

RV H

Air-cooled heat pumps
With axial fans, capacities from 117 to 1038 kW and screw compressors

EUROVENT
CERTIFIED PERFORMANCE



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R407C



Features

- Available in 17 different sizes
- Heat pump versions
- All versions are supplied for use with R407C
- Version equipped with partial heat recovery is available
- High-reliability screw compressor
- Version HL: Sound insulating cover for low noise operation
- Version HE: Sound insulating cover for low noise operation and with fan-speed control device
- Modular microprocessor control system
- Multilingual operating parameter display
- Plate-type heat exchangers
- Exchangers electric heater
- Axial flow fan units for extremely quiet operation
- Compact size
- Metallic protective cabinet with rustproof polyester paint

Accessories

- **AER485P2:** RS-485 interface for supervision systems with MODBUS protocol.
- **AVX:** Spring anti-vibration mounts. Select the AVX model by using the compatibility table.
- **DCPX:** Low temperature device for operation of outdoor units at ambient temperatures from less than 19 °C down to - 10 °C. **Standard on versions HD and HE.**
- **GP:** Safety grille: protects external coils from accidental impact and hail damage.
- **PRV:** For remote control of all chiller operations.
- **RIF:** Current rephaser. Parallel connection with the motor makes the reduction of input current possible. **This can only be installed when the machine is being made and must therefore be specified when the order is placed.**
- **ROME0:** (Remote Overwatching Modem Enabling Operation) is a device that enables a remote control of a chiller from an ordinary WAP mobile phone. Furthermore it allows to send alarm or pre-alarm SMS messages up to 3 GSM mobile phones which may not be equipped with WAP. **This device includes AER485 accessory, moreover you must add one AER485P2 for each compressor, as well.**
- **SAP:** A large series of storage tanks and pumps is available. As for the dimensions, they are compatible. Please refer to the technical manual.

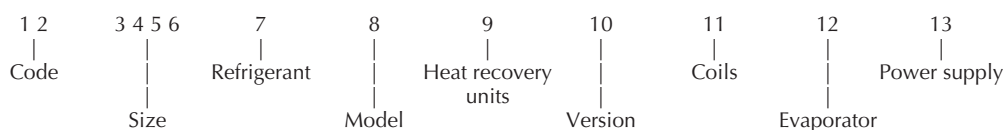
Mod. RV	Compatibility of accessories																	
	0601	0701	0901	1101	1401	1202	1402	1602	1802	2002	2202	2502	2802	3303	3603	3903	4203	
AER485P2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AVX (HL)	29	35	31	32	124	33	36	41	41	40	40	128	44	133	132	132	135	
AVX (HE)	29	35	31	32	124	33	36	41	41	40	40	128	44	133	132	132	135	
DCPX 37	✓	✓	✓	✓								✓		✓(x3)	✓(x2)	✓	✓	
DCPX 36					✓							✓			✓	✓(x2)	✓(x3)	
DCPX 29						✓	✓	✓	✓	✓	✓							
DCPX 30													✓					
GP 60	✓																	
GP 70		✓	✓	✓		✓				✓(x2)	✓(x2)	✓		✓(x3)	✓(x2)	✓	✓	
GP 100					✓		✓					✓	✓(x2)		✓	✓(x2)	✓(x3)	
GP 180								✓	✓									
PRV	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
RIFD	161	161	201	201	301	161	161	161 +	201	201	201	201 +	301	301	201(x2)	201 +	301	
ROMEO	✓	✓	✓	✓	✓	✓	✓	201	(x2)	✓	✓	✓	✓	(x2)	✓	+ 301	301(x2)	(x3)
SAP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

N.B. = the brackets indicated on certain models specify the combination of accessories to be installed.
for example, for the DCPX accessory on model RV 3603, 2 DCPX 37 and 1 DCPX 36 can be fitted.

Selection

By combining the various options, each model can be configured exactly to match even the most specific system requirements.

Configuration rules:



Code:

RV

Size:

0601, 0701, 0901, 1101, 1401
1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
3303, 3603, 3903, 4203

Refrigerant:

° - R407C

Model:

H - Heat Pump

Heat recovery units:

° - Without heat recovery units
D - With desuperheaters

Version:

L - Silenced
E - Extra-Silenced

Coils:

° - Aluminium
R - Copper
S - Tinned copper
V - Painted copper / aluminium version

Evaporator:

° - To PED standards

Power supply:

° - 3~ 400V 50Hz with fuses
8 - 3~ 400V 50Hz with thermal-magnetic cut-outs
2 - 3~ 230V 50Hz with fuses
4 - 3~ 230V 50Hz with thermal-magnetic cut-outs

Warning:

– standard options are shown by symbol °.

Commercial code example: **RV1402HLR8**

This code refers to an RV unit, size 1402, copper condenser coils, evaporator to PED standards and electrical panel for compressors with 3~ 400V 50Hz motors protected by thermal-magnetic cut-outs.

Note that as each option is precisely identified, it is not necessary to specify standard options (shown with °) in the commercial code.

Technical data

Mod. RV H	Vers.	0601	0701	0901	1101	1202	1401	1402	1602	1802
Cooling capacity (kW)	L	127	160	207	254	254	346	320	367	414
	E	117	143	186	232	234	314	286	329	372
Total input power (kW)	L	53	61	83	108	106	129	119	144	166
	E	56	67	91	119	112	140	130	158	183
Total input current (A)	L	92	108	143	182	184	223	211	251	286
	E	96	116	156	200	192	241	227	272	312
Water flow rate (l/h)	L	21840	27520	35600	43690	43690	59510	55040	63120	71210
	E	20120	24600	31990	39900	40250	54010	49190	56590	63980
Pressure drop (kPa)	L	27.1	31.3	38.0	31.9	38.7	47.0	48.5	38.4	40.5
	E	23.0	25.0	30.7	26.6	32.7	39.0	38.6	30.9	32.8
Heating capacity (kW)	L / E	146	175	230	300	292	392	350	405	460
Total input power (kW)	L / E	60	73	96	110	120	149	143	169	192
Total input current (A)	L / E	103	122	163	186	207	278	240	286	326
Water flow rate (l/h)	L / E	25110	30100	39560	51600	50220	67420	60200	69660	79120
Pressure drop (kPa)	L / E	33.3	36.1	42.9	41.5	49.1	53.0	51.6	43.3	47.7
Compressors (n.)	All	1	1	1	1	2	1	2	2	2
Partialisation steps (n.)	All	3	3	3	3	6	3	6	6	6
Total air flow rate (m ³ /h)	L	42000	77500	76000	73000	70000	108000	110000	154000	150000
	E	29000	44500	49000	54500	53000	68000	74000	94000	97000
♪ Sound pressure (dB A)	L	55,5	57	58	58,5	58,5	59,5	59,0	60,5	60,5
	E	48,0	50,5	50,5	51	51	52	52,5	53	53
Fans (n. x kW)	L	2 x 1.4	4 x 1.45	4 x 1.45	4 x 1.45	4 x 1.45	6 x 1.45	6 x 1.45	8 x 1.45	8 x 1.45
	E	2 x 0.6	4 x 0.3	4 x 0.4	4 x 0.8	4 x 0.5	6 x 0.3	6 x 0.3	8 x 0.3	8 x 0.4
Fans (Ø mm)	All	800	800	800	800	800	800	800	800	800
Evaporators (n.)	All	1	1	1	1	1	1	1	1	1
Water connections (V ⁽¹⁾ - Ø)	All	2"	2"	2"	3"	3"	3"	3"	3"	3"

Mod. RV H	Vers.	2002	2202	2502	2802	3303	3603	3903	4203
Cooling capacity (kW)	L	461	508	590	692	732	834	936	1038
	E	418	464	538	628	672	762	852	942
Total input power (kW)	L	191	215	237	258	324	345	366	387
	E	210	238	258	280	354	376	398	420
Total input current (A)	L	325	364	405	446	546	587	628	669
	E	356	400	439	482	592	636	680	726
Water flow rate (l/h)	L	79290	87380	101480	119020	125900	143450	160990	178540
	E	71900	79810	92540	108020	115580	131060	146540	162020
Pressure drop (kPa)	L	28.8	27.2	47.0	47.0	32.0	46.0	47.0	47.0
	E	23.7	22.7	39.0	39.0	33.0	39.0	39.0	39.0
Heating capacity (kW)	L / E	530	600	689	784	891	986	1081	1176
Total input power (kW)	L / E	206	220	259	298	330	369	408	447
Total input current (A)	L / E	350	373	464	556	558	650	742	834
Water flow rate (l/h)	L / E	91160	103200	118510	134850	153250	169590	185930	202270
Pressure drop (kPa)	L / E	36.9	37.3	53.0	53.0	42.0	53.0	53.0	53.0
Compressors (n.)	All	2	2	2	2	3	3	3	3
Partialisation steps (n.)	All	6	6	6	6	6	9	9	9
Total air flow rate (m ³ /h)	L	145000	143000	180000	216000	219000	254000	289000	320000
	E	102000	108000	125000	136000	163500	182000	193000	240000
♪ Sound pressure (dB A)	L	61	61	61,5	62	63	63	63	63,0
	E	53,5	53,5	54	54,5	55	55	55,5	55,5
Fans (n. x kW)	L	8 x 1.45	8 x 1.45	10 x 1.3	12 x 1.4	12 x 1.4	14 x 1.3	16 x 1.4	18 x 1.4
	E	8 x 0.5	8 x 0.8	10 x 0.6	12 x 0.5	12 x 0.5	14 x 0.6	16 x 0.7	18 x 0.7
Fans (Ø mm)	All	800	800	800	800	800	800	800	800
Evaporators (n.)	All	1	1	1 + 1	2	3	2 + 1	1 + 2	3
Water connections (V ⁽¹⁾ - Ø)	All	3"	3"	3"	3"	3"	3"	3"	3"

Power supply = 3~ 400V 50 Hz.

Performance values refer to the following conditions:

♪ Sound pressure measured in free field conditions at distance of 10 m with direction factor = 2.

In accordance with ISO 3744 regulations

■ Cooling:

- water outlet temperature 7 °C;
- ambient air temperature 35 °C;

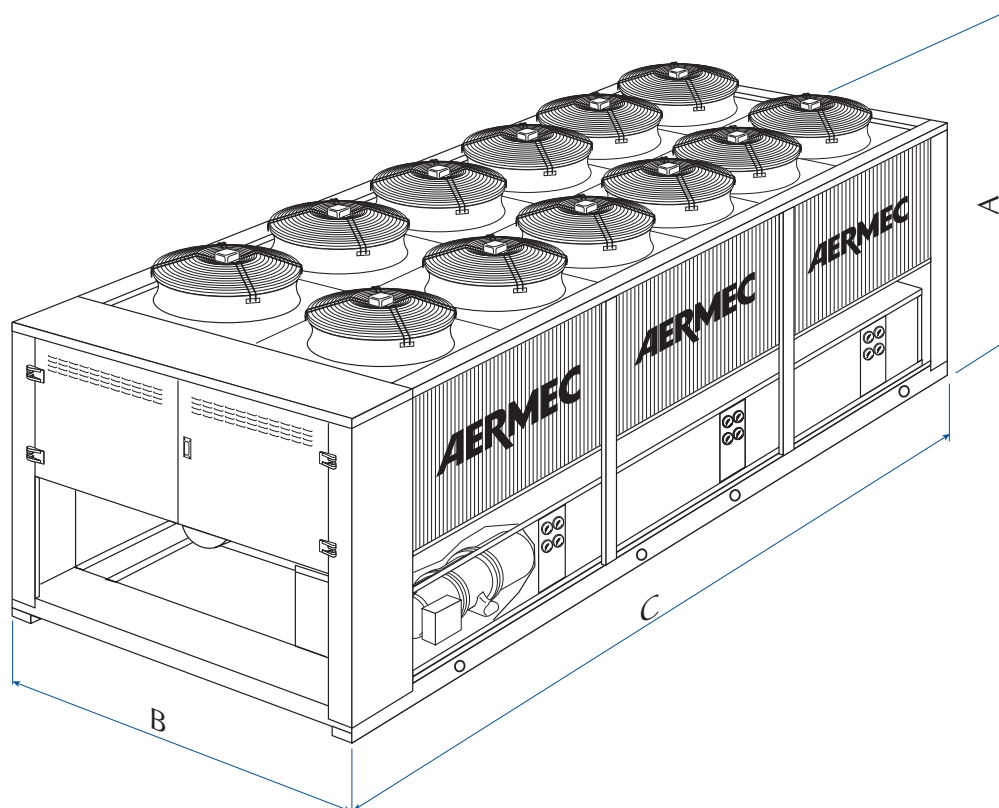
- Δt = 5 °C.

■ Riscaldamento:

- water outlet temperature 50 °C;
- ambient air temperature 7 °C D.B. 6 °C W.B.; Δt = 5 °C.

⁽¹⁾ V = Victaulic connection

Dimensions (mm)



Mod. RV HL / HE		0601	0701	0901	1101	1202	1401	1402	1602	1802
Height	A	2250	2310	2310	2310	2310	2310	2310	2325	2325
Width	B	1550	2200	2200	2200	2200	2200	2200	2200	2200
Depth	C	2700	3250	3250	3250	3250	3850	3850	5100	5100
Weight	Kg	1500	2075	2165	2510	2745	2950	3115	3850	4040

Mod. RV HL / HE		2002	2202	2502	2802	3303	3603	3903	4203
Height	A	2325	2325	2325	2325	2325	2325	2325	2325
Width	B	2200	2200	2200	2200	2200	2200	2200	2200
Depth	C	6105	6105	6705	7305	8955	9550	10155	10765
Weight	Kg	4680	5030	5475	5830	7510	7920	8260	8640

The technical data in this document are not binding.
Aermec S.p.A. reserves the right to make whatever modifications
it deems necessary to improve the product at any time.

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