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EQAC Air Cooled Condensers



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PERFORMANCE DATA: Heat of Rejection Watts (1KTD) R404A

MODEL	Motor Speed (rpm)							
	300	400	500	600	700	800	900	1000
Single Module								
EQAC3500	3330	4365	5225	6050	6875	7610	8285	8995
EQAC4000	4380	5475	6350	7155	7930	8635	9235	9815
EQAC5000	4865	6205	7295	8315	9305	10190	10980	11820
EQAC600	5325	6965	8345	9675	11000	12190	13270	14410
EQAC7500	6380	8320	9940	11560	13105	14570	15830	17210
Double Module								
EQAC7002	6660	8730	10450	12100	13750	15220	16570	17990
EQAC8002	8760	10950	12700	14310	15860	17270	18470	19630
EQAC10002	9730	12410	14590	16630	18610	20380	21960	23640
EQAC12002	10650	13930	16690	19350	22000	24380	26540	28820
EQAC15002	12760	16640	19880	23120	26210	29140	31660	34420
Three Module								
EQAC10503	**9990**	**13095**	**15675**	**18150**	**20625**	**22830**	**24855**	**26985**
EQAC12003	**13140**	**16425**	**19050**	**21465**	**23790**	**25905**	**27705**	**29445**
EQAC15003	**14595**	**18615**	**21885**	**24945**	**27915**	**30570**	**32940**	**35460**
EQAC18003	**15975**	**20895**	**25035**	**29025**	**33000**	**36570**	**39810**	**43230**
EQAC22503	**19140**	**24960**	**29820**	**34680**	**39315**	**43710**	**47490**	**51630**
Four Module								
EQAC14004	13320	17460	20900	24200	27500	30440	33140	35980
EQAC16004	17520	21900	25400	28620	31720	34540	36940	39260
EQAC20004	19460	24820	29180	33260	37220	40760	43920	47280
EQAC24004	21300	27860	33380	38700	44000	48760	53080	57640
EQAC30004	25520	33280	39760	46240	52420	58280	63320	68840

Altitude Correction Factors : m (Factor), 0 (1.0), 500 (0.96), 1000 (0.92), 2000 (0.83), 2500 (0.78)



PERFORMANCE DATA: Heat of Rejection Watts (1KTD) R134a

MODEL	Motor Speed (rpm)							
	300	400	500	600	700	800	900	1000
Single Module								
EQAC3500	3265	4275	5120	5930	6740	7460	8120	8815
EQAC4000	4290	5365	6225	7010	7770	8460	9050	9620
EQAC5000	4765	6080	7150	8150	9120	9985	10760	11585
EQAC6000	5220	6825	8180	9570	10780	11945	13005	14120
EQAC7500	6250	8155	9740	11320	12845	14275	15515	16865
Double Module								
EQAC7002	6530	8550	10240	11860	13480	14920	16240	17630
EQAC8002	8580	10730	12450	14020	15540	16920	18100	19240
EQAC10002	9530	12160	14300	16300	18240	19970	21520	23170
EQAC12002	10440	13650	16360	19140	21560	23890	26010	28240
EQAC15002	12500	16310	19480	22640	25690	28550	31030	33730
Three Module								
EQAC10503	9795	12825	15360	17790	20220	22380	24360	26445
EQAC12003	12870	16095	18675	21030	23310	25380	27150	28860
EQAC15003	14295	18240	21450	24450	27360	29955	32280	34755
EQAC18003	15660	20475	24540	28710	32340	35835	39015	42360
EQAC22503	18750	24465	29220	33960	38535	42825	46545	50595
Four Module								
EQAC14004	13060	17100	20480	23720	26960	29840	32480	35260
EQAC16004	17160	21460	24900	28040	31080	33840	36200	38480
EQAC20004	19060	24320	28600	32600	36480	39940	43040	46340
EQAC24004	20880	27300	32720	38280	43120	47780	52020	56480
EQAC30004	25000	32620	38960	45280	51380	57100	62060	67460

Altitude Correction Factors : m (Factor), 0 (1.0), 500 (0.96), 1000 (0.92), 2000 (0.83), 2500 (0.78)

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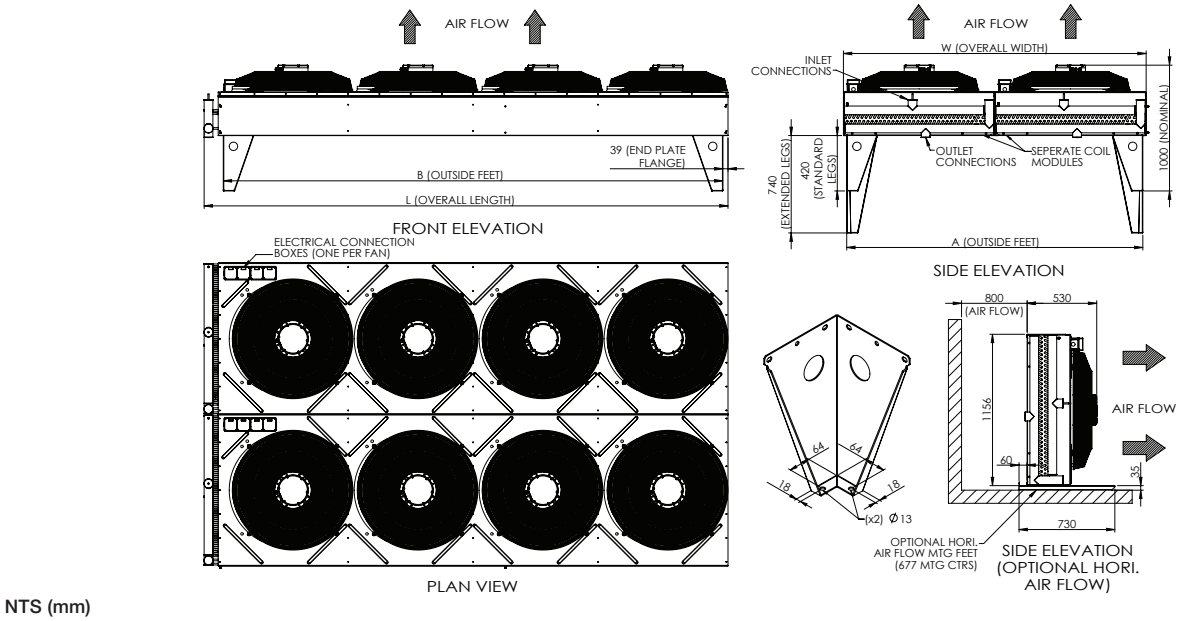
PERFORMANCE DATA: Heat of Rejection Watts (1KTD) R449A

MODEL	Motor Speed (rpm)							
	300	400	500	600	700	800	900	1000
Single Module								
EQAC3500	3195	4190	5015	5810	6600	7305	7955	8635
EQAC4000	4205	5255	6095	6870	7615	8290	8865	9420
EQAC5000	4670	5955	7005	7980	8935	9780	10540	11345
EQAC6000	5110	6685	8010	9290	10560	11700	12740	13835
EQAC7500	6125	7985	9540	11100	12580	13985	15195	16520
Double Module								
EQAC7002	6390	8380	10030	11620	13200	14610	15910	17270
EQAC8002	8410	10510	12190	13740	15230	16580	17730	18840
EQAC10002	9340	11910	14010	15960	17870	19560	21080	22690
EQAC12002	10220	13370	16020	18580	21120	23400	25480	27670
EQAC15002	12250	15970	19080	22200	25160	27970	30390	33040
Three Module								
EQAC10503	9585	12570	15045	17430	19800	21915	23865	25905
EQAC12003	12615	15765	18285	20610	22845	24870	26595	28260
EQAC15003	14010	17865	21015	23940	26805	29340	31620	34035
EQAC18003	15330	20055	24030	27870	31680	35100	38220	41505
EQAC22503	18375	23955	28620	33300	37740	41955	45585	49560
Four Module								
EQAC14004	12780	16760	20060	23240	26400	29220	31820	34540
EQAC16004	16820	21020	24380	27480	30460	33160	35460	37680
EQAC20004	18680	23820	28020	31920	35740	39120	42160	45380
EQAC24004	20440	26740	32040	37160	42240	46800	50960	55340
EQAC30004	24500	31940	38160	44400	50320	55940	60780	66080

Altitude Correction Factors : m (Factor), 0 (1.0), 500 (0.96), 1000 (0.92), 2000 (0.83), 2500 (0.78)



DIMENSIONS:



NTS (mm)

MODEL	DIMENSIONS (mm)					Dry Wgt (kg)
	L	W	B	A	Mounting Centres	
Single Module						
EQAC3500	2280	1156	2130	1100	2002 x 972	238
EQAC4000	3670	1156	3510	1100	3382 x 972	270
EQAC5000	3670	1156	3510	1100	3382 x 972	298
EQAC6000	3690	1156	3510	1100	3382 x 972	378
EQAC7500	3990	1156	3810	1100	3682 x 972	435
Double Module	(Supplied as one double module)					
EQAC7002	2280	2312	2130	2256	2002 x 2128	480
EQAC8002	3670	2312	3510	2256	3382 x 2128	544
EQAC10002	3670	2312	3510	2256	3382 x 2128	600
EQAC12002	3690	2312	3510	2256	3382 x 2128	760
EQAC15002	3990	2312	3810	2256	3682 x 2128	874
Three Module	(Supplied as one double module and one single module)					
EQAC10503	2280	3468	2130	(1100 + 2256)	(2002 x 972) + (2002 x 2128)	718
EQAC12003	3670	3468	3510	(1100 + 2256)	(3382 x 972) + (3382 x 2128)	814
EQAC15003	3670	3468	3510	(1100 + 2256)	(3382 x 972) + (3382 x 2128)	898
EQAC18003	3690	3468	3510	(1100 + 2256)	(3382 x 972) + (3382 x 2128)	1138
EQAC22503	3990	3468	3810	(1100 + 2256)	(3682 x 972) + (3682 x 2128)	1309
Four Module	(Supplied as two double modules)					
EQAC14004	2280	4624	2130	(2256 + 2256)	(2002 x 2128) + (2002 x 2128)	960
EQAC16004	3670	4624	3510	(2256 + 2256)	(3382 x 2128) + (3382 x 2128)	1088
EQAC20004	3670	4624	3510	(2256 + 2256)	(3382 x 2128) + (3382 x 2128)	1200
EQAC24004	3690	4624	3510	(2256 + 2256)	(3382 x 2128) + (3382 x 2128)	1520
EQAC30004	3990	4624	3810	(2256 + 2256)	(3682 x 2128) + (3682 x 2128)	1748

TECHNICAL DATA:

MODEL	Fan Motors (380-420V/3/50)							Coil			
	Qty.	Dia. (mm)	Total Air Vol (l/sec)				Electrical (Total fans)		Std Connections. (F.Sw)		Circ #	Circ Volume (dm3)
			300 rpm	500 rpm	800 rpm	1000 rpm	FLA	FL Watts	Inlet	Outlet		
Single Module												
EQAC3500	2	800	2945	5000	8108	10235	8.8	5600	1 x 1-5/8”	1 x 1-5/8”	18	59
EQAC4000	3	800	4960	8425	13665	17245	13.2	8400	1 x 1-5/8”	1 x 1-5/8”	18	47
EQAC5000	3	800	4815	8175	13260	16735	13.2	8400	1 x 2-1/8”	1 x 2-1/8”	24	64
EQAC6000	3	800	4675	7930	12865	16235	13.2	8400	1 x 2-5/8”	1 x 2-5/8”	36	94
EQAC7500	4	800	5655	9595	15820	19970	17.6	11200	1 x 2-5/8”	1 x 2-5/8”	36	102
Double Module												
EQAC7002	4	800	5890	10000	16216	20470	17.6	11200	2 x 1-5/8”	2 x 1-5/8”	36	118
EQAC8002	6	800	9920	16850	27330	34490	26.4	16800	2 x 1-5/8”	2 x 1-5/8”	36	94
EQAC10002	6	800	9630	16350	26520	33470	26.4	16800	2 x 2-1/8”	2 x 2-1/8”	48	128
EQAC12002	6	800	9350	15860	25730	32470	26.4	16800	2 x 2-5/8”	2 x 2-5/8”	72	188
EQAC15002	8	800	11310	19190	31640	39940	35.2	22400	2 x 2-5/8”	2 x 2-5/8”	72	204
Three Module												
EQAC10503	6	800	8835	15000	24324	30705	26.4	16800	3 x 1-5/8”	3 x 1-5/8”	54	177
EQAC12003	9	800	14880	25275	40995	51735	39.6	25200	3 x 1-5/8”	3 x 1-5/8”	54	141
EQAC15003	9	800	14445	24525	39780	50205	39.6	25200	3 x 2-1/8”	3 x 2-1/8”	72	192
EQAC18003	9	800	14025	23790	38595	48705	39.6	25200	3 x 2-5/8”	3 x 2-5/8”	108	282
EQAC22503	12	800	16965	28785	47460	59910	52.8	33600	3 x 2-5/8”	3 x 2-5/8”	108	306
Four Module												
EQAC14004	8	800	11780	20000	32432	40940	35.2	22400	4 x 1-5/8”	4 x 1-5/8”	72	236
EQAC16004	12	800	19840	33700	54660	68980	52.8	33600	4 x 1-5/8”	4 x 1-5/8”	72	188
EQAC20004	12	800	19260	32700	53040	66940	52.8	33600	4 x 2-1/8”	4 x 2-1/8”	96	256
EQAC24004	12	800	18700	31720	51460	64940	52.8	33600	4 x 2-5/8”	4 x 2-5/8”	144	376
EQAC30004	16	800	22620	38380	63280	79880	70.4	44800	4 x 2-5/8”	4 x 2-5/8”	144	408

NOISE LEVEL DATA dBA @ 3 mtrs.

MODEL	Qty.	Dia. (mm)	Motor rpm								
			300	400	500	600	700	800	900	1000	
Single Module											
EQAC3500	2	800	47	52	56	61	65	69	72	75	
EQAC4000	3	800	50	55	59	64	68	72	75	78	
EQAC5000	3	800	49	54	58	63	67	71	74	77	
EQAC6000	3	800	49	54	58	63	67	71	74	77	
EQAC7500	4	800	51	56	60	65	69	73	76	79	
Double Module											
EQAC7002	4	800	51	56	60	65	69	73	76	79	Sound Pressure Levels (Db re 20 uPa) (Rated in “free field conditions”, tested generallyin accordance with AS1217.7 1985)
EQAC8002	6	800	54	59	63	68	72	76	79	82	
EQAC10002	6	800	53	58	62	67	71	75	78	81	
EQAC12002	6	800	53	58	62	67	71	75	78	81	
EQAC15002	8	800	55	60	64	70	73	77	80	83	
Three Module											
EQAC10503	6	800	54	59	63	68	72	76	79	82	
EQAC12003	9	800	57	62	66	71	75	79	82	85	
EQAC15003	9	800	56	61	65	70	74	78	81	84	
EQAC18003	9	800	56	61	65	70	74	78	81	84	
EQAC22503	12	800	58	63	67	72	76	80	83	86	
Four Module											
EQAC14004	8	800	55	60	64	68	72	76	79	82	
EQAC16004	12	800	58	63	66	71	75	79	82	85	
EQAC20004	12	800	57	62	65	70	74	78	81	84	
EQAC24004	12	800	57	62	65	70	74	78	81	84	
EQAC30004	16	800	59	64	67	72	76	80	83	86	

NOISE LEVEL DATA dBA @ 10 mtrs.

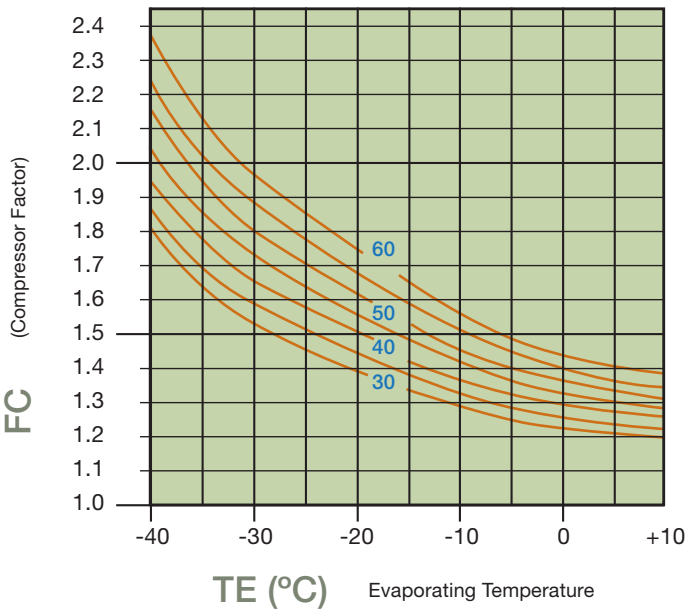
MODEL	Qty.	Dia. (mm)	Motor rpm								
			300	400	500	600	700	800	900	1000	
Single Module											
EQAC3500	2	800	41	46	50	55	59	63	66	69	
EQAC4000	3	800	44	49	53	58	62	66	69	72	
EQAC5000	3	800	43	48	52	57	61	65	68	71	
EQAC6000	3	800	43	48	52	57	61	65	68	71	
EQAC7500	4	800	45	50	54	59	63	67	70	73	
Double Module											
EQAC7002	4	800	45	50	54	59	63	67	70	73	Sound Pressure Levels (Db re 20 uPa) (Rated in “free field conditions”, tested generally in accordance with AS1217.7 1985)
EQAC8002	6	800	48	53	57	62	66	70	73	76	
EQAC10002	6	800	47	52	56	61	65	69	72	75	
EQAC12002	6	800	47	52	56	61	65	69	72	75	
EQAC15002	8	800	49	54	58	64	67	71	74	77	
Three Module											
EQAC10503	6	800	48	53	57	62	66	70	73	76	
EQAC12003	9	800	51	56	60	65	69	73	76	79	
EQAC15003	9	800	50	55	59	64	68	72	75	78	
EQAC18003	9	800	50	55	59	64	68	72	75	78	
EQAC22503	12	800	52	57	61	66	70	74	77	80	
Four Module											
EQAC14004	8	800	49	54	58	62	66	70	73	76	
EQAC16004	12	800	52	57	60	65	69	73	76	79	
EQAC20004	12	800	51	56	59	64	68	72	75	78	
EQAC24004	12	800	51	56	59	64	68	72	75	78	
EQAC30004	16	800	52	58	61	66	70	74	77	80	

SELECTION DATA: Analytical Selection

$$PC = \frac{PE \times FC \times FT \times FA \times 1/FR}{\triangle T}$$

PC = CONDENSER CAPACITY PER KTD
PE = EVAPORATOR CAPACITY
FC = COMPRESSOR FACTOR
FT = AMBIENT TEMPERATURE FACTOR
FA = ALTITUDE FACTOR
FR = REFRIGERANT FACTOR
△T = CONDENSING TEMP - AMBIENT TEMP.

FC (To be used when compressor data is unavailable.)



FT (Ambient Temperature Factor)

TA (°C)	20	25	30	35	40
FT	0.988	1.000	1.010	1.026	1.039

FA (Altitude Factor)

m	0	200	400	600	800
FA	1.000	1.013	1.027	1.042	1.056

m	1000	1200	1400	1600	1800
FA	1.074	1.090	1.107	1.124	1.142

m	2000	2400	2600	2800	3000
FA	1.160	1.201	1.222	1.243	1.265

FR (Refrigerant Factor)

R	R404A	R449A	R407F	R134a	R40A
FR	1.0	0.96	0.95	0.98	1.02

SELECTION EXAMPLE: Basic Data

PE	=	EVAPORATOR CAPACITY	=	145 Kws
TE	=	EVAPORATING TEMPERATURE	=	-5°C
TC	=	CONDENSING TEMPERATURE	=	43°C
TA	=	AMBIENT TEMPERATURE	=	30°C
		ALTITUDE	=	600m
		REFRIGERANT	=	R404A
△T	=	TC-TA	=	13KTD
dBA	=	REQUIRED BELOW 75 @ 3 MTRS.		

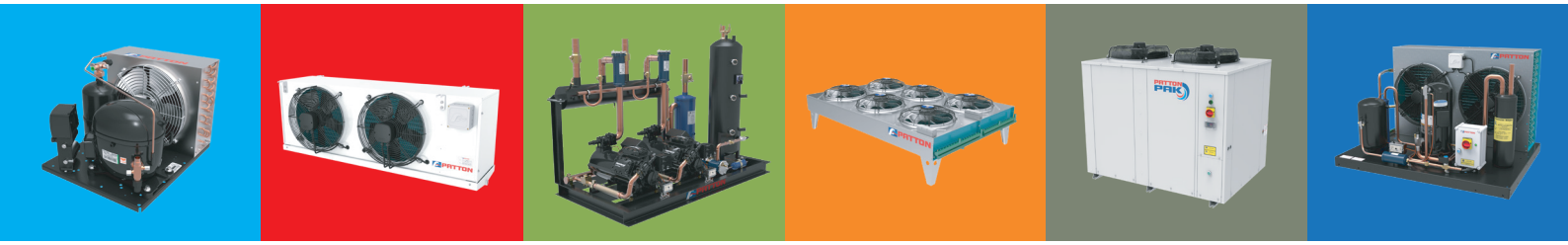
SELECTION:

$$PC = \frac{145 \times 1.35 \times 1.013 \times 1.042 \times 1/1.0}{13} = 15.89 \text{ Kws/KTD}$$

SELECTION =

EQAC8002
@ 15.86 Kws/KTD @ 700 RPM

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The company reserves the right to make specification changes without notice. 18/07/2018

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