

RVB H

Air-cooled heat pumps
With axial fans, capacities from 117 to 972 kW and twin-screw compressors

R407C



Aermec adheres to the EUROVENT Certification Programme. The products concerned appear in the EUROVENT Certified Products Guide.



Features

- Available in 18 different sizes
- Heat pump versions
- All versions are supplied for use with R407C
- Version equipped with partial heat recovery is available
- High-reliability twin screw-type 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-B:** 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.**
- **ROMEO: (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.

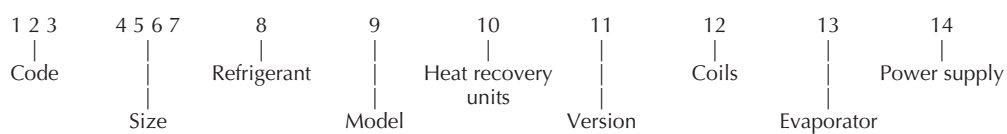
Mod. RVB H	Compatibility of accessories																	
	0601	0701	0801	0901	1101	1401	1202	1402	1602	1802	2002	2202	2502	2802	3303	3603	3903	4203
AER485P2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AVX	101	103	103	103	123	124	123	107	119	122	110	112	130	131	136	132	137	137
DCPX 37	✓	✓	✓	✓	✓								✓		✓(x3)	✓(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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RIF-B	161	161	201	241	241	301	161	161	201	241	241	241	241 +	301	241	241(x2)	241 +	301
ROMEO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
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 RVB 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:

RVB

Size:

0601, 0701, 0801, 0901, 1101, 1401
1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
3303, 3603, 3903, 4253

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: **RVB1402HLR8**

This code refers to an RVB 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. RVB H	Vers.	0601	0701	0801	0901	1101	1202	1401	1402	1602
Cooling capacity (kW)	L	135	160	184	210	262	270	324	320	368
	E	117	135	155	181	222	234	268	270	310
Total input power (kW)	L	51	60	70	79	92	103	120	118	141
	E	57	66	77	88	101	114	135	129	153
Total input current (A)	L	87	102	119	137	155	192	203	200	238
	E	96	111	129	151	169	209	224	217	258
Water flow rate (l/h)	L	23220	27520	31650	36120	45060	46440	55730	55040	63300
	E	20120	23220	26660	31130	38180	40250	46100	46440	53320
Pressure drop (kPa)	L	31	31	30	40	33	31	31	33	28
	E	24	23	22	30	24	24	21	24	20
Heating capacity (kW)	L / E	152	174	198	236	282	304	375	348	396
Total input power (kW)	L / E	58	67	77	90	103	116	139	132	153
Total input current (A)	L / E	99	115	131	156	175	197	244	221	258
Water flow rate (l/h)	L / E	26140	29930	34060	40590	48500	52290	64500	59860	68110
Pressure drop (kPa)	L / E	37	35	31	42	37	38	38	36	30
Compressors (n.)	All	1	1	1	1	1	2	1	2	2
Partialisation steps (n.)	All	3	3	3	3	3	6	3	6	6
Total air flow rate (m ³ /h)	L	36000	79000	76000	76000	73000	70000	108000	110000	154000
	E	25000	34000	44000	44000	57000	53000	68000	74000	94000
♪ Sound pressure (dB A)	L	59,5	61	62	62	62,5	62,5	63,5	63,5	64,5
	E	52	54,5	54,5	54,5	55	55	56	56,5	57
Fans (n. x kW)	L	2 x 1.3	4 x 1.3	4 x 1.3	4 x 1.3	4 x 1.3	4 x 1.45	6 x 1.45	6 x 1.45	8 x 1.45
	E	2 x 0.6	4 x 0.3	4 x 0.4	4 x 0.4	4 x 0.8	4 x 0.8	6 x 0.4	6 x 0.4	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	2	1	2	2
Water connections (V ⁽¹⁾ - Ø)	All	2"	2"	2"	3"	3"	2"	3"	2"	2"

Mod. RVB H	Vers.	1802	2002	2202	2502	2802	3303	3603	3903	4203
Cooling capacity (kW)	L	420	472	524	560	648	708	796	884	972
	E	362	403	444	474	536	618	680	742	804
Total input power (kW)	L	159	171	184	209	240	267	298	329	360
	E	176	189	202	233	270	294	331	370	407
Total input current (A)	L	275	292	310	354	406	453	505	557	609
	E	302	321	339	386	448	486	548	610	672
Water flow rate (l/h)	L	72240	81180	90130	96320	111460	121780	136910	152050	167180
	E	62260	69320	76370	81530	92190	106300	116960	127620	138290
Pressure drop (kPa)	L	40	40	33	30	31	27	30	30	31
	E	30	29	24	22	21	21	23	21	21
Heating capacity (kW)	L / E	472	518	564	657	750	846	939	1032	1125
Total input power (kW)	L / E	178	192	206	244	281	307	350	395	423
Total input current (A)	L / E	312	331	350	421	488	531	594	664	732
Water flow rate (l/h)	L / E	81180	89100	97010	113000	129000	145510	161510	177500	193500
Pressure drop (kPa)	L / E	46	44	36	36.5	39	41	37	37	37
Compressors (n.)	All	2	2	2	1 + 1	2	3	2 + 1	1 + 2	3
Partialisation steps (n.)	All	6	6	6	6	6	9	9	9	9
Total air flow rate (m ³ /h)	L	150000	145000	143000	180000	216000	219000	254000	289000	320000
	E	97000	102000	108000	125000	136000	163500	182000	193000	240000
♪ Sound pressure (dB A)	L	64,5	65	65	65,5	66	63	67	67,0	67,0
	E	57	57,5	57,5	58	54,5	55,5	59,5	59,5	59,5
Fans (n. x kW)	L	8 x 1.45	8 x 1.45	8 x 1.45	10 x 1.4	12 x 1.4	12 x 1.4	14 x 1.4	16 x 1.4	18 x 1.4
	E	8 x 0.4	8 x 0.45	8 x 0.6	10 x 0.6	12 x 0.6	12 x 0.6	14 x 0.6	16 x 0.7	18 x 0.7
Fans (Ø mm)	All	800	800	800	800	800	800	800	800	800
Evaporators (n.)	All	2	2	2	1 + 1	2	3	2 + 1	1 + 2	3
Water connections (V ⁽¹⁾ - Ø)	All	3"	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:

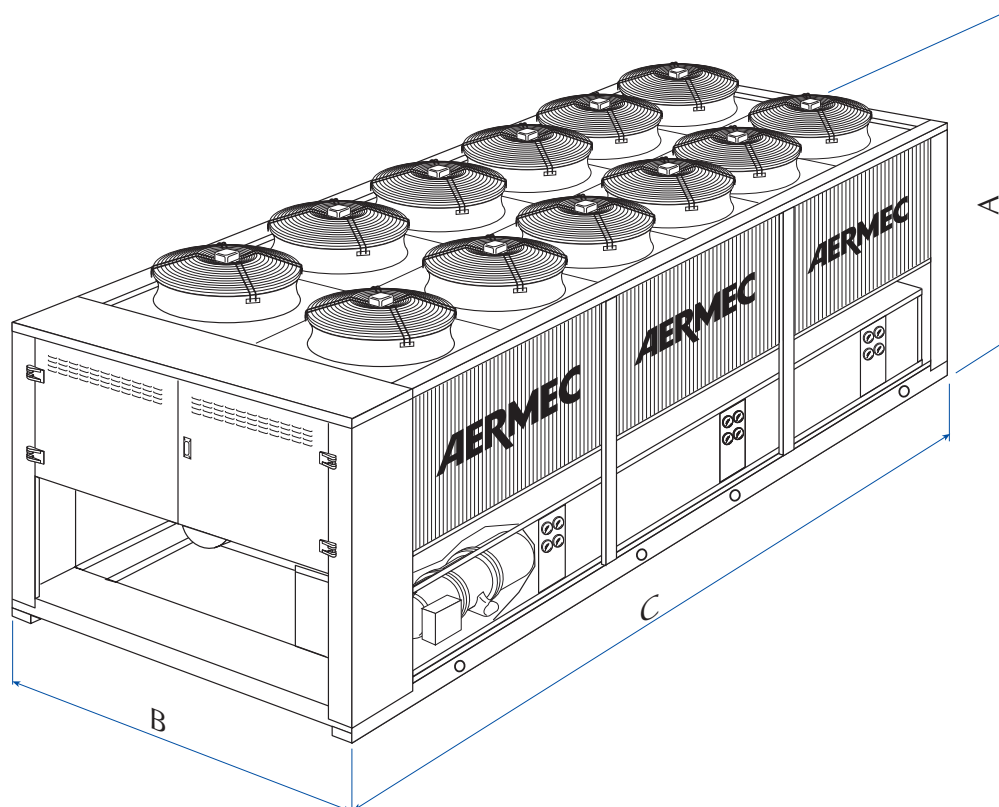
- water outlet temperature 7 °C;
- ambient air temperature 35 °C;
- Δt = 5 °C.

■ Heating:

- 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 RVB HL / HE		0601	0701	0801	0901	1101	1202	1401	1402	1602
Height	A	2250	2310	2310	2310	2310	2310	2310	2310	2325
Width	B	1550	2200	2200	2200	2200	2200	2200	2200	2200
Depth	C	2700	3250	3250	3250	3250	3250	3850	3850	5100
Weight	Kg	1580	2260	2325	2385	2953	2910	3190	3629	4221

Mod RVB HL / HE		1802	2002	2202	2502	2802	3303	3603	3903	4203
Height	A	2325	2325	2325	2325	2325	2325	2325	2325	2325
Width	B	2200	2200	2200	2200	2200	2200	2200	2200	2200
Depth	C	5100	6105	6105	6705	7305	8955	9550	10155	10765
Weight	Kg	4440	5278	5847	5905	6250	8170	8570	8900	9180

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.

Aermec S.p.A.
Via Roma, 44 - 37040 Bevilacqua (VR) - Italy
Tel. +39 04 42 63 31 11 - Telefax +39 044 29 35 66
www.aermec.com