

SUBMITTAL DATA SHEET



Submittal Data: ACiQ-24-HPB / ACiQ-24-ACL	
Location: _____ Engineer: _____ Submitted to: _____ Submitted by: _____ Reference: _____	Approval: _____ Date: _____ Construction: _____ Unit #: _____ Drawing #: _____

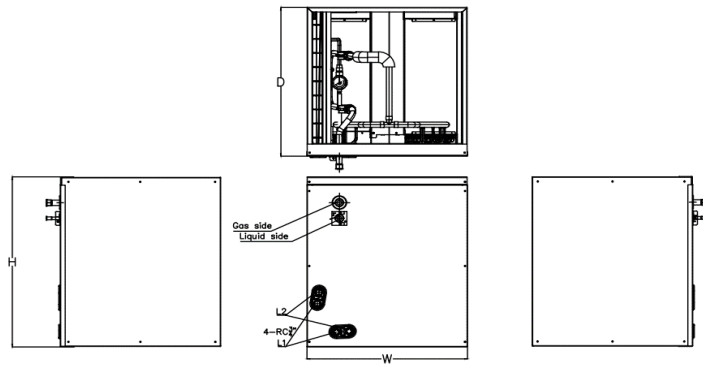
Set Code	
Indoor unit code	
Outdoor unit code	
Set Model	
Indoor unit model - ACiQ-24-ACL	
Outdoor unit model - ACiQ-24-HPB	
Certified	AHRI
	UL



SYSTEM PERFORMANCE DATA		
Power supply		
Normal Operational Voltage	(V, Ph, Hz)	208/230V, 1Ph, 60Hz
Voltage Range	(V)	187-253
Electrical		
Minimum circuit ampacity	(A)	19
Max.fuse	(A)	30
Connection wiring		18AWG
Cooling		
Rated Capacity	(Btu/h)	24000
Capacity Range	(Btu/h)	9800-28200
Power Input (Max)	(W)	2400(380-2990)
Rated current	(A)	9.0(1.0-12.0)
SEER	(Btu/W)	16.0
EER	(Btu/W)	10.0
Heating (Standard conditions)		
Rated Capacity	(Btu/h)	25600
Capacity Range	(Btu/h)	9700-31000
Power Input (Max)	(W)	2246(510-3000)
Rated current	(A)	8.5(2.0-12.0)
HSPF4	(Btu/W)	9.8
HSPF5	(Btu/W)	8.0
COP	W/W	3.34
Heating at 5F		
Capacity	(Btu/h)	18500
COP	W/W	2.20
REFRIGERANT PIPE DATA		
Design pressure	(PSIG)	550/340
Refrigerant Type		R410A
Refrigerant charge	(kg)	2.6
	(oz)	74.1
Additional charge for each ft	(oz/ft)	0.69
	(g/m)	65
Liquid side/ Gas side	(inch)	3/8" / 3/4"
	(mm)	φ9.52 / φ19
Max. pipe length	(ft)	164.0
	(m)	50
Max. difference in level	(ft)	82.0
	(m)	25
Connection method	Indoor	Brazed
	Outdoor	Flared to brazed
Indoor(cooling)	(Deg. °F / °C)	62-90/17~32
Indoor(heating)	(Deg. °F / °C)	32-86 / 0-30
Outdoor(cooling)	(Deg. °F / °C)	5-122 / -15 ~ 50
Outdoor(heating)	(Deg. °F / °C)	5-75 / -15 - 24

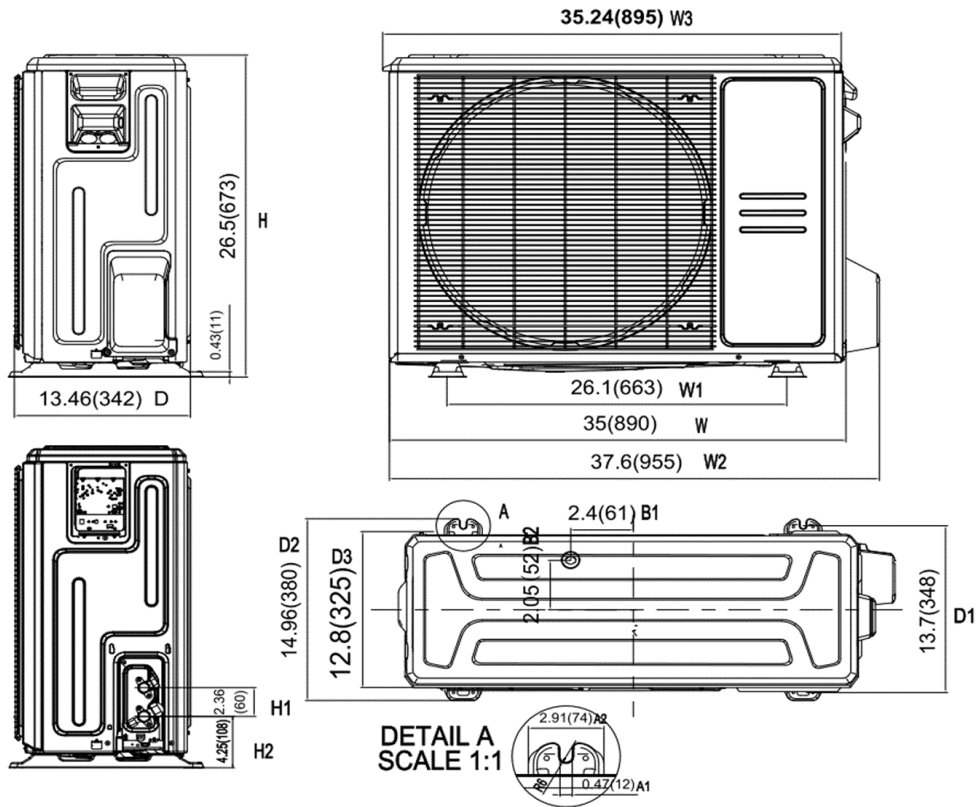
INDOOR UNIT DATA		
Throttle		TXV for Cooling
IRV	inch^3	58.3
Air flow	SCFM	720
Pressure drop	Pa	51.3
	In. wg.	0.21
Indoor unit		
Dimension (WxDxH)	(inch)	17.52x20.98x17.99
	(mm)	445x533x457
Packing(WxDxH)	(inch)	19.88x25.59x19.29
	(mm)	505x650x490
Net/Gross weight	(lbs.)	42.77/52.03
	(kg)	19.4/23.6
OUTDOOR UNIT DATA		
Compressor		
Type		KTM240D57UMT
Model		Twin-ROTARY
Brand		GMCC
Capacity	(Btu/h)	7740
Input	(W)	2085
Rated current (RLA)	(A)	14
Refrigerant oil/oil charge	(ml)	ESTER OIL VG74/670
Throttle		EEV for heating
Outdoor fan motor		
Model		ZKFN-80-8-3
Qty		1
Input	(W)	/
RLA	(A)	1
Speed	(r/min)	810/720
Air flow & Noise level		
Outdoor air flow (Max.)	(CFM)	1765.0
Outdoor noise level	[dB(A)]	61.5
Outdoor unit		
Dimension (WxDxH)	(inch)	35.04x13.46x26.50
	(mm)	890x342x673
Packing (WxDxH)	(inch)	39.17x15.67x29.13
	(mm)	995x398x740
Net/ Gross weight	(lbs.)	102.29/109.13
	(kg)	46.4/49.5

Indoor unit dimension



Model	Unit	Dimensions (mm)			Drain hole	
		W	D	H	L1	L2
12K-24K	mm	445	533	457		
	inch	17 1/2	21	18		
30K-48K	mm	533	533	609	Main drain hole	Overflow drain hole
	inch	21	21	24		
60K	mm	622	533	711		
	inch	24	21	28		

Outdoor unit dimension





ACIQ-24-ACL-COOLING																			
AIRFLOW (CFM)	OUTDOOR R	DWB (°F)	71.7				75.2				78.6				82.0				
			80.6	80.8	81.0	81.2	81.4	81.7	81.9	82.1	82.3	82.5	82.7	82.9	83.1	83.4	83.6	83.8	
			22.1				24.0				25.9				27.8				
			27.0	27.1	27.2	27.4	27.5	27.6	27.7	27.8	27.9	28.1	28.2	28.29	28.4	28.5	28.6	28.8	
			65.00	66.39	67.79	69.19	70.58	71.98	73.38	74.77	76.17	77.56	78.96	80.36	81.75	83.15	84.54	85.94	
-570	-1118	TC	21676	21968	22260	22552	22844	23136	23428	23720	24012	24304	24596	24888	25180	25472	25764	26056	
		S/T	0.85	0.88	0.92	0.95	0.98	1.02	1.05	1.08	1.12	1.15	1.18	1.22	1.25	1.28	1.32	1.35	1.35
		PI	0.67	0.68	0.69	0.69	0.70	0.71	0.72	0.73	0.74	0.74	0.75	0.76	0.77	0.77	0.78	0.79	0.80
	-10	TC	21897	22190	22483	22776	23069	23362	23655	23947	24240	24533	24826	25119	25412	25705	25998	26291	26584
		S/T	0.85	0.89	0.92	0.95	0.99	1.02	1.06	1.09	1.12	1.16	1.19	1.22	1.26	1.29	1.32	1.36	1.36
		PI	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	0.89	0.90	0.92	0.93	0.94	0.95	0.95
	0	TC	22081	22375	22669	22962	23256	23550	23843	24137	24431	24724	25018	25312	25605	25899	26193	26486	26780
		S/T	0.86	0.89	0.92	0.96	0.99	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.26	1.29	1.33	1.36	1.36
		PI	0.90	0.91	0.92	0.93	0.94	0.96	0.97	0.98	0.99	1.00	1.01	1.02	1.04	1.05	1.06	1.07	1.07
	5	TC	22174	22468	22762	23056	23350	23644	23938	24232	24526	24820	25114	25408	25702	25996	26290	26584	26878
		S/T	0.86	0.89	0.93	0.96	0.99	1.03	1.06	1.09	1.13	1.16	1.20	1.23	1.26	1.30	1.33	1.36	1.36
		PI	0.95	0.96	0.97	0.99	1.00	1.01	1.02	1.04	1.05	1.06	1.07	1.08	1.10	1.11	1.12	1.13	1.13
	14	TC	22340	22634	22928	23222	23516	23810	24104	24398	24692	24986	25280	25574	25868	26162	26456	26750	27044
		S/T	0.86	0.90	0.93	0.96	1.00	1.03	1.06	1.10	1.13	1.17	1.20	1.23	1.27	1.30	1.33	1.37	1.37
		PI	1.04	1.06	1.07	1.08	1.10	1.11	1.12	1.14	1.15	1.16	1.18	1.19	1.20	1.22	1.23	1.24	1.24
	23	TC	22492	22786	23080	23374	23668	23962	24256	24550	24844	25138	25432	25726	26020	26314	26608	26902	27196
		S/T	0.87	0.90	0.93	0.97	1.00	1.03	1.07	1.10	1.14	1.17	1.20	1.24	1.27	1.30	1.34	1.37	1.37
		PI	1.14	1.16	1.17	1.19	1.20	1.22	1.23	1.25	1.26	1.28	1.29	1.30	1.32	1.33	1.35	1.36	1.36
	32	TC	22638	22932	23226	23520	23814	24108	24402	24696	24990	25284	25578	25872	26166	26460	26754	27048	27342
		S/T	0.87	0.90	0.94	0.97	1.00	1.04	1.07	1.11	1.14	1.17	1.21	1.24	1.27	1.31	1.34	1.38	1.38
		PI	1.25	1.26	1.28	1.30	1.31	1.33	1.34	1.36	1.37	1.39	1.41	1.42	1.44	1.45	1.47	1.49	1.49
	41	TC	22758	23052	23346	23640	23934	24228	24522	24816	25110	25404	25698	25992	26286	26580	26874	27168	27462
		S/T	0.87	0.91	0.94	0.97	1.01	1.04	1.07	1.11	1.14	1.18	1.21	1.24	1.28	1.31	1.35	1.38	1.38
		PI	1.42	1.43	1.45	1.47	1.49	1.51	1.52	1.54	1.56	1.58	1.60	1.62	1.63	1.65	1.67	1.69	1.69
	50	TC	22860	23154	23448	23742	24036	24330	24624	24918	25212	25506	25800	26094	26388	26682	26976	27270	27564
		S/T	0.87	0.91	0.94	0.98	1.01	1.04	1.08	1.11	1.15	1.18	1.21	1.25	1.28	1.32	1.35	1.38	1.38
		PI	1.57	1.59	1.61	1.63	1.65	1.67	1.69	1.71	1.73	1.75	1.77	1.79	1.81	1.83	1.85	1.87	1.87
	59	TC	22950	23244	23538	23832	24126	24420	24714	25008	25302	25596	25890	26184	26478	26772	27066	27360	27654
		S/T	0.88	0.91	0.95	0.98	1.01	1.05	1.08	1.12	1.15	1.18	1.22	1.25	1.29	1.32	1.35	1.39	1.39
		PI	1.62	1.65	1.67	1.69	1.71	1.73	1.75	1.77	1.79	1.81	1.83	1.85	1.87	1.89	1.91	1.94	1.94
	68	TC	23040	23334	23628	23922	24216	24510	24804	25098	25392	25686	25980	26274	26568	26862	27156	27450	27744
		S/T	0.88	0.91	0.95	0.98	1.02	1.05	1.09	1.12	1.15	1.19	1.22	1.26	1.29	1.32	1.36	1.39	1.39
		PI	1.68	1.70	1.72	1.74	1.77	1.79	1.81	1.83	1.85	1.87	1.89	1.92	1.94	1.96	1.98	2.00	2.00
	77	TC	23130	23424	23718	24012	24306	24600	24894	25188	25482	25776	26070	26364	26658	26952	27246	27540	27834
		S/T	0.90	0.93	0.97	1.00	1.04	1.07	1.10	1.14	1.17	1.21	1.24	1.28	1.31	1.34	1.38	1.41	1.41
		PI	1.74	1.76	1.78	1.80	1.82	1.85	1.87	1.89	1.91	1.93	1.96	1.98	2.00	2.02	2.04	2.07	2.07
	86	TC	23348	23642	23936	24230	24524	24818	25112	25406	25700	26000	26294	26588	26882	27176	27470	27764	28058
		S/T	0.91	0.94	0.98	1.01	1.04	1.08	1.11	1.15	1.18	1.22	1.25	1.29	1.32	1.35	1.39	1.42	1.42
		PI	2.04	2.07	2.09	2.12	2.15	2.17	2.20	2.22	2.25	2.28	2.30	2.33	2.35	2.38	2.41	2.43	2.43
	95	TC	23468	23762	24056	24350	24644	24938	25232	25526	25820	26114	26408	26702	27000	27294	27588	27882	28176
		S/T	0.92	0.96	0.99	1.02	1.06	1.09	1.13	1.16	1.20	1.23	1.27	1.30	1.34	1.37	1.41	1.44	1.44
		PI	2.16	2.18	2.21	2.24	2.27	2.29	2.32	2.35	2.38	2.40	2.43	2.46	2.49	2.51	2.54	2.57	2.57
	104	TC	36714	37066	37418	37770	38122	38474	38826	39178	39530	39882	40234	40586	40938	41290	41642	41994	42346
		S/T	0.94	0.98	1.01	1.05	1.08	1.11	1.15	1.18	1.22	1.25	1.29	1.32	1.35	1.39	1.42	1.46	1.46
		PI	0.93	0.95	0.97	0.98	1.00	1.02	1.03	1.05	1.07	1.08	1.10	1.12	1.13	1.15	1.16	1.18	1.18
	114.8	TC	57983	58420	58856	59292	59728	60164	60600	61037	61473	61909	62345	62781	63217	63653	64089	64525	64961
		S/T	0.95	0.98	1.02	1.05	1.09	1.12	1.15	1.19	1.22	1.26	1.29	1.32	1.36	1.39	1.43	1.46	1.46
		PI	0.34	0.35	0.35	0.36	0.36	0.37	0.37	0.38	0.38	0.38	0.39	0.39	0.40	0.40	0.41	0.41	0.41
	122	TC	92675	93319	93963	94607	95251	95895	96539	97183	97827	98471	99115	99759	100403	101047	101691	102335	102979
		S/T	0.96	1.00	1.03	1.07	1.10	1.13	1.17	1.20	1.24	1.27	1.30	1.34	1.37	1.41	1.44	1.47	1.47
		PI	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16
	-1486	TC	28968	29358	29748	30138	30528	30918	31308	31698	32088	32478	32868	33258	33648	34038	34428	34818	35208
		S/T	0.99	1.03	1.06	1.09	1.12	1.16	1.19	1.22	1.25	1.29	1.32	1.35	1.38	1.42	1.45	1.48	1.48
		PI	0.89	0.90	0.92	0.93	0.94	0.95	0.96	0.97	0.98	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.06
	-10	TC	29264	29656	30048	30440	30832	31224	31616	32008	32400	32792	33184	33576	33968	34360	34752	35144	35536
		S/T	1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.22	1.25	1.29	1.32	1.35	1.38	1.42	1.45	1.48	1.48
		PI	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.26	1.26
	0	TC	29511	29903	30295	30687	31079	31471	31863	32255	32647	33039	33431	33823	34215	34607	35000	35392	35784
		S/T	1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.22	1.26	1.29	1.32	1.35	1.38	1.42	1.45	1.48	1.48
		PI	1.20	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38</				

	77	PI	2.24	2.27	2.30	2.33	2.36	2.39	2.42	2.45	2.47	2.50	2.53	2.56	2.59	2.62	2.65	2.67
		TC	30912	31310	31708	32106	32504	32902	33300	33698	34096	34494	34892	35291	35689	36087	36485	36883
		S/T	1.02	1.05	1.08	1.11	1.14	1.17	1.20	1.23	1.26	1.29	1.32	1.35	1.39	1.42	1.45	1.48
	86	PI	2.32	2.35	2.38	2.41	2.44	2.47	2.50	2.53	2.56	2.58	2.61	2.64	2.67	2.70	2.73	2.76
		TC	31204	31603	32002	32401	32801	33200	33599	33998	34397	34797	35196	35595	35994	36393	36793	37192
		S/T	1.02	1.05	1.08	1.11	1.14	1.17	1.20	1.23	1.26	1.29	1.32	1.35	1.38	1.41	1.44	1.47
	95	PI	2.73	2.76	2.80	2.83	2.87	2.90	2.94	2.97	3.01	3.04	3.08	3.11	3.15	3.18	3.22	3.25
		TC	31364	31764	32163	32563	32963	33363	33763	34163	34562	34962	35362	35762	36162	36562	36961	37361
		S/T	0.87	0.88	0.90	0.92	0.93	0.95	0.96	0.98	1.00	1.01	1.03	1.05	1.06	1.08	1.09	1.11
	104	PI	2.88	2.92	2.95	2.99	3.03	3.06	3.10	3.14	3.17	3.21	3.25	3.28	3.32	3.36	3.39	3.43
		TC	49066	49536	50006	50477	50947	51417	51887	52357	52827	53297	53767	54237	54707	55178	55648	56118
		S/T	1.04	1.06	1.09	1.12	1.14	1.17	1.20	1.22	1.25	1.28	1.30	1.33	1.36	1.38	1.41	1.44
	114.8	PI	1.25	1.27	1.29	1.31	1.33	1.36	1.38	1.40	1.42	1.45	1.47	1.49	1.51	1.53	1.56	1.58
		TC	77492	78075	78658	79241	79824	80407	80990	81572	82155	82738	83321	83904	84487	85070	85653	86236
		S/T	1.04	1.06	1.09	1.12	1.14	1.17	1.20	1.22	1.25	1.27	1.30	1.33	1.35	1.38	1.41	1.43
	122	PI	0.46	0.47	0.47	0.48	0.48	0.49	0.50	0.50	0.51	0.51	0.52	0.53	0.53	0.54	0.54	0.55
		TC	123136	123900	124664	125428	126193	126957	127721	128485	129249	130013	130778	131542	132306	133070	133834	134599
		S/T	1.04	1.07	1.09	1.12	1.14	1.17	1.19	1.22	1.24	1.27	1.29	1.31	1.34	1.36	1.39	1.41
		PI	0.18	0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.22	0.22
		TC																
		S/T																

TC:Total Cooling Capacity (BTU/hr)

S/T:Sensible Cooling Capacity Ratio

PI:Power Input(kW)

Extrapolated Data



ACiQ-24-ACL-HEATING

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE									
AIRFLOW (CFM)	OUTDOOR R DB (°F)	TC : TOTAL CAPACITY IN KILOWATTS				PI : TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB °F)				Indoor Conditions (DB °F)			
		73.9	75.0	76.1	77.3	78.4	79.49	80.6	81.7
		23.3	23.9	24.5	25.1	25.8	26.38	27.0	27.6
18454	21,205.8	26710	29462	32215	34967	2.78	2.79	2.84	2.85
	21,681.1	28509	31922	35336	38750	2.84	2.86	2.90	2.91
	23,776.2	31260	35003	38745	42487	2.89	2.91	2.95	2.97
	24,823.7	32636	36543	40449	44355	2.92	2.93	2.98	2.99
	26,709.2	35113	39315	43517	47719	2.96	2.98	3.02	3.04
	27,337.7	35939	40239	44539	48840	2.98	2.99	3.04	3.05
	29,473.6	38745	43381	48017	52653	3.09	3.11	3.16	3.17
	31,609.4	41552	46523	51494	56466	3.21	3.23	3.27	3.29
	33,745.2	44359	49665	54972	60279	3.32	3.34	3.39	3.41
	35,881.1	47165	52807	58449	64092	3.44	3.46	3.51	3.53
	36,680.4	48215	53982	59749	65517	3.31	3.33	3.38	3.40
	36,999.9	48634	54451	60269	66086	3.26	3.28	3.33	3.35
	38,279.0	50314	56332	62349	68367	3.06	3.08	3.12	3.14
	39,078.4	51364	57506	63649	69792	2.93	2.95	2.99	3.01
	39,877.7	52413	58681	64949	71217	2.81	2.82	2.86	2.88
40,197.3	52833	59151	65468	71786	2.76	2.77	2.81	2.83	
24177	27,780.2	34988	38591	42195	45799	2.81	2.82	2.87	2.88
	28,411.0	37356	41829	46302	50774	2.87	2.88	2.93	2.94
	31,157.8	40965	45869	50772	55676	2.92	2.94	2.98	3.00
	32,531.2	42769	47888	53007	58127	2.95	2.96	3.01	3.02
	35,003.3	46017	51524	57031	62538	2.99	3.01	3.05	3.07
	35,827.4	47100	52736	58372	64008	3.01	3.02	3.07	3.09
	38,627.0	50779	56855	62931	69007	3.13	3.14	3.19	3.20
	41,426.6	54458	60974	67490	74006	3.24	3.26	3.31	3.32
	44,226.3	58138	65094	72049	79005	3.36	3.37	3.43	3.44
	47,025.9	61817	69213	76609	84004	3.47	3.49	3.54	3.56
	48,074.1	63194	70754	78314	85874	3.35	3.36	3.41	3.43
	48,493.1	63744	71370	78995	86621	3.30	3.31	3.36	3.38
	50,170.3	65947	73836	81724	89613	3.09	3.11	3.15	3.17
	51,218.5	67324	75377	83430	91483	2.96	2.98	3.02	3.04
	52,266.6	68701	76918	85135	93352	2.84	2.85	2.89	2.91
52,685.7	69251	77534	85817	94099	2.79	2.80	2.84	2.86	