

ELFOEnergy Horus

WSAR-MT-E



Heat pump suitable for systems with radiant panels and water terminal units, with a design that guarantees quiet operation.

Reversible heat pump

Air cooled

Outdoor/indoor installation

Capacity from 6,17 to 23 kW**ELFOEnergy Horus**

Standard



CAN



The **ELFOEnergy Horus**, heat pump, ideal for the residential sector and optimized for heating, grants maximum energetic efficiency in the many different conditions of use: water production for radiant panels, terminals and for domestic hot water.

- ▶ Suitable for systems with radiant panels and water room terminals
- ▶ The special configuration allows for very quiet operation
- ▶ New design: none of the operating components (fans, coil and plumbing connections) are visible from the outside
- ▶ Versions for outdoor and indoor installation
- ▶ Room thermostat and programming included



Unit listed on
www.eurovent-certification.com

functions and features

Heat pump



Air cooled



Outdoor installation



R-407C



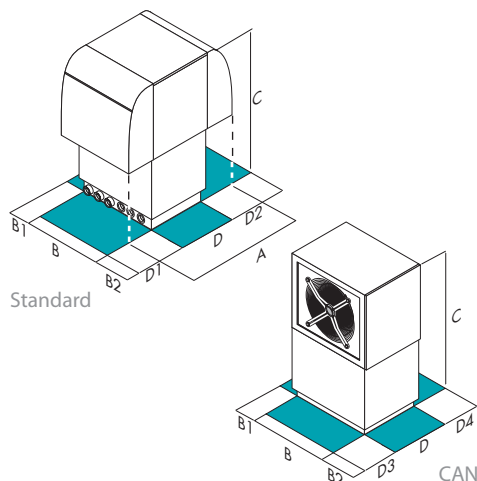
Hermetic Scroll

ELFOControl²

Ice protection system



Vary Flow

dimensions and clearances

Size – WSAR-MT-E		21	25	31	41	51	61	81
A - Length	mm	1420	1420	1420	1420	1420	1835	1835
B - Width	mm	800	800	800	800	800	1250	1250
C - Height	mm	1485	1485	1485	1485	1485	1770	1770
D - Length	mm	600	600	600	600	600	775	775
B1	mm	100	100	100	100	100	100	100
B2	mm	500	500	500	500	500	500	500
D1	mm	2000	2000	2000	2000	2000	2000	2000
D2	mm	2000	2000	2000	2000	2000	2000	2000
D3	mm	1000	1000	1000	1000	1000	1000	1000
D4	mm	1000	1000	1000	1000	1000	1000	1000
Operating weight	kg	216	221	226	231	251	305	365

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.

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

versions and configurations

VOLTAGE:

- ▶ **400TN** Supply voltage 400/3/50+N (Standard)
- ▶ **230M** Supply voltage 230/1/50 (sizes 21÷41)

UNIT INSTALLATION:

- ▶ **KCUX** External metallic hoods kit (Standard)
- ▶ **CAN** Ductable with high efficiency EC fans
- ▶ **SCF** Without hoods

ENERGY EFFICIENCY:

- ▶ **HEOH** High efficiency for heating only

VERSION:

- ▶ **S** Standard Version (Standard)
- ▶ **SUP** Full-optional version

technical data

Size - WSAR-MT-E		21	25	31	41	51	61	81
Unit for radiant panels								
A7/W35								
▶ Heating capacity	kW	6,17	8,21	10,1	11,3	14,1	17,8	23,0
Total power input	kW	1,61	2,10	2,57	2,95	3,64	4,52	6,00
COP (EN 14511:2011)	-	3,82	3,90	3,91	3,83	3,87	3,94	3,84
COP high efficiency option HEOH	-	4,10	4,12	4,10	4,16	4,11	4,14	4,10
A2/W35								
▶ Heating capacity	kW	4,84	6,52	7,87	8,84	11,2	14,0	18,2
Total power input	kW	1,52	1,96	2,39	2,76	3,39	4,18	5,57
COP (EN 14511:2011)	-	3,19	3,33	3,29	3,20	3,30	3,34	3,27
A-5/W35								
▶ Heating capacity	kW	4,38	5,90	7,04	8,00	9,95	12,6	16,3
Total power input	kW	1,49	1,90	2,30	2,67	3,26	4,01	5,32
COP (EN 14511:2011)	-	2,94	3,11	3,06	3,00	3,06	3,13	3,06
A35/W18								
▶ Cooling capacity	kW	6,39	8,44	10,6	11,8	14,4	18,0	22,3
Total power input	kW	2,31	3,05	3,88	4,55	5,71	6,36	8,20
EER (EN 14511:2011)	-	2,76	2,77	2,74	2,60	2,52	2,83	2,72
Terminal units								
A7/W45								
▶ Heating capacity	kW	6,10	8,00	9,76	11,1	13,5	17,2	22,2
Total power input	kW	1,90	2,48	3,04	3,62	4,38	5,32	6,78
COP (EN 14511:2011)	-	3,21	3,22	3,21	3,06	3,08	3,23	3,28
A2/W45								
▶ Heating capacity	kW	5,24	6,94	8,39	9,64	11,7	14,8	19,2
Total power input	kW	1,83	2,37	2,89	3,46	4,18	5,05	6,43
COP (EN 14511:2011)	-	2,87	2,93	2,90	2,79	2,79	2,93	2,99
A-5/W45								
▶ Heating capacity	kW	4,35	5,76	6,98	8,17	9,80	12,2	15,8
Total power input	kW	1,75	2,24	2,74	3,30	3,95	4,76	6,03
COP (EN 14511:2011)	-	2,49	2,57	2,55	2,47	2,48	2,57	2,62
A35/W7								
▶ Cooling capacity	kW	4,65	6,21	8,03	8,98	10,6	13,3	16,3
Total power input	kW	2,02	2,68	3,35	4,04	4,97	5,46	7,05
EER (EN 14511:2011)	-	2,30	2,32	2,39	2,22	2,14	2,44	2,31
ESEER	-	2,55	2,56	2,66	2,52	2,42	2,69	2,47
Supply air flow rate	l/s	694	778	889	944	944	1944	2222
Water flow rate (Utility Side)	(1) l/s	0,29	0,39	0,48	0,54	0,67	0,85	1,09
Useful pump discharge head	(1) kPa	55	47	59	55	28	113	101
Standard power supply	V	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)	(2) dB(A)	31	33	35	36	37	43	44
Min air inlet temperature (W.B.)	(3) °C	-15	-15	-15	-15	-15	-15	-15
Max water outlet temperature	(4) °C	60	60	60	60	60	60	60

Notes

- (1) Data referred to the following conditions : Water to internal exchanger 30/35°C; Outdoor air temperature 7°C DB - 6°C WB
- (2) The sound pressure at 10 m from the external surface of the unit in open field conditions, in accordance with EN 3744.
- (3) Water to internal exchanger 40/45°C
- (4) Outdoor air temperature = 0°C DB; 88% RH

Performances according to EN 14511:2011

A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.
 A2/W35 internal exchanger water 30/35°C; external air temperature 2°C D.B./ 1,1°C W.B.
 A-5/W35 internal exchanger water 30/35°C; external air temperature -5°C D.B./ -5,4°C W.B.
 A7/W45 internal exchanger water 40/45°C; external air temperature 7°C D.B./ 6°C W.B.
 A2/W45 internal exchanger water 40/45°C; external air temperature 2°C D.B./ 1,1°C W.B.
 A-5/W45 internal exchanger water 40/45°C; external air temperature -5°C D.B./ -5,4°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

- ▶ **VEC** High efficiency EC fan
- ▶ **GCEC** High efficiency EC circulation group
- ▶ **CCCA** Copper / aluminium condenser coil with acrylic lining
- ▶ **CCCA1** Copper / aluminium condenser coil with Energy Guard DCC Aluminum
- ▶ **SFSTR4N** Disposal for inrush current reduction, for unit 400/3/50+N
- ▶ **SFSTR1** Disposal for inrush current reduction, for unit 230/1/50 (sizes 21÷41)
- ▶ **PM** Phase monitor
- ▶ **CACSX** Domestic hot water kit control
- ▶ **ACS300X** 300 litres domestic hot water tank (sizes 21÷31)
- ▶ **ACS500X** 500 litres domestic hot water tank
- ▶ **ACS55X** 500 litres domestic hot water tank with solar coil
- ▶ **ACS35X** 300 litres domestic hot water tank with solar coil (sizes 21÷31)
- ▶ **KGPRX** Mixing group control module
- ▶ **HIDH1M** System multifunction keypad (BMS, system accessories, up to 1km)
- ▶ **KSAX** 100 litres hydraulic breaker
- ▶ **3DHW** Built-in 3-way valve for domestic hot water on the unit
- ▶ **3DHWX** Three-way valve for domestic hot water
- ▶ **EH246** Modular integration electric heater 2-4 and 6kW
- ▶ **KVICX** Boiler control kit
- ▶ **SCP3X** Set point compensation according to the outside enthalpy

Key to symbols:

- Accessories supplied separately.