



Wine has been a constant throughout the history of civilization and can be traced back to ancient times. The roots of the age-old wine-growing tradition run deep in the Land, thriving on its generosity. Nowadays, this tradition draws on advanced techniques and technologies to enhance, and bring to the consumer, the characteristics and unique qualities of each wine.

While wine has gone from being an everyday staple to a choice driven by enjoyment and cultural experience, each process and instrument contributing to its definition is now gaining new importance.

Progressing from a tradition linked to old-fashioned farming practices, today's winemaking also entails controlling every single stage within its creation with the aid of advanced hi-tech equipment to ensure the finished product is as true as possible to itself and to its territory.

The growing need to strive towards increasingly ambitious quality objectives is spurring the market to create a supply chain capable of ensuring excellence at every stage: from practices employed in the vineyard to the use of new technologies within winery resulting from systems designed and produced ad hoc.



Aermec solutions

Aermec is a well estabilished player in the winemaking market through its specific collaboration with leading suppliers within the industry.

Our specific know-how has grown extensively over the years so that we are now well placed to offer cutting edge solutions to the industry.

With a view to enabling personnel specialized in the wine industry to build on their know-how day by day, and hence be able to offer installers, designers and oenologists first-hand support at every stage of the system design and build process, Aermec offers pilot facilities and even a winery-cum-laboratory where we can test new solutions so that the equipment we design is developed on a bespoke basis and not simply adapted.

These plants are monitored daily and allow us to experiment with innovative solutions to cater to all the requirements of a modern winery.



Château Smith Haut Lafitte, Bordeaux Martillac. France





The winemaking process

Generally speaking, the process can be split into two different operating cycles: fermentation with skin contact (red wines) and **fermentation without skin contact** (white and rosé wines).

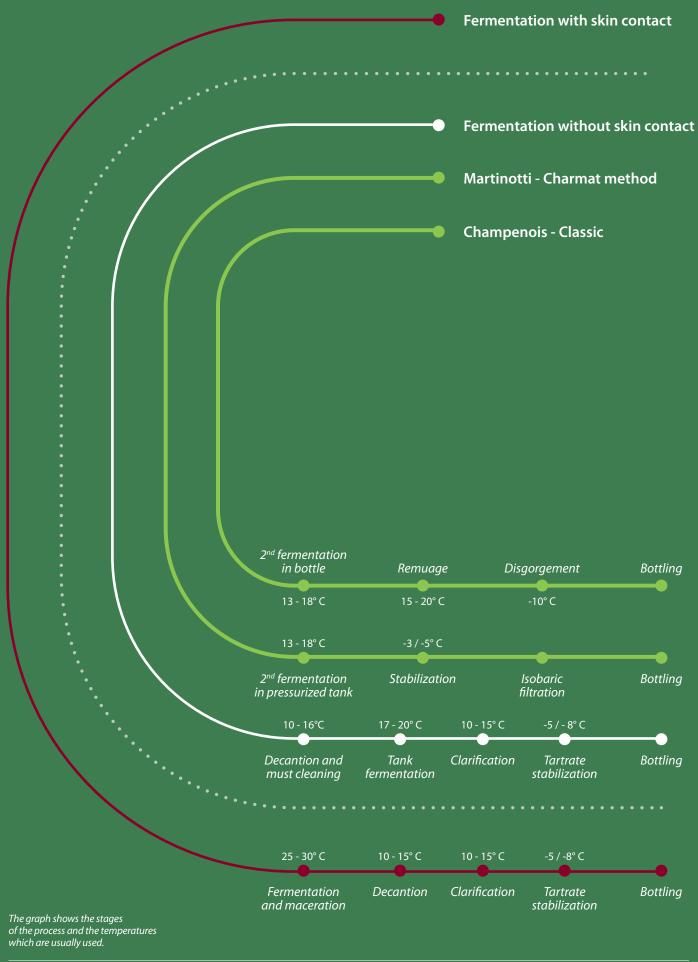
Essentially, the difference between the two cycles lies in the skin contact: namely, in **fermentation with skin contact**, the skins are kept in contact with the must so that they give up their flavour and colour to the product (maceration); while in fermentation without skin contact, grapes are immediately gently pressed to stop the must being contaminated by other elements.

Fermentation without the skins is also used in making **sparkling wines**, whose distinguishing feature is the foam produced by carbon dioxide building up in the bottle as a result of fermentation.

There are two possible methods for making a sparkling wine: the Classic Method (or Méthode Champenoise), featuring slow secondary bottle fermentation; and the Charmat Method, where the sparkling process takes place in a pressurized tank.

Cantina Vivallis, Nogaredo (TN). Italy

Process stages



Quality and technology

The fact that positive and negative charges are present during the winemaking cycle, and the considerable advantage of not having to use natural gas as a primary energy source, have led to the heat pump making successful inroads into the wine industry. In addition, the demand for ever-improved product quality translates into an ever-growing demand for quality in the production cycle as well, thus calling for an optimised design of the whole winery system. In such a scenario,

the refrigeration equipment plays an important and everexpanding role. From the arrival of the grapes through to bottling, every stage of the cycle has its optimum target temperature range and its own energy requirements that need to be quantified and taken into account at the design stage. Aermec delivers innovation and ensures the latest technologies are applied not just to the product, but to whole systems designed to promote the concept of reliability and energy efficiency.



Tenute Loacker - Corte Pavone, Montalcino (SI) Italy

The winery system

The target temperatures are achieved - depending on the various stages - and maintained with internal chilling, external chilling and air conditioning of the ambients.

Aermec supplies chilled or hot water for vinification components such as thermal jackets or heat exchangers. Furthermore, thanks to our extensive range of engineering solutions, we can also ensure the right temperature and humidity conditions required for each individual room,

with the option of remote control and monitoring to make the system more reliable and easier to operate. Interactions between the wine and wood are greatly affected by temperature and relative humidity and nowhere is this more true than in the barrel room, where the temperature is kept between 12 and 18 °C and humidity between 75% and 85%.

This correlation between two variables often requires the application of an Air Handling Unit (AHU).



The Aermec range

To cater to the requirements of wineries the world over, Aermec offers chillers and heat pumps sized specifically to meet the winemaking cycle's every need.

The ANL, NRL and NRB air-cooled ranges, supplied as a packaged solution, ensure high levels of energy efficiency, delivering considerable savings both in new projects and in the upgrading of existing facilities.

In addition to Eurovent certification confirming system performance, Aermec units feature the latest, most advanced technologies and high-quality components. The unit enclosure, made from hot-dip galvanized sheet steel with a polyester powder coating, provides both strength and easy access for maintenance work. The fan assembly comprises statically and dynamically

balanced axial-flow fans. With the application of multiple scroll compressors, reliability and safety are guaranteed and efficient step control is achieved, ensuring reduced partial load energy consumptions. Compliant scroll technology, offered on most models, represents the most advanced solution available on the market, ensuring high efficiency and reliability, low noise and reliability.

Depending on the configuration, the unit features safety devices including: high and low pressure switches; high and low pressure transducers; inlet and outlet water temperature sensors.

The plant side heat exchanger in a AISI 316 steel brazed plate configuration, comes with a frost protection heating element as standard.



Compliant Scroll technology ensures axial and radial compliance between the two scrolls.

Axial compliance minimizes leakages.

Radial compliance increases the compressor's service life as it allows small solids and liquid refrigerant to pass through it. As a result of this special combination, overall compressor efficiency and reliability are increased.



ANL SERIES Cooling capacity: 13 - 44 kW Heating capacity: 13 - 46 kW





NRB SERIES Cooling capacity: 224 - 1047 kW Heating capacity: 215 - 1009 kW

NRL models and all heat pumps feature an air-side finned coil heat exchanger, made with copper tubes and aluminium turbulence-inducing fins. ANL and NRB series chillers feature a microchannel heat exchanger ensuring considerable energy efficiency gains and a lower refrigerant content.

The thermostatic expansion valve adjusts the flow of gas to the evaporator based on the heat load, offering a dual cooling set point to cover a wide water outlet operating range from +18 to -10 °C.

All models come with the option of a built-in hydronic kit, a plug&play solution which notably simplifies installation. The various configurations include storage tanks with single or dual pumps and with different head pressures. The MODUCONTROL control system on ANL units offers

various features, including: set point compensation according to the outside temperature, alarm log management, operating hour counter, local or remote control, the display of all sensor and transducer readings.

The NRL and NRB series are fitted with the pCO5 microprocessor. Its various features include: temperature control based on load conditions; alarm log management; management of pumps, heating elements and other components; definition of operating time bands; defrost cycle management based on self-adaptive logic for improved efficiency; control of two units using Master/Slave logic; remote control via a dedicated display.

In addition, NRB can be ordered to handle outside air temperatures as low as -20 °C.

Chillers

ANL	Vers		050	070	080	090	102	152	202
Cooling	0	kW	13,31	16,39	20,35	22,14	26,34	32,69	42,60
Capacity	P/A	kW	13,51	16,63	20,62	22,42	26,93	33,48	43,49
	N/Q	kW	13,72	16,87	20,9	22,72	27,07	33,66	43,72
Input	0	kW	4,12	4,98	6,48	6,79	8,06	10,31	13,53
power	P/A	kW	4,01	4,83	6,3	6,6	8,07	10,53	13,79
	N/Q	kW	4,18	5,01	6,48	6,79	8,46	10,58	13,82
EER	0	W/W	3,23	3,29	3,14	3,26	3,27	3,17	3,15
	P/A	W/W	3,37	3,44	3,27	3,40	3,34	3,18	3,15
	N/Q	W/W	3,28	3,37	3,23	3,35	3,20	3,18	3,16
ESEER	0	W/W	3,74	3,82	3,65	3,71	3,85	3,99	3,94
	P/A	W/W	3,85	3,97	3,8	3,95	3,96	3,64	3,82
	N/Q	W/W	3,66	3,77	3,61	3,75	3,61	3,74	3,62

NRL	Vers		0200	0200	0330	0250
INIL	AGI 2		0200	0300	0330	0330
Cooling Cap.	Е	kW	56,64	64,64	73,63	82,50
Input power	Е	kW	17,16	19,76	22,17	25,57
EER	Е	W/W	3,30	3,27	3,32	3,23
ESEER	Е	W/W	3,75	3,72	3,80	3,68

NRL	Vers		0500	0550	0600	0650	0700	0750
Cooling Cap.	Α	kW	97,50	103,4	128,3	142,16	162,02	193,58
Input power	А	kW	30,72	34,79	40,83	45,44	53,28	63,32
EER	Α	W/W	3,17	2,97	3,14	3,13	3,04	3,06
ESEER	А	W/W	3,68	3,45	4,07	4,04	3,93	3,91

Heat pumps

Cooling Capacity ° kW 13,29 16,37 20,32 22,06 25,75 31,71 40,58 P/A kW 13,51 16,63 20,62 22,42 26,34 32,49 41,47 N/Q kW - - - - 27,07 33,70 43,70 Input power ° kW 4,14 5,01 6,51 6,87 8,82 10,48 14,28 P/A kW 4,01 4,84 6,3 6,6 8,83 10,7 14,52 N/Q kW - - - - 8,49 10,58 13,83 EER ° W/W 3,21 3,27 3,12 3,21 2,92 3,03 2,84 P/A W/W 3,37 3,44 3,27 3,40 2,98 3,04 2,86 N/Q W/W - - - - 3,20 3,18 3,16 ESEER °	Ì	ANL H	Vers		050	070	080	090	102	152	202
P/A			0	kW	13,29	16,37	20,32	22,06	25,75	31,71	40,58
P	1	Capacity	P/A	kW	13,51	16,63	20,62	22,42	26,34	32,49	41,47
Power RW 4,14 3,61 6,51 6,65 8,83 10,70 14,52 N/Q kW - - - - 8,49 10,58 13,83 EER ° W/W 3,21 3,27 3,12 3,21 2,92 3,03 2,84 P/A W/W 3,37 3,44 3,27 3,40 2,98 3,04 2,86 N/Q W/W - - - - 3,20 3,18 3,16 ESEER ° W/W 3,74 3,82 3,12 3,71 3,85 3,99 3,94 P/A W/W 3,37 3,97 3,8 3,95 3,96 3,64 3,82 N/Q W/W - - - - 3,61 3,74 3,62 Heating capacity ° kW 14,12 17,44 22,4 24,46 29,31 35,35 45,78 P/A kW			N/Q	kW	-	-	-	-	27,07	33,70	43,70
EFRA kW 4,01 4,84 6,3 6,6 8,83 10,7 14,52 N/Q kW - - - - 8,49 10,58 13,83 EER ° W/W 3,21 3,27 3,12 3,21 2,92 3,03 2,84 P/A W/W 3,37 3,44 3,27 3,40 2,98 3,04 2,86 N/Q W/W - - - - 3,20 3,18 3,16 ESEER ° W/W 3,74 3,82 3,12 3,71 3,85 3,99 3,94 P/A W/W 3,37 3,97 3,8 3,95 3,96 3,64 3,82 N/Q W/W - - - - 3,61 3,74 3,62 Heating capacity ° kW 14,12 17,44 22,4 24,46 29,31 35,35 45,78 P/A kW 13,89 </th <th>- 1</th> <th></th> <th>0</th> <th>kW</th> <th>4,14</th> <th>5,01</th> <th>6,51</th> <th>6,87</th> <th>8,82</th> <th>10,48</th> <th>14,28</th>	- 1		0	kW	4,14	5,01	6,51	6,87	8,82	10,48	14,28
EER ° W/W 3,21 3,27 3,12 3,21 2,92 3,03 2,84 P/A W/W 3,37 3,44 3,27 3,40 2,98 3,04 2,86 N/Q W/W - - - - 3,20 3,18 3,16 ESEER ° W/W 3,74 3,82 3,12 3,71 3,85 3,99 3,94 P/A W/W 3,37 3,97 3,8 3,95 3,96 3,64 3,82 N/Q W/W - - - - 3,61 3,74 3,62 Heating capacity ° kW 14,12 17,44 22,4 24,46 29,31 35,35 45,78 P/A kW 13,89 17,18 22,1 24,1 28,7 34,56 44,9 N/Q kW - - - - 28,56 34,34 44,64 Input power °	J	power	P/A	kW	4,01	4,84	6,3	6,6	8,83	10,7	14,52
P / A W/W 3,37 3,44 3,27 3,40 2,98 3,04 2,86 N / Q W/W - - - - 3,20 3,18 3,16 ESEER	1		N/Q	kW	-	-	-	-	8,49	10,58	13,83
N/Q W/W - - - - 3,20 3,18 3,16	Ī	EER	0	W/W	3,21	3,27	3,12	3,21	2,92	3,03	2,84
ESEER ° W/W 3,74 3,82 3,12 3,71 3,85 3,99 3,94 P/A W/W 3,37 3,97 3,8 3,95 3,96 3,64 3,82 N/Q W/W - - - - 3,61 3,74 3,62 Heating capacity ° kW 14,12 17,44 22,4 24,46 29,31 35,35 45,78 P/A kW 13,89 17,18 22,1 24,1 28,7 34,56 44,9 N/Q kW - - - - 28,56 34,34 44,64 Input power ° kW 4,42 5,04 6,5 7,12 8,87 10,45 13,76 P/A kW 4,28 4,87 6,29 6,85 8,9 10,71 14,07			P/A	W/W	3,37	3,44	3,27	3,40	2,98	3,04	2,86
P/A W/W 3,37 3,97 3,8 3,95 3,96 3,64 3,82 N/Q W/W - - - - 3,61 3,74 3,62 3,74 3,62			N/Q	W/W	-	-	-	-	3,20	3,18	3,16
N/Q W/W - - - 3,61 3,74 3,62		ESEER	0	W/W	3,74	3,82	3,12	3,71	3,85	3,99	3,94
Heating capacity **New Text	ı		P/A	W/W	3,37	3,97	3,8	3,95	3,96	3,64	3,82
Capacity P/A kW 13,89 17,18 22,1 24,1 28,7 34,56 44,9 N/Q kW 28,56 34,34 44,64 Input power P/A kW 4,42 5,04 6,5 7,12 8,87 10,45 13,76 P/A kW 4,28 4,87 6,29 6,85 8,9 10,71 14,07	ı		N/Q	W/W	-	-	-	-	3,61	3,74	3,62
P/A kW 13,89 17,18 22,1 24,1 28,7 34,56 44,9 N/Q kW 28,56 34,34 44,64 Input			0	kW	14,12	17,44	22,4	24,46	29,31	35,35	45,78
Input power ° kW 4,42 5,04 6,5 7,12 8,87 10,45 13,76 P/A kW 4,28 4,87 6,29 6,85 8,9 10,71 14,07		capacity	P/A	kW	13,89	17,18	22,1	24,1	28,7	34,56	44,9
power P/A kW 4,28 4,87 6,29 6,85 8,9 10,71 14,07			N/Q	kW	-	-	-	-	28,56	34,34	44,64
P / A kW 4,28 4,87 6,29 6,85 8,9 10,71 14,07	- 1		0	kW	4,42	5,04	6,5	7,12	8,87	10,45	13,76
N/O kW 930 1072 1408	ı	power	P/A	kW	4,28	4,87	6,29	6,85	8,9	10,71	14,07
147 Q KW 2,50 10,72 14,00	ı		N/Q	kW	-	-	-	-	9,30	10,72	14,08
COP		СОР	0	W/W	3,19	3,46	3,45	3,44	3,30	3,38	3,33
P / A W/W 3,25 3,53 3,51 3,52 3,22 3,23 3,19			P/A	W/W	3,25	3,53	3,51	3,52	3,22	3,23	3,19
N/Q W/W 3,07 3,20 3,17			N/Q	W/W	-	-	-	-	3,07	3,20	3,17

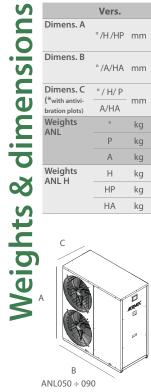
NRL H	Vers		0280	0300	0330	0350
Cooling Cap.	Е	kW	52,80	61,70	68,70	76,70
Input power	Е	kW	18,10	20,30	23,30	26,90
EER	Е	W/W	2,92	3,04	2,96	2,85
ESEER	Е	W/W	3,85	3,77	3,85	2,85
Heating cap.	Е	kW	59,25	69,35	76,33	86,40
Input power	Е	kW	17,55	20,65	22,83	26,20
COP	Е	W/W	3,38	3,36	3,34	3,30

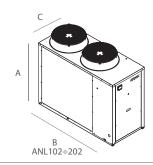
NRL H	Vers		0500	0550	0600	0650	0700	0750
Cooling Cap.	Α	kW	93,60	99,50	121,50	137,40	149,30	179,00
Input power	А	kW	30,80	34,10	41,50	48,50	52,10	64,20
EER	Α	W/W	3,04	2,92	2,92	2,83	2,87	2,79
ESEER	А	W/W	3,71	3,48	4,13	4,09	3,98	3,98
Heating Cap.	Α	kW	103,50	110,60	135,70	152,80	172	205,40
Input power	А	kW	31,70	34,40	40,80	45,70	53,10	62,70
COP	Α	W/W	3,26	3,22	3,33	3,34	3,24	3,28

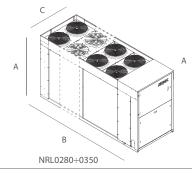
Vers. Dimens. A Dimens. B °/A/HA mm Dimens. C ° / H/ P 384/428* (*with antivi-bration plots) mm A/HA Weights ANL kg kg Weights ANL H kg ΗР kg

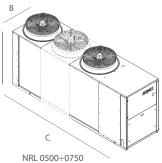
	Vers.		0280	0300	0330	0350	0500
Dimens. A	Alls	mm		— 16	06 —		1875
Dimens. B	Alls	mm			1100		
Dimens. C	Alls	mm	2450	2950	2950	2950	3010
Weights NRL	Alls	kg	686	751	761	767	955
Weights NRL H	Alls	kg	730	795	805	811	1099

	Vers.		0550	0600	0650	0700	0750
Dimens. A	Alls	mm	1875				1975
Dimens. B	Alls	mm	1100				1500
Dimens. C	Alls	mm	3010	3010	3010	4010	4350
Weights NRL	Alls	kg	959	1142	1155	1323	1663
Weights NRL H	Alls	kg	1103	1204	1212	1390	1748









NRB	Vers		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling	А	kW	224	252	283	326	361	411	461	518	575	632	696	756	804	865	927	978	1024
Capacity	Е	kW	219	248	275	321	358	403	454	514	568	636	687	740	793	856	910	963	1017
	U	kW	227	257	286	329	369	414	466	528	593	654	716	764	814	877	939	997	1047
	N	kW	227	260	284	327	367	412	465	521	578	645	702	748	803	865	925	971	1027
Input power	А	kW	71	81	90	105	115	132	148	166	183	203	223	240	256	277	297	314	330
	Е	kW	70	79	89	102	115	130	144	165	183	203	221	237	255	275	291	310	328
	U	kW	69	78	87	99	112	126	141	160	179	198	215	229	249	266	282	303	320
	N	kW	69	79	86	99	112	125	140	158	176	195	213	229	247	263	283	301	319
EER	А	W/W	3,17	3,11	3,14	3,11	3,13	3,12	3,13	3,12	3,13	3,11	3,12	3,14	3,14	3,12	3,12	3,11	3,10
	Е	W/W	3,14	3,12	3,10	3,14	3,12	3,10	3,15	3,12	3,10	3,13	3,10	3,13	3,10	3,12	3,13	3,10	3,10
	U	W/W	3,30	3,31	3,30	3,31	3,31	3,28	3,31	3,31	3,31	3,31	3,32	3,33	3,27	3,30	3,33	3,30	3,28
	N	W/W	3,14	3,12	3,10	3,14	3,12	3,10	3,15	3,12	3,10	3,13	3,10	3,13	3,10	3,12	3,13	3,10	3,10
ESEER	А	W/W	4,32	4,23	4,27	4,23	4,25	4,24	4,25	4,24	4,26	4,23	4,24	4,28	4,27	4,25	4,24	4,23	4,21
	Е	W/W	4,33	4,3	4,27	4,33	4,29	4,27	4,33	4,29	4,27	4,31	4,27	4,31	4,27	4,29	4,31	4,26	4,27
	U	W/W	4,37	4,39	4,37	4,39	4,38	4,35	4,39	4,39	4,39	4,39	4,41	4,42	4,33	4,38	4,41	4,37	4,34
	N	W/W	4.48	4,44	4,44	4,48	4,42	4,42	4,47	4,45	4,42	4,47	4,44	4,40	4,38	4,42	4,41	4,33	4,32

NRB H	Vers		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling Capacity	Α	kW	206,0	243,5	266,6	296,6	328,9	385,0	424,8	487,7	537,4	600,2	650,5	707,6	744,2	813,8	857,5	926,2	969,3
Capacity	Е	kW	209,4	241,5	264,5	294,1	326,4	377,3	431,8	488,7	539,7	596,7	647,0	698,1	733,8	797,6	839,6	902,3	943,0
Input power	Α	kW	71,8	78,3	88,3	102,3	117,1	129,2	147,0	163,7	184,7	201,4	222,0	237,4	257,5	274,0	295,7	311,8	333,1
	Е	kW	67,3	77,4	85,1	98,0	112,6	125,3	139,3	157,1	177,5	192,5	214,9	231,2	250,4	269,4	289,5	307,9	327,4
EER	Α	W/W	2,87	3,11	3,02	2,90	2,81	2,98	2,89	2,98	2,91	2,98	2,93	2,98	2,89	2,97	2,90	2,97	2,91
	Е	W/W	3,11	3,12	3,11	3	2,9	3,01	3,1	3,11	3,04	3,1	3,01	3,02	2,93	2,96	2,9	2,93	2,88
ESEER	Α	W/W	4,03	4,20	4,14	4,05	3,99	4,11	4,04	4,11	4,06	4,11	4,07	4,11	4,04	4,10	4,05	4,10	4,06
	Е	W/W	4,26	4,27	4,26	4,19	4,13	4,2	4,26	4,27	4,22	4,26	4,19	4,2	4,14	4,17	4,12	4,14	4,11
Heating Capacity	А	kW	214,5	254,7	279,3	310,9	341,4	401,5	439,5	506,9	554,2	621,3	667,4	731,1	772,4	841,4	887,2	956,3	1002,0
	Е	kW	223,7	258,3	284,0	317,2	349,7	403,8	459,3	521,7	573,0	635,6	684,9	742,5	785,6	849,7	897,1	962,3	1009,3
Input power	Α	kW	66,6	79,3	86,7	97,2	106,0	124,7	136,9	157,4	171,6	193,6	207,3	227,1	239,9	261,3	275,5	297,0	312,1
	Е	kW	69,3	80,5	87,9	98,5	109,0	126,2	143,1	162,5	176,9	198,0	212,0	229,9	244,7	264,7	279,5	299,8	315,4
COP	Α	W/W	3,22	3,21	3,22	3,20	3,22	3,22	3,21	3,22	3,23	3,21	3,22	3,22	3,22	3,22	3,22	3,22	3,21
	Е	W/W	3,23	3,21	3,23	3,22	3,21	3,2	3,21	3,21	3,24	3,21	3,23	3,23	3,21	3,21	3,21	3,21	3,2

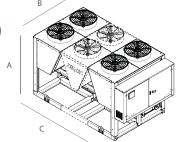
	Vers.		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Dimens. A	A/U	mm								24	50 –								
Dimens. B	A/U	mm								22	00 -								
Dimens. C	А	mm	2780*	2780*	3970	3970	3970	3970	4760	4760	5950	5950	7140	8330	8330	8330	9520	9520	9520
	E/U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330	9520	9520	10710	11900	11190	11900
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520	10710	10710	11900	11900	13090	13090
	НА	mm	2780*	3970	3970	3970	3970	4760	4760	5950	5950	7140	7140	8330	8330	9520	9520	10710	10710
	HE	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520	10710	10710	11900	11900	13090	13090
Weights NRB	Α°	kg	2260	2320	2800	2870	2910	2970	3490	3630	4110	4230	4670	5510	5760	5910	6390	6520	6600
	E/U°	kg	2720	2760	2840	3370	3440	3460	3940	4390	4510	5200	5280	5910	6160	6700	7140	7220	7300
	N°	kg	3220	3270	3340	3770	3840	3870	4290	4840	4970	5600	5680	6310	6560	7010	7540	7620	7700
Weights	Α°	kg	2550	3130	3200	3240	3320	3970	4040	4700	4820	5340	5620	4610	6660	7340	7420	8040	8120
NRB H	E°	kg	3080	3770	3840	3870	3950	4510	5020	5760	5890	6460	6690	7420	7670	8300	8380	9010	9090

 * Depht unit Standard or with pump, for the unit with buffer tank the depht is 3970mm

Reference conditions:

In cooling mode: T outlet: 7°C T inlet: 12°C T ext. air: 35°C

In heating mode: T outlet: 45°C T inlet: 40°C T ext. air: 7°C



Customised solutions

With an extensive range of accessories and different unit configurations to choose from, Aermec offers custom made solutions designed to meet your every specific need.



Shell and tube heat exchanger on plant side (depending on model).

AISI 304 steel hydronic kit (depending on model).

AISI 316 stainless steel plate desuperheater for partial heat recovery, insulated externally with closed-cell material to reduce heat loss.

Inverter-driven fans for continuous air flow control.

Oversized fans to overcome pressure drops in ducted systems.

Condensing temperature control device (DCPX), with continuous fan speed adjustment via pressure transducer.

Electronic thermostatic expansion valve for improved superheating control, optimizing the evaporation under all conditions and improving the efficiency levels.

Primary side inverter-driven pump with two step settings (depending on the set point), of benefit especially during installation as it adapts automatically to the system head pressure.



System management

The remote management systems Aermec offers allow each system component to be controlled and monitored locally, via a central system and remotely.

AERWEB 300

Enables remote connection of up to 18 units to a PC using an Ethernet connection through a browser.
There is also the option of a LAN or USB connection or link via GPRS.

MULTICONTROL

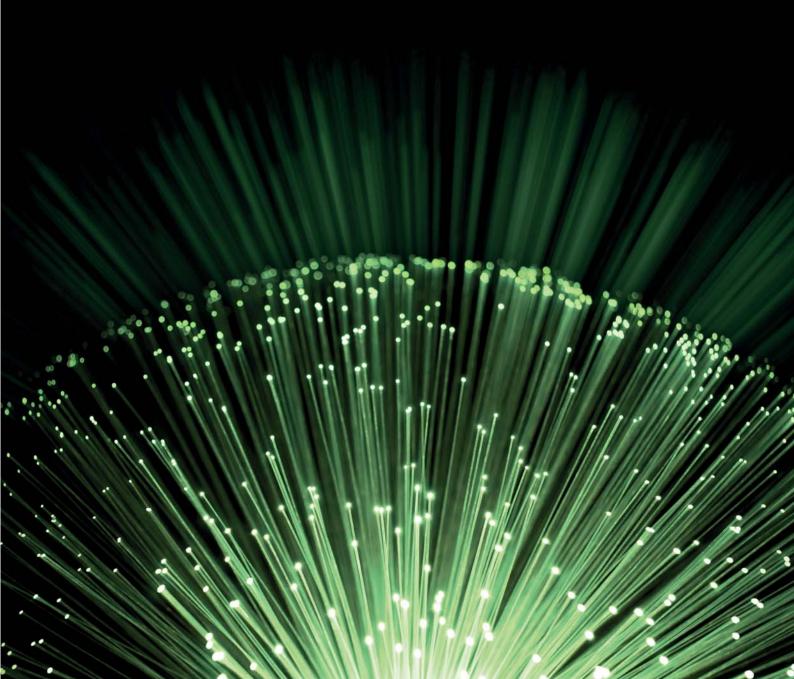
Enables simultaneous control of up to 4 units (installed in the same system) fitted with the MODUCONTROL unit. For more complete control, the Multicontrol unit can be used in conjunction with other VMF system accessories.

MULTICHILLER

Allows you to control, switch on and switch off individual chillers in a system fitted with a number of appliances running in parallel, ensuring a consistently steady flow to the evaporators.

VMF

Designed to allow either local or central control of each individual component of a hydronic system; ideal in ambients such as reception areas, tasting rooms and offices.



Aermec: a force to be reckoned with





A leading brand

Aermec, founded in 1961, can be considered one of the first, if not the very first, supplier of air conditioning equipment in Europe; a true pioneer and continuous innovator, Aermec swiftly expanded into new applications, including process cooling and wine cooling; in fact today Aermec is major player within wine applications covering numerous nations on a worldwide scale. Renowned global OEMs and famous vineyards worldwide have chosen Aermec for their vinification process needs.

Today the Aermec Group, whose turnover has grown beyond €300m, combines 6 Centres of Excellence, over 1600 employees and 8 production facilities, distributing its products via 6 distinct Group brands.

Worldwide presence

With 10 Sales Subsidiaries and Affiliates and more than 70 international Distributing Companies Aermec covers every continent worldwide, offering dedicated customer consultancy and support serving a global clientele.

Aermec offers its products with numerous 50Hz and 60Hz supply voltages, as well as CE certification in Europe, cUL listing in North America and other leading certifications worldwide.

Global service support

Aermec places high value in supporting its customers at all times, offering dedicated service support in all countries it serves. All Aermec service partners are continuously updated concerning the latest Aermec solutions and technologies.

Rapid spare parts support is ensured on a worldwide scale, combining local stocks with advanced supply logistics.

Technological Expertise

Aermec's sophisticated R&D facilities include Europe's largest calometric chamber, both Eurovent and AHRI certified and capable of testing single units up to 2MW. Highly accurate testing with precision levels of +/- 0,2°C can be achieved with ambient temperatures ranging from -20°C to +55°C. Other laboratories cater for noise, aeraulic and enthalpic testing. Aermec's quality is guaranteed by renowned certifications, including Eurovent in Europe, AHRI in North America and many more beyond.

Furthermore countless customers visit Aermec every year to witness personalised tests in Aermec's dedicated customer testing facilities. Rigorous design phase procedures, including the selection of renowned suppliers, extensive prototype testing, field testing and vibration testing, ensure that all Aermec products withstand even the toughest working conditions.

Advanced Logistics

Highly robotised production facilities combined with the latest logistical advances, including Enterprise Resource Planning (ERP), ensure rapid product delivery times, high flexibility to customer personalisation requests and elevated product quality levels; each and every unit leaving the Aermec factories is subject to extensive individual testing covering operation, safety and performance at nominal conditions.

Highest Energy Efficiencies

Aermec is an ISO14001 certified company dedicated towards minimizing carbon footprints within all its activities. This is true within its own facilities but also within the product solutions it offers its customers, which benefit from the lowest electrical power consumptions achievable, combining advanced product design, technologies allowing freecooling and high partial load energy savings and unique system control algorithms.



















References

When it comes to the vinification process or air conditioning of interiors, Aermec is the supplier of choice to leading wineries around the globe, who value the reliability offered by Aermec solutions and a highly qualified team always on hand to provide prompt support.

Italy

Piedmont Conterno Giacomo, Monforte d'Alba (CU)

Trentino Alto Adige Cantina Vivallis, Nogaredo (TN)

SicilyFeudo Principi di Butera,
Butera (CL)

Tuscany Ornellaia, Castagneto Carducci (LI)

Tenute Loacker - Corte Pavone, Montalcino (SI)

VenetoSperi Viticoltori,
Pedemonte (VR)

Worldwide

Canada Robin Ridge Winery, Keremeos (British Columbia)

France Château Cheval Blanc, Saint-Émilion (Aquitaine)

Château Smith Haut Lafitte, Bordeaux Martillac (Aquitaine)

Portugal Aveleda, Penafiel (Porto)

Slovakia Elesko, Modra (Bratislava)

South Africa Ladismith Cellar, Ladismith (Western Cape)

Aermec S.p.A. Via Roma, 996 37040 Bevilacqua (VR) - Italy Tel. + 39 0442 633111 Fax +39 0442 93577 sales@aermec.com www.aermec.com

