

Reversible heat pump

Air cooled
Outdoor installation
Capacity from 31 to 103 kW

ELFOEnergy Vulcan Medium



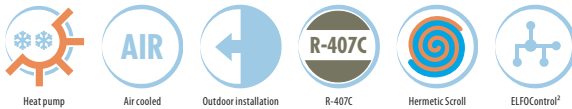
ELFOEnergy Vulcan Medium comprises a series of **high temperature** heat pumps, ideal as a one-stop heating, cooling and hot water solution for centralised systems.

- ▶ Ideal for centralised systems such as residential complexes, hotels and collective applications
- ▶ Operation with outdoor air temperature down to -18°C
- ▶ Hot water production up to 60°C at outdoor temperatures of down to -10°C
- ▶ Dual temperature management and domestic hot water production

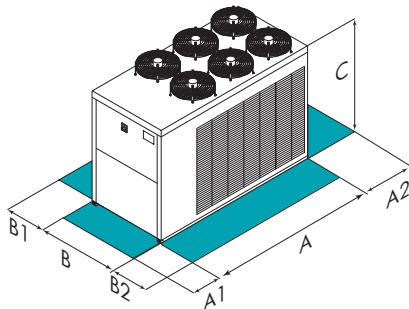


Unit listed on
www.eurovent-certification.com

functions and features



dimensions and clearances



Size – WBAN		82	122	162	202	262	302
A - Length	mm	1928	1928	2328	2328	2932	2932
B - Width	mm	1100	1100	1100	1100	1100	1100
C - Height	mm	1474	1474	1474	1474	1474	1474
A1	mm	700	700	700	700	700	700
A2	mm	700	700	700	700	700	700
B1	mm	700	700	700	700	700	700
B2	mm	700	700	700	700	700	700
Operating weight	kg	420	466	635	670	803	826

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

LOW TEMPERATURE:

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

ENERGY RECOVERY:

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

technical data

Size – WBAN		82	122	162	202	262	302
Unit for radiant panels							
A7/W35							
▶ Heating capacity	kW	31,0	41,4	53,3	73,9	83,3	103
Total power input	kW	7,04	9,93	13,0	17,5	20,6	25,3
COP (EN 14511:2013)	-	4,40	4,17	4,12	4,23	4,05	4,05
COP (EN 14511:2008)	(1) -	4,50	4,29	4,24	4,40	4,19	4,23
A2/W35							
▶ Heating capacity	kW	25,1	37,5	46,3	64,2	72,3	89,5
Total power input	kW	6,88	9,77	12,7	16,9	19,9	24,4
COP (EN 14511:2013)	-	3,65	3,84	3,65	3,79	3,64	3,66
A-5/W35							
▶ Heating capacity	kW	20,3	30,2	37,1	53,5	59,9	74,5
Total power input	kW	6,64	9,48	12,2	16,3	19,0	23,5
COP (EN 14511:2013)	-	3,05	3,19	3,04	3,29	3,16	3,18
A35/W18							
▶ Cooling capacity	kW	30,4	44,3	55,4	75,0	94,5	113
Total power input	kW	8,26	14,0	16,3	24,4	30,7	36,9
EER (EN 14511:2013)	-	3,69	3,18	3,39	3,08	3,07	3,05
Terminal units							
A7/W45							
▶ Heating capacity	kW	29,1	40,3	51,0	71,1	80,4	99,5
Total power input	kW	8,53	12,1	15,5	20,8	24,8	30,8
COP (EN 14511:2013)	-	3,41	3,34	3,28	3,41	3,24	3,23
A2/W45							
▶ Heating capacity	kW	25,1	36,0	44,4	62,6	70,7	87,5
Total power input	kW	8,32	11,8	15,1	20,3	23,9	29,7
COP (EN 14511:2013)	-	3,02	3,04	2,94	3,08	2,96	2,94
A-5/W45							
▶ Heating capacity	kW	20,3	29,2	35,9	52,2	58,6	73,1
Total power input	kW	7,98	11,4	14,4	19,3	22,7	28,3
COP (EN 14511:2013)	-	2,54	2,57	2,49	2,71	2,59	2,58
A35/W7							
▶ Cooling capacity	kW	21,3	32,2	39,7	53,9	65,9	80,3
Total power input	kW	7,79	12,5	14,9	21,9	27,6	32,1
EER (EN 14511:2013)	-	2,73	2,58	2,67	2,46	2,39	2,50
ESEER	-	3,36	3,16	3,22	2,96	2,91	3,05
Radiators							
A7/W55							
▶ Heating capacity	kW	27,4	40,1	48,6	69,3	78,4	98,2
Total power input	kW	10,3	14,9	18,4	25,3	29,9	37,6
COP (EN 14511:2013)	-	2,65	2,69	2,64	2,74	2,62	2,61
A2/W55							
▶ Heating capacity	kW	23,9	35,1	42,4	61,1	69,2	86,7
Total power input	kW	10,1	14,5	17,8	24,3	28,7	36,2
COP (EN 14511:2013)	-	2,38	2,42	2,39	2,52	2,41	2,40
A-5/W55							
▶ Heating capacity	kW	19,6	28,8	34,7	51,2	58,2	72,9
Total power input	kW	9,62	13,8	16,8	22,9	27,1	34,0
COP (EN 14511:2013)	-	2,04	2,09	2,06	2,23	2,15	2,14
W10/W55							
▶ Heating capacity	kW	27,4	40,1	48,6	69,3	78,4	98,2
Total power input	kW	10,3	14,9	18,4	25,3	29,9	37,6
COP (EN 14511:2013)	-	2,65	2,69	2,64	2,74	2,62	2,61
Water flow-rate (User Side)	(2) l/s	1,00	1,50	1,90	2,60	3,10	3,80
Useful pump discharge head	(2) kPa	183	183	173	195	184	201
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
Sound Pressure Level (10m)	dB(A)	47	48	50	50	52	53
Min inlet air temperature (W.B.)	°C	-15	-15	-15	-15	-15	-15
Max. leaving water temperature	°C	60	60	60	60	60	60

Notes

- (1) COP (EN 14511:2008) performance coefficient in heating mode. Ratio between heating capacity supplied and absorbed power in accordance with EN 14511:2008. The absorbed power is the sum of the power absorbed by the compressor + electric auxiliary circuit + percentage of power absorbed by the pump to prevent pressure drops inside the unit
- (2) Data refer to the following conditions: internal water exchanger = 12/7 °C; outdoor air temperature 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.
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.
A7/W55 internal exchanger water 50/55°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W55 internal exchanger water 50/55°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-5/W55 internal exchanger water 50/55°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

- ▶ **1PUR** Single-pump with reduced available head
- ▶ **1PUM** Single-pump with larger available head
- ▶ **1PUHE** High efficiency single inverter pump for primary circuit.
- ▶ **EOL** Operating limit extension
- ▶ **ECHP** External fans with larger available head "ECOBREEZE"
- ▶ **AMRX** Rubber antivibration mounts
- ▶ **CCCA** Copper / aluminium condenser coil with acrylic lining
- ▶ **SFSTR4N** Disposal for inrush current reduction, for unit 400/3/50+N
- ▶ **PFCP** Power factor correction capacitors (cosfi > 0.9)
- ▶ **3DHW** Built-in 3-way valve for domestic hot water on the unit
- ▶ **3DHWX** Three-way valve for domestic hot water
- ▶ **IS4** Compressor insulation
- ▶ **PGFC** Finned coil protection grill
- ▶ **PGFCX** Finned coil protection grill
- ▶ **PM** Phase monitor
- ▶ **PMX** Phase monitor
- ▶ **TCDC** Condensate collection pan with electric heater
- ▶ **CACSX** Domestic hot water kit control
- ▶ **TASRX** Compartment for multifunction keyboard

Key to symbols:

- Accessories separately supplied

