

## RV

Air-cooled water chillers  
With axial fans, capacities from 118 to 1200 kW and screw compressors



### R407C

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



### Features

- Available in 20 different sizes
- Cooling only versions
- All versions are supplied for use with R407C
- Version equipped with partial or total heat recovery is available
- High-reliability screw compressor
- Version L, A: Sound insulating cover for low noise operation
- Version E: 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 D and E.**
- **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.**
- **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. RV	Compatibility of accessories																			
	0601	0701	0901	1101	1401	1601	1202	1402	1602	1802	2002	2202	2502	2802	3002	3202	3603	3903	4203	4803
AER485P2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AVX (L)	29	30	31	31	32	33	34	33	36	37	38	40	42	43	44	44	48	49	45	45
AVX (A)	29	35	31	34	32	39	33	33	37	41	40	40	42	44	46	46	48	47	45	45
AVX (E)	29	35	34	34	32	39	33	36	41	41	40	40	42	44	46	46	48	47	45	45
DCPX 37	✓	✓	✓	✓									✓				✓(x2)	✓		
DCPX 36					✓	✓							✓				✓	✓(x2)	✓(x3)	✓(x3)
DCPX 29						✓(**)	✓	✓	✓	✓	✓	✓								
DCPX 30														✓	✓	✓				
GP 60	✓	✓(L)																		
GP 70		✓(*)	✓	✓			✓				✓(x2)	✓(x2)	✓				✓(x3)(*)	✓(x3)(*)	✓(x2)	✓
GP 100					✓	✓(L)		✓	✓(L)				✓	✓(x2)	✓(x2)(L)	✓(x2)(L)	✓	✓(x2)	✓(x3)	✓(x3)
GP 180						✓(*)			✓(*)	✓										
PRV	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RIFD	161	161	201	201	301	301	161 (x2)	161 (x2)	161 + 201	201 (x2)	201 (x2)	201 (x2)	201 + 301	301 (x2)	301 (x2)	301 (x2)	201(x2) + 301	201 + 301(x2)	301 (x3)	301 (x3)
ROMEO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SAP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

(L) = may be used with silent versions (L) only, cooling only.

(\*) = may be used with all RV units, excepting silent versions (L), cooling only.

(\*\*) = High temperature version.

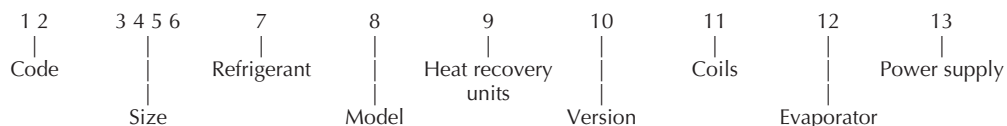
N.B. = the brackets indicated on certain models specify the combination of accessories to be installed.

Es.: 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, 1601  
1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802, 3002, 3202  
3603, 3903, 4203, 4803

#### Refrigerant:

° - R407C  
Y - R407C with water outlet down to -6 °C

#### Model:

° - Cooling only

#### Heat recovery units:

° - Without heat recovery units  
D - With desuperheaters  
T - With total recovery units

#### Version:

L - Silenced  
A - High temperature  
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 °;  
– for cooling only versions, it is possible only the combination between options Y and A (please, contact the Headquarter for particular needs);  
\* = for combining with L and E versions please contact us.

Commercial code example: **RV1402LR8**

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	Vers.	0601	0701	0901	1101	1401	1601	1202	1402	1602	1802
Cooling capacity (kW)	L	131	153	205	270	338	388	262	306	358	410
	A	133	169	224	280	349	400	267	338	392	448
	E	118	144	199	260	314	376	235	287	342	398
Total input power (kW)	L	51	61	80	105	128	161	102	122	141	160
	A	50	55	77	103	123	153	99	110	132	153
	E	55	70	93	119	145	178	109	140	163	186
Total input current (A)	L	91	108	145	188	228	318	182	222	253	302
	A	90	105	139	180	223	316	179	204	244	277
	E	97	115	153	193	228	331	193	227	268	305
Water flow rate (l/h)	L	22530	26320	35260	46440	58140	66740	45060	52630	61580	70520
	A	22880	29070	38530	48160	60030	68800	45920	58140	67420	77060
	E	20300	24770	34230	44720	54010	64670	40420	49360	58820	68460
Pressure drop (kPa)	L	29	29	37	36	34	29	43	41	36	43
	A	30	35	45	38	36	31	44	50	44	49
	E	23	25	35	34	29	27	34	36	33	38
Compressors (n.)	All	1	1	1	1	1	1	2	2	2	2
Partialisation steps (n.)	All	3	3	3	3	3	3	6	6	6	6
Total air flow rate (m <sup>3</sup> /h)	L	39000	39000	82000	80000	110000	107000	80000	112000	111000	162000
	A	36000	79000	75300	72000	108000	158000	73800	118500	154300	148000
	E	25000	34000	44000	57000	68000	83000	50000	62000	78000	88000
♪ Sound pressure (dB A)	L	55,5	57	58	59	60	59	59	60,0	61	61
	A	55,5	57	58	58,5	59	60	58,5	59	60,5	60,5
	E	44	46,5	46,5	47	48	49	47	48,0	49	49
Fans (n. x kW)	L	2 x 1.3	2 x 1.3	4 x 1.3	4 x 1.3	6 x 1.4	6 x 1.4	4 x 1.3	6 x 1.4	6 x 1.4	8 x 1.3
	A	2 x 1.4	4 x 1.3	4 x 1.4	4 x 1.4	6 x 1.4	8 x 1.3	4 x 1.4	6 x 1.3	8 x 1.3	8 x 1.4
	E	2 x 0.6	4 x 0.3	4 x 0.4	4 x 0.8	6 x 0.5	8 x 0.5	4 x 0.5	6 x 0.3	8 x 0.37	8 x 0.4
Fans (Ø mm)	All	800	800	800	800	800	800	800	800	800	800
Evaporators (n.)	All	1	1	1	1	1	1	1	1	1	1
Water connections (V <sup>(1)</sup> - Ø)	All	2"	2"	2"	3"	3"	3"	3"	3"	3"	3"

Mod. RV	Vers.	2002	2202	2502	2802	3002	3202	3603	3903	4203	4803
Cooling capacity (kW)	L	475	540	608	676	726	776	878	946	1014	1164
	A	503	560	628	698	748	800	908	976	1045	1200
	E	459	520	574	628	690	752	834	888	942	1128
Total input power (kW)	L	185	210	233	256	289	322	338	361	384	483
	A	179	206	226	245	276	306	328	348	368	460
	E	212	237	263	289	322	355	382	408	434	532
Total input current (A)	L	332	375	416	457	546	635	604	644	685	953
	A	318	359	403	446	533	620	582	625	668	930
	E	346	386	433	480	567	654	626	673	721	981
Water flow rate (l/h)	L	81700	92880	104580	116270	124870	133470	151020	162710	174410	200210
	A	86520	96320	108020	120060	128660	137600	156180	167870	179740	206400
	E	78950	89440	98730	108020	118680	129340	143450	152740	162020	194020
Pressure drop (kPa)	L	32	32	33	30	30	27	33	30	30	27
	A	36	35	35	32	32	28	35	35	32	28
	E	30	30	29	26	27	25	30	30	26	25
Compressors (n.)	All	2	2	2	2	2	2	3	3	3	3
Partialisation steps (n.)	All	6	6	6	6	6	6	9	9	9	9
Total air flow rate (m <sup>3</sup> /h)	L	162000	160000	190000	220000	217000	214000	270000	300000	300000	300000
	A	148000	144000	180000	216000	228000	237000	252000	288000	320000	320000
	E	100000	114000	125000	136000	150000	160000	182000	215000	240000	240000
♪ Sound pressure (dB A)	L	61	61,5	62	62,5	63	63	63	63,5	64	64,5
	A	61,0	61	61,5	62	62	63	62,5	63	63	63,5
	E	49,5	49,5	50	50,5	50,5	50,5	51	51,5	51,5	52
Fans (n. x kW)	L	8 x 1.3	8 x 1.3	10 x 1.3	12 x 1.4	12 x 1.4	12 x 1.4	14 x 1.3	16 x 1.4	18 x 1.4	18 x 1.4
	A	8 x 1.4	8 x 1.4	10 x 1.4	12 x 1.4	12 x 1.3	12 x 1.3	14 x 1.4	16 x 1.4	18 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	12 x 0.5	14 x 0.6	16 x 0.7	18 x 0.7	18 x 0.7
Fans (Ø mm)	All	800	800	800	800	800	800	800	800	800	800
Evaporators (n.)	All	1	1	2	2	2	2	3	3	3	3
Water connections (V <sup>(1)</sup> - Ø)	All	3"	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.

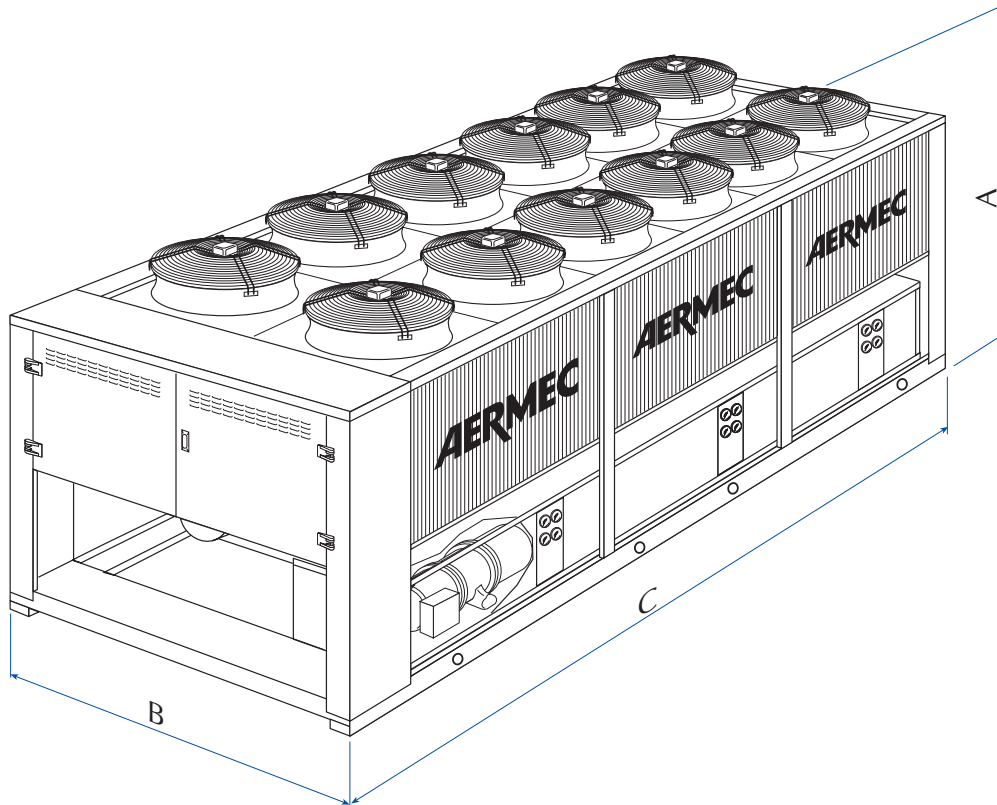
In accordance with ISO 3744 regulations

<sup>(1)</sup> V = Victaulic connection

■ Cooling:

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

## Dimensions (mm)



<b>Mod. RV</b>	<b>Vers.</b>	<b>0601</b>	<b>0701</b>	<b>0901</b>	<b>1101</b>	<b>1401</b>	<b>1601</b>	<b>1202</b>	<b>1402</b>	<b>1602</b>	<b>1802</b>
Height (A)	L	2250	2250	2310	2310	2310	2310	2310	2310	2310	2325
	A	2250	2310	2310	2310	2310	2325	2310	2310	2325	2325
	E	2250	2310	2310	2310	2310	2325	2310	2310	2325	2325
Width (B)	L	1550	1550	2200	2200	2200	2200	2200	2200	2200	2200
	A	1550	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E	1550	2200	2200	2200	2200	2200	2200	2200	2200	2200
Depth (C)	L	2700	2700	3250	3250	3850	3850	3250	3850	3850	5100
	A	2700	3250	3250	3250	3850	5100	3250	3850	5100	5100
	E	2700	3250	3250	3250	3850	5100	3250	3850	5100	5100
Weight (Kg)	L	1380	1715	1970	2230	2635	3005	2465	2810	3110	3600
	A	1450	2015	2085	2410	2815	3430	2645	2995	3665	3830
	E	1480	2045	2275	2440	2845	3460	2705	3055	3935	4110
<b>Mod. RV</b>	<b>Vers.</b>	<b>2002</b>	<b>2202</b>	<b>2502</b>	<b>2802</b>	<b>3002</b>	<b>3202</b>	<b>3603</b>	<b>3903</b>	<b>4203</b>	<b>4803</b>
Height (A)	L	2325	2325	2325	2325	2325	2325	2325	2325	2325	2325
	A	2325	2325	2325	2325	2325	2325	2325	2325	2325	2325
	E	2325	2325	2325	2325	2325	2325	2325	2325	2325	2325
Width (B)	L	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Depth (C)	L	6105	6105	6705	7305	7305	7305	9550	10155	10765	10765
	A	6105	6105	6705	7305	8955	8955	9550	10155	10765	10765
	E	6105	6105	6705	7305	8955	8955	9550	10155	10765	10765
Weight (Kg)	L	4145	4405	4785	5100	5470	5840	6685	7200	7555	8665
	A	4440	4765	5145	5470	6120	6575	7425	7745	8105	8745
	E	4660	4825	5205	5530	6420	6636	7515	7835	8195	8835