

Condensing unit

AQWC 1404-2406

 428-715 kW

 HFC 410A

 Scroll

Technical features

- 5 sizes.
- Cooling capacity from 428 to 715 kW.
- 4 versions:
 - STD (Standard);
 - HSE (High Seasonal Efficiency);
 - HT (High Temperature);
 - HPF (High Pressure Fans).
- 3 acoustic versions:
 - BLN (Basic Low Noise);
 - LN (Low Noise);
 - ELN (Extra Low Noise).
- Two refrigerant circuits.
- Scroll compressors.

Accessories and options

- Coils treatments.
- Unit protection grilles.
- Sofstart.
- BMS interface.
- Overload protection for compressors.
- Automatic circuit breaker.
- Fan speed control (-18°C).
- Power factor corrector capacitors.
- Sequence phases control (standard).
- Compressors acoustic box as standard.
- Compressors jackets.



Operating limit

AQWC		1404		1604		1806		2106		2406	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Evaporating temperature		°C from +3 to +15									
Air temperature	BLN	°C from -5 to +44									
	LN	°C from -5 to +42									
	ELN	°C from -18 to +40									
	HT	°C from -18 to +45									

Technical feature AQWC STD/HSE/HPF 1404-2406 BLN

Model AQWC STD/HSE/HPF BLN		1404	1604	1806	2106	2406
Cooling capacity (1)	kW	428	477	559	634	715
Power input (2)	kW	123	139	162	185	208
Number of refrigerant circuits		2	2	2	2	2
Part load steps	%	21-50-71-100	25-50-75-100	17-33-50-67-83-100	15-29-43-62-81-100	17-33-50-67-83-100
Compressor						
Type		Scroll				
Qty		4	4	6	6	6
Condenser						
Qty		4				
Frontal surface	m ³	4,4	4,4	5,6	6,7	6,7
Fan						
Qty		8	8	10	10	12
Speed	rpm/min	880	880	880	880	880
Air flow	m ³ /h	162.000	153.000	190.000	204.000	227.000
Total power input	kW	14,4	14,4	18,0	18,0	21,6
Total power input*	kW	13,0	13,0	16,2	16,2	19,5
Available static pressure	Pa	from 0 to 120**				
Refrigerant connection						
Liquid diameter	inch	1½"	1¾"	1¾"	1½"	1½"
Gas diameter	inch	2½"	2½" (2¾")	2¾"	2½"	2½"
Dimensions						
Length	mm	4.000	4.000	5.000	6.000	6.000
Width	mm	2.200	2.200	2.200	2.200	2.200
Height	mm	2.550	2.550	2.550	2.550	2.550
Weight						
Shipping	kg	2.393	2.581	3.255	3.496	3.579
Acoustical data						
Sound power level (3)	dB(A)	97	97	98	98	98
Sound pressure level at 10 m (4)	dB(A)	65	65	66	66	67

* For HSE version with Special Inverter Fans.

** For HPF version with Special Inverter Fan with high static pressure.

(1) Data based on 7°C water evaporating temperature and 35°C ambient air temperature.

(2) Only compressors.

(3) Acoustic data are at full load. Sound power values in accordance with ISO 3744 and Eurovent 8/1. Tolerance +2dBA.

(4) Pressure power values in accordance with ISO 3744.

Technical feature AQWC STD/HSE 1404–2406 LN

Model AQWC STD/HSE LN		1404	1604	1806	2106	2406
Cooling capacity (1)	kW	415	462	542	613	693
Power input (2)	kW	129	145	169	192	216
Number of refrigerant circuits		2	2	2	2	2
Part load steps	%	21-50-71-100	25-50-75-100	17-33-50-67-83-100	15-29-43-62-81-100	17-33-50-67-83-100
Compressor						
Type		Scroll				
Qty		4	4	6	6	6
Condenser						
Qty		4				
Frontal surface	m ³	4,4	4,4	5,6	6,7	6,7
Fan						
Qty		8	8	10	10	12
Speed	rpm/min	700	700	700	700	700
Air flow	m ³ /h	124.000	116.000	142.000	156.000	172.000
Total power input	kW	9,6	9,6	12,0	12,0	14,4
Total power input*	kW	6,6	6,6	8,2	8,2	9,8
Available static pressure	Pa	0				
Refrigerant connection						
Liquid diameter	inch	1½"	1¾"	1¾"	1½"	1½"
Gas diameter	inch	2½"	2½" (2¾")	2¾"	2½"	2½"
Dimensions						
Length	mm	4.000	4.000	5.000	6.000	6.000
Width	mm	2.200	2.200	2.200	2.200	2.200
Height	mm	2.550	2.550	2.550	2.550	2.550
Weight						
Shipping	kg	2.393	2.581	3.255	3.496	3.579
Acoustical data						
Sound power level (3)	dB(A)	91	91	92	92	93
Sound pressure level at 10 m (4)	dB(A)	59	59	60	60	61

* For HSE version with special inverter fans.

(1) Data based on 7°C water evaporating temperature and 35°C ambient air temperature.

(2) Only compressors.

(3) Acoustic data are at full load. Sound power values in accordance with ISO 3744 and Eurovent 8/1. Tolerance +2 dBA.

(4) Pressure power values in accordance with ISO 3744.

Technical feature AQWC STD/HSE 1404–2406 ELN

Model AQWC STD/HSE ELN		1404	1604	1806	2106	2406
Cooling capacity (1)	kW	395	439	514	583	658
Power input (2)	kW	137	153	180	205	230
Number of refrigerant circuits		2	2	2	2	2
Part load steps	%	21-50-71-100	25-50-75-100	17-33-50-67-83-100	15-29-43-62-81-100	17-33-50-67-83-100
Compressor						
Type		Scroll				
Qty		4	4	6	6	6
Condenser						
Qty		4				
Frontal surface	m ³	4,4	4,4	5,6	6,7	6,7
Fan						
Qty		8	8	10	10	12
Speed	rpm/min	550	550	550	550	550
Air flow	m ³ /h	97.000	91.000	112.000	122.000	135.000
Total power input	kW	9,6	9,6	12,0	12,0	14,4
Total power input*	kW	2,6	2,6	3,2	3,2	3,8
Available static pressure	Pa	0				
Refrigerant connection						
Liquid diameter	inch	1½"	1¾"	1¾"	1½"	1½"
Gas diameter	inch	2½"	2½" (2¾")	2¾"	2½"	2½"
Dimensions						
Length	mm	4.000	4.000	5.000	6.000	6.000
Width	mm	2.200	2.200	2.200	2.200	2.200
Height	mm	2.550	2.550	2.550	2.550	2.550
Weight						
Shipping	kg	2.393	2.581	3.255	3.496	3.579
Acoustical data						
Sound power level (3)	dB(A)	88	88	89	89	90
Sound pressure level at 10 m (4)	dB(A)	56	56	57	57	58

* For HSE version with special inverter fans.

(1) Data based on 7°C water evaporating temperature and 35°C ambient air temperature.

(2) Only compressors.

(3) Acoustic data are at full load. Sound power values in accordance with ISO 3744 and Eurovent 8/1. Tolerance +2 dBA.

(4) Pressure power values in accordance with ISO 3744.

Technical feature AQWC HT 1404–2406

Model AQWC HT		1404	1604	1806	2106	2406
Cooling capacity (1)	kW	433	471	565	640	722
Power input (2)	kW	122	137	160	183	206
Number of refrigerant circuits		2	2	2	2	2
Part load steps	%	21-50-71-100	25-50-75-100	17-33-50-67-83-100	15-29-43-62-81-100	17-33-50-67-83-100
Compressor						
Type		Scroll				
Qty		4	4	6	6	6
Condenser						
Qty		4				
Frontal surface	m ³	4,4	4,4	5,6	6,7	6,7
Fan						
Qty		8	8	10	10	12
Speed	rpm/min	1.100	1.100	1.100	1.100	1.100
Air flow	m ³ /h	198.000	187.000	232.000	249.000	277.000
Total power input	kW	20,8	20,8	26,0	26,0	31,2
Available static pressure	Pa	0				
Refrigerant connection						
Liquid diameter	inch	1½"	1½"	1½"	1½"	1½"
Gas diameter	inch	2½"	2½" (2¾")	2¾"	2½"	2½"
Dimensions						
Length	mm	4.000	4.000	5.000	6.000	6.000
Width	mm	2.200	2.200	2.200	2.200	2.200
Height	mm	2.550	2.550	2.550	2.550	2.550
Weight						
Shipping	kg	2.393	2.581	3.255	3.496	3.579
Acoustical data						
Sound power level (3)	dB(A)	103	103	104	104	105
Sound pressure level at 10 m (4)	dB(A)	71	71	72	72	73

- (1) Data based on 7°C water evaporating temperature and 35°C ambient air temperature.
 (2) Only compressors.
 (3) Acoustic data are at full load. Sound power values in accordance with ISO 3744 and Eurovent 8/1. Tolerance +2 dBA.
 (4) Pressure power values in accordance with ISO 3744.