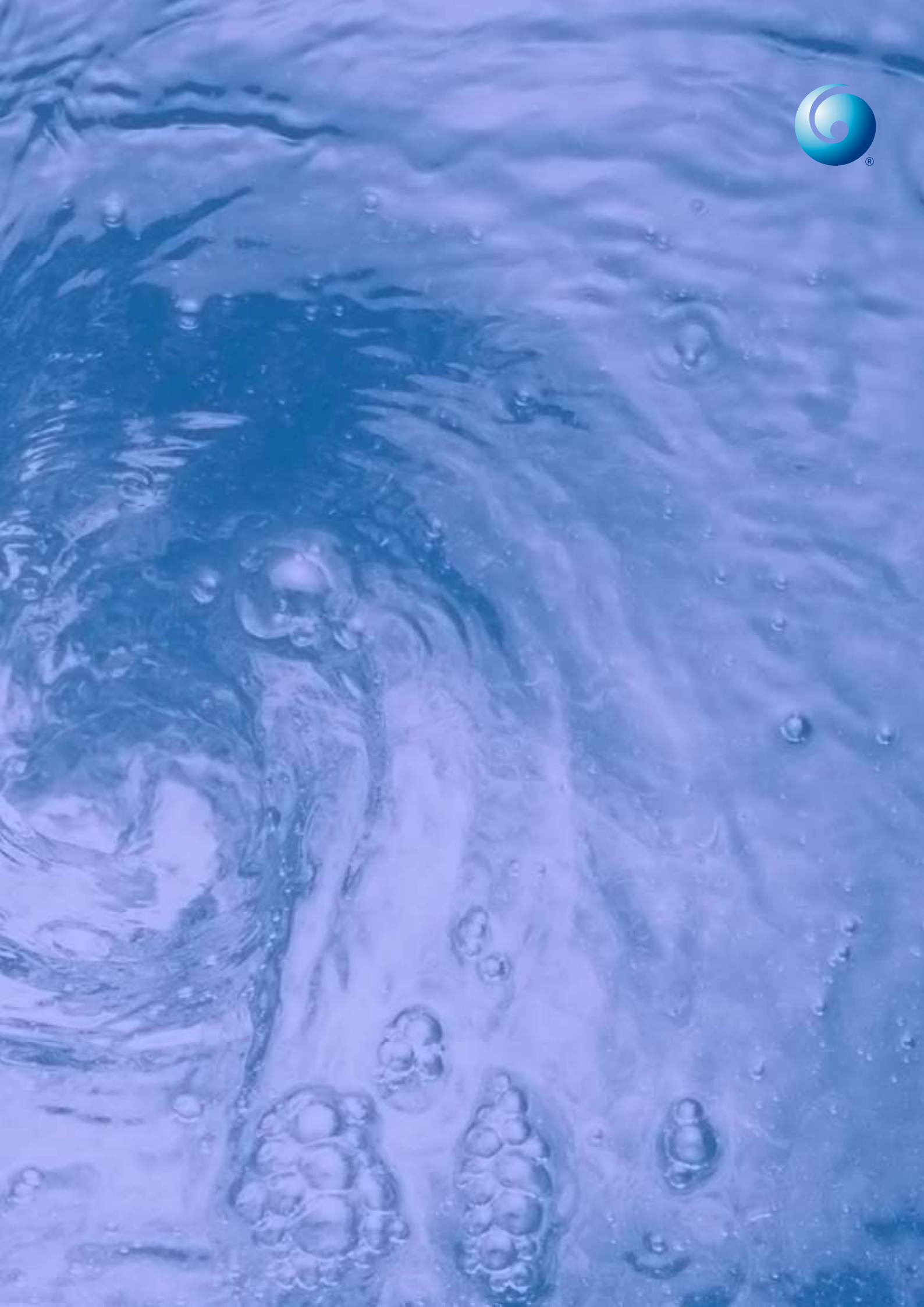
Refrigeratore ad Acqua
Water Cooled Water Chiller

400÷3100 kW

R407C/R134a

Optional falling film type

AirWave
www.airwavehvac.com



indice contents

AIRWAVE is well-known in the international air conditioning industry for its professional research and design, high quality products and aftersales service, originated from Italia in 2005. Today, AIRWAVE has grown into an international refrigeration & air conditioning products and system supplier, providing users all over the world with our reliable products, professional expert group and all-around prompt supporting services to meet customers' diverse needs on HVAC in commercial, industrial and residential fields.

AIRWAVE aims to users who have special demands on product quality, size and energy saving, etc. We are committed to provide them comprehensive services including system design, product development, project installation and after-sales support.

AIRWAVE brings great influences to the world around us in many ways. Our products are widely used in many countries and regions, including Europe, Russia, Middle East, South Asia, Middle Asia, South Africa, North Africa, etc. We provide not only comfortable sight experience, but also perfect energy-saving solutions, which are genuine benefits to the users.

Introduction Introduction

Il refrigeratore ad acqua condensato ad acqua costituisce uno dei sistemi di refrigerazione gli impianti centralizzati di condizionamento aria, si avvale della torre di raffreddamento per refrigerare l'acqua e l'acqua refrigerata costituisce la sorgente fredda della macchina. Il refrigeratore ad acqua condensato ad acqua con I vantaggi legati a un ottimo rendimento, bassa rumorosità, struttura compatta, pratico e stabile funzionamento, installazione e manutenzione semplici, è un confortevole condizionatore d'aria adatto ad essere utilizzato in hotel, centri commerciali, uffici, centri di esposizione, aeroporti, palestre.

I refrigeratori d'acqua condensati ad acqua della serie VWSA sono prodotti resistenti progettati dalla AIRWAVE con l'impiego di moderne tecnologie del settore di condizionamento aria sia internazionale che locale, e sono ideati e prodotti in conformità agli standard internazionali, grazie all'impiego di noti compressori di ottima qualità, accessori per l'impianto e dispositivo di controllo computerizzato, hanno una struttura compatta e facilmente adattabile, sono affidabili, di ottima qualità, silenziosi e senza alcun impatto sull'ambiente.

Water cooled water chiller is one of the cooling system in central air conditioner, uses cooling tower to cool the water, and the cold water is cooling source. Water cooled water chiller has advantages of high efficient, low noise, reasonable structure, simple and stable operation, convenient installation and maintenance, which is comfortable central air conditioner that suitable for hotel, shopping mall, office building, exhibition mall, airport, gymnasium.

VWSA series water cooled water chiller is the stable product developed by AIRWAVE with the using of new technologies of international and domestic air conditioning industry, which is designed and produced according to international standard, adopting world famous high quality compressor, system accessories and computerized controller, with the reasonable match and structure design, it's stable, high quality, low noise and no contamination to outdoor environment.

Features Features

1. Modello ottimizzato:

Sistemi di alta e bassa alimentazione elettrica sono installati separatamente per garantire maggiore sicurezza. Il sistema flessibile dell'alta pressione ne allunga la durata.

2. Scelta di componenti di qualità:

I compressori e gli accessori per la refrigerazione (quali il filtro a secco, valvola di espansione termica, elettrovalvola sulla linea del liquido, specchio di livello del liquido, dispositivi di controllo alta/bassa pressione) sono prodotti di noti marchi selezionati per garantire che l'unità raggiunga un grado eccellente di efficienza.

Grazie all'impiego dei più avanzati tubi di calore DAE / DAC, la superficie di trasferimento del calore con tubi scanalati internamente aumenta sostanzialmente il coefficiente di trasferimento termico; il singolare modello strutturale dello scambiatore di calore, la migliore disposizione dei tubi in rame e la precisione della tecnologia di controllo del refrigerante migliora enormemente l'efficienza di trasferimento termico.

3. Funzionamento semplice e stabile

Controllo perfetto

1) Controllo computerizzato con sistema di standby manuale
2) Temporizzazione di funzionamento del compressore
3) Sequenza di avviamento automatica del compressore
4) Segnalazioni di allarme
5) Azzeramento allarme
6) Controllo temperatura dell'acqua
7) Azzeramento manuale del pressostato di alta pressione,

Azzeramento automatico del pressostato di bassa pressione
Dispositivi di sicurezza che ne garantiscono il funzionamento sicuro e stabile:

1. Optimized design:

The strong and weak electricity systems installed separately to ensure safety.
Flexible high pressure system makes it lifetime longer.

2. Quality components selection:

Compressors and refrigeration accessories (such as dry filter, thermal expansion valve, liquid supply solenoid, liquid level mirror, high/low pressure control devices) all chosen world-renowned brand products to ensure that the unit reached an excellent level of performance

Using the most advanced DAE / DAC efficient heat transfer pipe, heat transfer surface with internal ribbed tube makes the heat transfer coefficient substantially increased; the heat exchanger unique structural design, the best way of copper tube layout and precision of refrigerant control technology, greatly improved the efficiency of heat transfer.

3. Simple and stable operation,

Perfect control

1) Computerized control with standby manual operation system,
2) Compressor operation timing,
3) Compressor automatic start-up sequence,
4) Alarm signals,
5) Alarm reset,
6) Water temperature control,
7) Manual reset high pressure switch, Automatic reset low pressure switch

Protections that ensure its safe and stable operation:

1) Inversione di fase
2) Mancanza di fase
3) Alta/bassa Pressione
4) Scarico gas
5) Temperatura dell'acqua in uscita troppo bassa (alta)
6) Mancanza d'acqua
7) Antigelo
8) Surriscaldamento compressore etc.

1) Reverse phase
2) lack phase
3) High/low pressure
4) Gas discharge
5) Outlet water temp. too low (high)
6) Water stopped
7) Antifreeze
8) Compressor overheat etc.

Viene utilizzato un microprocessore ad alta velocità.

High speed microprocessor is used.

Disponibilità di terminale per telecontrollo remoto via SMS

Reserved the terminal for SMS control

Disponibilità di terminale per il monitoraggio hardware tramite PC

Reserved the terminal for PC monitoring hardware

Con funzione di autodiagnosi, ed eliminazione automatica dei problemi legati al software, la capacità anti-interferenza è potenziata dalla molteplicità di utilizzi del software e della tecnologia TRAP con sistema hardware WATCHDOG.

With self diagnosis function, and automatically eliminate software problem, the capability of anti-interference is improved by the software uses redundancy and trap technology with WATCHDOG of hardware.

Viene impiegato uno schermo tattile all'avanguardia, la cui durata va oltre 1 milione di digitazioni consecutive.

Advanced touch screen is used, the lifetime of which is more than 1million times of consecutive touch.

Display digitale per:
1) Temperatura dell'acqua in entrata e in uscita
2)impostazioni di temperatura e differenziale
3)Descrizione delle segnalazioni di allarme
4) Lettura contatore per esercizio, numero di unità e di avviamenti del compressore

Digital display of:
1) Entering and leaving water temperature
2) Temperature and differential settings
3) Alarm description
4) Hour meters readout of operation and number of unit and compressor start-ups

Nomenclatura Nomenclature

V	W	W	C	4	0	0	C	F	S	D	5
1	2	3	4	5	6	7	8	9	10	11	12

1: AIRWAVE

2&t3: Product: water to water

4: Function: C: cooling only

5&t6&t7: cooling capacity kW

8: Refrigerant: A: R134a C: R407C

9: Compressor brand: F: Fusheng, R: Refcomp, B: Bitzer

10: Refrigerant circiut: S: single, D: double, F: four

11: Evaporator: D: dry shell and tube; F: falling film type

12: Power supply: 4=230V/3Ph/60Hz, 5=380V/3Ph/50Hz
6=415V/3Ph/50Hz, 7=460V/3Ph/60Hz

Accessori opzionali - funzioni

optional accessories - function

1. Dispositivo di controllo PLC
2. Regolazione di potenza variabile in continuo
3. Avviamento dolce
4. Recupero calore
5. Involucro fono isolante
6. Tipo anticorrosione
7. Pressione di carico lato acqua 2.0 Mpa

1) PLC controller
2) Stepless variable capacity adjust
3) Soft starter
4) Heat recovery
5) Noise insulation box
6) Anti-corrosion type
7) Waterside 2.0 Mpa pressure bearing capacity

Specifiche tecniche Specification

Model		VWWC400	VWWC430	VWWC480	VWWC560	VWWC660	VWWC760
Cooling capacity (R407C)	kW	381	410	457	533	629	724
	BTU	1,300,000	1,400,000	1,560,000	1,819,000	2,146.000	2,470,000
Total power input (R407C)	kW	86	92	101	118	140	160
Max. operating current	A	185	185	218	234	275	339
Energy control range		25%~100%					
Refrigerant circuit		1					
Compressor qty.		1					
Compressor type		Semi-hermetic Twin Screw Compressor					
Noise (standard)	dB(A)	71	70	73	73	73	73
Noise (Noise-proof)	dB(A)	61	60	65	65	65	65
Power		380V/3Ph/50Hz					
Refrigerant		R407C/R134					
Refrigerant Charge amount	kg	40	45	50	55	65	70
Cooled water inlet temp.	°C	12					
Cooled water outlet temp.	°C	7					
Cooled water flow	m^3/h	69	74	83	96	114	131
Cooled waterside pressure drop	kPa	50	50	50	55	55	55
Cooled water side connection pipe		DN125	DN125	DN125	DN125	DN125	DN150
Cooling water inlet temp.	°C	30					
Cooling water outlet temp.	°C	35					
Cooling water flow	m^3/h	83	89	99	116	136	157
Cooling water side pressure drop	kPa	55	55	55	58	58	58
Cooling water side connection pipe		DN100	DN125	DN125	DN125	DN125	DN125
Partial heat recovery capacity	KW	80	86	96	112	132	152
	BTU	273,000	294,000	328,000	382,000	451,000	519,000
Partial heat recovery water flow	m^3/h	14	15	17	19	23	26
Partial heat recovery pressure drop	Kpa	30	32	32	33	34	34
Total heat recoverycapacity	KW	444	477	530	619	731	841
	BTU	1,515,000	1,515,000	1,812,000	2,112,000	2,494,000	2,870.000
Total heat recoverywater flow	m^3/h	76	82	91	106	126	145
Total heat recoverypressure drop	Kpa	37	38	37	38	38	38
Operating Weight (Standard)	kg	2,500	2,550	3,150	3,450	3,600	3,800
Operating Weight (Noise-proof)	kg	2,620	2,670	3,300	3,580	3,740	3,950

Note:
Il recupero calore è un dispositivo opzionale, acqua in ingresso 40°C, acqua in uscita 45°C.
Carico massimo di pressione lato acqua:1.0Mpa
I dati sopra indicati sono suscettibili di variazioni senza preavviso

Note:
Heat recovery is optional device, inlet water 40°C, outlet water 45°C.
Water side Max. bearing pressure: 1.0 MPa.
The data above is subject to change without prior notice.

Model		VWWC900	VWWC960	VWWC1120	VWWC1320	VWWC1520
Cooling capacity (R407C)	kW	857	914	1,067	1,257	1,448
	BTU	2,9245,000	3,119,000	3,641,000	4,290,000	4,941,000
Total power input (R407C)	kW	189	202	235	281	320
Max. operating current	A	2*185	2*218	2*234	2*275	2*339
Energy control range		12.5%~100%				
Refrigerant circuit		2				
Compressor quantity		2				
Compressor type		Semi-Hermetic Twin Screw Compressor				
Noise (standard)	dB(A)	78	78	74	74	74
Noise (noise-proof)	dB(A)	70	70	66	66	66
Supply Power		380V/3Ph/50Hz				
Refrigerant		R407C/R134A				
Refrigerant charge amount	kg	90	100	120	135	160
Cooled water inlet temp.	°C	12				
Cooled water outlet temp.	°C	7				
Cooled water flow	m^3/h	155	165	193	227	262
Cooled waterside pressure drop	kPa	50	55	55	55	60
Cooled water side connection pipe		DN150	DN200	DN200	DN200	DN200
Cooling water inlet temp.	°C	30				
Cooling water outlet temp.	°C	35				
Cooling water flow	m3/h	186	198	231	273	315
Cooling water side pressure drop	kPa	60	60	60	60	65
Cooling water side connection pipe		2*DN125	2*DN125	2*DN125	2*DN150	2*DN150
Partial heat recovery capacity	KW	180	192	224	264	304
	BTU	615,000	656,000	764,320	901,000	1,038,000
Partial heat recovery water flow	m^3/h	31	33	39	45	52
Partial heat recovery pressure drop	Kpa	34	32	32	33	34
Total heat recovery capacity	KW	995	1,062	1,238	1,463	1,682
	BTU	3,395,000	3,624,000	4,225,000	4,992,000	5,740,000
Total heat recovery water flow	m^3/h	171	183	213	252	289
Total heat recovery pressure drop	Kpa	39	37	39	39	38
Operating Weight (Standard)	kg	4,150	4,650	5,400	6,400	8,000
Operating Weight (Noise-proof)	kg	4,310	4,830	5,610	6,650	8,320

Note:
Il recupero calore è un dispositivo opzionale, acqua in ingresso 40°C, acqua in uscita 45°C.
Carico massimo di pressione lato acqua:1.0Mpa
I dati sopra indicati sono suscettibili di variazioni senza preavviso

Note:
Heat recovery is optional device, inlet water 40°C, outlet water 45°C.
Water side Max. bearing pressure: 1.0 MPa.
The data above is subject to change without prior notice.

Model-VWWC		1660	1800	1920	2080	2240	2480	2720	3100
Cooling capacity (R407C)	kW	1,581	1,714	1,829	1,981	2,133	2,362	2,590	2,952
	BTU	5,395,000	5,849,000	6,241,000	6,760,000	7,278,000	8,060,000	8,838,000	8,838,000
Total power input (R407C)	kW	349	376	404	437	477	518	570	649
Max. operating current	A	4*185	2*(185+218)	4*218	4*234	2*(234+275)	4*275	2*(275+339)	4*339
Energy control range		6.25%~100%							
Refrigerant circuit		4							
Compressor quantity		4							
Compressor type		Semi-Hermetic Twin Screw Compressor							
Noise (standard)	dB(A)	79	80	80	81	81	81	83	83
Noise (noise-proof)	dB(A)	71	72	72	73	73	73	75	75
Supply Power		380V/3Ph/50Hz							
Refrigerant		R407C/R134A							
Refrigerant charge amount	kg	4*78	2*(78+94)	4*94	4*99	2*(99+117)	4*117	2*(117+143)	4*143
Cooled water inlet temp.	°C	12							
Cooled water outlet temp.	°C	7							
Cooled water flow	m^3/h	286	310	331	358	386	427	468	534
Cooled waterside pressure drop	kPa	45	45	45	46	46	46	46	46
Cooled water side connection pipe		2*DN150	2*DN150	2*DN150	2*DN150	2*DN150	2*DN200	2*DN200	2*DN200
Cooling water inlet temp.	°C	30							
Cooling water outlet temp.	°C	35							
Cooling water flow	m^3/h	342	372	397	428	462	511	562	637
Cooling water side pressure drop	kPa	46	46	46	46	46	46	46	46
Cooling water side connection pipe		2*DN150	2*DN200	2*DN200	2*DN200	2*DN200	2*DN200	2*DN200	2*DN200
Partial heat recovery capacity	KW	332	360	384	416	448	496	544	620
	BTU	1,133,000	1,229.000	1,311,000	1,420,000	1,529,000	1,693,000	1,856,000	2,116,000
Partial heat recovery water flow	m^3/h	57	62	66	72	77	85	94	107
Partial heat recovery pressure drop	Kpa	35	35	35	35	35	35	35	35
Total heat recovery capacity	KW	1,836	1,989	2,123	2,300	2,483	2,740	3,007	3,426
Total heat recovery water flow	m^3/h	316	342	365	396	427	471	517	589
Total heat recovery pressure drop	Kpa	39	39	39	39	39	39	39	39
Operating Weight (Standard)	kg	8,500	8,800	9,500	11,000	11,800	12,800	13,000	13,500
Operating Weight (Noise-proof)	kg	8,750	9,060	9,780	11,280	12,100	13,130	13,330	13,850

Nota:
Il recupero calore è un dispositivo opzionale, acqua in ingresso 40°C, acqua in uscita 45°C.
Carico massimo di pressione lato acqua:1.0Mpa
I dati sopra indicati sono suscettibili di variazioni senza preavviso

Note:
Heat recovery is optional device, inlet water 40°C, outlet water 45°C.
Water side Max. bearing pressure: 1.0 MPa.
The data above is subject to change without prior notice.

Capacità / potenza di input in differenti condizioni
Capacities / power input in different conditions

VWWC Cooling Capacity Correction coefficient

Outlet Cooled Water temp. °C	Cooling water inlet temp. °C												
	25	26	27	28	29	30	31	32	33	34	35	36	37
5°C	1.01	1.00	0.99	0.97	0.96	0.95	0.94	0.92	0.91	0.90	0.89	0.88	0.87
7°C	1.07	1.05	1.04	1.03	1.01	1.00	0.99	0.97	0.96	0.95	0.94	0.92	0.91
9°C	1.12	1.11	1.09	1.08	1.07	1.05	1.04	1.03	1.01	1.00	0.99	0.97	0.96
11°C	1.18	1.17	1.15	1.14	1.12	1.11	1.09	1.08	1.07	1.05	1.04	1.03	1.01
13°C	1.25	1.23	1.21	1.20	1.18	1.17	1.15	1.14	1.12	1.11	1.09	1.08	1.07
15°C	1.31	1.29	1.28	1.26	1.25	1.23	1.21	1.20	1.18	1.17	1.15	1.14	1.12

Cooling power input correction coefficient:

Outlet Cooled Water temp. °C	Cooling water inlet temp. °C												
	25	26	27	28	29	30	31	32	33	34	35	36	37
5°C	0.863	0.886	0.910	0.934	0.959	0.985	1.011	1.037	1.064	1.092	1.120	1.149	1.179
7°C	0.877	0.900	0.924	0.949	0.974	1.000	1.026	1.053	1.080	1.108	1.137	1.166	1.197
9°C	0.890	0.913	0.938	0.963	0.989	1.015	1.041	1.068	1.096	1.125	1.154	1.184	1.215
11°C	0.903	0.927	0.952	0.977	1.003	1.030	1.057	1.084	1.113	1.142	1.171	1.202	1.233
13°C	0.917	0.941	0.966	0.992	1.018	1.046	1.073	1.101	1.129	1.159	1.189	1.220	1.251
15°C	0.930	0.955	0.981	1.007	1.034	1.061	1.089	1.117	1.146	1.176	1.207	1.238	1.270

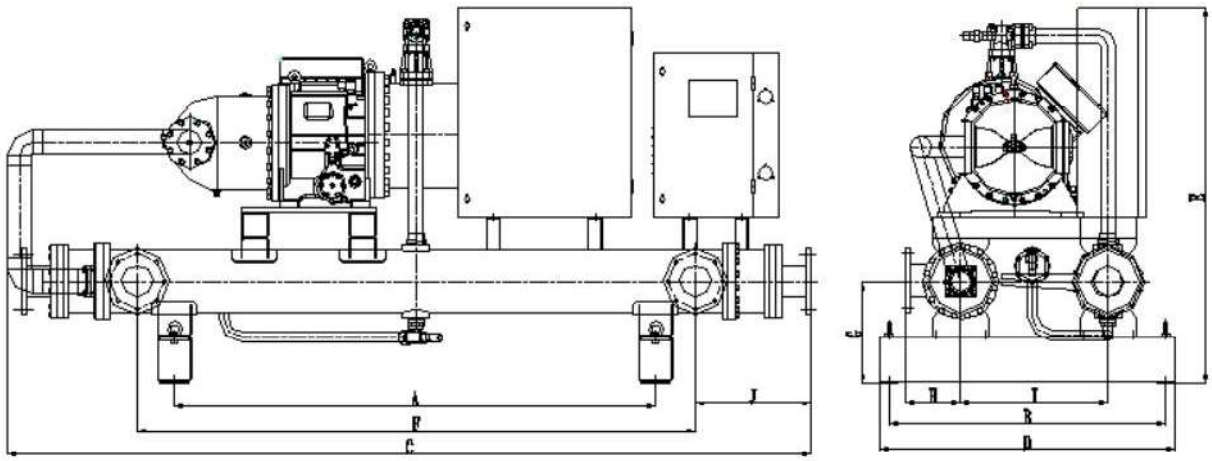
Dimension

Dimension

1. VWWC400~760

Dimensioni macchina

Unit dimension



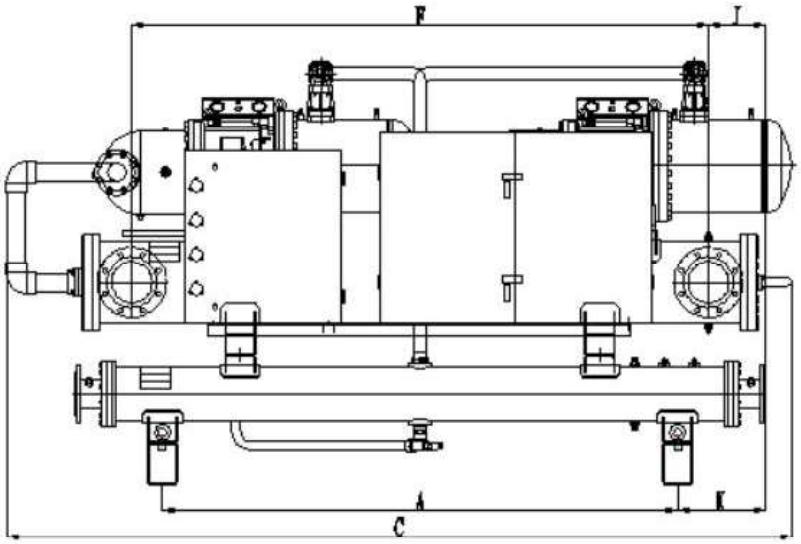
Model	VWWC400	VWWC430	VWWC480	VWWC560	VWWC660	VWWC760
A	1820	2120	2120	2120	2120	2120
B	1120	1120	1220	1220	1220	1220
C	3600	3480	3545	3540	4100	3600
D	1200	1200	1300	1300	1300	1300
E	1400	1660	1660	1660	1660	1660
F	2460	2460	2460	2460	3010	2422
G	385	450	450	450	450	450
H	240	245	245	245	330	262
I	550	550	650	650	877	650
J	465	510	530	510	535	579

Note:
Il tubo di ingresso dell'acqua di raffreddamento è in basso di uscita in alto.
Ingresso acqua refrigerata a destra e uscita a sinistra (di fronte alla centralina)

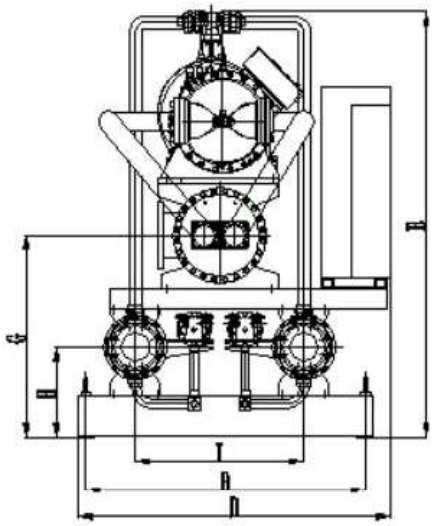
Note:
Cooling water below inlet and above outlet.
Cooled water inlet at right and outlet at left (facing to the control box)

2. VWWC900~1520

Dimensioni macchina



Unit dimension



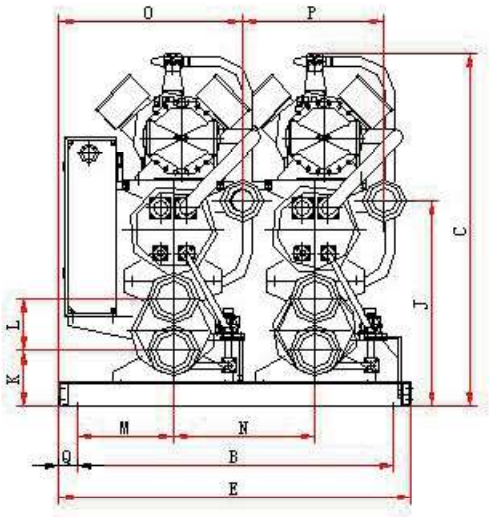
Model	VWWC900	VWWC960	VWWC1120	VWWC1520	VWWC760
A	2600	2600	2600	2600	2600
B	1420	1410	1410	1410	1410
C	4300	3970	4000	4100	3960
D	1585	1580	1580	1580	1580
E	1990	2090	2090	2160	2170
F	3272	2910	2910	2910	2910
G	960	1000	1000	1000	1000
H	450	450	450	450	450
I	850	850	850	850	850
J	105	285	285	285	285

Note:
Il tubo di ingresso dell'acqua di raffreddamento è in basso di uscita in alto.
Ingresso acqua refrigerata a destra e uscita a sinistra (di fronte alla centralina)

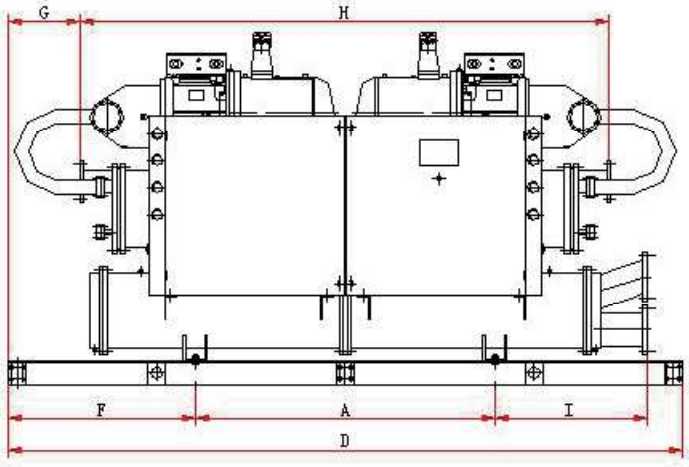
Note:
Cooling water below inlet and above outlet.
Cooled water inlet at right and outlet at left (facing to the control box)

3. VWWC1660-3100

Dimensioni macchina



Unit dimension



Model	VWWC1660	VWWC1800	VWWC1920	VWWC2080	VWWC2240	VWWC2480	VWWC2720	VWWC3100
A	2000	2000	2000	2000	2000	2000	2000	2260
B	2050	2050	2110	2110	2160	2260	2210	2360
C	2210	2315	2355	2365	2495	2465	2555	2575
D	4320	4600	4500	4650	4650	5000	4750	4850
E	2290	2290	2350	2350	2400	2500	2450	2600
F	1160	1300	1250	1325	1325	1500	1375	1295
G	465	380	479	404	304	260	355	436
H	3390	3840	3540	3840	4040	4480	4040	3980
I	765	920	1015	1065	1090	970	1090	1060
J	1222	1340	1370	1390	1026	1350	1475	1465
K	350	348	372	373	350	344	350	350
L	305	355	350	350	390	350	390	390
M	647	647	642	642	672	677	662	787
N	900	900	950	950	950	980	1000	1050
O	1218	1208	1223	1223	1253	1307	1273	1337

Note:
Il tubo di ingresso dell'acqua di raffreddamento è in basso di uscita in alto.
Ingresso acqua refrigerata a destra e uscita a sinistra (di fronte alla centralina)

Note:
Cooling water below inlet and above outlet.
Cooled water inlet at right and outlet at left (facing to the control box)

EER/COP

EER and COP of Water Cooled Water Chiller

No.	Model	Refrigerant	Cooling capacity (kw)	Power input (kw)	EER
1	VWWC400	R407C	381	86,00	4,43
2	VWWC430	R407C	410	92,00	4,46
3	VWWC480	R407C	457	101,00	4,52
4	VWWC560	R407C	533	118,00	4,52
5	VWWC660	R407C	629	140,00	4,49
6	VWWC760	R407C	724	160,00	4,53
7	VWWC900	R407C	857	189,00	4,53
8	VWWC960	R407C	914	202,00	4,52
9	VWWC1120	R407C	1067	235,00	4,54
10	VWWC1320	R407C	1257	281,00	4,47
11	VWWC1520	R407C	1448	320,00	4,53
12	VWWC1660	R407C	1581	349,00	4,53
13	VWWC1800	R407C	1714	376,00	4,56
14	VWWC1920	R407C	1829	404,00	4,53
15	VWWC2080	R407C	1981	437,00	4,53
16	VWWC2240	R407C	2133	477,00	4,47
17	VWWC2480	R407C	2362	518,00	4,56
18	VWWC2720	R407C	2590	570,00	4,54
19	VWWC3100	R407C	2952	649,00	4,55

Working condition: Cooling water inlet/outlet temperature 30/35°C, Cooled water inlet/outlet temperature 12/7°C.

EER and COP of Water Cooled Water Chiller

No.	Model	Refrigerant	Cooling capacity (kw)	Power input (kw)	EER
1	VWWC400	R407C	486	88,60	5,49
2	VWWC430	R407C	523	94,80	5,52
3	VWWC480	R407C	583	104,10	5,60
4	VWWC560	R407C	680	121,60	5,59
5	VWWC660	R407C	803	144,20	5,57
6	VWWC760	R407C	924	164,80	5,61
7	VWWC900	R407C	1094	194,70	5,62
8	VWWC960	R407C	1167	208,10	5,61
9	VWWC1120	R407C	1362	242,10	5,63
10	VWWC1320	R407C	1605	289,50	5,54
11	VWWC1520	R407C	1849	329,60	5,61
12	VWWC1660	R407C	2018	359,50	5,61
13	VWWC1800	R407C	2188	387,30	5,65
14	VWWC1920	R407C	2335	416,20	5,61
15	VWWC2080	R407C	2529	450,20	5,62
16	VWWC2240	R407C	2723	491,40	5,54
17	VWWC2480	R407C	3016	533,60	5,65
18	VWWC2720	R407C	3307	587,10	5,63
19	VWWC3100	R407C	3769	668,50	5,64

Working condition: Cooling water inlet/outlet temperature 30/35°C, Cooled water inlet/outlet temperature 23/18°C.

Water Cooled Water Chiller

No.	Model	Refrigerant	100% Cooling Capacity (kw)	100% Power input (kw)	100% EER	25% Cooling Capacity (kw)	25% Power input (kw)	25% EER	50% Cooling Capacity (kw)	50% Power input (kw)	50% EER	75% Cooling Capacity (kw)	75% Power input (kw)	75% EER
1	VWWC400	R407C	486	88,60	5,49	121,50	32,50	3,74	243,00	57,00	4,26	364,50	75,00	4,86
2	VWWC430	R407C	523	94,80	5,52	130,75	34,00	3,85	261,50	60,00	4,36	392,25	80,00	4,90
3	VWWC480	R407C	583	104,10	5,60	145,75	36,00	4,05	291,50	66,00	4,42	437,25	86,00	5,08
4	VWWC560	R407C	680	121,60	5,59	170,00	41,00	4,15	340,00	76,00	4,47	510,00	100,00	5,10
5	VWWC660	R407C	803	144,20	5,57	200,75	50,00	4,02	401,50	90,00	4,46	602,25	120,00	5,02
6	VWWC760	R407C	924	164,80	5,61	231,00	57,00	4,05	462,00	103,00	4,49	693,00	137,00	5,06
7	VWWC900	R407C	1094	194,70	5,62	273,50	67,00	4,08	547,00	121,00	4,52	820,50	162,00	5,06
8	VWWC960	R407C	1167	208,10	5,61	291,75	72,00	4,05	583,50	130,00	4,49	875,25	175,00	5,00
9	VWWC1120	R407C	1362	242,10	5,63	340,50	83,00	4,10	681,00	150,00	4,54	1021,50	200,00	5,11
10	VWWC1320	R407C	1605	289,50	5,54	401,25	100,00	4,01	802,50	177,00	4,53	1203,75	237,00	5,08
11	VWWC1520	R407C	1849	329,60	5,61	462,25	115,00	4,02	924,50	202,00	4,58	1386,75	272,00	5,10
12	VWWC1660	R407C	2018	359,50	5,61	504,50	125,00	4,04	1009,00	220,00	4,59	1513,50	297,00	5,10
13	VWWC1800	R407C	2188	387,30	5,65	547,00	136,50	4,01	1094,00	239,00	4,58	1641,00	323,00	5,08
14	VWWC1920	R407C	2335	416,20	5,61	583,75	146,00	4,00	1167,50	260,00	4,49	1751,25	348,00	5,03
15	VWWC2080	R407C	2529	450,20	5,62	632,25	158,00	4,00	1264,50	282,00	4,48	1896,75	375,00	5,06
16	VWWC2240	R407C	2723	491,40	5,54	680,75	170,00	4,00	1361,50	310,00	4,39	2042,25	410,00	4,98
17	VWWC2480	R407C	3016	533,60	5,65	754,00	186,00	4,05	1508,00	330,00	4,57	2262,00	430,00	5,26
18	VWWC2720	R407C	3307	587,10	5,63	826,75	205,00	4,03	1653,50	366,00	4,52	2480,25	470,00	5,28
19	VWWC3100	R407C	3769	668,50	5,64	942,25	234,00	4,03	1884,50	415,00	4,54	2826,75	534,00	5,29

Cooling water inlet 22°C and 50% load			Cooling water inlet 26°C and 75% load			Cooling water inlet 30°C and 100% load			
50% Cooling Capacity (kw)	50% Power input (kw)	50% EER	75% Cooling Capacity (kw)	75% Power input (kw)	75% EER	100% Cooling Capacity (kw)	100% Power input (kw)	100% EER	ESEER
243,00	54,00	4,50	364,50	70,00	5,21	486	88,60	5,49	4,66
261,50	58,00	4,51	392,25	76,00	5,16	523	94,80	5,52	4,66
291,50	64,00	4,55	437,25	82,00	5,33	583	104,10	5,60	4,73
340,00	74,00	4,59	510,00	98,00	5,20	680	121,60	5,59	4,72
401,50	86,00	4,67	602,25	114,00	5,28	803	144,20	5,57	4,81
462,00	100,00	4,62	693,00	130,00	5,33	924	164,80	5,61	4,79
547,00	118,00	4,64	820,50	155,00	5,29	1094	194,70	5,62	4,78
583,50	125,00	4,67	875,25	168,00	5,21	1167	208,10	5,61	4,76
681,00	145,00	4,70	1021,50	190,00	5,38	1362	242,10	5,63	4,81
802,50	170,00	4,72	1203,75	220,00	5,47	1605	289,50	5,54	4,88
924,50	195,00	4,74	1386,75	258,00	5,38	1849	329,60	5,61	4,87
1009,00	215,00	4,69	1513,50	282,00	5,37	2018	359,50	5,61	4,83
1094,00	230,00	4,76	1641,00	318,00	5,16	2188	387,30	5,65	4,79
1167,50	252,00	4,63	1751,25	338,00	5,18	2335	416,20	5,61	4,76
1264,50	272,00	4,65	1896,75	368,00	5,15	2529	450,20	5,62	4,74
1361,50	295,00	4,62	2042,25	397,00	5,14	2723	491,40	5,54	4,73
1508,00	320,00	4,71	2262,00	420,00	5,39	3016	533,60	5,65	4,86
1653,50	350,00	4,72	2480,25	462,00	5,37	3307	587,10	5,63	4,85
1884,50	408,00	4,62	2826,75	528,00	5,35	3769	668,50	5,64	4,81

Working condition: Cooling water inlet/outlet temperature 30/35°C, Cooled water inlet/outlet temperature 23/18°C.

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