

NSB

Air cooled chillers
With axial fans and power ratings from 238 to 1480 kW with two-screw compressor

R134a

standard versions⁽¹⁾



Aermec adhere to the EUROVENT Certification program. The products concerned appear in the EUROVENT Certified product guide.



Operating limits up to 44 °C

Available with pumping assembly

Features

- Available in 32 different sizes
- Cooling only versions
- The versions are made with R134 gas
- Available versions fitted with partial and total heat recovery unit
- High efficiency volute compressors with quiet functioning and with regulation of refrigerating capacity by means of continuous modulation from 40 to 100%. **(25-100% with accessory electronic valve)**
- Possibility of also having a **pump assembly** (see configurator) that includes:
 - 1 pump, or 1 pump plus 1 reserve pump
 - two 25 litre expansion tanks
 - charging assembly
- Standard Version (°):
 - **Operating limits up to 44 °C** room air temperature.
 - Acoustic protection cover on the compressor for silent functioning
- Version L:
 - Acoustic protection cover on the compressor for silent functioning
 - Fan-speed control device
 - Muffler on the pressing line.
- Modular microprocessor control system
- Multilingual operating parameter display.
- Tubular band exchanger optimised for R134a gas.
- Axial flow fan units for extremely quiet operation
- Compact size
- Metallic protective cabinet with rustproofing polyester paint.

Note⁽¹⁾ In addition to these versions (°) and L the following versions are also available:
A - High efficiency
E - High efficiency in muffled operation. For more information, please refer to the dedicated sheet.

Accessories

- **AER 485P2:** RS-485 interface for supervision systems with MODBUS protocol.
- **AVX:** Sprung shock absorber supports. Select the AVX model from the technical booklet.
- **DCPX:** Low temperature device for operation of outdoor units at ambient temperatures from less than 19 °C down to - 10 °C. Standard for versions D, and L.
- **KRS:** Exchanger electrical element **to be installed in the factory**
- **SOLENOID VALVE** that permits modulation between 25 and 100% inclusive
- **GP:** Safety grille: protects external batteries from accidental impact and hail damage. **To be installed in the factory**
- **PRV:** This allows the refrigerator command operations to be given from a distance.
- **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.** Select the RIF model from the technical booklet.
- **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. The set includes the AER485. The AER485P2 accessory must be added to this kit.

Technical data

Mod. NSB	Vers.	1251	1401	1601	1801	2101	2401	1402	1602	1802
Cooling capacity (kW)	(°)	259	294	336	385	443	493	282	317	358
	L	238	265	308	361	412	454	259	287	325
Total input power (kW)	(°)	91	101	117	138	155	171	96	112	129
	L	97	110	124	147	162	185	101	118	137
E.E.R.	(°)	2,85	2,91	2,87	2,79	2,86	2,88	2,94	2,83	2,78
	L	2,45	2,41	2,48	2,46	2,54	2,45	2,56	2,43	2,37
Total input current (A)	(°)	159	175	197	227	262	287	169	195	216
	L	162	186	206	239	270	307	171	200	205
Water flow rate (l/h)	(°)	44.550	50.570	57.790	66.220	76.200	84.800	48.500	54.520	61.580
	L	40.940	45.580	52.980	62.090	70.860	78.090	44.550	49.360	55.900
Compressor	No.	1	1	1	1	1	1	2	2	2
Capacity step control	%	40 - 100								
♪ Sound pressure (dB A)	°	62	63	65	65	66	66	64	65	65
	L	54	55	57	57	58	58	56	57	57
Air flow rate (m³/h)	(°)	116.000	110.000	110.000	106.000	145.000	140.000	110.000	110.000	106.000
	L	82.000	82.000	82.000	80.000	104.000	96.000	74.000	74.000	74.000
Fans (No.)	(°) - L	6	6	6	6	8	8	6	6	6
Evaporators (1)	No.	1	1	1	1	1	1	1	1	1

Mod. NSB	Vers.	2002	2202	2352	2502	2652	2802	3002	3202	3402
Cooling capacity (kW)	(°)	404	450	486	503	541	578	629	671	721
	L	372	420	443	459	495	530	573	616	669
Total power input (kW)	(°)	151	168	169	176	192	204	219	235	256
	L	157	177	180	187	203	219	234	248	271
E.E.R.	(°)	2,68	2,68	2,88	2,86	2,82	2,83	2,87	2,86	2,82
	L	2,37	2,37	2,46	2,45	2,44	2,42	2,45	2,48	2,47
Total input current (A)	(°)	256	289	291	304	330	350	372	394	424
	L	261	295	301	314	340	363	392	411	444
Water flow rate (l/h)	(°)	69.490	77.400	83.590	86.520	93.050	99.420	108.190	115.410	124.010
	L	63.980	72.240	76.200	78.950	85.140	91.160	98.560	105.950	115.070
Compressor	No.	2	2	2	2	2	2	2	2	2
Capacity step control	%	40 - 100								
♪ Sound pressure (dB A)	°	66	66	65	66	66	66	67	67	67
	L	58	58	58	58	58	59	58	59	59
Air flow rate (m³/h)	(°)	140.000	138.000	152.000	152.000	182.000	182.000	220.000	220.000	216.000
	L	92.000	98.000	108.000	108.000	134.000	136.000	164.000	164.000	162.000
Fans (No.)	(°) - L	8	8	8	8	10	10	12	12	12
Evaporators (1)	No.	1	1	1	1	1	1	2	2	2

Mod. NSB	Vers.	3602	3902	4202	4502	4802	5003	5203	5403	5703
Refrigerating capacity (kW)	(°)	771	828	879	936	987	1,057	1,106	1,156	1,213
	L	722	773	815	866	907	977	1,030	1,083	1,134
Total input power (kW)	(°)	277	294	310	326	342	373	394	415	432
	L	294	308	332	347	370	395	418	440	455
E.E.R.	(°)	2,78	2,82	2,84	2,87	2,89	2,83	2,81	2,79	2,81
	L	2,46	2,51	2,45	2,50	2,45	2,47	2,46	2,46	2,49
Total input current (A)	(°)	454	489	514	549	574	621	651	681	716
	L	478	508	545	576	613	650	683	716	747
Water flow rate (l/h)	(°)	132.610	142.420	151.190	160.990	169.760	181.800	190.230	198.830	208.640
	L	124.180	132.960	140.180	148.950	156.000	168.040	177.160	186.280	195.050
Compressor	No.	2	2	2	2	2	3	3	3	3
Capacity step control	%	40 - 100								
♪ Sound pressure (dB A)	°	67	68	68	68	68	69	69	69	69
	L	60	60	60	60	60	61	61	61	61
Air flow rate (m³/h)	(°)	212.000	251.000	246.000	285.000	280.000	326.000	322.000	318.000	357.000
	L	160.000	184.000	176.000	200.000	192.000	244.000	242.000	240.000	264.000
Fans (No.)	(°) - L	12	14	14	16	16	18	18	18	20
Evaporators (1)	No.	2	2	2	2	2	3	3	3	3

(1) = Shell & tube
 Supply voltage = 3~ 400V 50 Hz. Performance values refer to the following conditions :

■ Cooling:
 Water inlet temperature 12°C
 Water outlet temperature 7°C
 outside air temperature 35 °C
 $\Delta t = 5$ °C.

♪ Sound Pressure:
 Measured in free field conditions at distance of 10 m and direction factor = 2. In accordance with the ISO 3744

Mod. NSB	Vers.	6003	6303	6603	6903	7203
Cooling capacity (kW)	(°)	1.264	1.321	1.372	1.430	1.480
	L	1.176	1.227	1.268	1.319	1.361
Total input power (kW)	(°)	448	465	481	498	514
	L	479	493	517	532	555
E.E.R.	(°)	2.82	2.84	2.85	2.87	2.88
	L	2.46	2.49	2.45	2.48	2.45
Total input current (A)	(°)	741	776	801	836	861
	L	784	815	852	883	920
Water flow rate (l/h)	(°)	217.410	227.210	235.980	245.960	254.560
	L	202.270	211.040	218.100	226.870	234.090
No. of compressors		3	3	3	3	3
Capacity step control	%			40 - 100		
Sound pressure (dB A)	°	69	69	69	70	70
	L	61	61	61	61	62
Air flow rate (m³/h)	(°)	352.000	391.000	386.000	425.000	420.000
	L	256.000	280.000	272.000	296.000	288.000
Fans (No.)	(°) - L	20	22	22	24	24
Evaporators (1)	No.	3	3	3	3	3

(1) = Shell & tube

Supply voltage = 3~ 400V 50 Hz. Performance values refer to the following conditions :

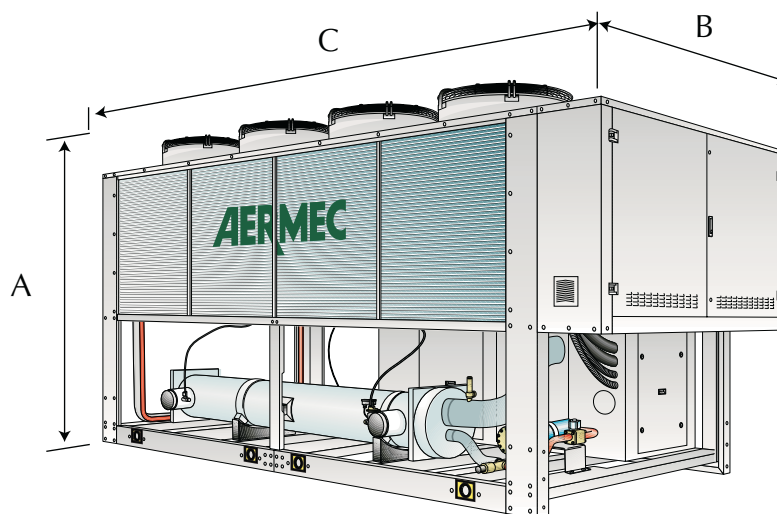
■ Cooling:

Water inlet temperature 12°C
Water outlet temperature 7°C
outside air temperature 35 °C
 $\Delta t = 5$ °C.

♪ Sound Pressure:

Measured in free field conditions at distance of 10 m and direction factor = 2. In accordance with the ISO 3744

Dimensions (mm)



Mod. NSB		1251	1401	1601	1801	2101	2401	1402	1602	1802	2002	2202	2352
Height (A)		2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450
Width (B)		2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200
Depth (C)	°/L	3780	3.780	3.780	3.780	4.770	4.770	3.780	3.780	3.780	4.770	4.770	5.750
Weight	kg °/L	2910	3060	3150	3650	4230	4570	3250	3270	3460	4270	4740	5140

Mod. NSB		2502	2652	2802	3002	3202	3402	3602	3902	4202	4502	4802	5003
Height (A)		2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450
Width (B)		2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200
Depth (C)	°/L	5.750	5.750	5.750	7.160	7.160	7.160	7.160	8.150	8.150	9.140	9.140	10.540
Weight	kg °/L	5310	5320	5330	6180	6270	6770	7280	7830	8180	8750	9090	9830

Mod. NSB		5203	5403	5703	6003	6303	6603	6903	7203
Height (A)		2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450
Width (B)		2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200
Depth (C)	°/L	10.540	10.540	11.530	11.530	12.520	12.520	13.510	13.510
Weight	kg °/L	10180	10530	11230	11390	12210	12250	13230	13570

The technical data in this document is not binding. Aermec S.p.A. shall have the right to introduce at any time whatever modifications deemed necessary for the improvement of the product.

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