubber antivibration mounts
- ▶ **RCTX** Remote control
- ▶ **CMSC2X** Serial communication module with RS485 serial converter kit
- ▶ **KSAX** 100-litre circuit breaker
- ▶ **KTFLX** Hose kit for connection to the chiller/heat pump
- ▶ **KG4UP** Management kit up to 4 units in parallel
- ▶ **PGFCP** Finned coil protection grill
- ▶ **HEDIF** Diffuser for high efficiency axial fan (sizes 131=171)

Key to symbols:

- Accessories separately supplied

WSAN-XIN only:

- **CMACSX** Domestic hot water module
- **ACS300X** 300-litre domestic hot water storage tank (sizes 21=51)
- **ACS500X** 500-litre domestic hot water storage tank (sizes 21=101)
- **ACS35X** 300-litre domestic hot water storage tank with solar coil (sizes 21=51)
- **ACS55X** 500-litre domestic hot water storage tank with solar coil (sizes 21=101)
- **3DHWX** Three-way valve for domestic hot water