



**寶豐冷凍設備有限公司**

Proficient Refrigeration Equipment Company Ltd.

## 半封閉壓縮冷凝機組產品手冊（比澤爾篇）

Semi-Hermetic Series Condensing Unit Catalogue (Bitzer Series)



半封閉風冷型冷凝機組&半封閉水冷型冷凝機組

Semi-hermetic air-cooled condensing unit

Semi-hermetic water-cooled condensing unit



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R22、R404A製冷量	R22、R404ACapacity	

### 概述

風冷式冷凝機組應避免安裝在高溫高濕的空間，進風側儘可能遠離熱源。機組周圍應保持足夠間距使空氣流動暢通，避免形成空氣短路。機組在露天安裝時應架設遮陽篷以避免淋雨和陽光直射。

水冷式冷凝機組在露天安裝時應架設遮陽篷以避免淋雨或陽光直射；在專用機房安裝時應預留定期清洗冷凝器所需的空間，並保證機房的正常通風。

半封閉風冷式機組配有曲軸箱加熱器，使用曲軸箱加熱器能有效防止系統中的製劑遷移回壓縮機造成的潤滑不良，並且在試運行及長期停機後再次啟動前保證足夠的預熱時間。

吸氣避震管應儘量靠近壓縮機且與曲軸平行，不允許水平安裝的避震管與曲軸垂直。

電氣設施的安裝應符合有關標準。用戶應根據機組的總功率配置足夠容量的動力電源並安裝合適的電氣控制系統。另外還必須注意銘牌上的壓縮機型號以確認其適用的連接方式。

### 製冷劑管道的連接

在機組和系統的管道連接之前，應首先釋放機組中存留的氮氣（壓力約 0.5-2 bar）。連接管應使用內部乾燥潔淨、無氧化、無殘留物的紫銅管。焊接時應以乾燥氮氣，採用低熔點的銀銅合金焊料並控制其熔化程度以減少管道內氧化物的生成。如管道內殘存製冷劑（即使處於非壓力狀態），必須先行抽真空並用乾燥氮氣吹洗，否則製冷劑、潤滑油等在受熱後會產生酸性物質。如果不能確認系統內部具備足夠的清潔度，建議在靠近壓縮機的吸氣管路上安裝大容量的過濾器並在系統運行一段時間後將其拆除。

由機組接出的液體製冷劑管道直徑應與機組本身的出液管道相當，以降低製冷量損失。為了提高系統的回油性能，應在控制壓降和噪聲的前提下儘量減小特別是上升吸氣管內徑以保證足夠的製冷劑帶油流速。在排氣管路上有時還應使用集油彎或單向閥。當採用螺紋或法蘭連接時，應注意正確的緊固方法，避免管道受力扭曲，保證結合處的平整和密封性。連接管道應使用適當的固定夾以減少震動的傳導及由震動引起的管道受損。

系統試運行結束後可按需將蒸發器出口與壓縮機之間的管路以絕熱材料覆蓋。

### 冷卻水管道得連接

水冷式冷凝機組的冷卻水管道連接時水管的口徑應和水冷凝器上水管的接口一致，出水管道上應安裝水流量開關，防止機組在缺少狀態下工作而造成故障，冷卻水管應清潔、無洩漏。

### Overview

The air-cooled condensing unit should not be installed in the space with intense heat and high degree of wetness, and the air inlet should be kept away from the heat source also. The surrounding of the unit should remain enough space for the smooth air flow so as to avoid the happening of air short circuit. The sun shield is needed when the installation is outside the room, which could protect the unit from the damage from rain and sunshine.

The water-cooled condensing unit need to be equipped with sun shield to protect it from rain and sunshine when the installation is outside. When the unit is installed in the appropriate machine room, the space around the unit should also be remained for the periodical clean of the condensing unit.

The semi-hermetic air-cooled condensing unit is equipped with crankcase heater which can prevent the system from the problem of refrigerant flowing back which may influence the lubricant performance, besides, it can also ensure the enough time of preheating after the unit has been closed for a long time.

The suction vibration absorber should be close to the compressor and be parallel with the crankshaft, the absorber vertical installation with the crankshaft is not allowed.

The installation of the electric utility should conform to the related standards. According to the total power of the unit, the users should equip it with dynamic power with enough capacity and install the proper electric control system, besides, the user should pay attention to the model number on the nameplate of the compressor to ensure the correct way of connection.

### The connection between the refrigerant pipes

Before the connection between the unit and the system, the nitrogen remains in the unit must be released. (the pressure is nearly 0.5 bar). The connection pipe should use red brass tube which the inner of it should be dry and clean and with no oxidation and residue. Dry nitrogen should be used when the pipes are welded and the users should choose the low melting point silver-copper alloy solder to control the melting degree so as to reduce the oxide formation inside the tube. If some refrigerant is left in the pipe (even is under the status of non-pressure), the pipe should be vacuumized and use dry nitrogen to blowwash, or the refrigerant and lubricant will turn into acid material after heated. If the user can not confirm the enough cleanliness inside the system, it is suggested that a large capacity filter need to be installed next to the sniffer pipe of the compressor and to be removed after the unit runs for some time.

The diameter of the liquid refrigerant pipe which is connected from the unit should be corresponding to the discharge pipe of the unit so as to reduce the loss of refrigeration capacity. In order to increase the oil return capacity, the inner diameter of the upward sniffer tube should be as possible as decreased to ensure the enough oil flow velocity of the refrigerant and which should be on the premise of pressure and noise control. The oil-collecting turn and check valve should also be installed on the exhaust pipe. The users should choose the right way of fixation when the screw and threaded flange are used for the connection so as to avoid the twist of the pipe and ensure the flatness and air tightness. The proper pipe clamps should be used to reduce the vibration transmission and the damage of the pipe from the vibration when the pipes are connected.

The pipes between the vent of the evaporator and the compressor should be covered with heat-insulating material after the test is finished.

### The connection between cooling water pipes

The caliber of the cooling water pipe should be the same as the one on the condenser when these pipes of the condenser are connected, the waterflow switch need to be installed on the outlet pipe to prevent the unit from the damage of lack of water, besides, the cooling water pipe should be clean and without leak.

### 氣密性試驗

製冷劑管道連接後應立即對除壓縮機外的管道部分進行氣密性試驗。注意試驗壓力不得超過各有關部件的最高允許壓力。所有現場連接部分包括安裝的各類閥門及各種管路構件都必須以乾燥氮氣或氮氣/製冷劑混合物作氣密性試驗。試驗過程中壓縮機的吸氣和排氣截止閥應保持關閉以防止空氣和水份進入。

電子檢漏儀和鹵素檢漏儀可用于這種氣密性試驗。採用氮氣/製冷劑檢漏時，應先加入一定量的製冷劑然後緩慢加註乾燥氮氣至規定的壓力。如採用氮氣檢漏法，則可在充註乾燥氮氣後將少量易起泡溶液塗于待檢部位表面，以觀察是否有氣泡產生。

水冷式冷凝機組的冷却水管道同樣要進行檢漏，確保水路暢通、無堵塞、無洩漏。

### 抽真空和加註製冷劑

系統在氣密性試驗後必須抽真空。製冷劑管路應分兩步抽真空，第一步：壓縮機截止閥在關閉狀態下抽真空；第二步：打開壓縮機截止閥，將包括壓縮機在內的整個系統再次抽真空。兩次抽真空之間可加入適量製冷劑以吸收管路內可能存在的水份。建議從系統的低壓側和高壓側同時抽真空，且真空表應儘量遠離真空泵的吸氣口。**不允許用壓縮機自行抽真空。**抽真空連接管道應選用足夠的內徑，儘量短且不能有急遽彎曲或狹窄段。抽真空操作時應仔細，否則系統內部存在的空氣將使潤滑油在高溫排氣下結碳而影響潤滑質量，空氣中存在的水份可腐蝕金屬，分解潤滑油及形成酸性物質，這種情況在高的排氣壓力/溫度下將加速形成。

加註製冷劑應在系統抽真空後立即進行。建議從儲液器截止閥的工藝接口或通過加液閥加入額定量的製冷劑，此時磅秤上的製冷劑瓶應保持出口閥向下，加液管道上應安裝過濾乾燥器。若製冷劑未加註至額定數量，可在系統運行時從低壓側補充氣態製冷劑。

### 注意

- 不允許壓縮機在真空下啟動以防止損害其內置電機。
- 不允許在真空下對壓縮機進行高電壓實驗和電絕緣強度實驗。
- 不允許直接從壓縮機吸氣口加註液態製冷劑。

### 電氣連接

在進行電氣連接前，用戶必須檢查動力電源的電壓、相數、頻率、容量是否和機組及其他電氣設備相匹配，並根據各部件的電功率相應配置足夠容量的電氣部件。另外應注意壓縮機銘牌上的代碼或壓縮機接線盒蓋上的接線圖，以確認壓縮機電機的電源連接和啟動方式。半封閉風冷式機組的適用電源一般為  $380 \sim 420V \pm 10\%/3/50Hz$ 。通常用戶應配置合適的控制系統以適應各種可能的運行工況。所有電纜應穿入護套管，系統中所有金屬部件的外殼包括金屬護套管必須可靠接地。

### Air tight test

The air tight test for the partial pipes outside the compressor should be run at once after the connection of the refrigerant pipes. The test pressure can not be higher than the allowed highest pressure of any parts. All the types of installed valves and all the pipe parts should choose dry nitrogen or nitrogen/refrigerant mixture for the air tight test. The break valve for the sinffer pipe and the vent-pipe of the compressor should be closed for preventing it from the entering of the air and water.

The electronic leak detector and halogen leak detector could be used for the air tight test. The dry nitrogen should be slowly injected to a specified pressure after the injection of a rated amount of refrigerant before the air tight test. If using the way of nitrogen air tight test, a little of easy bubbled liquid should be painted on the surface of the part after the injection of dry nitrogen, and observe whether there are any bubbles.

The cooling water pipe of the water-cooled condensing unit also need leak detection test to ensure the water in the pipe flow smoothly and without block and leak.

### Vacuumization and the charge of refrigerant

The unit must be vacuumized after the air tight test. The refrigerant pipe should be vacuumized within two steps, 1) the break valve of the compressor could be vacuumized only when it is closed; 2) open the break valve, vacuumize the whole system again. Between the two steps, an appropriate amount of refrigerant could be injected into the pipe to absorb the water which may exist. It is suggested that both of the low pressure side and the high pressure side need to be vacuumized at the same time, and the vacuum gauge should be as possible as away from the intake port of the vacuum pump. The compressor is not allowed to vacuumized by itself. The inner diameter of the connection pipe for vacuumization should be enough larger and shorter, and the pipe can not be heavily twisted and narrowed. The procedure of vacuumization should be very careful, or the air exist in the system will carbonize the lubricant under the high temperature which will affect the quality of the lubricant, the water in the air can also corrupt the metal, disassemble the lubricant and form the acid material, and that will be accelerated to form under high exhaust pressure and high temperature.

The injection of refrigerant should be run at once after the vacuumization of the system. A rated amount of refrigerant should be injected into the craft interface of the break valve on the liquid reservoir, accordingly, the outlet valve of the refrigerant bottle on the weighing machine will keep down forward, and a dry filter should be installed on the charging line. If the amount of refrigerant is not added appropriately, the gaseous state refrigerant can be added from the low pressure side when the system is running.

### Attention:

- The compressor can not be started under the vacuum status or the inside electrical machine will be damaged.
- The high voltage test and electric insulation test can not be run under the vacuum status.
- The liquid state refrigerant can not be injected from the inspiration side of the compressor.

### The connection between electrical machines

Before the connection between the electrical machines, the users must check the voltage, phase number, frequency and the capacity of the dynamic power and make sure whether they match with the other electrical equipments, and the electrical machine parts with enough capacity should be equipped according to the electric power of each part. Besides, the users should also pay attention to the connection layout on the terminal box or the number on the nameplate of the compressor to confirm the right connection of the compressor power and the way of start. The power of the Copeland semi-hermetic air-cooled condensing unit should be  $380 \sim 420V \pm 10\%/3/50Hz$ . The users should equip the unit with proper control system to make it adapt to all the possible running conditions. All the cables should be covered with shield tube. All the shell of the metal parts in the system including the metal shield tube must be reliable earth.

### 開機準備

在完成製冷系統的氣密性實驗、抽真空和加注製冷劑以及連接電氣電纜後，應繼續完成如下步驟才可進入試運行階段。

- a) 確認電源及各電氣部件已正確配置，各金屬殼體已可靠接地
- b) 確認各部分電纜已可靠連接，回路中無短路或開路
- c) 確認製冷劑管路上的所有手動截止閥均處於開放狀態
- d) 調整熱力膨脹閥的預緊力螺絲使之保持較高的過熱度
- e) (水冷式冷凝機組) 確認冷卻水已可靠接通並開啟

### 補充潤滑油

每一臺風冷式冷凝機組都已預加了正常運行狀況所需的足量的潤滑油。根據系統的設計和其運行工況，部分潤滑油隨同製冷劑被排出壓縮機後可能停留在製冷劑管路的某些部位而不能完全返回壓縮機。當壓縮機曲軸箱的存油量減少時，應通過壓縮機體上的加油孔補充潤滑油。補充潤滑油與否及補充數量主要以壓縮機進入穩定工況或在穩定工況下停止壓縮機的最初 10 秒內視油鏡中的油位為依據（具體參照壓縮機視油鏡旁的標誌）。補充潤滑油時應注意防止空氣進入壓縮機。

### 補充製冷劑

製冷劑的正確加注對製冷系統的正常和高效運行至關重要。但即使採用同樣壓縮機的製冷系統，也會因其內部容積、蒸發溫度、冷凝壓力等因素的不同而具有不同的最佳製冷劑加注量。另外採用高壓側加注液態製冷劑的方法未必能一次加入足量的製冷劑。因此實際操作中通常採用完成液態製冷劑加注後在試運行時從系統低壓側加注氣態製冷劑的方法補充製冷劑。

除了對已確定的系統可進行秤量加注外，確定製冷劑加注量的常用方法之一是觀察液體管道視液鏡中製冷劑的流動情況。當其中連續的液體流動清晰可見時，就可以認為製冷劑已基本正確加注。必須注意，觀察視液鏡中液體流動情況可以作為一種確定製冷劑加注量的有效，然爾不是唯一的依據。最終以確認壓力表的數據為準。

### 水冷凝器的維護保養

水冷凝器常見故障是銅管內壁結垢或髒堵，水溫越高、流速越低、水質越硬雜質越容易沉積。所以水冷凝器內部銅管要定期檢查 / 清洗，以減少水垢厚度，尽可能保持換熱效果。

### Start preparation

Only after the air tight test, vacuumization, refrigerant injection and the connection between electrical machines and cables have been finished, then the following running test can be made.

- a) Make sure the power and each electrical machine have been installed in the right way, every metal shell has been reliable earth.
- b) Make sure each cable has been reliable earth, and the loop is without short circuit or open circuit.
- c) Make sure all the manual break valves on the refrigerant tube are open.
- d) Adjust the pretightening force screw of the thermostatic expansion valve to keep it in high degree of superheat.
- e) (Water-cooled condensing unit) Make sure the cooling water has been reliable put through.

### The lubricant supplement

Each Copeland wind-cooled condensing unit has been added enough ultra lubricant, according to the design of the system and the specific working condition, some lubricant will remain in the refrigerant pipe and can not totally back to the compressor after the refrigerant and partial lubricant is discharged from the compressor. When there is not enough lubricant in the crankshaft, the lubricant should be injected through the oil way on the compressor. Whether the additional lubricant is needed to be injected and the relevant quantity should be subjected to the oil level of the sight glass in the first 10 seconds after the user shut down the compressor under the stable work condition (the detail information should be subjected to the mark on the sight glass of the compressor). The air entrance is not allowed when the lubricant is injected into the compressor.

### The refrigerant charge

The right way injection of the refrigerant is very important to the running of the refrigeration system. But even using the refrigeration system of the same compressor, the best supplement quantity of the refrigerant will be different for the difference of the inside volume, evaporating temperature and the condensing pressure, moreover, the liquid refrigerant injection from the high pressure side can not guarantee the enough refrigerant injection in one time, so during the practice process, after the liquid refrigerant injection is finished the user can inject the gaseous refrigerant from the low pressure side of the compressor when the system is running.

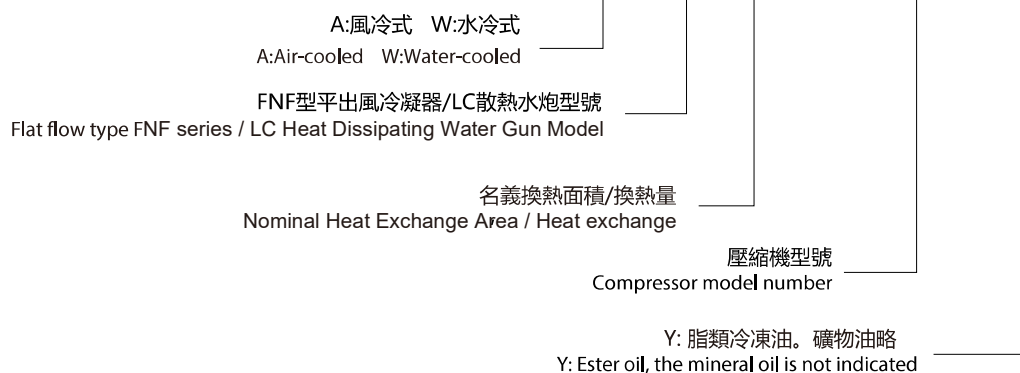
Beside the way of weighing to the established system, the general way to confirm the refrigerant quantity is to watch the refrigerant movement inside the pipe of the sight glass. If the user can see the frequent flow of the liquid clearly, then he can make sure that the refrigerant has been rightly injected. It must be noticed that watching the liquid movement inside the sight glass is not the only way to confirm whether the refrigerant is rightly injected or not, the final result should be subjected to the data on the pressure gauge.

### The repair and maintenance of water-cooled condensing unit

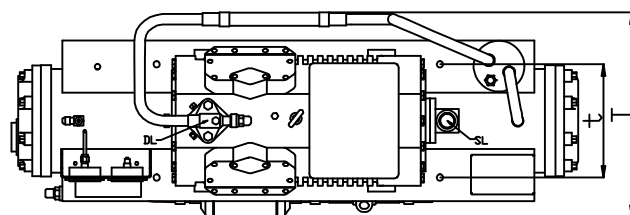
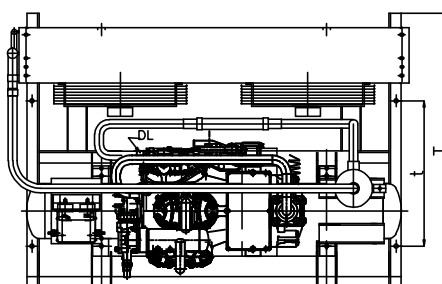
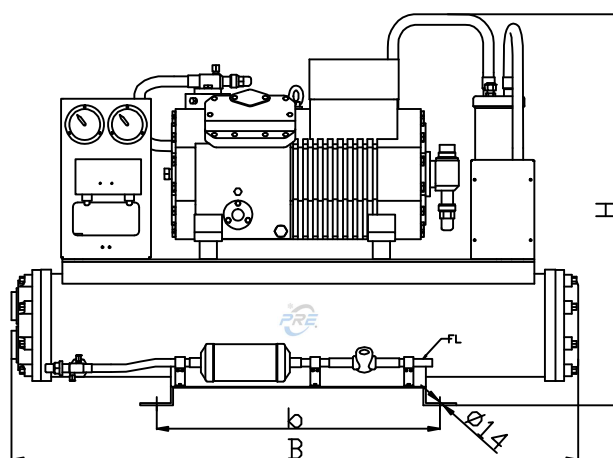
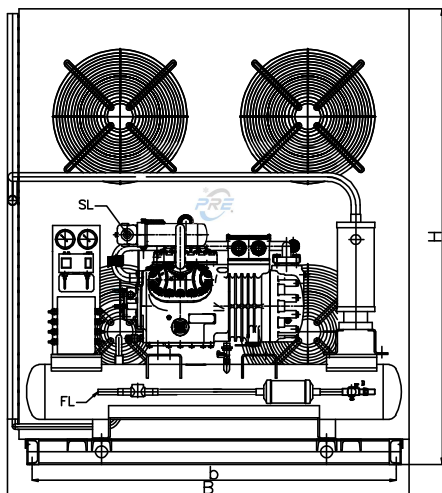
The common fault of the water-cooled condensing unit is the incrustation or block of the inner wall of the brass tube, the higher temperature of the water is, the slower the flow velocity will be, the harder of the impurity is in the water, the easier the sediment in the water will exist. Therefore, the brass tube inside the water-cooled condensing unit should be clean periodically to decrease the thickness of the scale and as possible as to keep the heat exchange effect.

## 型號說明 Unit model

A FNF20 / 2GES-2 Y



## 外形尺寸 Dimensions



# 風冷型 Air-cooled

## 技術參數 Specification

380/420V-3Ph-50Hz

風冷機組型號 Condensing Unit	壓縮機 排氣量 Displacement m <sup>3</sup> /h	最大 工作電流 Max.Oper. Current A	儲液罐容 積 Receiver L	風機數量 Fan n'	風機風量 Air Flow m <sup>3</sup> /h	外形尺寸 Overall Dimension			安裝尺寸 Instaling Measure			接管尺寸 Tube Connection			重量 Gross Weight Kg
						B mm	T mm	H mm	b mm	t mm	Φ mm	SL inc	DL inc	FL inc	
AFNF10/2KES-05Y	4.06	2.8	2	1	5415	770	700	630	540	475	11	5/8"	1/2"	3/8"	94
AFNF10/2JES-07Y	5.21	3.7	2	1	5415	770	700	630	695	370	11	5/8"	1/2"	3/8"	94
AFNF10/2HES-1Y	6.51	3.8	2	1	5415	770	700	630	540	475	11	5/8"	1/2"	3/8"	94
AFNF20/2HES-2Y	6.51	4.5	3	1	5415	770	700	630	540	475	11	5/8"	1/2"	3/8"	96
AFNF20/2GES-2Y	7.58	5.30	3	1	5415	770	700	630	695	370	11	5/8"	1/2"	3/8"	101
AFNF20/2FES-2Y	9.54	5.27	3	1	5415	770	700	630	540	475	11	5/8"	1/2"	3/8"	102
AFNF20/2EES-2Y	11.40	6.07	3	1	5415	770	700	630	540	475	11	7/8"	5/8"	3/8"	115
AFNF20/2DES-2Y	13.40	7.27	3	1	5415	770	700	630	540	475	11	7/8"	5/8"	3/8"	116
AFNF30/2FES-3Y	9.54	6.40	6	1	7395	800	770	680	695	370	11	5/8"	1/2"	1/2"	103
AFNF30/2EES-3Y	11.40	7.64	6	1	7395	800	770	680	915	380	14	7/8"	5/8"	1/2"	126
AFNF30/2DES-3Y	13.40	8.54	6	1	7395	800	770	680	915	380	14	7/8"	5/8"	1/2"	126
AFNF30/2CES-3Y	16.20	9.10	6	1	7395	800	770	680	695	370	11	7/8"	5/8"	1/2"	128
AFNF30/4FES-3Y	18.10	9.80	6	1	7395	800	770	680	695	370	11	7/8"	5/8"	1/2"	138
AFNF39/2CES-4Y	16.20	10.60	6	2	7840	1030	800	630	1155	475	14	7/8"	5/8"	1/2"	141
AFNF39/4EES-4Y	22.70	11.44	6	2	7840	1030	800	630	915	380	14	1 1/8"	5/8"	1/2"	145
AFNF49/4FES-5Y	18.10	12.00	6	2	7840	1030	800	630	915	380	14	7/8"	5/8"	1/2"	161
AFNF49/4DES-5Y	26.80	14.24	6	2	7840	1030	800	630	915	380	14	1 1/8"	7/8"	1/2"	161
AFNF63/4EES-6Y	22.70	14.40	6	2	10830	1120	850	730	915	475	14	1 1/8"	5/8"	1/2"	190
AFNF63/4CES-6Y	32.50	17.10	6	2	10830	1120	850	730	915	475	14	1 1/8"	7/8"	1/2"	189
AFNF70/4DES-7Y	26.80	17.10	14	2	10830	1250	850	880	1155	475	14	1 1/8"	7/8"	5/8"	202
AFNF82/4TES-9Y	41.30	18.20	14	2	14790	1400	910	760	1155	475	14	1 3/8"	1 1/8"	5/8"	238
AFNF82/4CES-9Y	32.50	21.70	14	2	14790	1400	910	760	1155	550	14	1 1/8"	7/8"	5/8"	194
AFNF100/4VES-10Y	34.70	22.70	14	2	17840	1550	910	760	1155	550	14	1 1/8"	7/8"	5/8"	323
AFNF123/4PES-12Y	48.50	22.20	14	2	22000	1550	950	910	1155	550	14	1 3/8"	1 1/8"	5/8"	352
AFNF123/4TES-12Y	41.30	25.70	14	2	22000	1550	950	910	1155	550	14	1 3/8"	1 1/8"	5/8"	325
AFNF152/4NES-14Y	56.20	25.70	14	2	22000	1550	950	960	1155	550	14	1 3/8"	1 1/8"	5/8"	365
AFNF152/4PES-15Y	48.50	33.40	26	2	22000	1550	980	960	1155	550	14	1 5/8"	1 1/8"	5/8"	382
AFNF180/4HE-18Y	73.70	32.70	26	4	29580	1350	1000	1410	1155	550	14	1 5/8"	1 1/8"	5/8"	397
AFNF180/4NES-20Y	56.20	40.40	26	4	29580	1350	1000	1410	1155	550	14	1 3/8"	1 1/8"	5/8"	393

壓縮機電機名義轉速1450 rpm 時的理論排氣量。  
最低允許電壓 (50Hz) 時的最大值。

The theoretical displacement when the compressor revolving speed is 1450rpm.  
The maximum of the allowed lowest voltage(50Hz).

# 風冷型 Air-cooled

## 技術參數 Specification

380/420V-3Ph-50Hz

水冷機組型號 Condensing Unit	壓縮機 排氣量 Displacement m <sup>3</sup> /h	最大 工作電流 Max.Oper. Current A	儲液罐容 積 Receiver L	風機數量 Fan n'	風機風量 Air Flow m <sup>3</sup> /h	外型尺寸 Overall Dimension			安裝尺寸 Instaling Measure			接管尺寸 Tube Connection			重量 Gross Weight Kg
						B mm	T mm	H mm	b mm	t mm	Φ mm	SL inc	DL inc	FL inc	
AFNF220/4GE-23Y	84.60	39.40	26	6	23520	1870	1200	1310	1155	475	14	2 1/8"	1 1/8"	5/8"	397
AFNF220/4HE-25Y	73.70	48.40	50	6	23520	1870	1200	1310	1155	550	14	2 1/8"	1 1/8"	7/8"	491
AFNV270/6HE-28Y	110.50	48.40	50	6	32490	1870	1200	1550	1155	550	14	2 1/8"	1 3/8"	7/8"	468
AFNV270/4GE-30Y	84.60	56.40	50	6	32490	1870	1200	1550	1155	550	14	2 1/8"	1 1/8"	7/8"	522
AFNV320/6GE-34Y	126.80	56.40	50	6	32490	1870	1200	1550	1155	550	14	2 1/8"	1 3/8"	7/8"	472
AFNV320/6HE-35Y	110.50	64.40	50	6	32490	1870	1130	1700	1155	550	14	2 1/8"	1 3/8"	7/8"	551
AFNV360/6FE-44Y	151.60	81.40	50	8	43320	2200	1500	1700	1155	550	14	2 1/8"	1 5/8"	7/8"	527
AFNF49/S4T-5.2Y	19.70	15.20	6	2	7840	1190	820	660	1155	475	14	1 1/8"	7/8"	1/2"	240
AFNF82/S4N-8.2Y	28.00	18.20	14	2	14790	1190	820	710	1155	475	14	1 1/8"	7/8"	1/2"	254
AFNF120/S4G-12.2Y	42.30	25.70	14	2	22000	1630	910	900	1155	550	14	1 3/8"	1 1/8"	5/8"	364
AFNF170/S6J-16.2Y	63.50	33.40	26	2	22000	1190	820	1360	1155	475	14	1 5/8"	1 3/8"	7/8"	420
AFNF200/S6H-20.2Y	73.60	40.40	26	6	23520	1630	1130	1300	1155	550	14	1 5/8"	1 3/8"	7/8"	463
AFNF242/S6G-25.2Y	84.50	48.40	50	6	23520	1630	1130	1700	1155	550	14	2 1/8"	1 3/8"	7/8"	517
AFNV300/S6F-30.2Y	101.10	56.40	50	6	23520	1630	1130	1700	1155	550	14	2 1/8"	1 3/8"	7/8"	546

壓縮機電機名義轉速 1450 rpm 時的理論排氣量。  
最低允許電壓 (50Hz) 時的最大值。

The theoretical displacement when the compressor revolving speed is 1450rpm.  
The maximum of the allowed lowest voltage(50Hz).

# 風冷型 Air-cooled type

# R134

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 冷凝機組 型號	Verfl. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量			Leistungsaufnahme Power consumption 功率消耗				
			Q <sub>o</sub> [Watt]			P <sub>e</sub> [kW]				
			Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	
			15	10	5	0	-5	-10	-15	-20
AFNF10/2KES-05Y	40	Q	2770	2250	1810	1420	1090	815	580	
		P	0,68	0,64	0,59	0,55	0,50	0,45	0,39	
	50	Q	2420	1960	1570	1220	930	685	470	
		P	0,78	0,72	0,67	0,61	0,55	0,49	0,41	
	60	Q	2090	1690	1350	1050	790	570	385	
		P	0,87	0,81	0,74	0,67	0,60	0,51	0,42	
AFNF10/2JES-07Y	40	Q	3540	2880	2310	1820	1400	1040	740	
		P	0,86	0,82	0,77	0,72	0,66	0,59	0,51	
	50	Q	3100	2510	2000	1570	1190	875	605	
		P	0,98	0,93	0,87	0,80	0,72	0,64	0,53	
	60	Q	2690	2170	1730	1340	1020	735	495	
		P	1,10	1,04	0,96	0,88	0,79	0,68	0,56	
AFNF10/2HES-1Y	40	Q	4650	3820	3100	2490	1960	1520	1140	
		P	1,02	0,99	0,94	0,89	0,83	0,76	0,68	
	50	Q	4080	3330	2690	2150	1680	1280	940	
		P	1,18	1,13	1,07	0,99	0,91	0,81	0,70	
	60	Q	3510	2850	2290	1810	1390	1040	740	
		P	1,35	1,27	1,18	1,08	0,97	0,84	0,71	
AFNF20/2HES-2Y	60	Q	4240	3490	2850	2290	1810	1390	1040	740
		P	1,39	1,33	1,25	1,17	1,08	0,97	0,86	0,73
	70	Q	3560	2920	2370	1890	1480	1120	820	560
		P	1,57	1,48	1,38	1,27	1,15	1,02	0,87	0,71
	80	Q	2850	2340	1890	1500	1160	860	610	
		P	1,75	1,63	1,51	1,37	1,22	1,05	0,88	
AFNF20/2GES-2Y	40	Q	5400	4450	3630	2930	2320	1810	1370	
		P	1,19	1,15	1,11	1,05	0,98	0,90	0,81	
	50	Q	4760	3910	3180	2550	2010	1540	1150	
		P	1,38	1,32	1,24	1,16	1,06	0,95	0,84	
	60	Q	4120	3370	2730	2170	1690	1280	935	
		P	1,56	1,47	1,36	1,25	1,12	0,99	0,84	
AFNF20/2FES-2Y	40	Q	6850	5640	4590	3690	2920	2270	1720	
		P	1,43	1,38	1,32	1,24	1,15	1,04	0,92	
	50	Q	5880	4820	3910	3130	2450	1880	1400	
		P	1,69	1,60	1,49	1,38	1,25	1,11	0,96	
	60	Q	4960	4060	3270	2600	2020	1530	1110	
		P	1,90	1,78	1,64	1,49	1,33	1,15	0,97	
AFNF30/2FES-3Y	60	Q	6000	4960	4060	3280	2610	2030	1540	1120
		P	2,12	1,99	1,86	1,72	1,57	1,41	1,24	1,06
	70	Q	4970	4110	3350	2690	2130	1640	1230	875
		P	2,35	2,20	2,03	1,85	1,66	1,47	1,27	1,06
	80	Q	3960	3270	2660	2130	1670	1280	940	
		P	2,58	2,39	2,18	1,96	1,74	1,51	1,27	
AFNF20/2EES-2Y	40	Q	8600	7040	5700	4560	3580	2760	2070	
		P	1,78	1,70	1,60	1,48	1,34	1,20	1,04	
	50	Q	7440	6070	4900	3890	3040	2320	1710	
		P	2,09	1,95	1,79	1,62	1,44	1,25	1,07	
	60	Q	6290	5110	4100	3230	2500	1880	1350	
		P	2,34	2,14	1,93	1,71	1,48	1,27	1,06	
AFNF30/2EES-3Y	60	Q	7650	6290	5110	4100	3230	2500	1880	1350
		P	2,51	2,33	2,14	1,94	1,73	1,51	1,30	1,10
	70	Q	6260	5120	4140	3290	2560	1950	1420	990
		P	2,74	2,50	2,26	2,01	1,76	1,51	1,27	1,04
	80	Q	4840	3940	3150	2470	1890	1390	975	
		P	2,89	2,60	2,31	2,02	1,73	1,45	1,19	
AFNF20/2DES-2Y	40	Q	10240	8390	6800	5450	4300	3320	2510	
		P	2,15	2,06	1,93	1,79	1,62	1,45	1,27	
	50	Q	8870	7260	5870	4680	3670	2810	2090	
		P	2,54	2,37	2,17	1,97	1,75	1,53	1,31	
	60	Q	7530	6130	4940	3910	3040	2300	1680	
		P	2,86	2,61	2,35	2,09	1,82	1,56	1,32	
AFNF30/2DES-3Y	60	Q	9140	7530	6130	4940	3910	3040	2300	1680
		P	3,01	2,80	2,57	2,32	2,07	1,82	1,57	1,33
	70	Q	7510	6160	4990	3990	3130	2390	1770	1250
		P	3,31	3,02	2,73	2,43	2,13	1,84	1,55	1,29
	80	Q	5830	4760	3820	3020	2320	1730	1230	
		P	3,52	3,17	2,82	2,46	2,12	1,79	1,47	
AFNF30/2CES-3Y	40	Q	12590	10290	8370	6720	5320	4140	3150	
		P	2,60	2,50	2,36	2,19	1,99	1,79	1,58	
	50	Q	10900	8940	7250	5810	4580	3540	2670	
		P	3,08	2,88	2,66	2,42	2,17	1,91	1,66	
	60	Q	9290	7600	6150	4900	3840	2940	2180	
		P	3,49	3,20	2,90	2,59	2,28	1,98	1,69	
AFNF39/2CES-4Y	60	Q	11250	9290	7600	6150	4900	3840	2940	2180
		P	3,69	3,44	3,17	2,88	2,58	2,28	1,99	1,70
	70	Q	9290	7650	6240	5010	3960	3060	2310	1670
		P	4,08	3,74	3,40	3,04	2,69	2,34	2,00	1,69
	80	Q	7250	5950	4820	3830	2980	2260	1650	
		P	4,37	3,96	3,54	3,12	2,72	2,33	1,96	

# 風冷型 Air-cooled type

# R134

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 冷凝機組 型號	Verfl. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量			[Watt]	Leistungsaufnahme Power consumption 功率消耗			
			Q <sub>o</sub>				P <sub>e</sub> [kW]			
			Verdampfungstemperatur °C Evaporating temperature °C				蒸发温度 °C			
			15	10	5	0	-5	-10	-15	-20
AFNF30/4FES-3Y	40	Q	13590	11040	8880	7060	5520	4240		3190
		P	2,78	2,65	2,48	2,28	2,06	1,83		1,60
	50	Q	11650	9440	7560	5970	4630	3510		2590
		P	3,24	3,01	2,75	2,48	2,19	1,90		1,62
	60	Q	9730	7840	6240	4880	3730	2780		1990
		P	3,60	3,28	2,94	2,60	2,25	1,90		1,57
AFNF49/4FES-5Y	60	Q	11910	9730	7850	6250	4890	3740		2790
		P	3,83	3,55	3,25	2,93	2,60	2,26		1,92
	70	Q	9620	7820	6270	4950	3820	2860		2070
		P	4,15	3,79	3,41	3,01	2,62	2,22		1,83
	80	Q	7340	5930	4720	3660	2760	2000		1360
		P	4,35	3,91	3,45	2,99	2,53	2,08		1,65
AFNF39/4EES-4Y	40	Q	17030	14000	11410	9190	7320	5730		4410
		P	3,52	3,36	3,16	2,93	2,67	2,40		2,12
	50	Q	14760	12110	9830	7890	6240	4850		3690
		P	4,18	3,90	3,59	3,26	2,91	2,56		2,22
	60	Q	12500	10230	8280	6610	5190	3980		2980
		P	4,75	4,35	3,93	3,51	3,08	2,67		2,27
AFNF63/4EES-6Y	60	Q	15130	12500	10230	8280	6610	5190		3980
		P	5,02	4,67	4,30	3,90	3,50	3,09		2,69
	70	Q	12450	10270	8380	6750	5340	4150		3130
		P	5,57	5,11	4,63	4,15	3,66	3,19		2,73
	80	Q	9760	8040	6540	5230	4100	3130		2300
		P	6,02	5,45	4,88	4,31	3,75	3,21		2,70
AFNF49/4DES-5Y	40	Q	20500	16690	13470	10750	8460	6550		4980
		P	4,16	3,96	3,71	3,42	3,11	2,77		2,43
	50	Q	17650	14360	11550	9180	7180	5510		4130
		P	4,88	4,54	4,17	3,77	3,35	2,93		2,51
	60	Q	14830	12030	9630	7600	5890	4450		3270
		P	5,47	5,00	4,50	4,00	3,49	2,99		2,51
AFNF70/4DES-7Y	60	Q	18090	14830	12030	9640	7610	5890		4460
		P	5,79	5,38	4,94	4,47	3,98	3,49		3,01
	70	Q	14720	12040	9730	7740	6050	4610		3410
		P	6,34	5,80	5,24	4,66	4,08	3,51		2,96
	80	Q	11350	9250	7420	5850	4490	3340		2370
		P	6,72	6,07	5,40	4,72	4,05	3,40		2,78
AFNF63/4CES-6Y	40	Q	25050	20450	16560	13260	10490	8170		6250
		P	5,05	4,82	4,54	4,20	3,83	3,44		3,04
	50	Q	21700	17690	14290	11400	8970	6950		5270
		P	5,94	5,55	5,12	4,65	4,16	3,67		3,19
	60	Q	18320	14920	12010	9540	7450	5710		4260
		P	6,69	6,14	5,57	4,98	4,38	3,80		3,24
AFNF82/4CES-9Y	60	Q	22300	18320	14920	12010	9540	7450		5710
		P	7,20	6,69	6,14	5,57	4,98	4,38		3,80
	70	Q	18240	14980	12160	9750	7680	5930		4470
		P	7,95	7,29	6,59	5,88	5,18	4,49		3,82
	80	Q	14170	11620	9390	7470	5820	4410		3220
		P	8,53	7,71	6,88	6,05	5,24	4,45		3,71
AFNF70/4VES-7Y	40	Q	26950	22000	17720	14090	11020	8440		6290
		P	5,15	4,97	4,68	4,29	3,85	3,38		2,90
	50	Q	22950	18680	15000	11850	9160	6880		4960
		P	6,04	5,65	5,17	4,64	4,09	3,53		3,01
	60	Q	19060	15480	12380	9690	7380	5400		3700
		P	6,77	6,18	5,54	4,88	4,22	3,57		2,97
AFNF100/4VES-10Y	60	Q	23300	19010	15330	12200	9550	7340		5500
		P	7,07	6,60	6,06	5,47	4,83	4,19		3,56
	70	Q	18940	15360	12300	9700	7510	5670		4160
		P	7,75	7,11	6,42	5,70	4,96	4,24		3,55
	80	Q	14450	11620	9200	7150	5420	3980		2810
		P	8,26	7,47	6,65	5,82	5,00	4,22		3,50
AFNF82/4TES-9Y	40	Q	32350	26450	21400	17080	13420	10340		7760
		P	6,20	5,98	5,64	5,19	4,68	4,13		3,56
	50	Q	27700	22600	18210	14450	11240	8510		6210
		P	7,29	6,82	6,27	5,65	5,00	4,35		3,72
	60	Q	23100	18840	15140	11930	9160	6780		4740
		P	8,20	7,51	6,77	5,99	5,21	4,45		3,74
AFNF123/4TES-12Y	60	Q	28200	23050	18660	14920	11760	9100		5090
		P	8,80	8,20	7,51	6,77	5,99	5,21		4,45
	70	Q	23000	18750	15090	11980	9360	7160		5350
		P	9,79	8,98	8,10	7,18	6,23	5,29		4,39
	80	Q	17690	14320	11420	8960	6890	5160		3750
		P	10,65	9,69	8,64	7,53	6,39	5,25		4,14

**Leistungswerte 50 Hz**  
bezogen auf Sauggastemperatur 20°C,  
ohne Flüssigkeits-Unterkühlung

**Performance data 50 Hz**  
relating to 20°C suction gas tempera-  
ture, without liquid subcooling

**性能参数 50Hz**  
对应20°C吸气温度，液体无过冷

# 風冷型 Air-cooled type

# R134

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 冷 凝 機 組 型 號	Verf. Temp. Cond. temp. 冷 凝 溫 度 °C	↓	Kälteleistung Cooling capacity 製冷量				Leistungsaufnahme Power consumption 功率消耗			
			Q <sub>o</sub> [Watt]				P <sub>e</sub> [kW]			
			Verdampfungstemperatur °C Evaporating temperature °C		蒸发温度 °C		Verdampfungstemperatur °C Evaporating temperature °C		蒸发温度 °C	
15	10	5	0	-5	-10	-15	-20			
AFNF123/4PES-12Y	40	Q	37450	30500	24500	19450	15170	11570	8570	
		P	7,03	6,75	6,34	5,82	5,23	4,59	3,94	
	50	Q	31800	25800	20700	16280	12530	9360	6700	
AFNF152/4PES-15Y	60	P	8,18	7,63	6,98	6,26	5,50	4,73	3,96	
	60	Q	26300	21300	16970	13240	10020	7260	4910	
		P	9,10	8,29	7,43	6,52	5,60	4,68	3,79	
AFNF152/4NES-14Y	60	Q	32250	26250	21100	16740	13050	9960	7400	
		P	9,88	9,20	8,40	7,53	6,62	5,70	4,80	
	70	Q	26100	21100	16890	13210	10160	7610	5520	
AFNF152/4NES-14Y	80	P	10,81	9,85	8,83	7,76	6,69	5,64	4,66	
	80	Q	19800	15860	12490	9630	7230	5240	3620	
		P	11,40	10,20	8,97	7,74	6,53	5,38	4,34	
AFNF152/4NES-14Y	40	Q	43850	35800	28900	23000	18050	13860	10370	
		P	8,33	7,99	7,51	6,92	6,24	5,51	4,76	
	50	Q	37400	30500	24500	19410	15050	11350	8240	
AFNF152/4NES-14Y	60	P	9,72	9,08	8,33	7,50	6,62	5,71	4,82	
	60	Q	31150	25350	20300	15960	12200	8970	6210	
		P	10,89	9,96	8,94	7,88	6,80	5,73	4,69	
AFNF180/4NES-20Y	60	Q	38400	31450	25450	20400	16070	12460	9450	
		P	11,84	11,05	10,13	9,13	8,08	7,02	6,00	
	70	Q	31400	25600	20600	16390	12810	9820	7350	
AFNF180/4NES-20Y	80	P	13,03	11,92	10,73	9,49	8,25	7,04	5,91	
	80	Q	24150	19570	15630	12280	9450	7100	5170	
		P	13,84	12,43	10,99	9,54	8,13	6,79	5,57	
AFNF152/4JE-15Y	40	Q	48850	40050	32650	26300	20850	16230	12330	
		P	9,30	8,98	8,52	7,94	7,28	6,56	5,81	
	50	Q	42250	34700	28200	22600	17800	13720	10260	
AFNF152/4JE-15Y	60	P	10,94	10,34	9,62	8,80	7,93	7,03	6,13	
	60	Q	35950	29400	23800	18920	14750	11200	8180	
		P	12,35	11,47	10,50	9,47	8,39	7,30	6,23	
AFNF220/4JE-22Y	60	Q	42750	35250	28700	23100	18280	14150	10630	
		P	12,90	12,14	11,25	10,25	9,18	8,06	6,93	
	70	Q	35050	28750	23300	18550	14470	10970	7990	
AFNF220/4JE-22Y	80	P	14,25	13,18	12,00	10,74	9,42	8,08	6,74	
	80	Q	27150	22100	17710	13890	10580	7740	5320	
		P	15,18	13,81	12,34	10,80	9,24	7,66	6,11	
AFNF180/4HE-18Y	40	Q	57400	47250	38550	31100	24750	19390	14870	
		P	11,20	10,74	10,12	9,38	8,56	7,68	6,77	
	50	Q	49800	40950	33300	26800	21250	16530	12570	
AFNF180/4HE-18Y	60	P	13,12	12,33	11,42	10,41	9,34	8,25	7,16	
	60	Q	42200	34600	28100	22500	17690	13630	10220	
		P	14,77	13,67	12,47	11,21	9,91	8,61	7,35	
AFNF220/4HE-25Y	60	Q	50700	41900	34300	27700	22050	17170	13030	
		P	15,31	14,39	13,35	12,20	10,98	9,71	8,41	
	70	Q	41600	34350	28000	22500	17680	13550	10000	
AFNF220/4HE-25Y	80	P	16,96	15,71	14,36	12,93	11,44	9,91	8,37	
	80	Q	32500	26700	21650	17200	13290	9890	6930	
		P	18,29	16,71	15,06	13,34	11,57	9,77	7,95	
AFNF220/4GE-23Y	40	Q	65100	53500	43600	35150	27900	21800	16640	
		P	13,25	12,56	11,73	10,77	9,73	8,63	7,50	
	50	Q	56200	46000	37250	29800	23450	18110	13640	
AFNF220/4GE-23Y	60	P	15,37	14,31	13,13	11,86	10,52	9,16	7,81	
	60	Q	47000	38250	30750	24400	18980	14450	10690	
		P	17,11	15,70	14,20	12,63	11,03	9,43	7,86	
AFNV270/4GE-30Y	60	Q	59100	48900	40100	32450	25850	20200	15350	
		P	17,91	16,76	15,49	14,13	12,70	11,21	9,68	
	70	Q	48500	40150	32800	26450	20900	16070	11910	
AFNV270/4GE-30Y	80	P	19,88	18,33	16,70	15,00	13,25	11,46	9,65	
	80	Q	37800	31250	25500	20400	15880	11910	8390	
		P	21,63	19,66	17,65	15,61	13,53	11,42	9,31	
AFNV270/4FE-28Y	40	Q	79200	65200	53300	43100	34450	27200	21100	
		P	16,66	15,80	14,74	13,54	12,23	10,88	9,53	
	50	Q	69300	57000	46500	37550	29900	23500	18130	
AFNV270/4FE-28Y	60	P	19,43	18,07	16,56	14,95	13,29	11,63	10,01	
	60	Q	59300	48750	39700	31900	25300	19760	15110	
		P	21,81	19,99	18,06	16,08	14,09	12,15	10,31	
AFNV320/4FE-35Y	60	Q	70300	58100	47600	38550	30800	24200	18670	
		P	22,82	21,16	19,35	17,44	15,47	13,49	11,56	
	70	Q	58000	47850	39100	31500	25000	19480	14800	
AFNV320/4FE-35Y	80	P	25,10	22,97	20,73	18,44	16,14	13,87	11,70	
	80	Q	45500	37500	30500	24450	19210	14740	10940	
		P	26,89	24,33	21,70	19,06	16,46	13,94	11,56	

### Leistungswerte 50 Hz

bezogen auf Sauggasstemperatur 20°C, ohne Flüssigkeits-Unterkühlung

### Performance data 50 Hz

relating to 20°C suction gas temperature, without liquid subcooling

### 性能参数 50Hz

对应20°C 吸气温度, 液体无过冷

# 風冷型 Air-cooled type

# R134

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 冷凝機組 型號	Verfl. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量				Leistungsaufnahme Power consumption 功率消耗			
			Q <sub>o</sub> [Watt]				P <sub>e</sub> [kW]			
			Verdampfungstemperatur °C Evaporating temperature °C		蒸发温度 °C		Verdampfungstemperatur °C Evaporating temperature °C		蒸发温度 °C	
		15	10	5	0	-5	-10	-15	-20	
AFNF220/6JE-25Y	40	Q	72500	59400	48200	38650	30550	23700	18020	
		P	14,27	13,64	12,81	11,82	10,70	9,50	8,24	
	50	Q	62700	51200	41400	33000	25850	19840	14830	
		P	16,66	15,56	14,30	12,92	11,45	9,94	8,42	
	60	Q	52800	42950	34500	27300	21150	15990	11680	
		P	18,57	17,03	15,37	13,63	11,84	10,04	8,28	
AFNV320/6JE-33Y	60	Q	65500	53800	43600	34900	27500	21200	15960	
		P	19,68	18,38	16,91	15,30	13,61	11,87	10,13	
	70	Q	53700	43850	35300	28000	21800	16550	12160	
		P	21,80	19,99	18,06	16,04	13,99	11,94	9,94	
	80	Q	41700	33900	27100	21300	16310	12120	8630	
		P	23,44	21,14	18,78	16,38	13,99	11,65	9,41	
AFNV270/6HE-28Y	40	Q	85100	69800	56800	45700	36300	28350	21700	
		P	16,80	16,08	15,12	13,98	12,70	11,31	9,87	
	50	Q	73800	60500	49050	39300	31000	24000	18130	
		P	19,76	18,48	17,02	15,42	13,72	11,98	10,23	
	60	Q	62500	51100	41200	32800	25650	19630	14590	
		P	22,21	20,41	18,47	16,44	14,37	12,31	10,29	
AFNV320/6HE-35Y	60	Q	75400	62000	50400	32050	24850	18790	13740	
		P	23,32	21,73	19,95	18,02	15,99	13,92	11,86	
	70	Q	61800	50600	41000	32650	25550	19530	14470	
		P	25,79	23,62	21,31	18,92	16,49	14,07	11,72	
	80	Q	48050	39200	31500	24900	19220	14430	10410	
		P	27,69	24,96	22,16	19,33	16,53	13,80	11,18	
AFNV320/6GE-34Y	40	Q	97100	79900	65100	52500	41800	32800	25300	
		P	20,01	18,97	17,72	16,32	14,78	13,16	11,50	
	50	Q	84100	69100	56200	45200	35850	27950	21350	
		P	23,32	21,71	19,93	18,04	16,05	14,03	12,01	
	60	Q	71100	58300	47400	38000	29950	23150	17410	
		P	25,98	23,86	21,60	19,26	16,88	14,50	12,18	
AFNV400/6GE-40Y	60	Q	87300	72200	59100	47900	38300	30100	23150	
		P	27,61	25,84	23,85	21,69	19,42	17,11	14,80	
	70	Q	72100	59500	48600	39200	31100	24200	18420	
		P	30,50	28,15	25,63	23,00	20,32	17,64	15,03	
	80	Q	56400	46500	37850	30400	23950	18480	13860	
		P	32,80	29,91	26,90	23,84	20,78	17,78	14,90	
AFNV400/6FE-44Y	40	Q	116700	96100	78400	63300	50600	39800	30800	
		P	24,10	22,92	21,50	19,88	18,12	16,25	14,32	
	50	Q	101300	83300	67900	54700	43500	34050	26100	
		P	27,97	26,15	24,13	21,97	19,69	17,36	15,02	
	60	Q	85800	70600	57400	46150	36550	28350	21500	
		P	31,11	28,72	26,17	23,50	20,77	18,04	15,35	

**Leistungswerte 50 Hz**  
bezogen auf Sauggastemperatur 20°C,  
ohne Flüssigkeits-Unterkühlung

**Performance data 50 Hz**  
relating to 20°C suction gas tempera-  
ture, without liquid subcooling

**性能参数 50Hz**  
对应20°C 吸气温度，液体无过冷

# 風冷型 Air-cooled type

# R404A

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 冷凝機組型號	Verfl. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量					[Watt]	Leistungsaufnahme Power consumption 功率消耗					[kW]												
			Verdampfungstemperatur °C						Evaporating temperature °C						蒸发温度 °C											
			5	0	-5	-10	-15		-20	-25	-30	-35	-40		5	0	-5	-10	-15	-20	-25	-30	-35	-40		
AFNF10/2KES-05Y	30	Q	4290	3570	2940	2390	1920	1510	1160	865	610	395														
		P	0,81	0,80	0,78	0,75	0,72	0,68	0,63	0,57	0,50	0,42														
	40	Q	3520	2920	2390	1940	1540	1200	900	650	435	255														
		P	0,96	0,93	0,89	0,84	0,79	0,72	0,65	0,57	0,47	0,36														
	50	Q	2810	2320	1890	1520	1190	910	670	460	285	140														
		P	1,11	1,05	0,99	0,92	0,84	0,76	0,66	0,55	0,43	0,30														
AFNF10/2JES-07Y	30	Q	5670	4730	3920	3210	2600	2070	1620	1230	900	625														
		P	1,08	1,07	1,05	1,02	0,97	0,91	0,84	0,76	0,66	0,56														
	40	Q	4740	3950	3250	2650	2130	1680	1290	960	675	440														
		P	1,31	1,27	1,21	1,14	1,06	0,98	0,87	0,76	0,64	0,51														
	50	Q	3850	3190	2620	2120	1680	1300	980	700	465	265														
		P	1,53	1,45	1,36	1,26	1,14	1,02	0,89	0,75	0,60	0,44														
AFNF10/2HES-1Y	30	Q	5920	4910	4040	3280	2630	2070	1590	1180	840															
		P	1,45	1,38	1,31	1,23	1,14	1,04	0,93	0,82	0,69															
	40	Q	4950	4090	3340	2690	2130	1650	1240	890	595															
		P	1,70	1,59	1,47	1,35	1,21	1,08	0,94	0,79	0,64	0,51														
	50	Q	4000	3290	2670	2130	1660	1250	905	615	365															
		P	1,92	1,76	1,60	1,43	1,26	1,09	0,91	0,73	0,55															
AFNF20/2HES-2Y	30	Q	7200	6020	5000	4110	3340	2680	2110	1620	1210	855														
		P	1,42	1,40	1,37	1,32	1,25	1,16	1,06	0,95	0,83	0,70														
	40	Q	6060	5060	4190	3420	2760	2190	1700	1270	910	610														
		P	1,70	1,64	1,56	1,47	1,36	1,23	1,10	0,96	0,80	0,64														
	50	Q	4940	4110	3380	2740	2190	1700	1290	935	630	375														
		P	1,96	1,85	1,73	1,59	1,44	1,28	1,11	0,93	0,75	0,56														
AFNF20/2GES-2Y	30	Q	8230	6890	5730	4720	3850	3090	2450	1890	1420	1030														
		P	1,67	1,65	1,60	1,53	1,45	1,34	1,23	1,10	0,96	0,81														
	40	Q	6910	5780	4790	3930	3190	2540	1990	1520	1110	775														
		P	2,00	1,93	1,83	1,72	1,59	1,45	1,30	1,13	0,96	0,79														
	50	Q	5650	4710	3890	3180	2560	2020	1560	1160	825	540														
		P	2,33	2,20	2,05	1,90	1,72	1,54	1,35	1,16	0,96	0,76														
AFNF20/2FES-2Y	30	Q	8690	7220	5940	4830	3870	3050	2350	1750	1250															
		P	2,02	1,98	1,91	1,80	1,67	1,51	1,35	1,17	1,01	0,88														
	40	Q	7190	5960	4880	3950	3150	2450	1860	1360	930															
		P	2,37	2,27	2,13	1,97	1,79	1,60	1,39	1,18	1,01	0,87														
	50	Q	5770	4770	3900	3140	2480	1910	1420	1000	650															
		P	2,72	2,55	2,36	2,15	1,92	1,68	1,44	1,20	0,97															
AFNF30/2FES-3Y	30	Q	10320	8640	7170	5900	4800	3850	3030	2330	1740	1250														
		P	2,03	2,00	1,95	1,86	1,76	1,63	1,49	1,34	1,17	1,00														
	40	Q	8560	7160	5930	4860	3940	3130	2440	1850	1350	930														
		P	2,46	2,37	2,25	2,10	1,94	1,77	1,58	1,38	1,17	0,96														
	50	Q	6890	5760	4760	3890	3130	2470	1900	1410	995	645														
		P	2,88	2,72	2,53	2,33	2,11	1,88	1,64	1,40	1,15	0,91														
AFNF20/2EES-2Y	30	Q	10920	9070	7470	6080	4890	3860	2980	2230	1600															
		P	2,37	2,28	2,16	2,01	1,85	1,67	1,47	1,27	1,07															
	40	Q	9250	7670	6300	5100	4070	3180	2420	1770	1220															
		P	2,81	2,64	2,45	2,23	2,01	1,77	1,53	1,28	1,04															
	50	Q	7490	6180	5040	4050	3190	2450	1820	1280	830															
		P	3,16	2,91	2,65	2,37	2,09	1,80	1,51	1,23	0,95															
AFNF30/2EES-3Y	30	Q	13040	10920	9070	7470	6080	4890	3860	2980	2230	1600														
		P	2,40	2,36	2,27	2,16	2,02	1,87	1,69	1,50	1,31	1,11														
	40	Q	11070	9250	7670	6300	5100	4070	3180	2420	1770	1220														
		P	2,89	2,76	2,61	2,43	2,23	2,02	1,79	1,55	1,32	1,08														
	50	Q	8980	7490	6180	5040	4050	3190	2450	1820	1280	830														
		P	3,27	3,08	2,86	2,62	2,36	2,09	1,82	1,54	1,26	0,99														
AFNF20/2DES-2Y	30	Q	12990	10810	8910	7270	5860	4640	3590	2710	1960															
		P	2,87	2,76	2,62	2,45	2,25	2,03	1,80	1,55	1,31															
	40	Q	11040	9170	7540	6120	4900	3850	2940	2180	1530															
		P	3,42	3,22	2,98	2,73	2,46	2,17	1,88	1,59	1,30															
	50	Q	8960	7420	6070	4890	3870	2990	2240	1600	1070															
		P	3,87	3,57	3,25	2,92	2,58	2,23	1,88	1,55	1,22															
AFNF30/2DES-3Y	30	Q	15500	12990	10810	8910	7270	5860	4640	3590	2710	1960														
		P	2,87	2,81	2,71	2,58	2,41	2,22	2,01	1,79	1,56	1,33														
	40	Q	13180	11040	9170																					

# 風冷型 Air-cooled type

# R404A

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 冷凝機組型號	Verf. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量					[Watt]	Leistungsaufnahme Power consumption 功率消耗					[kW]									
			Verdampfungstemperatur °C						Evaporating temperature °C						蒸发温度 °C								
			5	0	-5	-10	-15		-20	-25	-30	-35	-40		5	0	-5	-10	-15	-20	-25	-30	-35
AFNF30/2CES-3Y	30	Q	15890	13250	10950	8960	7250	5770	4500	3420	2500	P	3,47	3,35	3,19	2,98	2,75	2,50	2,23	1,94	1,66		
		P	13550	11280	9310	7590	6110	4830	3730	2790	2000		4,15	3,92	3,65	3,35	3,03	2,70	2,36	2,02	1,69		
	40	Q	11060	9180	7540	6120	4880	3810	2890	2110	1450	P	4,73	4,38	4,01	3,62	3,22	2,81	2,41	2,01	1,64		
		P	11060	9180	7540	6120	4880	3810	2890	2110	1450		4,73	4,38	4,01	3,62	3,22	2,81	2,41	2,01	1,64		
	AFNF39/2CES-4Y	30	Q	18920	15890	13250	10950	8960	7250	5770	4500	3420	P	3,49	3,42	3,31	3,15	2,96	2,74	2,49	2,23	1,95	1,68
			P	16150	13550	11280	9310	7590	6110	4830	3730	2790		2000	4,24	4,06	3,84	3,59	3,31	3,00	2,68	2,35	2,02
40		Q	13190	11060	9180	7540	6120	4880	3810	2890	2110	P	4,86	4,58	4,27	3,92	3,56	3,18	2,79	2,40	2,02	1,65	
		P	13190	11060	9180	7540	6120	4880	3810	2890	2110		4,86	4,58	4,27	3,92	3,56	3,18	2,79	2,40	2,02	1,65	
AFNF30/4FES-3Y		30	Q	17510	14460	11840	9610	7700	6100	4750	3640	2720	P	3,71	3,61	3,45	3,25	3,01	2,74	2,44	2,14	1,84	
			P	14840	12260	10040	8140	6520	5140	3990	3030	2250		4,44	4,23	3,96	3,66	3,33	2,97	2,61	2,24	1,89	
	40	Q	12030	9940	8140	6580	5250	4120	3170	2380	1730	P	5,03	4,71	4,35	3,96	3,54	3,11	2,68	2,26	1,85		
		P	12030	9940	8140	6580	5250	4120	3170	2380	1730		5,03	4,71	4,35	3,96	3,54	3,11	2,68	2,26	1,85		
	AFNF49/4FES-5Y	30	Q	21050	17510	14460	11840	9610	7700	6100	4750	3640	P	3,69	3,66	3,56	3,41	3,22	2,99	2,73	2,45	2,16	1,86
			P	17810	14830	12260	10040	8140	6510	5140	3990	3030		2240	4,48	4,34	4,14	3,89	3,61	3,29	2,96	2,61	2,26
40		Q	14400	12010	9940	8130	6580	5250	4130	3180	2380	P	5,12	4,88	4,58	4,25	3,88	3,49	3,09	2,68	2,27	1,87	
		P	14400	12010	9940	8130	6580	5250	4130	3180	2380		5,12	4,88	4,58	4,25	3,88	3,49	3,09	2,68	2,27	1,87	
AFNF39/4EES-4Y		30	Q	22100	18300	15010	12200	9790	7760	6050	4630	3460	P	4,75	4,61	4,40	4,12	3,80	3,43	3,05	2,65	2,26	
			P	18810	15550	12740	10330	8270	6520	5060	3830	2830		5,71	5,42	5,06	4,65	4,20	3,73	3,25	2,77	2,31	
	40	Q	15360	12690	10380	8390	6690	5240	4020	3010	2170	P	6,52	6,07	5,58	5,05	4,49	3,92	3,35	2,80	2,27		
		P	15360	12690	10380	8390	6690	5240	4020	3010	2170		6,52	6,07	5,58	5,05	4,49	3,92	3,35	2,80	2,27		
	AFNF63/4EES-6Y	30	Q	26400	22000	18160	14880	12060	9660	7630	5930	4510	P	4,70	4,65	4,51	4,30	4,04	3,72	3,38	3,00	2,62	2,23
			P	22400	18650	15390	12590	10180	8120	6380	4920	3700		5,72	5,52	5,24	4,90	4,51	4,08	3,63	3,17	2,71	2,25
40		Q	18240	15170	12510	10200	8220	6520	5080	3870	2870	P	6,57	6,22	5,81	5,35	4,85	4,32	3,78	3,23	2,69	2,18	
		P	18240	15170	12510	10200	8220	6520	5080	3870	2870		6,57	6,22	5,81	5,35	4,85	4,32	3,78	3,23	2,69	2,18	
AFNF49/4DES-5Y		30	Q	26200	21750	17860	14540	11700	9280	7250	5550	4140	P	5,64	5,47	5,22	4,89	4,51	4,08	3,63	3,16	2,70	
			P	22400	18530	15190	12320	9870	7790	6030	4580	3370		6,74	6,40	5,97	5,49	4,97	4,42	3,86	3,30	2,76	
	40	Q	18440	15220	12440	10040	8000	6260	4800	3600	2600	P	7,69	7,17	6,59	5,96	5,31	4,65	3,99	3,35	2,74		
		P	18440	15220	12440	10040	8000	6260	4800	3600	2600		7,69	7,17	6,59	5,96	5,31	4,65	3,99	3,35	2,74		
	AFNF70/4DES-7Y	30	Q	31450	26250	21750	17870	14540	11700	9280	7250	5550	P	5,60	5,54	5,39	5,15	4,84	4,47	4,06	3,63	3,18	2,73
			P	26900	22400	18540	15190	12320	9870	7790	6040	4580		3370	6,81	6,57	6,25	5,85	5,40	4,91	4,39	3,85	3,31
40		Q	22150	18430	15220	12440	10040	8000	6260	4810	3600	P	7,83	7,43	6,96	6,42	5,84	5,23	4,61	3,98	3,36	2,77	
		P	22150	18430	15220	12440	10040	8000	6260	4810	3600		7,83	7,43	6,96	6,42	5,84	5,23	4,61	3,98	3,36	2,77	
AFNF63/4CES-6Y		30	Q	31750	26300	21650	17610	14160	11220	8730	6650	4930	P	6,82	6,61	6,29	5,88	5,40	4,87	4,31	3,74	3,17	
			P	27150	22400	18350	14850	11850	9310	7180	5400	3930		8,10	7,66	7,14	6,54	5,90	5,22	4,54	3,86	3,21	
	40	Q	22500	18520	15080	12120	9610	7480	5690	4220	3010	P	9,19	8,55	7,83	7,07	6,27	5,47	4,67	3,90	3,17		
		P	22500	18520	15080	12120	9610	7480	5690	4220	3010		9,19	8,55	7,83	7,07	6,27	5,47	4,67	3,90	3,17		
	AFNF82/4CES-9Y	30	Q	38000	31750	26300	21650	17610	14160	11220	8730	6650	P	6,91	6,82	6,61	6,29	5,88	5,40	4,87	4,31	3,74	3,17
			P	32600	27150	22400	18350	14850	11850	9310	7180	5400		3930	8,42	8,10	7,66	7,14	6,54	5,90	5,22	4,54	3,86
40		Q	27100	22500	18520	15080	12120	9610	7480	5690	4220	P	9,75	9,19	8,55	7,83	7,07	6,27	5,47	4,67	3,90	3,17	
		P	27100	22500	18520	15080	12120	9610	7480	5690	4220		9,75	9,19	8,55	7,83	7,07	6,27	5,47	4,67	3,90	3,17	
AFNF70/4VES-7Y		30	Q	34100	28150	23000	18590	14820	11600	8890	6630	4750	P	7,15	6,92	6,55	6,07	5,52	4,91	4,27	3,64	3,04	
			P	28800	23650	19180	15360	12110	9350	7040	5130	3560		8,58	8,04	7,39	6,68	5,91	5,13	4,35	3,60	2,91	
	40	Q	23550	19180	15430	12210	9480	7190	5280	3710	2440	P	9,77	8,92	8,02	7,08	6,12	5,18	4,28	3,43	2,67		
		P	23550	19180	15430	12210	9480	7190	5280	3710	2440		9,77	8,92	8,02	7,08	6,12	5,18	4,28	3,43	2,67		
	AFNF100/4VES-10Y	30	Q	41050	34150	28150	23000	18590	14810	11600	8890	6630	P	6,97	6,92	6,71	6,38	5,94	5,42	4,85	4,25	3,65	3,07
			P	34800	28800	23650	19180	15350	12100	9350	7040	5140		3580	8,54	8,20	7,72	7,15	6,50	5,79	5,06	4,33	3,62
40		Q	28600	23550	19180	15420	12200	9480	7190	5280	3720	P	9,84	9,22	8,50	7,70	6,86	5,98	5,11	4,26	3,45	2,73	
		P	28600	23550	19180	15420	12200	9480	7190	5280	3720		9,84	9,22	8,50	7,70	6,86	5,98	5,11	4,26	3,45	2,73	

### Leistungswerte 50 Hz

bezogen auf Sauggastemperatur 20°C, ohne Flüssigkeits-Unterkühlung

### Performance data 50 Hz

relating to 20°C suction gas temperature, without liquid subcooling

### 性能参数 50Hz

对应20°C吸气温度, 液体无过冷

# 風冷型 Air-cooled type

# R404A

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 冷凝機組 型號	Verf. Temp. Cond. temp. 冷凝 溫度 °C	↓	Kälteleistung Cooling capacity 製冷量								Leistungsaufnahme Power consumption 功率消耗	P <sub>e</sub> [kW]
			Verdampfungstemperatur °C Evaporating temperature °C				蒸发温度 °C					
			5	0	-5	-10	-15	-20	-25	-30		
AFNF82/4TES-9Y	30	Q	40850	33800	27700	22450	17970	14150	10930	8230	6000	
		P	8,60	8,32	7,89	7,34	6,69	5,98	5,24	4,50	3,79	
	40	Q	34700	28600	23300	18750	14870	11580	8820	6520	4630	
		P	10,32	9,70	8,96	8,13	7,24	6,33	5,42	4,54	3,72	
	50	Q	28500	23300	18860	15040	11780	9030	6740	4840	3300	
		P	11,75	10,80	9,77	8,69	7,58	6,49	5,42	4,43	3,52	
AFNF123/4TES-12Y	30	Q	49200	40950	33850	27700	22450	17930	14100	10870	8180	5950
		P	8,52	8,43	8,16	7,74	7,20	6,57	5,88	5,17	4,45	3,76
	40	Q	41800	34700	28550	23200	18670	14780	11500	8750	6470	4600
		P	10,43	10,00	9,42	8,73	7,94	7,09	6,21	5,34	4,49	3,71
	50	Q	34450	28500	23300	18810	14990	11730	9000	6720	4850	3330
		P	12,07	11,32	10,45	9,50	8,48	7,44	6,40	5,39	4,45	3,60
AFNF123/4PES-12Y	30	Q	47250	38900	31750	25600	20350	15900	12160	9050	6500	
		P	9,72	9,36	8,84	8,18	7,43	6,61	5,75	4,89	4,05	
	40	Q	40000	32800	26550	21200	16680	12860	9660	7020	4870	
		P	11,51	10,78	9,93	8,97	7,95	6,90	5,84	4,81	3,83	
	50	Q	32550	26500	21250	16790	13010	9830	7200	5040	3300	
		P	12,92	11,84	10,67	9,43	8,17	6,90	5,66	4,49	3,41	
AFNF152/4PES-15Y	30	Q	57000	47300	38950	31700	25550	20300	15800	12050	8930	6370
		P	9,90	9,72	9,35	8,82	8,15	7,39	6,56	5,69	4,83	4,00
	40	Q	48200	39800	32600	26400	21050	16520	12710	9520	6890	4760
		P	11,96	11,40	10,67	9,82	8,87	7,86	6,82	5,78	4,77	3,83
	50	Q	39450	32400	26350	21150	16680	12920	9760	7140	5000	3280
		P	13,69	12,78	11,73	10,58	9,38	8,14	6,91	5,71	4,58	3,55
AFNF152/4NES-14Y	30	Q	55400	45700	37400	30250	24150	18980	14650	11050	8090	
		P	11,59	11,15	10,54	9,78	8,91	7,97	6,98	5,98	5,00	
	40	Q	47200	38800	31550	25400	20100	15640	11910	8820	6290	
		P	13,74	12,91	11,93	10,84	9,67	8,45	7,23	6,03	4,88	
	50	Q	38550	31550	25500	20350	15950	12240	9140	6580	4510	
		P	15,46	14,25	12,93	11,53	10,08	8,61	7,17	5,79	4,49	
AFNF180/4NES-20Y	30	Q	67000	55700	46000	37600	30400	24300	19080	14710	11080	8100
		P	11,68	11,45	11,00	10,38	9,62	8,76	7,83	6,86	5,90	4,99
	40	Q	56900	47200	38800	31550	25400	20100	15660	11940	8860	6350
		P	14,06	13,42	12,60	11,64	10,58	9,45	8,29	7,14	6,03	5,00
	50	Q	46800	38700	31700	25650	20450	16070	12380	9310	6780	4740
		P	16,19	15,16	13,99	12,72	11,39	10,03	8,67	7,36	6,13	5,02
AFNF152/4JE-15Y	30	Q	62400	51900	42850	34950	28200	22400	17440	13250	9730	
		P	13,05	12,56	11,91	11,12	10,22	9,24	8,21	7,15	6,10	
	40	Q	53400	44300	36400	29550	23650	18600	14300	10680	7650	
		P	15,41	14,50	13,46	12,31	11,10	9,84	8,56	7,29	6,06	
	50	Q	44200	36500	29850	24050	19080	14810	11200	8160	5640	
		P	17,40	16,10	14,69	13,22	11,71	10,18	8,67	7,21	5,82	
AFNF220/4JE-22Y	30	Q	73700	61600	51100	42050	34200	27450	21650	16740	12580	9090
		P	13,02	12,72	12,23	11,57	10,79	9,89	8,91	7,88	6,83	5,77
	40	Q	63000	52500	43400	35500	28700	22800	17780	13520	9920	6930
		P	15,71	14,96	14,05	13,02	11,88	10,67	9,42	8,14	6,87	5,62
	50	Q	51900	43200	35500	28850	23100	18150	13930	10350	7350	4860
		P	18,00	16,83	15,53	14,13	12,67	11,16	9,64	8,13	6,66	5,24
AFNF180/4HE-18Y	30	Q	72700	60500	50000	40900	33050	26300	20600	15750	11680	
		P	15,66	15,02	14,20	13,22	12,12	10,94	9,71	8,45	7,21	
	40	Q	62200	51700	42600	34700	27900	22050	17080	12890	9390	
		P	18,50	17,36	16,08	14,69	13,23	11,72	10,20	8,71	7,28	
	50	Q	51400	42650	35000	28350	22600	17720	13570	10070	7160	
		P	20,93	19,32	17,61	15,84	14,03	12,22	10,44	8,74	7,14	
AFNF220/4HE-25Y	30	Q	86000	72100	59900	49400	40300	32500	25750	20050	15230	11180
		P	15,55	15,15	14,55	13,76	12,83	11,78	10,64	9,44	8,22	7,00
	40	Q	73600	61500	51000	41900	34000	27200	21400	16470	12310	8830
		P	18,63	17,74	16,68	15,47	14,16	12,76	11,32	9,85	8,40	6,99
	50	Q	60700	50700	41900	34250	27600	21900	17040	12910	9440	6560
		P	21,22	19,88	18,41	16,82	15,15	13,44	11,71	10,00	8,34	6,76
AFNF220/4GE-23Y	30	Q	83800	69900	57800	47350	38350	30650	24100	18540	13880	
		P	18,72	17,88	16,84	15,63	14,30	12,88	11,41	9,93	8,48	
	40	Q	71800	59800	49350	40300	32550	25900	20200	15420	11430	
		P	22,15	20,71	19,13	17,44	15,68	13,88	12,09	10,34	8,68	
	50	Q	59300	49300	40600	33050	26550	21000	16290	12320	9010	
		P	25,11	23,12	21,03	18,88	16,72	14,58	12,50	10,52	8,68	
AFNF270/4GE-30Y	30	Q	98700	82700	68800	56800	46350	37400	29700	23150	17640	13020
		P	18,19	17,66	16,90	15,94	14,83	13,60	12,27	10,88	9,47	8,06
	40	Q	84400	70600	58600	48200	39200	31400	24800	19160	14410	10450
		P	21,62	20,56	19,30	17,89	16,37	14,75	13,09	11,40	9,74	8,13
	50	Q	69400	57900	48000	39300	31800	25350	19820	15140	11210	7950
		P	24,47	22,94	21,24	19,42	17,52	15,56	13,59	11,64	9,75	7,96

### Leistungswerte 50 Hz

bezogen auf Sauggastemperatur 20°C,  
ohne Flüssigkeits-Unterkühlung

### Performance data 50 Hz

relating to 20°C suction gas tempera-  
ture, without liquid subcooling

### 性能参数 50Hz

对应20°C 吸气温度, 液体无过冷

# 風冷型 Air-cooled type

# R404A

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 冷凝機組 型號	Verfl. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量								[Watt]	Leistungsaufnahme Power consumption 功率消耗									
			Verdampfungstemperatur °C Evaporating temperature °C				蒸发温度 °C					Pe	[kW]								
			5	0	-5	-10	-15	-20	-25	-30				-35	-40						
AFNV270/4FE-28Y	30	Q	99400	83000	68800	56400	45800	36700	28950	22350	16830	22,31	18,88	17,32	15,63	13,86	12,07	10,28			
		P	22,31	21,42	20,27	18,88	17,32	15,63	13,86	12,07	10,28										
	40	Q	85000	71000	58800	48200	39000	31100	24350	18900	13720	26,16	24,66	22,93	21,01	18,96	16,82	14,65	12,49	10,38	
		P	26,16	24,66	22,93	21,01	18,96	16,82	14,65	12,49	10,38										
	50	Q	70100	58600	48500	39650	32000	25350	19630	14710	10520	29,47	27,37	25,09	22,66	20,14	17,57	15,02	12,51	10,11	
		P	29,47	27,37	25,09	22,66	20,14	17,57	15,02	12,51	10,11										
AFNV320/4FE-35Y	30	Q	117900	99000	82600	68300	56000	45400	36300	28550	22000	22,43	21,00	19,85	18,49	16,95	15,28	13,53	11,76	10,00	
		P	22,43	21,00	19,85	18,49	16,95	15,28	13,53	11,76	10,00										
	40	Q	100500	84500	70500	58300	47700	38550	30650	23900	18160	26,81	25,61	24,13	22,42	20,53	18,51	16,40	14,25	12,12	10,04
		P	26,81	25,61	24,13	22,42	20,53	18,51	16,40	14,25	12,12										
	50	Q	82600	69500	58000	47900	39100	31500	24850	19140	14240	30,62	28,79	26,73	24,48	22,09	19,60	17,07	14,55	12,08	9,70
		P	30,62	28,79	26,73	24,48	22,09	19,60	17,07	14,55	12,08										
AFNV220/6JE-25Y	30	Q	92400	76900	63500	51900	41850	33250	25950	19790	14610	19,14	18,51	17,59	16,43	15,09	13,60	12,02	10,39	8,77	
		P	19,14	18,51	17,59	16,43	15,09	13,60	12,02	10,39	8,77										
	40	Q	79400	65900	54100	43900	35150	27700	21300	15970	11510	22,59	21,37	19,90	18,24	16,43	14,52	12,56	10,61	8,70	
		P	22,59	21,37	19,90	18,24	16,43	14,52	12,56	10,61	8,70										
	50	Q	66100	54600	44550	35900	28450	22100	16750	12260	8540	25,49	23,72	21,74	19,60	17,36	15,06	12,75	10,48	8,31	
		P	25,49	23,72	21,74	19,60	17,36	15,06	12,75	10,48	8,31										
AFNV320/6JE-33Y	30	Q	108800	91000	75500	62100	50500	40500	32000	24700	18590	18,93	18,63	18,00	17,10	15,96	14,64	13,18	11,63	10,02	8,41
		P	18,93	18,63	18,00	17,10	15,96	14,64	13,18	11,63	10,02										
	40	Q	93300	77800	64200	52500	42400	33650	26200	19910	14610	22,73	21,82	20,62	19,19	17,56	15,80	13,93	12,00	10,06	8,16
		P	22,73	21,82	20,62	19,19	17,56	15,80	13,93	12,00	10,06										
	50	Q	77400	64300	52800	42800	34200	26800	20500	15210	10780	25,92	24,43	22,71	20,78	18,70	16,51	14,25	11,97	9,72	7,53
		P	25,92	24,43	22,71	20,78	18,70	16,51	14,25	11,97	9,72										
AFNV270/6HE-28Y	30	Q	106700	88900	73400	60100	48600	38750	30350	23300	17320	22,95	22,07	20,89	19,46	17,83	16,07	14,21	12,33	10,46	
		P	22,95	22,07	20,89	19,46	17,83	16,07	14,21	12,33	10,46										
	40	Q	91300	75900	62600	51000	41000	32450	25150	19020	13880	27,01	25,45	23,65	21,64	19,49	17,25	14,97	12,71	10,51	
		P	27,01	25,45	23,65	21,64	19,49	17,25	14,97	12,71	10,51										
	50	Q	75700	62800	51500	41750	33300	26100	19970	14800	10490	30,56	28,35	25,94	23,38	20,72	18,01	15,32	12,69	10,18	
		P	30,56	28,35	25,94	23,38	20,72	18,01	15,32	12,69	10,18										
AFNV320/6HE-35Y	30	Q	126200	105700	88000	72500	59200	47750	37900	29550	22500	22,85	22,36	21,53	20,42	19,06	17,52	15,84	14,06	12,25	10,44
		P	22,85	22,36	21,53	20,42	19,06	17,52	15,84	14,06	12,25										
	40	Q	108000	90300	74900	61500	50000	40050	31500	24250	18140	27,31	26,15	24,71	23,02	21,14	19,12	16,99	14,81	12,63	10,49
		P	27,31	26,15	24,71	23,02	21,14	19,12	16,99	14,81	12,63										
	50	Q	89300	74500	61600	50400	40650	32250	25100	18970	13840	31,19	29,42	27,39	25,16	22,78	20,28	17,72	15,14	12,59	10,11
		P	31,19	29,42	27,39	25,16	22,78	20,28	17,72	15,14	12,59										
AFNV320/6GE-34Y	30	Q	122900	102700	85200	70000	57000	45750	36200	28100	21300	27,68	26,50	25,02	23,29	21,37	19,33	17,21	15,07	12,98	
		P	27,68	26,50	25,02	23,29	21,37	19,33	17,21	15,07	12,98										
	40	Q	105200	87900	72900	59800	48550	38900	30600	23600	17660	32,62	30,69	28,50	26,13	23,63	21,05	18,46	15,91	13,46	
		P	32,62	30,69	28,50	26,13	23,63	21,05	18,46	15,91	13,46										
	50	Q	87200	72800	60300	49400	39950	31800	24850	18920	13930	37,24	34,53	31,64	28,61	25,52	22,40	19,33	16,35	13,54	
		P	37,24	34,53	31,64	28,61	25,52	22,40	19,33	16,35	13,54										
AFNV400/6GE-40Y	30	Q	143700	120400	100300	82800	67700	54700	43550	34050	26000	27,04	26,29	25,20	23,84	22,23	20,45	18,52	16,51	14,45	12,41
		P	27,04	26,29	25,20	23,84	22,23	20,45	18,52	16,51	14,45										
	40	Q	122200	102400	85200	70200	57200	46000	36400	28200	21250	31,85	30,41	28,69	26,72	24,56	22,26	19,86	17,41	14,96	12,55
		P	31,85	30,41	28,69	26,72	24,56	22,26	19,86	17,41	14,96										
	50	Q	100400	84100	69900	57400	46550	37200	29100	22200	16390	36,13	34,05	31,71	29,16	26,45	23,63	20,74	17,84	14,96	12,17
		P	36,13	34,05	31,71	29,16	26,45	23,63	20,74	17,84	14,96										
AFNV400/6FE-44Y	30	Q	148100	123600	102400	84100	68300	54700	43100	33300	25050	33,45	32,18	30,52	28,52	26,27	23,83	21,26	18,65	16,05	
		P	33,45	32,18	30,52	28,52	26,27	23,83	21,26	18,65	16,05										
	40	Q	126600	105700	87500	71800	58100	46350	36250	27700	20450	38,97	36,82	34,34	31,59	28,63	25,55	22,40	19,26	16,19	
		P	38,97	36,82	34,34	31,59	28,63	25,55	22,40	19,26	16,19										
	50	Q	104400	87200	72200	59100	47650	37750	29250	21900	15660	43,70	40,71	37,44	33,95	30,33	26,63	22,93	19,30	15,80	
		P	43,70	40,71	37,44	33,95	30,33	26,63	22,93	19,30	15,80										
AFNV490/6FE-50Y	30	Q	174500	146400	122000	100800	82500	66700	53200	41650	31900	33,41	32,59	31,30	29,63	27,63	25,38	22,93	20,37	17,74	15,14
		P	33,41	32,59	31,30	29,63	27,63	25,38	22,93	20,37	17,74										
	40	Q	148500	124600	103800	85700	69900	56300	44600	34600	26100	39,56	37,80	35,65	33,16	30,41	27,46	24,38	21,23	18,08	15,00
		P	39,56	37,80	35,65	33,16	30,41	27,46	24,38	21,23	18,08										
	50	Q	121700	102200	85100	70100	57100	45700	35850	27400	20150	44,80	42,15	39,16	35,90	32,43	28,82	25,13	21,42	17,77	14,24
		P	44,80	42,15	39,16	35,90	32,43	28,82	25,13	21,42	17,77										

**Leistungswerte 50 Hz**  
bezo-gen auf Saug-gastemperatur 20°C,  
ohne Flüssigkeits-Unter-kühlung

**Performance data 50 Hz**  
relating to 20°C suction gas tempera-  
ture, without liquid subcooling

**性能参数 50Hz**  
对应20°C吸气温度，液体无过冷

# 雙級風冷型 Dual - pole air cooled type

# R22

製冷量 ( 瓦 ) Capacity (Watts)

380-420V/3/50Hz

冷凝機組 Condensing Unit		環境溫度 Ambient temperature °C	蒸發溫度 Evaporating Temperature °C						
			-25	-30	-35	-40	-45	-50	-55
AFNF49/S4T-5.2	Q	27	7870	6640	5510	4480	3550	2720	
		32	7730	6500	5370	4340	3430	2610	
		38	7600	6360	5240	4220	3130	2330	
		43	7480	6260	5140	4130			
	P	27	4330	4030	3730	3410	3080	2750	
		32	4560	4250	3930	3590	3230	2870	
		38	4860	4530	4180	3810	3360	3060	
		43	5120	4750	4390	3990			
AFNF82/S4N-8.2	Q	27	11100	9420	7860	6410	5080	3860	
		32	10920	9240	7660	6210	4880	3660	
		38	10720	9030	7450	6000	4500	3290	
		43	10540	8860	7290	5830			
	P	27	6340	5820	5320	4850	4390	3970	
		32	6740	6190	5640	5130	4630	4160	
		38	7230	6610	6020	5460	4810	4320	
		43	7630	6970	6340	5730			
AFNF120/S4G-12.2	Q	27	16450	14000	11700	9560	7590	5780	
		32	16230	13750	11430	9280	7300	5490	
		38	15950	13460	11130	8970	6800	4980	
		43	15720	13220	10890	8730			
	P	27	9690	8890	8120	7390	6710	6030	
		32	10310	9440	8610	7810	7060	6320	
		38	11040	10090	9180	8320	7340	6570	
		43	11650	10640	9660	8730			
AFNF170/S6J-16.2	Q	27	23610	20250	17110	14110	11260	8500	
		32	23470	20050	16850	13810	10910	8080	
		38	23280	19820	16600	13520	10150	7320	
		43	23110	19620	16400	13300			
	P	27	14230	12830	11500	10210	8990	7810	
		32	15080	13590	12140	10770	9450	8170	
		38	16070	14460	12900	11390	9780	8450	
		43	16910	15180	13520	11890			
AFNF200/S6H-20.2	Q	27	28560	24390	20470	16800	13340	10030	
		32	28260	24030	20090	16390	12890	9520	
		38	27900	23640	19710	16000	11800	8480	
		43	27600	23340	19430	15720			
	P	27	16630	15070	13580	12130	10750	9430	
		32	17600	15940	14330	12770	11270	9830	
		38	18770	16950	15210	13510	11700	10190	
			19730	17800	15920	14080			
AFNF242/S6G-25.2	Q	27	32290	27660	23240	19120	15210	11440	
		32	32000	27280	22830	18670	14710	10870	
		38	31670	26900	22430	18250	13550	9740	
		43	31400	26610	22140	17940			
	P	27	18970	17160	15420	13750	12150	10620	
		32	20100	18150	16280	14490	12760	11080	
		38	21450	19310	17280	15320	13220	11480	
		43	22570	20300	18110	15990			

基于吸氣溫度 5°C，製冷劑液體過冷度 0K 時的製冷量 Q (W) 和輸入功率 P (W)。

The capacity Q and input power P is based on the 5°C suction temp and zero K subcooling for the liquid refrigerant

# 雙級風冷型 Dual - pole air cooled type

## R22

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

冷凝機組 Condensing Unit		環境溫度 Ambient temperature °C	蒸發溫度 Evaporating Temperature °C							
			-25	-30	-35	-40	-45	-50	-55	-60
AFNV300/S6F-30.2	Q	27	37690	32340	27310	22480	17940	13540		
		32	37470	32040	26890	21980	17380	12880		
		38	37150	31670	26470	21550	16150	11650		
		43	36860	31370	26150	21240				
	P	27	22610	20410	18290	16250	14300	12440		
		32	23930	21600	19330	17120	15010	12990		
		38	25540	23000	20520	18110	15540	13460		
		43	24270	24200	21520	18910				

蒸發溫度 -15°C以上基于吸氣溫度 18°C，製冷劑液體過冷度 0K 時的製冷量 Q (W) 和輸入功率 P (W)。  
蒸發溫度 -20°C以下基于吸氣溫度 5°C，製冷劑液體過冷度 0K 時的製冷量 Q (W) 和輸入功率 P (W)。

The capacity Q and input power P is based on the above -15°C evaporating temp, 18°C suction temp and zero K subcooling for the liquid refrigerant  
The capacity Q and input power P is based on the below -20°C evaporating temp, 5°C suction temp and zero K subcooling for the liquid refrigerant

# 雙級風冷型 Dual - pole air cooled type

## R404A

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

冷凝機組 Condensing Unit		環境溫度 Ambient temperature °C	蒸發溫度 Evaporating Temperature °C							
			-25	-30	-35	-40	-45	-50	-55	-60
AFNF49/S4T-5.2Y	Q	27	8820	7550	6390	5340	4390	3370	2660	2040
		32	8650	7370	6220	5170	4230	3260	2560	1950
		38	8440	7170	6020	4990	4070	3150	2460	1770
		43	8260	7010	5870	4860	3950	3060	2380	
	P	27	5250	4870	4480	4100	3710	3330	2970	2610
		32	5560	5680	4730	4310	3890	3480	3080	2690
		38	5930	5470	5020	4560	4110	3650	3220	2790
		43	6250	5740	5250	4780	4300	3780	3320	

蒸發溫度 -15°C以上基于吸氣溫度 18°C，製冷劑液體過冷度 0K 時的製冷量 Q (W) 和輸入功率 P (W)。  
蒸發溫度 -20°C以下基于吸氣溫度 5°C，製冷劑液體過冷度 0K 時的製冷量 Q (W) 和輸入功率 P (W)。

The capacity Q and input power P is based on the above -15°C evaporating temp, 18°C suction temp and zero K subcooling for the liquid refrigerant  
The capacity Q and input power P is based on the below -20°C evaporating temp, 5°C suction temp and zero K subcooling for the liquid refrigerant

# 雙級風冷型 Dual - pole air cooled type

# R404A

製冷量 ( 瓦 ) Capacity (Watts)

380-420V/3/50Hz

冷凝機組 Condensing Unit		環境溫度 Ambient temperature °C	蒸發溫度 Evaporating Temperature °C							
			-25	-30	-35	-40	-45	-50	-55	-60
AFNF82/S4N-8.2Y	Q	27	11900	10250	8730	7330	6070	4680	3710	2860
		32	11730	10060	8530	7140	5880	4550	3590	2750
		38	11490	9820	8290	6920	5670	4400	3460	2540
		43	11270	8610	8100	6740	5510	4280	3340	
	P	27	7450	6870	6290	5720	5140	4590	4040	3530
		32	7900	7260	6630	6010	5400	4800	4210	3660
		38	8430	7730	7050	6370	5710	5040	4420	3780
		43	8870	8120	7380	6690	5980	5220	4600	
AFNF120/S4G-12.2Y	Q	27	17550	15900	13820	11780	9850	7650	6100	4750
		32	17450	15610	13480	11430	9520	7440	5920	4590
		38	17140	15180	13050	11050	9180	7210	5720	4260
		43	16850	14810	12710	10740	8920	7030	5560	
	P	27	11290	10390	9510	8630	7760	6930	6130	5380
		32	11950	10990	10030	9070	8140	7240	6390	5570
		38	12720	11700	10670	9640	8620	7600	6680	5760
		43	13360	12290	11200	10110	9030	7870	6900	
AFNF170/S6J-16.2Y	Q	27	25110	22190	19350	16600	13960	10920	8780	6880
		32	24740	21750	18890	16130	13510	10630	8520	6660
		38	24250	21210	18350	15610	13040	10300	8240	6200
		43	23810	20750	17900	15190	12680	10050	8020	
	P	27	16250	14730	13300	11950	10680	9490	8370	7360
		32	17200	15570	14040	12610	11270	10000	8830	7730
		38	18310	16560	14930	13410	11970	10570	9340	8100
		43	19250	17400	15670	14060	12540	10980	9680	
AFNF200/S6H-20.2Y	Q	27	29610	26140	22770	19480	16350	12780	10250	8030
		32	29090	25590	22180	18880	15790	12400	9930	7760
		38	28390	24840	21450	18220	15210	12000	9600	7180
		43	27780	24210	20860	17700	14770	11700	9340	
	P	27	19110	10670	15730	14190	12740	11380	10100	8940
		32	20150	18330	16590	14950	13420	11980	10620	9360
		38	21420	19480	17620	15870	14210	12620	11200	9780
		43	22470	20420	18460	16620	14890	13090	11600	
AFNF242/S6G-25.2Y	Q	27	32980	29970	26100	22340	18780	14670	11780	9220
		32	32570	29310	25430	21650	18120	14240	11410	8910
		38	31970	28470	24570	20880	17440	13770	11000	8220
		43	31460	27760	23860	20270	16920	13410	10690	
	P	27	21640	19680	17850	16090	14410	12820	11340	9970
		32	22890	20770	18810	16950	15170	13510	11940	10480
		38	24360	22110	19960	17970	16090	14270	12640	11020
		43	25560	23210	20950	18840	16860	14800	13080	
AFNV300/S6F-30.2Y	Q	27	39580	34990	30510	26210	22040	17270	13910	10910
		32	38870	34230	29710	25400	21260	16780	13480	10560
		38	37880	33200	28710	24480	20490	16240	13020	9820
		43	37000	32310	27880	23740	19900	15830	12660	
	P	27	25640	23350	21120	19050	17030	15130	13360	11670
		32	27010	24620	22280	20080	17950	15940	14040	12290
		38	28780	26180	23670	21300	19030	16810	14830	12880
		43	30260	27510	24820	22340	19950	17460	15380	

蒸發溫度 -15°C以上基于吸氣溫度 18°C，製冷劑液體過冷度 0K 時的製冷量 Q (W) 和輸入功率 P (W)。

蒸發溫度 -20°C以下基于吸氣溫度 5°C，製冷劑液體過冷度 0K 時的製冷量 Q (W) 和輸入功率 P (W)。

The capacity Q and input power P is based on the above -15°C evaporating temp, 18°C suction temp and zero K subcooling for the liquid refrigerant

The capacity Q and input power P is based on the below -20°C evaporating temp, 5°C suction temp and zero K subcooling for the liquid refrigerant

# 水冷型 Water-cooled type

## 技術參數 Specification

380/420V-3Ph-50Hz

水冷機組型號 Condensing Unit	壓縮機 排氣量 Displacement	最大 工作電流 Max.Oper. Current	冷凝器 換熱量 Condenser Capacity	冷凝器 水接口 Water Connection	外形尺寸 Overall Dimension			安裝尺寸 Instaling Measure			接管尺寸 Tube Connection		重量 Gross Weight
					B mm	T mm	H mm	b mm	t mm	Φ mm	SL inc	FL inc	
WLC5/2KES-05Y	4.06	2.8	7.04	1-1/2	849	450	556	400	150	13	5/8"	3/8"	96
WLC5/2JES-07Y	5.21	3.7	10.56	1-1/2	849	450	556	400	150	13	5/8"	3/8"	96
WLC5/2HES-1Y	6.51	3.8	7.04	1-1/2	849	450	556	400	150	13	5/8"	3/8"	96
WLC9/2HES-2Y	6.51	4.5	7.04	1-1/2	849	450	556	400	150	13	5/8"	3/8"	98
WLC9/2GES-2Y	7.58	4.70	10.56	1-1/2	849	450	556	400	150	13	5/8"	3/8"	100
WLC9/2FES-2Y	9.54	4.90	7.04	1-1/2	849	450	556	400	150	13	5/8"	3/8"	99
WLC9/2EES-2Y	11.40	5.70	7.04	1-1/2	849	450	608	400	150	13	7/8"	3/8"	126
WLC9/2DES-2Y	13.40	6.90	7.04	1-1/2	849	450	608	400	150	13	7/8"	3/8"	126
WLC9/2FES-3Y	9.54	5.80	10.56	1-1/2	849	450	556	400	150	13	5/8"	1/2"	102
WLC9/2EES-3Y	11.40	6.90	17.60	1-1/2	849	450	608	400	150	13	7/8"	1/2"	127
WLC9/2DES-3Y	13.40	7.80	17.06	1-1/2	849	450	608	400	150	13	7/8"	1/2"	128
WLC9/2CES-3Y	16.20	8.50	10.56	1-1/2	849	450	608	400	150	13	7/8"	1/2"	122
WLC9/4FES-3Y	18.10	9.20	10.56	1-1/2	849	450	653	400	150	13	7/8"	1/2"	134
WLC20/2CES-4Y	16.20	9.40	17.60	1-1/2	849	450	608	400	150	13	7/8"	1/2"	124
WLC20/4EES-4Y	22.70	10.76	17.60	1-1/2	849	450	653	400	150	13	1-1/8"	1/2"	138
WLC20/4FES-5Y	18.10	10.80	21.12	1-1/2	849	450	653	400	150	13	7/8"	1/2"	141
WLC20/4DES-5Y	26.80	13.50	17.60	1-1/2	849	450	653	400	150	13	1-1/8"	1/2"	140
WJDC32/4EES-6Y	22.70	13.20	24.64	1-1/2	1202	450	723	800	280	13	1-1/8"	1/2"	154
WJDC32/4CES-6Y	32.50	15.90	17.60	1-1/2	1202	450	723	800	280	13	1-1/8"	1/2"	145
WJDC32/4DES-7Y	26.80	15.90	28.16	1-1/2	1202	450	723	800	280	13	1-1/8"	5/8"	158
WJDC38/4TES-9Y	41.30	17.00	24.64	1-1/2	1202	450	756	800	280	13	1-3/8"	5/8"	205
WJDC38/4CES-9Y	32.50	20.00	35.20	1-1/2	1202	450	723	800	280	14	1-1/8"	5/8"	240
WJDC43/4PES-12Y	48.50	21.00	28.16	1-1/2	1202	450	756	800	280	13	1-3/8"	5/8"	311
WJDC38/4VES-10Y	34.70	21.00	45.76	1-1/2	1202	450	756	800	280	14	1-1/8"	5/8"	330
WJDC56/4NES-14Y	56.20	24.00	35.20	2	1532	450	756	900	315	14	1-3/8"	5/8"	291
WJDC43/4TES-12Y	41.30	24.00	45.76	1-1/2	1202	450	756	800	280	14	1-3/8"	5/8"	332
WJDC74/4HE-18Y	73.70	31.00	35.20	2	1532	550	870	900	315	14	1-5/8"	5/8"	333

壓縮機電機名義轉速 2900rpm 時的理論排氣量。

最低允許電壓（50Hz）時的最大值。

進水溫度 30°C，出水溫度 35°C，額定水流量時的冷凝器換熱能力。

外形尺寸未包含缸頂風機，如增加缸頂風機高度增加 220-250 毫米。

The theoretical displacement when the compressor revolving speed is 2900rpm.

The maximum of the allowed lowest voltage(50Hz).

The condenser heat exchage capacity under the rated water flow when the water inlet temperature is 30° C and the water outlet temperature is 35° C.

The overall size is not include the compressor fan motor, the unit height will be increased by 220-250mm when the fan motor is needed.

# 水冷型 Water-cooled type

## 技術參數 Specification

380/420V-3Ph-50Hz

水冷機組型號 Condensing Unit	壓縮機 排氣量 Displacement	最大 工作電流 Max.Oper. Current	冷凝器 換熱量 Condenser Capacity	冷凝器 水接口 Water Connection	外形尺寸 Overall Dimension			安裝尺寸 Instaling Measure			接管尺寸 Tube Connection		重量 Gross Weight
					B mm	T mm	H mm	b mm	t mm	Φ mm	SL inc	FL inc	
WJDC56/4PES-15Y	48.50	31.10	52.80	2	1532	550	756	900	315	14	1-5/8"	5/8"	335
WJDC95/4GES-23Y	84.60	37.00	45.76	2-1/2	1625	550	870	1000	330	14	2-1/8"	5/8"	385
WJDC74/4NES-20Y	56.20	37.00	59.84	2	1532	550	756	900	315	14	1-3/8"	5/8"	348
WJDC111/6HE-28Y	110.50	45.00	59.84	2-1/2	1625	550	870	900	315	14	2-1/8"	7/8"	422
WJDC95/4HE-25Y	73.70	45.00	88.00	2-1/2	1625	550	870	900	315	14	2-1/8"	7/8"	427
WJDC135/6GE-34Y	126.80	53.00	70.40	2-1/2	1885	550	870	900	315	14	2-1/8"	7/8"	436
WJDC111/4GE-30Y	84.60	53.00	105.60	2-1/2	1625	550	929	1000	330	14	2-1/8"	7/8"	465
WJDC135/6HE-35Y	110.50	61.00	123.20	2-1/2	1885	550	929	1200	330	14	2-1/8"	7/8"	494
WJDC135/6FE-44Y	151.60	78.00	88.00	2-1/2	1885	550	929	1200	330	14	2-1/8"	7/8"	463
WJDC135/6GE-40Y	126.80	78.00	140.80	2-1/2	1885	550	929	1200	330	14	2-1/8"	7/8"	586
WJDC168/6FE-50Y	151.60	92.00	176.00	2-1/2	2010	550	929	1200	330	14	2-1/8"	1-1/8"	619
WLC20/S4T-5.2Y	19.70	14.00	17.6	1-1/2	849	550	670	400	150	13	1 1/8"	1/2"	191
WJDC32/S4N-8.2Y	28.00	17.00	24.64	1-1/2	1202	550	770	800	280	13	1 1/8"	1/2"	212
WJDC43/S4G-12.2Y	42.30	24.00	35.2	1-1/2	1202	550	770	800	280	14	1-3/8"	5/8"	330
WJDC56/S6J-16.2Y	63.50	31.00	45.76	2	1532	610	880	900	315	14	1-5/8"	7/8"	400
WJDC74/S6H-20.2Y	73.60	37.00	52.8	2	1532	610	880	900	315	14	1-5/8"	7/8"	408
WJDC95/S6G-25.2Y	84.50	45.00	59.84	2-1/2	1625	610	925	1000	330	14	2-1/8"	7/8"	431
WJDC111/S6F-30.2Y	101.10	53.00	70.4	2-1/2	1625	610	939	1000	330	14	2 1/8"	7/8"	442

壓縮機電機名義轉速 2900rpm 時的理論排氣量。

最低允許電壓（50Hz）時的最大值。

進水溫度 30°C，出水溫度 35°C，額定水流量時的冷凝器換熱能力。

外形尺寸未包含缸頂風機，如增加缸頂風機高度增加 220-250 毫米。

The theoretical displacement when the compressor revolving speed is 2900rpm.

The maximum of the allowed lowest voltage(50Hz).

The condenser heat exchage capacity under the rated water flow when the water inlet temperature is 30° C and the water outlet temperature is 35° C.

The overall size is not include the compressor fan motor, the unit height will be increased by 220-250mm when the fan motor is needed.

# 水冷型 Water-cooled type

# R134

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 水冷機組 型號	Verfl. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量			Leistungsaufnahme Power consumption 功率消耗				
			Q <sub>o</sub> [Watt]			P <sub>e</sub> [kW]				
			Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C	Verdampfungstemperatur °C Evaporating temperature °C
			15	10	5	0	-5	-10	-15	-20
WLC5/2KES-05Y	40	Q	2770	2250	1810	1420	1090	815	580	
		P	0,68	0,64	0,59	0,55	0,50	0,45	0,39	
	50	Q	2420	1960	1570	1220	930	685	470	
		P	0,78	0,72	0,67	0,61	0,55	0,49	0,41	
	60	Q	2090	1690	1350	1050	790	570	385	
		P	0,87	0,81	0,74	0,67	0,60	0,51	0,42	
WLC5/2JES-07Y	40	Q	3540	2880	2310	1820	1400	1040	740	
		P	0,86	0,82	0,77	0,72	0,66	0,59	0,51	
	50	Q	3100	2510	2000	1570	1190	875	605	
		P	0,98	0,93	0,87	0,80	0,72	0,64	0,53	
	60	Q	2690	2170	1730	1340	1020	735	495	
		P	1,10	1,04	0,96	0,88	0,79	0,68	0,56	
WLC5/2HES-1Y	40	Q	4650	3820	3100	2490	1960	1520	1140	
		P	1,02	0,99	0,94	0,89	0,83	0,76	0,68	
	50	Q	4080	3330	2690	2150	1680	1280	940	
		P	1,18	1,13	1,07	0,99	0,91	0,81	0,70	
	60	Q	3510	2850	2290	1810	1390	1040	740	
		P	1,35	1,27	1,18	1,08	0,97	0,84	0,71	
WLC9/2HES-2Y	60	Q	4240	3490	2850	2290	1810	1390	1040	740
		P	1,39	1,33	1,25	1,17	1,08	0,97	0,86	0,73
	70	Q	3560	2920	2370	1890	1480	1120	820	560
		P	1,57	1,48	1,38	1,27	1,15	1,02	0,87	0,71
	80	Q	2850	2340	1890	1500	1160	860	610	
		P	1,75	1,63	1,51	1,37	1,22	1,05	0,88	
WLC9/2GES-2Y	40	Q	5400	4450	3630	2930	2320	1810	1370	
		P	1,19	1,15	1,11	1,05	0,98	0,90	0,81	
	50	Q	4760	3910	3180	2550	2010	1540	1150	
		P	1,38	1,32	1,24	1,16	1,06	0,95	0,84	
	60	Q	4120	3370	2730	2170	1690	1280	935	
		P	1,56	1,47	1,36	1,25	1,12	0,99	0,84	
WLC9/2FES-2Y	40	Q	6850	5640	4590	3690	2920	2270	1720	
		P	1,43	1,38	1,32	1,24	1,15	1,04	0,92	
	50	Q	5880	4820	3910	3130	2450	1880	1400	
		P	1,69	1,60	1,49	1,38	1,25	1,11	0,96	
	60	Q	4960	4060	3270	2600	2020	1530	1110	
		P	1,90	1,78	1,64	1,49	1,33	1,15	0,97	
WLC9/2FES-3Y	60	Q	6000	4960	4060	3280	2610	2030	1540	1120
		P	2,12	1,99	1,86	1,72	1,57	1,41	1,24	1,06
	70	Q	4970	4110	3350	2690	2130	1640	1230	875
		P	2,35	2,20	2,03	1,85	1,66	1,47	1,27	1,06
	80	Q	3960	3270	2660	2130	1670	1280	940	
		P	2,58	2,39	2,18	1,96	1,74	1,51	1,27	
WLC9/2EES-2Y	40	Q	8600	7040	5700	4560	3580	2760	2070	
		P	1,78	1,70	1,60	1,48	1,34	1,20	1,04	
	50	Q	7440	6070	4900	3890	3040	2320	1710	
		P	2,09	1,95	1,79	1,62	1,44	1,25	1,07	
	60	Q	6290	5110	4100	3230	2500	1880	1350	
		P	2,34	2,14	1,93	1,71	1,48	1,27	1,06	
WLC9/2EES-3Y	60	Q	7650	6290	5110	4100	3230	2500	1880	1350
		P	2,51	2,33	2,14	1,94	1,73	1,51	1,30	1,10
	70	Q	6260	5120	4140	3290	2560	1950	1420	990
		P	2,74	2,50	2,26	2,01	1,76	1,51	1,27	1,04
	80	Q	4840	3940	3150	2470	1890	1390	975	
		P	2,89	2,60	2,31	2,02	1,73	1,45	1,19	
WLC9/2DES-2Y	40	Q	10240	8390	6800	5450	4300	3320	2510	
		P	2,15	2,06	1,93	1,79	1,62	1,45	1,27	
	50	Q	8870	7260	5870	4680	3670	2810	2090	
		P	2,54	2,37	2,17	1,97	1,75	1,53	1,31	
	60	Q	7530	6130	4940	3910	3040	2300	1680	
		P	2,86	2,61	2,35	2,09	1,82	1,56	1,32	
WLC9/2DES-3Y	60	Q	9140	7530	6130	4940	3910	3040	2300	1680
		P	3,01	2,80	2,57	2,32	2,07	1,82	1,57	1,33
	70	Q	7510	6160	4990	3990	3130	2390	1770	1250
		P	3,31	3,02	2,73	2,43	2,13	1,84	1,55	1,29
	80	Q	5830	4760	3820	3020	2320	1730	1230	
		P	3,52	3,17	2,82	2,46	2,12	1,79	1,47	
WLC9/2CES-3Y	40	Q	12530	10290	8370	6720	5320	4140	3150	
		P	2,60	2,50	2,36	2,19	1,99	1,79	1,58	
	50	Q	10900	8940	7250	5810	4580	3540	2670	
		P	3,08	2,88	2,66	2,42	2,17	1,91	1,66	
	60	Q	9290	7600	6150	4900	3840	2940	2180	
		P	3,49	3,20	2,90	2,59	2,28	1,98	1,69	
WLC20/2CES-4Y	60	Q	11250	9290	7600	6150	4900	3840	2940	2180
		P	3,69	3,44	3,17	2,88	2,58	2,28	1,99	1,70
	70	Q	9290	7650	6240	5010	3960	3060	2310	1670
		P	4,08	3,74	3,40	3,04	2,69	2,34	2,00	1,69
	80	Q	7250	5950	4820	3830	2980	2260	1650	
		P	4,37	3,96	3,54	3,12	2,72	2,33	1,96	

# 水冷型 Water-cooled type

# R134

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 水冷機組 型號	Verf. Temp. Cond. temp. 冷凝 溫度 °C	↓	Kälteleistung Cooling capacity 製冷量			Q <sub>0</sub> [Watt]	Leistungsaufnahme Power consumption 功率消耗				P <sub>e</sub> [kW]	
			Verdampfungstemperatur °C		Evaporating temperature °C		蒸发温度 °C					
			15	10	5		0	-5	-10	-15		-20
WLC9/4FES-3Y	40	Q	13590	11040	8880	7060	5520	4240	3190			
		P	2,78	2,65	2,48	2,28	2,06	1,83	1,60			
	50	Q	11650	9440	7560	5970	4630	3510	2590			
		P	3,24	3,01	2,75	2,48	2,19	1,90	1,62			
	60	Q	9730	7840	6240	4880	3730	2780	1990			
		P	3,60	3,28	2,94	2,60	2,25	1,90	1,57			
WLC20/4FES-5Y	60	Q	11910	9730	7850	6250	4890	3740	2790	2000		
		P	3,83	3,55	3,25	2,93	2,60	2,26	1,92	1,60		
	70	Q	9620	7820	6270	4950	3820	2860	2070	1410		
		P	4,15	3,79	3,41	3,01	2,62	2,22	1,83	1,47		
	80	Q	7340	5930	4720	3660	2760	2000	1360			
		P	4,35	3,91	3,45	2,99	2,53	2,08	1,65			
WLC20/4EES-4Y	40	Q	17030	14000	11410	9190	7320	5730	4410			
		P	3,52	3,36	3,16	2,93	2,67	2,40	2,12			
	50	Q	14760	12110	9830	7890	6240	4850	3690			
		P	4,18	3,90	3,59	3,26	2,91	2,56	2,22			
	60	Q	12500	10230	8280	6610	5190	3980	2980			
		P	4,75	4,35	3,93	3,51	3,08	2,67	2,27			
WJDC32/4EES-6Y	60	Q	15130	12500	10230	8280	6610	5190	3980	2980		
		P	5,02	4,67	4,30	3,90	3,50	3,09	2,69	2,31		
	70	Q	12450	10270	8380	6750	5340	4150	3130	2280		
		P	5,57	5,11	4,63	4,15	3,66	3,19	2,73	2,30		
	80	Q	9760	8040	6540	5230	4100	3130	2300			
		P	6,02	5,45	4,88	4,31	3,75	3,21	2,70			
WLC20/4DES-5Y	40	Q	20500	16690	13470	10750	8460	6550	4980			
		P	4,16	3,96	3,71	3,42	3,11	2,77	2,43			
	50	Q	17650	14360	11550	9180	7180	5510	4130			
		P	4,88	4,54	4,17	3,77	3,35	2,93	2,51			
	60	Q	14830	12030	9630	7600	5890	4450	3270			
		P	5,47	5,00	4,50	4,00	3,49	2,99	2,51			
WJDC32/4DES-7Y	60	Q	18090	14830	12030	9640	7610	5890	4460	3280		
		P	5,79	5,38	4,94	4,47	3,98	3,49	3,01	2,54		
	70	Q	14720	12040	9730	7740	6050	4610	3410	2420		
		P	6,34	5,80	5,24	4,66	4,08	3,51	2,96	2,43		
	80	Q	11350	9250	7420	5850	4490	3340	2370			
		P	6,72	6,07	5,40	4,72	4,05	3,40	2,78			
WJDC32/4CES-6Y	40	Q	25050	20450	16560	13260	10490	8170	6250			
		P	5,05	4,82	4,54	4,20	3,83	3,44	3,04			
	50	Q	21700	17690	14290	11400	8970	6950	5270			
		P	5,94	5,55	5,12	4,65	4,16	3,67	3,19			
	60	Q	18320	14920	12010	9540	7450	5710	4260			
		P	6,69	6,14	5,57	4,98	4,38	3,80	3,24			
WJDC38/4CES-9Y	60	Q	22300	18320	14920	12010	9540	7450	5710	4260		
		P	7,20	6,69	6,14	5,57	4,98	4,38	3,80	3,24		
	70	Q	18240	14980	12160	9750	7680	5930	4470	3250		
		P	7,95	7,29	6,59	5,88	5,18	4,49	3,82	3,19		
	80	Q	14170	11620	9390	7470	5820	4410	3220			
		P	8,53	7,71	6,88	6,05	5,24	4,45	3,71			
WJDC32/4VES-7Y	40	Q	26950	22000	17720	14090	11020	8440	6290			
		P	5,15	4,97	4,68	4,29	3,85	3,38	2,90			
	50	Q	22950	18680	15000	11850	9160	6880	4960			
		P	6,04	5,65	5,17	4,64	4,09	3,53	3,01			
	60	Q	19060	15480	12380	9690	7380	5400	3700			
		P	6,77	6,18	5,54	4,88	4,22	3,57	2,97			
WJDC38/4VES-10Y	60	Q	23300	19010	15330	12200	9550	7340	5500	3990		
		P	7,07	6,60	6,06	5,47	4,83	4,19	3,56	2,95		
	70	Q	18940	15360	12300	9700	7510	5670	4160	2930		
		P	7,75	7,11	6,42	5,70	4,96	4,24	3,55	2,92		
	80	Q	14450	11620	9200	7150	5420	3980	2810			
		P	8,26	7,47	6,65	5,82	5,00	4,22	3,50			
WJDC38/4TES-9Y	40	Q	32350	26450	21400	17080	13420	10340	7760			
		P	6,20	5,98	5,64	5,19	4,68	4,13	3,56			
	50	Q	27700	22600	18210	14450	11240	8510	6210			
		P	7,29	6,82	6,27	5,65	5,00	4,35	3,72			
	60	Q	23100	18840	15140	11930	9160	6780	4740			
		P	8,20	7,51	6,77	5,99	5,21	4,45	3,74			
WJDC43/4TES-12Y	60	Q	28200	23050	18660	14920	11760	9100	6900	5090		
		P	8,80	8,20	7,51	6,77	5,99	5,21	4,45	3,74		
	70	Q	23000	18750	15090	11980	9360	7160	5350	3870		
		P	9,79	8,98	8,10	7,18	6,23	5,29	4,39	3,55		
	80	Q	17690	14320	11420	8960	6890	5160	3750			
		P	10,65	9,69	8,64	7,53	6,39	5,25	4,14			

### Leistungswerte 50 Hz

bezogen auf Sauggastemperatur 20°C,  
ohne Flüssigkeits-Unterkühlung

### Performance data 50 Hz

relating to 20°C suction gas tempera-  
ture, without liquid subcooling

### 性能参数 50Hz

对应20°C 吸气温度，液体无过冷

Verdichter Typ Condensing Unit 水冷機組 型號	Verf. Temp. Cond. temp. 冷凝 溫度 °C	↓	Kälteleistung Cooling capacity 製冷量				Leistungsaufnahme Power consumption 功率消耗			
			Q <sub>o</sub> [Watt]				P <sub>e</sub> [kW]			
			Verdampfungstemperatur °C Evaporating temperature °C		Verdampfungstemperatur °C Evaporating temperature °C		Verdampfungstemperatur °C Evaporating temperature °C		Verdampfungstemperatur °C Evaporating temperature °C	
		15	10	5	0	-5	-10	-15	-20	
WJDC43/4PES-12Y	40	Q	37450	30500	24500	19450	15170	11570	8570	
		P	7,03	6,75	6,34	5,82	5,23	4,59	3,94	
	50	Q	31800	25800	20700	16280	12530	9360	6700	
WJDC56/4PES-15Y	60	P	8,18	7,63	6,98	6,26	5,50	4,73	3,96	
		Q	26300	21300	16970	13240	10020	7260	4910	
		P	9,10	8,29	7,43	6,52	5,60	4,68	3,79	
WJDC56/4PES-15Y	60	Q	32250	26250	21100	16740	13050	9960	7400	
		P	9,88	9,20	8,40	7,53	6,62	5,70	4,80	3,96
	70	Q	26100	21100	16890	13210	10160	7610	5520	3810
WJDC56/4NES-14Y	80	P	10,81	9,85	8,83	7,76	6,69	5,64	4,66	3,76
		Q	19800	15860	12490	9630	7230	5240	3620	
		P	11,40	10,20	8,97	7,74	6,53	5,38	4,34	
WJDC56/4NES-14Y	40	Q	43850	35800	28900	23000	18050	13860	10370	
		P	8,33	7,99	7,51	6,92	6,24	5,51	4,76	
	50	Q	37400	30500	24500	19410	15050	11350	8240	
WJDC74/4NES-20Y	60	P	9,72	9,08	8,33	7,50	6,62	5,71	4,82	
		Q	31150	25350	20300	15960	12200	8970	6210	
		P	10,89	9,96	8,94	7,88	6,80	5,73	4,69	
WJDC74/4NES-20Y	60	Q	38400	31450	25450	20400	16070	12460	9450	
		P	11,84	11,05	10,13	9,13	8,08	7,02	6,00	5,04
	70	Q	31400	25600	20600	16390	12810	9820	7350	5330
WJDC56/4JE-15Y	80	P	13,03	11,92	10,73	9,49	8,25	7,04	5,91	4,88
		Q	24150	19570	15630	12280	9450	7100	5170	
		P	13,84	12,43	10,99	9,54	8,13	6,79	5,57	
WJDC56/4JE-15Y	40	Q	48850	40050	32650	26300	20850	16230	12330	
		P	9,30	8,98	8,52	7,94	7,28	6,56	5,81	
	50	Q	42250	34700	28200	22600	17800	13720	10260	
WJDC95/4JE-22Y	60	P	10,94	10,34	9,62	8,80	7,93	7,03	6,13	
		Q	35950	29400	23800	18920	14750	11200	8180	
		P	12,35	11,47	10,50	9,47	8,39	7,30	6,23	
WJDC95/4JE-22Y	60	Q	42750	35250	28700	23100	18280	14150	10630	
		P	12,90	12,14	11,25	10,25	9,18	8,06	6,93	5,80
	70	Q	35050	28750	23300	18550	14470	10970	7990	5480
WJDC74/4HE-18Y	80	P	14,25	13,18	12,00	10,74	9,42	8,08	6,74	5,43
		Q	27150	22100	17710	13890	10580	7740	5320	
		P	15,18	13,81	12,34	10,80	9,24	7,66	6,11	
WJDC74/4HE-18Y	40	Q	57400	47250	38550	31100	24750	19390	14870	
		P	11,20	10,74	10,12	9,38	8,56	7,68	6,77	
	50	Q	49800	40950	33300	26800	21250	16530	12570	
WJDC95/4HE-25Y	60	P	13,12	12,33	11,42	10,41	9,34	8,25	7,16	
		Q	42200	34600	28100	22500	17690	13630	10220	
		P	14,77	13,67	12,47	11,21	9,91	8,61	7,35	
WJDC95/4HE-25Y	60	Q	50700	41900	34300	27700	22050	17170	13030	
		P	15,31	14,39	13,35	12,20	10,98	9,71	8,41	7,11
	70	Q	41600	34350	28000	22500	17680	13550	10000	6980
WJDC95/4GE-23Y	80	P	16,96	15,71	14,36	12,93	11,44	9,91	8,37	6,82
		Q	32500	26700	21650	17200	13290	9890	6930	
		P	18,29	16,71	15,06	13,34	11,57	9,77	7,95	
WJDC111/4GE-30Y	40	Q	65100	53500	43600	35150	27900	21800	16640	
		P	13,25	12,56	11,73	10,77	9,73	8,63	7,50	
	50	Q	56200	46000	37250	29800	23450	18110	13640	
WJDC111/4FE-28Y	60	P	15,37	14,31	13,13	11,86	10,52	9,16	7,81	
		Q	47000	38250	30750	24400	18980	14450	10690	
		P	17,11	15,70	14,20	12,63	11,03	9,43	7,86	
WJDC111/4FE-28Y	60	Q	59100	48900	40100	32450	25850	20200	15350	
		P	17,91	16,76	15,49	14,13	12,70	11,21	9,68	8,14
	70	Q	48500	40150	32800	26450	20900	16070	11910	8320
WJDC135/4FE-35Y	80	P	19,88	18,33	16,70	15,00	13,25	11,46	9,65	7,83
		Q	37800	31250	25500	20400	15880	11910	8390	
		P	21,63	19,66	17,65	15,61	13,53	11,42	9,31	
WJDC111/4FE-28Y	40	Q	79200	65200	53300	43100	34450	27200	21100	
		P	16,66	15,80	14,74	13,54	12,23	10,88	9,53	
	50	Q	69300	57000	46500	37550	29900	23500	18130	
WJDC135/4FE-35Y	60	P	19,43	18,07	16,56	14,95	13,29	11,63	10,01	
		Q	59300	48750	39700	31900	25300	19760	15110	
		P	21,81	19,99	18,06	16,08	14,09	12,15	10,31	
WJDC135/4FE-35Y	60	Q	70300	58100	47600	38550	30800	24200	18670	
		P	22,82	21,16	19,35	17,44	15,47	13,49	11,56	9,72
	70	Q	58000	47850	39100	31500	25000	19480	14800	10880
WJDC135/4FE-35Y	80	P	25,10	22,97	20,73	18,44	16,14	13,87	11,70	9,66
		Q	45500	37500	30500	24450	19210	14740	10940	
		P	26,89	24,33	21,70	19,06	16,46	13,94	11,56	

### Leistungswerte 50 Hz

bezogen auf Sauggasttemperatur 20°C,  
ohne Flüssigkeits-Unterkühlung

### Performance data 50 Hz

relating to 20°C suction gas tempera-  
ture, without liquid subcooling

### 性能参数 50Hz

对应20°C 吸气温度，液体无过冷

Verdichter Typ Condensing Unit 水冷機組 型號	Verfl. Temp. Cond. temp. 冷凝 溫度 °C	↓	Kälteleistung Cooling capacity 製冷量				Leistungsaufnahme Power consumption 功率消耗			
			Q <sub>o</sub> [Watt]				P <sub>e</sub> [kW]			
			Verdampfungstemperatur °C Evaporating temperature °C		蒸发温度 °C		Verdampfungstemperatur °C Evaporating temperature °C		蒸发温度 °C	
		15	10	5	0	-5	-10	-15	-20	
WJDC95/6JE-25Y	40	Q	72500	59400	48200	38650	30550	23700	18020	
		P	14,27	13,64	12,81	11,82	10,70	9,50	8,24	
	50	Q	62700	51200	41400	33000	25850	19840	14830	
		P	16,66	15,56	14,30	12,92	11,45	9,94	8,42	
WJDC135/6JE-33Y	60	Q	52800	42950	34500	27300	21150	15990	11680	
		P	18,57	17,03	15,37	13,63	11,84	10,04	8,28	
	60	Q	65500	53800	43600	34900	27500	21200	15960	
		P	19,68	18,38	16,91	15,30	13,61	11,87	10,13	8,42
WJDC111/6HE-28Y	70	Q	53700	43850	35300	28000	21800	16550	12160	
		P	21,80	19,99	18,06	16,04	13,99	11,94	9,94	8,02
	80	Q	41700	33900	27100	21300	16310	12120	8630	
		P	23,44	21,14	18,78	16,38	13,99	11,65	9,41	
WJDC135/6HE-35Y	40	Q	85100	69800	56800	45700	36300	28350	21700	
		P	16,80	16,08	15,12	13,98	12,70	11,31	9,87	
	50	Q	73800	60500	49050	39300	31000	24000	18130	
		P	19,76	18,48	17,02	15,42	13,72	11,98	10,23	
WJDC135/6HE-35Y	60	Q	62500	51100	41200	32800	25650	19630	14590	
		P	22,21	20,41	18,47	16,44	14,37	12,31	10,29	
	70	Q	75400	62000	50400	40500	32050	24850	18790	
		P	23,32	21,73	19,95	18,02	15,99	13,92	11,86	9,86
WJDC135/6GE-34Y	80	Q	61800	50600	41000	32650	25550	19530	14470	
		P	25,79	23,62	21,31	18,92	16,49	14,07	11,72	9,47
	80	Q	48050	39200	31500	24900	19220	14430	10410	
		P	27,69	24,96	22,16	19,33	16,53	13,80	11,18	
WJDC135/6GE-40Y	40	Q	97100	79900	65100	52500	41800	32800	25300	
		P	20,01	18,97	17,72	16,32	14,78	13,16	11,50	
	50	Q	84100	69100	56200	45200	35850	27950	21350	
		P	23,32	21,71	19,93	18,04	16,05	14,03	12,01	
WJDC135/6GE-40Y	60	Q	71100	58300	47400	38000	29950	23150	17410	
		P	25,98	23,86	21,60	19,26	16,88	14,50	12,18	
	60	Q	87300	72200	59100	47900	38300	30100	23150	
		P	27,61	25,84	23,85	21,69	19,42	17,11	14,80	12,56
WJDC135/6FE-44Y	70	Q	72100	59500	48600	39200	31100	24200	18420	
		P	30,50	28,15	25,63	23,00	20,32	17,64	15,03	12,54
	80	Q	56400	46500	37850	30400	23950	18480	13860	
		P	32,80	29,91	26,90	23,84	20,78	17,78	14,90	
WJDC135/6FE-44Y	40	Q	116700	96100	78400	63300	50600	39800	30800	
		P	24,10	22,92	21,50	19,88	18,12	16,25	14,32	
	50	Q	101300	83300	67900	54700	43500	34050	26100	
		P	27,97	26,15	24,13	21,97	19,69	17,36	15,02	
WJDC135/6FE-44Y	60	Q	85800	70600	57400	46150	36550	28350	21500	
		P	31,11	28,72	26,17	23,50	20,77	18,04	15,35	

**Leistungswerte 50 Hz**  
bezogen auf Sauggastemperatur 20°C,  
ohne Flüssigkeits-Unterkühlung

**Performance data 50 Hz**  
relating to 20°C suction gas tempera-  
ture, without liquid subcooling

**性能参数 50Hz**  
对应20°C 吸气温度，液体无过冷

# 水冷型 Water-cooled type

# R404A

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 水冷機組型號	Verf. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量					Q <sub>o</sub> [Watt]	Leistungsaufnahme Power consumption 功率消耗					P <sub>e</sub> [kW]
			Verdampfungstemperatur °C			Evaporating temperature °C			蒸发温度 °C					
			5	0	-5	-10	-15		-20	-25	-30	-35	-40	
WLC5/2KES-05Y	30	Q	4290	3570	2940	2390	1920	1510	1160	865	610	395		
		P	0,81	0,80	0,78	0,75	0,72	0,68	0,63	0,57	0,50	0,42		
	40	Q	3520	2920	2390	1940	1540	1200	900	650	435	255		
		P	0,96	0,93	0,89	0,84	0,79	0,72	0,65	0,57	0,47	0,36		
	50	Q	2810	2320	1890	1520	1190	910	670	460	285	140		
		P	1,11	1,05	0,99	0,92	0,84	0,76	0,66	0,55	0,43	0,30		
WLC5/2JES-07Y	30	Q	5670	4730	3920	3210	2600	2070	1620	1230	900	625		
		P	1,08	1,07	1,05	1,02	0,97	0,91	0,84	0,76	0,66	0,56		
	40	Q	4740	3950	3250	2650	2130	1680	1290	960	675	440		
		P	1,31	1,27	1,21	1,14	1,06	0,98	0,87	0,76	0,64	0,51		
	50	Q	3850	3190	2620	2120	1680	1300	980	700	465	265		
		P	1,53	1,45	1,36	1,26	1,14	1,02	0,89	0,75	0,60	0,44		
WLC5/2HES-1Y	30	Q	5920	4910	4040	3280	2630	2070	1590	1180	840			
		P	1,45	1,38	1,31	1,23	1,14	1,04	0,93	0,82	0,69			
	40	Q	4950	4090	3340	2690	2130	1650	1240	890	595			
		P	1,70	1,59	1,47	1,35	1,21	1,08	0,94	0,79	0,64			
	50	Q	4000	3290	2670	2130	1660	1250	905	615	365			
		P	1,92	1,76	1,60	1,43	1,26	1,09	0,91	0,73	0,55			
WLC9/2HES-2Y	30	Q	7200	6020	5000	4110	3340	2680	2110	1620	1210	855		
		P	1,42	1,40	1,37	1,32	1,25	1,16	1,06	0,95	0,83	0,70		
	40	Q	6060	5060	4190	3420	2760	2190	1700	1270	910	610		
		P	1,70	1,64	1,56	1,47	1,36	1,23	1,10	0,96	0,80	0,64		
	50	Q	4940	4110	3380	2740	2190	1700	1290	935	630	375		
		P	1,96	1,85	1,73	1,59	1,44	1,28	1,11	0,93	0,75	0,56		
WLC9/2GES-2Y	30	Q	8230	6890	5730	4720	3850	3090	2450	1890	1420	1030		
		P	1,67	1,65	1,60	1,53	1,45	1,34	1,23	1,10	0,96	0,81		
	40	Q	6910	5780	4790	3930	3190	2540	1990	1520	1110	775		
		P	2,00	1,93	1,83	1,72	1,59	1,45	1,30	1,13	0,96	0,79		
	50	Q	5650	4710	3890	3180	2560	2020	1560	1160	825	540		
		P	2,33	2,20	2,05	1,90	1,72	1,54	1,35	1,16	0,96	0,76		
WLC9/2FES-2Y	30	Q	8690	7220	5940	4830	3870	3050	2350	1750	1250			
		P	2,02	1,98	1,91	1,80	1,67	1,51	1,35	1,17	1,07			
	40	Q	7190	5960	4880	3950	3150	2450	1860	1360	930			
		P	2,37	2,27	2,13	1,97	1,79	1,60	1,39	1,18	1,07			
	50	Q	5770	4770	3900	3140	2480	1910	1420	1000	650			
		P	2,72	2,55	2,36	2,15	1,92	1,68	1,44	1,20	0,97			
WLC9/2FES-3Y	30	Q	10320	8640	7170	5900	4800	3850	3030	2330	1740	1250		
		P	2,03	2,00	1,95	1,86	1,76	1,63	1,49	1,34	1,17	1,00		
	40	Q	8560	7160	5930	4860	3940	3130	2440	1850	1350	930		
		P	2,46	2,37	2,25	2,10	1,94	1,77	1,58	1,38	1,17	0,96		
	50	Q	6890	5760	4760	3890	3130	2470	1900	1410	995	645		
		P	2,88	2,72	2,53	2,33	2,11	1,88	1,64	1,40	1,15	0,91		
WLC9/2EES-2Y	30	Q	10920	9070	7470	6080	4890	3860	2980	2230	1600			
		P	2,37	2,28	2,16	2,01	1,85	1,67	1,47	1,27	1,07			
	40	Q	9250	7670	6300	5100	4070	3180	2420	1770	1220			
		P	2,81	2,64	2,45	2,23	2,01	1,77	1,53	1,28	1,04			
	50	Q	7490	6180	5040	4050	3190	2450	1820	1280	830			
		P	3,16	2,91	2,65	2,37	2,09	1,80	1,51	1,23	0,95			
WLC9/2EES-3Y	30	Q	13040	10920	9070	7470	6080	4890	3860	2980	2230	1600		
		P	2,40	2,36	2,27	2,16	2,02	1,87	1,69	1,50	1,31	1,11		
	40	Q	11070	9250	7670	6300	5100	4070	3180	2420	1770	1220		
		P	2,89	2,76	2,61	2,43	2,23	2,02	1,79	1,55	1,32	1,08		
	50	Q	8980	7490	6180	5040	4050	3190	2450	1820	1280	830		
		P	3,27	3,08	2,86	2,62	2,36	2,09	1,82	1,54	1,26	0,99		
WLC9/2DES-2Y	30	Q	12990	10810	8910	7270	5860	4640	3590	2710	1960			
		P	2,87	2,76	2,62	2,45	2,25	2,03	1,80	1,55	1,31			
	40	Q	11040	9170	7540	6120	4900	3850	2940	2180	1530			
		P	3,42	3,22	2,98	2,73	2,46	2,17	1,88	1,59	1,30			
	50	Q	8960	7420	6070	4890	3870	2990	2240	1600	1070			
		P	3,87	3,57	3,25	2,92	2,58	2,23	1,88	1,55	1,22			
WLC9/2DES-3Y	30	Q	15500	12990	10810	8910	7270	5860	4640	3590	2710	1960		
		P	2,87	2,81	2,71	2,58	2,41	2,22	2,01	1,79	1,56	1,33		
	40	Q	13180	11040	9170	7540	6120	4900	3850	2940	2180	1530		
		P	3,47	3,32	3,13	2,92	2,68	2,42	2,15	1,87	1,59	1,31		
	50	Q	10720	8960	7420	6070	4890	3870	2990	2240	1600	1070		
		P	3,97	3,73	3,46	3,17	2,86	2,53	2,21	1,88	1,55	1,24		

### Leistungswerte 50 Hz

bezogen auf Saugstemp. 20°C,  
ohne Flüssigkeits-Unterkühlung

### Performance data 50 Hz

relating to 20°C suction gas temperature,  
without liquid subcooling

### 性能参数 50Hz

对应20°C吸气温度，液体无过冷

# 水冷型 Water-cooled type

# R404A

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 水冷機組 型號	Verf. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量					[Watt]	Leistungsaufnahme Power consumption 功率消耗					[kW]								
			Verdampfungstemperatur °C						Evaporating temperature °C						蒸发温度 °C							
			5	0	-5	-10	-15		-20	-25	-30	-35	-40									
WLC9/2CES-3Y	30	Q	15890	13250	10950	8960	7250	5770	4500	3420	2500	3,47	3,35	3,19	2,98	2,75	2,50	2,23	1,94	1,66		
		P	3,47	3,35	3,19	2,98	2,75	2,50	2,23	1,94	1,66											
	40	Q	13550	11280	9310	7590	6110	4830	3730	2790	2000	4,15	3,92	3,65	3,35	3,03	2,70	2,36	2,02	1,69		
		P	4,15	3,92	3,65	3,35	3,03	2,70	2,36	2,02	1,69											
	50	Q	11060	9180	7540	6120	4880	3810	2890	2110	1450	4,73	4,38	4,01	3,62	3,22	2,81	2,41	2,01	1,64		
		P	4,73	4,38	4,01	3,62	3,22	2,81	2,41	2,01	1,64											
WLC20/2CES-4Y	30	Q	18920	15890	13250	10950	8960	7250	5770	4500	3420	3,49	3,42	3,31	3,15	2,96	2,74	2,49	2,23	1,95	1,68	
		P	3,49	3,42	3,31	3,15	2,96	2,74	2,49	2,23	1,95											1,68
	40	Q	16150	13550	11280	9310	7590	6110	4830	3730	2790	2000	4,24	4,06	3,84	3,59	3,31	3,00	2,68	2,35	2,02	1,70
		P	4,24	4,06	3,84	3,59	3,31	3,00	2,68	2,35	2,02	1,70										
	50	Q	13190	11060	9180	7540	6120	4880	3810	2890	2110	1450	4,86	4,58	4,27	3,92	3,56	3,18	2,79	2,40	2,02	1,65
		P	4,86	4,58	4,27	3,92	3,56	3,18	2,79	2,40	2,02	1,65										
WLC9/4FES-3Y	30	Q	17510	14460	11840	9610	7700	6100	4750	3640	2720	3,71	3,61	3,45	3,25	3,01	2,74	2,44	2,14	1,84		
		P	3,71	3,61	3,45	3,25	3,01	2,74	2,44	2,14	1,84											
	40	Q	14840	12260	10040	8140	6520	5140	3990	3030	2250	4,44	4,23	3,96	3,66	3,33	2,97	2,61	2,24	1,89		
		P	4,44	4,23	3,96	3,66	3,33	2,97	2,61	2,24	1,89											
	50	Q	12030	9940	8140	6580	5250	4120	3170	2380	1730	5,03	4,71	4,35	3,96	3,54	3,11	2,68	2,26	1,85		
		P	5,03	4,71	4,35	3,96	3,54	3,11	2,68	2,26	1,85											
WLC20/4FES-5Y	30	Q	21050	17510	14460	11840	9610	7700	6100	4750	3640	3,69	3,66	3,56	3,41	3,22	2,99	2,73	2,45	2,16	1,86	
		P	3,69	3,66	3,56	3,41	3,22	2,99	2,73	2,45	2,16											1,86
	40	Q	17810	14830	12260	10040	8140	6510	5140	3990	3030	2240	4,48	4,34	4,14	3,89	3,61	3,29	2,96	2,61	2,26	1,91
		P	4,48	4,34	4,14	3,89	3,61	3,29	2,96	2,61	2,26	1,91										
	50	Q	14400	12010	9940	8130	6580	5250	4130	3180	2380	1730	5,12	4,88	4,58	4,25	3,88	3,49	3,09	2,68	2,27	1,87
		P	5,12	4,88	4,58	4,25	3,88	3,49	3,09	2,68	2,27	1,87										
WLC20/4EES-4Y	30	Q	22100	18300	15010	12200	9790	7760	6050	4630	3460	4,75	4,61	4,40	4,12	3,80	3,43	3,05	2,65	2,26		
		P	4,75	4,61	4,40	4,12	3,80	3,43	3,05	2,65	2,26											
	40	Q	18810	15550	12740	10330	8270	6520	5060	3830	2830	5,71	5,42	5,06	4,65	4,20	3,73	3,25	2,77	2,31		
		P	5,71	5,42	5,06	4,65	4,20	3,73	3,25	2,77	2,31											
	50	Q	15360	12690	10380	8390	6690	5240	4020	3010	2170	6,52	6,07	5,58	5,05	4,49	3,92	3,35	2,80	2,27		
		P	6,52	6,07	5,58	5,05	4,49	3,92	3,35	2,80	2,27											
WJDC32/4EES-6Y	30	Q	26400	22000	18160	14880	12060	9660	7630	5930	4510	4,70	4,65	4,51	4,30	4,04	3,72	3,38	3,00	2,62	2,23	
		P	4,70	4,65	4,51	4,30	4,04	3,72	3,38	3,00	2,62											2,23
	40	Q	22400	18650	15390	12590	10180	8120	6380	4920	3700	2700	5,72	5,52	5,24	4,90	4,51	4,08	3,63	3,17	2,71	2,25
		P	5,72	5,52	5,24	4,90	4,51	4,08	3,63	3,17	2,71	2,25										
	50	Q	18240	15170	12510	10200	8220	6520	5080	3870	2870	2040	6,57	6,22	5,81	5,35	4,85	4,32	3,78	3,23	2,69	2,18
		P	6,57	6,22	5,81	5,35	4,85	4,32	3,78	3,23	2,69	2,18										
WLC20/4DES-5Y	30	Q	26200	21750	17860	14540	11700	9280	7250	5550	4140	5,64	5,47	5,22	4,89	4,51	4,08	3,63	3,16	2,70		
		P	5,64	5,47	5,22	4,89	4,51	4,08	3,63	3,16	2,70											
	40	Q	22400	18530	15190	12320	9870	7790	6030	4580	3370	6,74	6,40	5,97	5,49	4,97	4,42	3,86	3,30	2,76		
		P	6,74	6,40	5,97	5,49	4,97	4,42	3,86	3,30	2,76											
	50	Q	18440	15220	12440	10040	8000	6260	4800	3600	2600	7,69	7,17	6,59	5,96	5,31	4,65	3,99	3,35	2,74		
		P	7,69	7,17	6,59	5,96	5,31	4,65	3,99	3,35	2,74											
WJDC32/4DES-7Y	30	Q	31450	26250	21750	17870	14540	11700	9280	7250	5550	5,60	5,54	5,39	5,15	4,84	4,47	4,06	3,63	3,18	2,73	
		P	5,60	5,54	5,39	5,15	4,84	4,47	4,06	3,63	3,18											2,73
	40	Q	26900	22400	18540	15190	12320	9870	7790	6040	4580	3370	6,81	6,57	6,25	5,85	5,40	4,91	4,39	3,85	3,31	2,79
		P	6,81	6,57	6,25	5,85	5,40	4,91	4,39	3,85	3,31	2,79										
	50	Q	22150	18430	15220	12440	10040	8000	6260	4810	3600	2600	7,83	7,43	6,96	6,42	5,84	5,23	4,61	3,98	3,36	2,77
		P	7,83	7,43	6,96	6,42	5,84	5,23	4,61	3,98	3,36	2,77										
WJDC32/4CES-6Y	30	Q	31750	26300	21650	17610	14160	11220	8730	6650	4930	6,82	6,61	6,29	5,88	5,40	4,87	4,31	3,74	3,17		
		P	6,82	6,61	6,29	5,88	5,40	4,87	4,31	3,74	3,17											
	40	Q	27150	22400	18350	14850	11850	9310	7180	5400	3930	8,10	7,66	7,14	6,54	5,90	5,22	4,54	3,86	3,21		
		P	8,10	7,66	7,14	6,54	5,90	5,22	4,54	3,86	3,21											
	50	Q	22500	18520	15080	12120	9610	7480	5690	4220	3010	9,19	8,55	7,83	7,07	6,27	5,47	4,67	3,90	3,17		
		P	9,19	8,55	7,83	7,07	6,27	5,47	4,67	3,90	3,17											
WJDC38/4CES-9Y	30	Q	38000	31750	26300	21650	17610	14160	11220	8730	6650	6,91	6,82	6,61	6,29	5,88	5,40	4,87	4,31	3,74	3,17	
		P	6,91	6,82	6,61	6,29	5,88	5,40	4,87	4,31	3,74											3,17
	40	Q	32600	27150	22400	18350	14850	11850	9310	7180	5400	3930	8,42	8,10	7,66	7,14	6,54	5,90	5,22	4,54	3,86	3,21
		P	8,42	8,10	7,66	7,14	6,54	5,90	5,22	4,54	3,86	3,21										
	50	Q	27100	22500	18520	15080	12120	9610	7480	5690	4220	3010	9,75	9,19	8,55	7,83	7,07	6,27	5,47	4,67	3,90	3,17
		P	9,75	9,19	8,55	7,83	7,07	6,27	5,47	4,67	3,90	3,17										
WJDC32/4VES-7Y	30	Q	34100	28150	23000	18590	14820	11600	8890	6630	4750	7,15	6,92	6,55	6,07	5,52	4,91	4,27	3,64	3,04		
		P	7,15	6,92	6,55	6,07	5,52	4,91	4,27	3,64	3,04											
	40	Q	28800	23650	19180	15360	12110	9350	7040	5130	3560	8,58	8,04	7,39	6,68	5,91	5,13	4,35	3,60	2,91		
		P	8,58	8,04	7,39	6,68	5,91	5,13	4,35	3,60	2,91											
	50	Q	23550	19180	15430	12210	9480	7190	5280	3710	2440	9,77	8,92	8,02	7,08	6,12	5,18	4,28	3,43	2,67		
		P	9,77	8,92	8,02	7,08	6,12	5,18	4,28	3,43	2,67											
WJDC38/4VES-10Y																						

# 水冷型 Water-cooled type

# R404A

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ Condensing Unit 水冷機組 型號	Verf. Temp. Cond. temp. 冷凝溫度 °C	↓	Kälteleistung Cooling capacity 製冷量								Leistungsaufnahme Power consumption 功率消耗	P <sub>e</sub> [kW]
			Verdampfungstemperatur °C Evaporating temperature °C				蒸发温度 °C					
			5	0	-5	-10	-15	-20	-25	-30		
WJDC38/4TES-9Y	30	Q	40850	33800	27700	22450	17970	14150	10930	8230	6000	
		P	8,60	8,32	7,89	7,34	6,69	5,98	5,24	4,50	3,79	
	40	Q	34700	28600	23300	18750	14870	11580	8820	6520	4630	
		P	10,32	9,70	8,96	8,13	7,24	6,33	5,42	4,54	3,72	
	50	Q	28500	23300	18860	15040	11780	9030	6740	4840	3300	
		P	11,75	10,80	9,77	8,69	7,58	6,49	5,42	4,43	3,52	
WJDC43/4TES-12Y	30	Q	49200	40950	33850	27700	22450	17930	14100	10870	8180	5950
		P	8,52	8,43	8,16	7,74	7,20	6,57	5,88	5,17	4,45	3,76
	40	Q	41800	34700	28550	23200	18670	14780	11500	8750	6470	4600
		P	10,43	10,00	9,42	8,73	7,94	7,09	6,21	5,34	4,49	3,71
	50	Q	34450	28500	23300	18810	14990	11730	9000	6720	4850	3330
		P	12,07	11,32	10,45	9,50	8,48	7,44	6,40	5,39	4,45	3,60
WJDC43/4PES-12Y	30	Q	47250	38900	31750	25600	20350	15900	12160	9050	6500	
		P	9,72	9,36	8,84	8,18	7,43	6,61	5,75	4,89	4,05	
	40	Q	40000	32800	26550	21200	16680	12860	9660	7020	4870	
		P	11,51	10,78	9,93	8,97	7,95	6,90	5,84	4,81	3,83	
	50	Q	32550	26500	21250	16790	13010	9830	7200	5040	3300	
		P	12,92	11,84	10,67	9,43	8,17	6,90	5,66	4,49	3,41	
WJDC56/4PES-15Y	30	Q	57000	47300	38950	31700	25550	20300	15800	12050	8930	6370
		P	9,90	9,72	9,35	8,82	8,15	7,39	6,56	5,69	4,83	4,00
	40	Q	48200	39800	32600	26400	21050	16520	12710	9520	6890	4760
		P	11,96	11,40	10,67	9,82	8,87	7,86	6,82	5,78	4,77	3,83
	50	Q	39450	32400	26350	21150	16680	12920	9760	7140	5000	3280
		P	13,69	12,78	11,73	10,58	9,38	8,14	6,91	5,71	4,58	3,55
WJDC56/4NES-14Y	30	Q	55400	45700	37400	30250	24150	18980	14650	11050	8090	
		P	11,59	11,15	10,54	9,78	8,91	7,97	6,98	5,98	5,00	
	40	Q	47200	38800	31550	25400	20100	15640	11910	8820	6290	
		P	13,74	12,91	11,93	10,84	9,67	8,45	7,23	6,03	4,88	
	50	Q	38550	31550	25500	20350	15950	12240	9140	6580	4510	
		P	15,46	14,25	12,93	11,53	10,08	8,61	7,17	5,79	4,49	
WJDC74/4NES-20Y	30	Q	67000	55700	46000	37600	30400	24300	19080	14710	11080	8100
		P	11,68	11,45	11,00	10,38	9,62	8,76	7,83	6,86	5,90	4,99
	40	Q	56900	47200	38800	31550	25400	20100	15660	11940	8860	6350
		P	14,06	13,42	12,60	11,64	10,58	9,45	8,29	7,14	6,03	5,00
	50	Q	46800	38700	31700	25650	20450	16070	12380	9310	6780	4740
		P	16,19	15,16	13,99	12,72	11,39	10,03	8,67	7,36	6,13	5,02
WJDC56/4JE-15Y	30	Q	62400	51900	42850	34950	28200	22400	17440	13250	9730	
		P	13,05	12,56	11,91	11,12	10,22	9,24	8,21	7,15	6,10	
	40	Q	53400	44300	36400	29550	23650	18600	14300	10680	7650	
		P	15,41	14,50	13,46	12,31	11,10	9,84	8,56	7,29	6,06	
	50	Q	44200	36500	29850	24050	19080	14810	11200	8160	5640	
		P	17,40	16,10	14,69	13,22	11,71	10,18	8,67	7,21	5,82	
WJDC74/4JE-22Y	30	Q	73700	61600	51100	42050	34200	27450	21650	16740	12580	9090
		P	13,02	12,72	12,23	11,57	10,79	9,89	8,91	7,88	6,83	5,77
	40	Q	63000	52500	43400	35500	28700	22800	17780	13520	9920	6930
		P	15,71	14,96	14,05	13,02	11,88	10,67	9,42	8,14	6,87	5,62
	50	Q	51900	43200	35500	28850	23100	18150	13930	10350	7350	4860
		P	18,00	16,83	15,53	14,13	12,67	11,16	9,64	8,13	6,66	5,24
WJDC74/4HE-18Y	30	Q	72700	60500	50000	40900	33050	26300	20600	15750	11680	
		P	15,66	15,02	14,20	13,22	12,12	10,94	9,71	8,45	7,21	
	40	Q	62200	51700	42600	34700	27900	22050	17080	12890	9390	
		P	18,50	17,36	16,08	14,69	13,23	11,72	10,20	8,71	7,28	
	50	Q	51400	42650	35000	28350	22600	17720	13570	10070	7160	
		P	20,93	19,32	17,61	15,84	14,03	12,22	10,44	8,74	7,14	
WJDC95/4HE-25Y	30	Q	86000	72100	59900	49400	40300	32500	25750	20050	15230	11180
		P	15,55	15,15	14,55	13,76	12,83	11,78	10,64	9,44	8,22	7,00
	40	Q	73600	61500	51000	41900	34000	27200	21400	16470	12310	8830
		P	18,63	17,74	16,68	15,47	14,16	12,76	11,32	9,85	8,40	6,99
	50	Q	60700	50700	41900	34250	27600	21900	17040	12910	9440	6560
		P	21,22	19,88	18,41	16,82	15,15	13,44	11,71	10,00	8,34	6,76
WJDC95/4GE-23Y	30	Q	83800	69900	57800	47350	38350	30650	24100	18540	13880	
		P	18,72	17,88	16,84	15,63	14,30	12,88	11,41	9,93	8,48	
	40	Q	71800	59800	49350	40300	32550	25900	20200	15420	11430	
		P	22,15	20,71	19,13	17,44	15,68	13,88	12,09	10,34	8,68	
	50	Q	59300	49300	40600	33050	26550	21000	16290	12320	9010	
		P	25,11	23,12	21,03	18,88	16,72	14,58	12,50	10,52	8,63	
WJDC111/4GE-30Y	30	Q	98700	82700	68800	56800	46350	37400	29700	23150	17640	13020
		P	18,19	17,66	16,90	15,94	14,83	13,60	12,27	10,88	9,47	8,06
	40	Q	84400	70600	58600	48200	39200	31400	24800	19160	14410	10450
		P	21,62	20,56	19,30	17,89	16,37	14,75	13,09	11,40	9,74	8,13
	50	Q	69400	57900	48000	39300	31800	25350	19820	15140	11210	7950
		P	24,47	22,94	21,24	19,42	17,52	15,56	13,59	11,64	9,75	7,96

### Leistungswerte 50 Hz

bezogen auf Sauggastemperatur 20°C, ohne Flüssigkeits-Unterkühlung

### Performance data 50 Hz

relating to 20°C suction gas temperature, without liquid subcooling

### 性能参数 50Hz

对应20°C 吸气温度, 液体无过冷

# 水冷型 Water-cooled type

# R404A

製冷量 (瓦) Capacity (Watts)

380-420V/3/50Hz

Verdichter Typ	Verf. Temp.	Condensing Unit	Cond. temp.	水冷機組 型號	冷凝 溫度 °C	↓	Kälteleistung Cooling capacity 製冷量					Q <sub>o</sub>	[Watt]	Leistungsaufnahme Power consumption 功率消耗					P <sub>e</sub>	[kW]					
							Verdampfungstemperatur °C							Evaporating temperature °C							蒸发温度 °C				
							5	0	-5	-10	-15			-20	-25	-30	-35	-40							
WJDC111/4FE-28Y	30	Q	99400	83000	68800	56400	45800	36700	28950	22350	16830														
		P	22,31	21,42	20,27	18,88	17,32	15,63	13,86	12,07	10,28														
	40	Q	85000	71000	58800	48200	39000	31100	24350	18590	13720														
		P	26,16	24,66	22,93	21,01	18,96	16,82	14,65	12,49	10,38														
	50	Q	70100	58600	48500	39650	32000	25350	19630	14710	10520														
		P	29,47	27,37	25,09	22,66	20,14	17,57	15,02	12,51	10,11														
WJDC135/4FE-35Y	30	Q	117900	99000	82600	68300	56000	45400	36300	28550	22000	16460													
		P	22,43	21,87	21,00	19,85	18,49	16,95	15,28	13,53	11,76	10,00													
	40	Q	100500	84500	70500	58300	47700	38550	30650	23900	18160	13310													
		P	26,81	25,61	24,13	22,42	20,53	18,51	16,40	14,25	12,12	10,04													
	50	Q	82600	69500	58000	47900	39100	31500	24850	19140	14240	10070													
		P	30,62	28,79	26,73	24,48	22,09	19,60	17,07	14,55	12,08	9,70													
WJDC95/6JE-25Y	30	Q	92400	76900	63500	51900	41850	33250	25950	19790	14610														
		P	19,14	18,51	17,59	16,43	15,09	13,60	12,02	10,39	8,77														
	40	Q	79400	65900	54100	43900	35150	27700	21300	15970	11510														
		P	22,59	21,37	19,90	18,24	16,43	14,52	12,56	10,61	8,70														
	50	Q	66100	54600	44550	35900	28450	22100	16750	12260	8540														
		P	25,49	23,72	21,74	19,60	17,36	15,06	12,75	10,48	8,31														
WJDC135/6JE-33Y	30	Q	108800	91000	75500	62100	50500	40500	32000	24700	18590	13450													
		P	18,93	18,63	18,00	17,10	15,96	14,64	13,18	11,63	10,02	8,41													
	40	Q	93300	77800	64200	52500	42400	33650	26200	19910	14610	10200													
		P	22,73	21,82	20,62	19,19	17,56	15,80	13,93	12,00	10,06	8,16													
	50	Q	77400	64300	52800	42800	34200	26800	20500	15210	10780	7130													
		P	25,92	24,43	22,71	20,78	18,70	16,51	14,25	11,97	9,72	7,53													
WJDC111/6HE-28Y	30	Q	106700	88900	73400	60100	48600	38750	30350	23300	17320														
		P	22,95	22,07	20,89	19,46	17,83	16,07	14,21	12,33	10,46														
	40	Q	91300	75900	62600	51000	41000	32450	25150	19020	13880														
		P	27,01	25,45	23,65	21,64	19,49	17,25	14,97	12,71	10,51														
	50	Q	75700	62800	51500	41750	33300	26100	19970	14800	10490														
		P	30,56	28,35	25,94	23,38	20,72	18,01	15,32	12,69	10,18														
WJDC135/6HE-35Y	30	Q	126200	105700	88000	72500	59200	47750	37900	29550	22500	16560													
		P	22,85	22,36	21,53	20,42	19,06	17,52	15,84	14,06	12,25	10,44													
	40	Q	108000	90300	74900	61500	50000	40050	31500	24250	18140	13030													
		P	27,31	26,15	24,71	23,02	21,14	19,12	16,99	14,81	12,63	10,49													
	50	Q	89300	74500	61600	50400	40650	32250	25100	18970	13840	9570													
		P	31,19	29,42	27,39	25,16	22,78	20,28	17,72	15,14	12,59	10,11													
WJDC135/6GE-34Y	30	Q	122900	102700	85200	70000	57000	45750	36200	28100	21300														
		P	27,68	26,50	25,02	23,29	21,37	19,33	17,21	15,07	12,98														
	40	Q	105200	87900	72900	59800	48550	38900	30600	23600	17660														
		P	32,62	30,69	28,50	26,13	23,63	21,05	18,46	15,91	13,46														
	50	Q	87200	72800	60300	49400	39950	31800	24850	18920	13930														
		P	37,24	34,53	31,64	28,61	25,52	22,40	19,33	16,35	13,54														
WJDC135/6GE-40Y	30	Q	143700	120400	100300	82800	67700	54700	43550	34050	26000	19280													
		P	27,04	26,29	25,20	23,84	22,23	20,45	18,52	16,51	14,45	12,41													
	40	Q	122200	102400	85200	70200	57200	46000	36400	28200	21250	15410													
		P	31,85	30,41	28,69	26,72	24,56	22,26	19,86	17,41	14,96	12,55													
	50	Q	100400	84100	69900	57400	46550	37200	29100	22200	16390	11490													
		P	36,13	34,05	31,71	29,16	26,45	23,63	20,74	17,84	14,96	12,17													
WJDC135/6FE-44Y	30	Q	148100	123600	102400	84100	68300	54700	43100	33300	25050														
		P	33,45	32,18	30,52	28,52	26,27	23,83	21,26	18,65	16,05														
	40	Q	126600	105700	87500	71800	58100	46350	36250	27700	20450														
		P	38,97	36,82	34,34	31,59	28,63	25,55	22,40	19,26	16,19														
	50	Q	104400	87200	72200	59100	47650	37750	29250	21900	15660														
		P	43,70	40,71	37,44	33,95	30,33	26,63	22,93	19,30	15,80														
WJDC168/6FE-50Y	30	Q	174500	146400	122000	100800	82500	66700	53200	41650	31900	23700													
		P	33,41	32,59	31,30	29,63	27,63	25,38	22,93	20,37	17,74	15,14													
	40	Q	148500	124600	103800	85700	69900	56300	44600	34600	26100	18880													
		P	39,56	37,80	35,65	33,16	30,41	27,46	24,38	21,23	18,08	15,00													
	50	Q	121700	102200	85100	70100	57100	45700	35850	27400	20150	13970													
		P	44,80	42,15	39,16	35,90	32,43	28,82	25,13	21,42	17,77	14,24													

**Leistungswerte 50 Hz**  
bezogen auf Sauggastemperatur 20°C,  
ohne Flüssigkeits-Unterkühlung

**Performance data 50 Hz**  
relating to 20°C suction gas tempera-  
ture, without liquid subcooling

**性能参数 50Hz**  
对应20°C 吸气温度，液体无过冷

# 雙級水冷型 Dual pole water cooled type

# R22

製冷量 (瓦) Capacity (Watts)

380/420V-3Ph-50Hz

冷凝機組 Condensing Unit		冷凝溫度 Condensing temperature °C	蒸發溫度 Evaporating Temperature °C						
			-25	-30	-35	-40	-45	-50	-55
WLC20/S4T-5.2	Q	40	7650	6260	5040	3980	3070	2280	
	P	40	4100	3840	3550	3230	2880	2500	
WJDC32/S4N-8.2	Q	40	11020	9050	7290	5760	4410	3220	
	P	40	6240	5770	5290	4810	4330	3850	
WJDC43/S4G-12.2	Q	40	16640	13660	11030	8700	6660	4880	
	P	40	9430	8710	7990	7260	6540	5810	
WJDC56/S6J-16.2	Q	40	24300	20090	16370	13010	9980	7170	
	P	40	13910	12630	11350	10070	8790	7510	
WJDC74/S6H-20.2	Q	40	28220	23320	18970	15080	11560	8310	
	P	40	16120	14640	13150	11670	10190	8710	
WJDC95/S6G-25.2	Q	40	32340	26750	21760	17320	13280	9550	
	P	40	18510	16810	15100	13400	11700	10000	
WJDC111/S6F-30.2	Q	40	38710	32050	26070	20680	15890	11420	
	P	40	22100	20100	18070	16030	13990	11960	

冷凝器進水溫度 30°C，出水溫度 35°C。

基于吸氣溫度 5°C，製冷劑液體過冷度 0K 時的製冷量 Q (W) 和輸入功率 P (W)。

The condenser inlet water temp is 30°C, the outlet temp is 35°C

The capacity Q and input power P is based on the 5°C suction temp and zero K subcooling for the liquid refrigerant

# 雙級水冷型 Dual pole water cooled type

# R404A

製冷量 ( 瓦 ) Capacity (Watts)

380/420V-3Ph-50Hz

冷凝機組 Condensing Unit		冷凝溫度 Condensing temperature °C	蒸發溫度 Evaporating Temperature °C							
			-25	-30	-35	-40	-45	-50	-55	-60
WLC20/S4T-5.2Y	Q	40	8580	7110	5860	4760	3820	3020	2320	1730
	P	40	5100	4740	4360	3960	3550	3130	2720	2310
WJDC32/S4N-8.2Y	Q	40	12130	10090	8320	6780	5450	4300	3320	2490
	P	40	7310	6780	6220	5650	5070	4480	3890	3310
WJDC43/S4G-12.2Y	Q	40	18330	15630	13130	10860	8920	7040	5490	4170
	P	40	11050	10230	9370	8490	7600	6720	5850	5010
WJDC56/S6J-16.2Y	Q	40	25580	21850	18470	15370	12560	10080	7930	6080
	P	40	16000	14580	13210	11900	10630	9420	8260	7150
WJDC74/S6H-20.2Y	Q	40	29500	25280	21360	17750	14510	11650	9160	7040
	P	40	18530	16900	15320	13790	12320	10920	9570	8290
WJDC95/S6G-25.2Y	Q	40	33520	28810	24400	20290	16600	13340	10500	8060
	P	40	21300	19400	17590	15850	14160	12550	11000	9520
WJDC111/S6F-30.2Y	Q	40	39890	34200	28910	24110	19700	15880	12510	9620
	P	40	25200	23100	21000	18960	16950	15000	13140	11370

冷凝器進水溫度 30°C，出水溫度 35°C。

基于吸氣溫度 5°C，製冷劑液體過冷度 0K 時的製冷量 Q (W) 和輸入功率 P (W)。

The condenser inlet water temp is 30°C, the outlet temp is 35°C

The capacity Q and input power P is based on the 5°C suction temp and zero K subcooling for the liquid refrigerant



- Be certificated by the ISO9001-2000 Quality System
- Be authorized to produce by the National Refrigeration Association
- The professional manufacturer of the condensing unit
- With a variety of products for the middle-end and high-end users
- Was used for the laboratory equipments of the space industry
- Be widely used for the kitchen refrigeratory of the four-star and five-star hotels
- Provide refrigeration units for the international fast-food industry

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