

Cooling capacity for 25ton:

Air Flow Ent.(DB)	CFM (°F)	9500							10000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		75	80	85	90	95	100	105	110	115	120	125																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
61	TGC	277	283	288	294	299	304	309	314	319	324	329	334	339	344	349	354	359	364	369	374	379	384	389	394	399	404	409	414	419	424	429	434	439	444	449	454	459	464	469	474	479	484	489	494	499	504	509	514	519	524	529	534	539	544	549	554	559	564	569	574	579	584	589	594	599	604	609	614	619	624	629	634	639	644	649	654	659	664	669	674	679	684	689	694	699	704	709	714	719	724	729	734	739	744	749	754	759	764	769	774	779	784	789	794	799	804	809	814	819	824	829	834	839	844	849	854	859	864	869	874	879	884	889	894	899	904	909	914	919	924	929	934	939	944	949	954	959	964	969	974	979	984	989	994	999	1004	1009	1014	1019	1024	1029	1034	1039	1044	1049	1054	1059	1064	1069	1074	1079	1084	1089	1094	1099	1104	1109	1114	1119	1124	1129	1134	1139	1144	1149	1154	1159	1164	1169	1174	1179	1184	1189	1194	1199	1204	1209	1214	1219	1224	1229	1234	1239	1244	1249	1254	1259	1264	1269	1274	1279	1284	1289	1294	1299	1304	1309	1314	1319	1324	1329	1334	1339	1344	1349	1354	1359	1364	1369	1374	1379	1384	1389	1394	1399	1404	1409	1414	1419	1424	1429	1434	1439	1444	1449	1454	1459	1464	1469	1474	1479	1484	1489	1494	1499	1504	1509	1514	1519	1524	1529	1534	1539	1544	1549	1554	1559	1564	1569	1574	1579	1584	1589	1594	1599	1604	1609	1614	1619	1624	1629	1634	1639	1644	1649	1654	1659	1664	1669	1674	1679	1684	1689	1694	1699	1704	1709	1714	1719	1724	1729	1734	1739	1744	1749	1754	1759	1764	1769	1774	1779	1784	1789	1794	1799	1804	1809	1814	1819	1824	1829	1834	1839	1844	1849	1854	1859	1864	1869	1874	1879	1884	1889	1894	1899	1904	1909	1914	1919	1924	1929	1934	1939	1944	1949	1954	1959	1964	1969	1974	1979	1984	1989	1994	1999	2004	2009	2014	2019	2024	2029	2034	2039	2044	2049	2054	2059	2064	2069	2074	2079	2084	2089	2094	2099	2104	2109	2114	2119	2124	2129	2134	2139	2144	2149	2154	2159	2164	2169	2174	2179	2184	2189	2194	2199	2204	2209	2214	2219	2224	2229	2234	2239	2244	2249	2254	2259	2264	2269	2274	2279	2284	2289	2294	2299	2304	2309	2314	2319	2324	2329	2334	2339	2344	2349	2354	2359	2364	2369	2374	2379	2384	2389	2394	2399	2404	2409	2414	2419	2424	2429	2434	2439	2444	2449	2454	2459	2464	2469	2474	2479	2484	2489	2494	2499	2504	2509	2514	2519	2524	2529	2534	2539	2544	2549	2554	2559	2564	2569	2574	2579	2584	2589	2594	2599	2604	2609	2614	2619	2624	2629	2634	2639	2644	2649	2654	2659	2664	2669	2674	2679	2684	2689	2694	2699	2704	2709	2714	2719	2724	2729	2734	2739	2744	2749	2754	2759	2764	2769	2774	2779	2784	2789	2794	2799	2804	2809	2814	2819	2824	2829	2834	2839	2844	2849	2854	2859	2864	2869	2874	2879	2884	2889	2894	2899	2904	2909	2914	2919	2924	2929	2934	2939	2944	2949	2954	2959	2964	2969	2974	2979	2984	2989	2994	2999	3004	3009	3014	3019	3024	3029	3034	3039	3044	3049	3054	3059	3064	3069	3074	3079	3084	3089	3094	3099	3104	3109	3114	3119	3124	3129	3134	3139	3144	3149	3154	3159	3164	3169	3174	3179	3184	3189	3194	3199	3204	3209	3214	3219	3224	3229	3234	3239	3244	3249	3254	3259	3264	3269	3274	3279	3284	3289	3294	3299	3304	3309	3314	3319	3324	3329	3334	3339	3344	3349	3354	3359	3364	3369	3374	3379	3384	3389	3394	3399	3404	3409	3414	3419	3424	3429	3434	3439	3444	3449	3454	3459	3464	3469	3474	3479	3484	3489	3494	3499	3504	3509	3514	3519	3524	3529	3534	3539	3544	3549	3554	3559	3564	3569	3574	3579	3584	3589	3594	3599	3604	3609	3614	3619	3624	3629	3634	3639	3644	3649	3654	3659	3664	3669	3674	3679	3684	3689	3694	3699	3704	3709	3714	3719	3724	3729	3734	3739	3744	3749	3754	3759	3764	3769	3774	3779	3784	3789	3794	3799	3804	3809	3814	3819	3824	3829	3834	3839	3844	3849	3854	3859	3864	3869	3874	3879	3884	3889	3894	3899	3904	3909	3914	3919	3924	3929	3934	3939	3944	3949	3954	3959	3964	3969	3974	3979	3984	3989	3994	3999	4004	4009	4014	4019	4024	4029	4034	4039	4044	4049	4054	4059	4064	4069	4074	4079	4084	4089	4094	4099	4104	4109	4114	4119	4124	4129	4134	4139	4144	4149	4154	4159	4164	4169	4174	4179	4184	4189	4194	4199	4204	4209	4214	4219	4224	4229	4234	4239	4244	4249	4254	4259	4264	4269	4274	4279	4284	4289	4294	4299	4304	4309	4314	4319	4324	4329	4334	4339	4344	4349	4354	4359	4364	4369	4374	4379	4384	4389	4394	4399	4404	4409	4414	4419	4424	4429	4434	4439	4444	4449	4454	4459	4464	4469	4474	4479	4484	4489	4494	4499	4504	4509	4514	4519	4524	4529	4534	4539	4544	4549	4554	4559	4564	4569	4574	4579	4584	4589	4594	4599	4604	4609	4614	4619	4624	4629	4634	4639	4644	4649	4654	4659	4664	4669	4674	4679	4684	4689	4694	4699	4704	4709	4714	4719	4724	4729	4734	4739	4744	4749	4754	4759	4764	4769	4774	4779	4784	4789	4794	4799	4804	4809	4814	4819	4824	4829	4834	4839	4844	4849	4854	4859	4864	4869	4874	4879	4884	4889	4894	4899	4904	4909	4914	4919	4924	4929	4934	4939	4944	4949	4954	4959	4964	4969	4974	4979	4984	4989	4994	4999	5004	5009	5014	5019	5024	5029	5034	5039	5044	5049	5054	5059	5064	5069	5074	5079	5084	5089	5094	5099	5104	5109	5114	5119	5124	5129	5134	5139	5144	5149	5154	5159	5164	5169	5174	5179	5184	5189	5194	5199	5204	5209	5214	5219	5224	5229	5234	5239	5244	5249	5254	5259	5264	5269	5274	5279	5284	5289	5294	5299	5304	5309	5314	5319	5324	5329	5334	5339	5344	5349	5354	5359	5364	5369	5374	5379	5384	5389	5394	5399	5404	5409	5414	5419	5424	5429	5434	5439	5444	5449	5454	5459	5464	5469	5474	5479	5484	5489	5494	5499	5504	5509	5514	5519	5524	5529	5534	5539	5544	5549	5554	5559	5564	5569	5574	5579	5584	5589	5594	5599	5604	5609	5614	5619	5624	5629	5634	5639	5644	5649	5654	5659	5664	5669	5674	5679	5684	5689	5694	5699	5704	5709	5714	5719	5724	5729	5734	5739	5744	5749	5754	5759	5764	5769	5774	5779	5784	5789	5794	5799	5804	5809	5814	5819	5824	5829	5834	5839	5844	5849	5854	5859	5864	5869	5874	5879	5884	5889	5894	5899	5904	5909	5914	5919	5924	5929	5934	5939	5944	5949	5954	5959	5964	5969	5974	5979	5984	5989	5994	5999	6004	6009	6014	6019	6024	6029	6034	6039	6044	6049	6054	6059	6064	6069	6074	6079	6084	6089	6094	6099	6104	6109	6114	6119	6124	6129	6134	6139	6144	6149	6154	6159	6164	6169	6174	6179	6184	6189	6194	6199	6204	6209	6214	6219	6224	6229	6234	6239	6244	6249	6254	6259	6264	6269	6274	6279	6284	6289	6294	6299	6304	6309	6314	6319	6324	6329	6334	6339	6344	6349	6354	6359	6364	6369	6374	63

Cooling capacity for 6.2ton

Ambient Temperature(°F)	Air Flow	CFM	2400					2600					2800								
			75	80	85	90	95	75	80	85	90	95	75	80	85	90					
85	61	TGC	73.9	75.3	76.8	78.4	75.6	77.1	78.6	80.2	77.0	78.5	80.1	81.7							
		SHC	65.5	71.3	74.6	77.1	69.4	74.4	76.4	79.1	72.9	76.4	79.1	80.6							
		TGC	81.1	82.8	84.4	86.1	81.8	83.4	85.1	86.8	82.3	83.9	85.6	87.4							
		SHC	49.1	61.4	72.3	81.5	50.3	62.4	74.6	84.7	51.4	64.1	76.7	85.3							
		TGC	83.9	85.6	87.3	89.0	84.1	85.8	87.5	89.3	84.4	86.1	87.7	89.5							
	73	SHC	31.6	42.9	52.7	63.5	32.0	46.4	53.6	63.8	32.4	48.0	54.3	65.0							
		TGC	66.5	69.9	71.3	72.8	70.5	71.9	73.4	74.8	72.2	73.6	75.1	76.6							
		SHC	61.2	66.5	68.7	72.2	63.6	67.1	70.7	73.4	70.9	72.0	73.8	75.6							
		TGC	73.7	75.2	77.4	79.8	74.1	75.6	77.9	80.2	78.9	80.3	85.4	86.2							
		SHC	47.6	60.6	73.2	77.3	49.7	63.5	76.8	77.8	51.7	66.1	80.0	81.1							
	95	67	TGC	83.2	84.9	86.6	88.3	83.5	85.2	86.9	88.6	83.4	85.1	86.8	88.5						
			SHC	30.6	43.3	54.2	65.4	31.1	44.0	55.5	67.0	31.6	47.0	56.6	68.6						
			TGC	63.0	64.2	65.5	66.8	64.7	66.0	67.4	68.7	66.3	67.7	69.0	70.4						
			SHC	60.2	61.3	64.6	66.3	63.7	64.7	65.9	66.0	64.4	66.5	67.9	69.8						
			TGC	73.0	74.5	76.0	77.5	74.3	75.8	77.3	78.9	75.4	76.9	78.4	80.0						
67		SHC	45.4	56.0	71.9	76.4	47.6	62.0	76.7	78.1	49.8	65.3	76.2	78.2							
		TGC	80.6	82.2	83.8	85.5	81.8	83.4	85.1	86.8	82.2	83.8	85.5	87.2							
		SHC	28.9	42.6	55.5	66.7	30.0	44.2	56.9	66.5	30.4	45.2	58.3	70.7							
		TGC	56.9	58.0	59.1	60.3	59.1	60.2	61.4	62.7	61.0	62.2	63.5	64.7							
		SHC	51.8	54.4	57.2	58.5	56.9	58.5	60.1	61.9	59.5	60.2	62.3	64.1							
105		67	TGC	66.4	67.8	69.1	70.5	63.1	65.0	66.3	66.3	69.0	70.3	71.8	73.2						
			SHC	42.7	55.8	69.3	69.5	44.9	59.4	61.2	63.0	47.1	63.0	69.5	72.4						
			TGC	72.8	74.2	75.7	77.3	78.6	80.2	81.8	83.4	79.2	80.8	82.4	84.0						
			SHC	27.9	41.0	53.7	66.1	28.5	42.6	56.4	66.6	29.0	44.4	58.7	72.7						
			TGC	52.2	53.2	54.2	55.3	54.2	55.3	56.4	57.5	55.9	57.1	58.2	59.4						
	67	SHC	47.5	49.9	52.5	53.6	52.2	53.6	55.1	56.9	54.6	55.3	57.1	58.8							
		TGC	60.9	62.2	63.4	64.6	62.2	63.5	64.7	66.0	63.3	64.6	65.8	67.1							
		SHC	39.2	51.3	60.8	63.7	41.2	54.5	63.7	65.7	43.2	57.8	63.7	66.4							
		TGC	66.8	68.1	69.5	70.8	72.1	73.5	75.1	76.5	72.7	74.1	75.6	77.1							
		SHC	25.6	37.6	49.3	60.7	26.1	39.1	51.7	63.9	26.7	40.8	53.9	66.7							

Notes:
 ■ All capacities are gross and have not considered indoor fan heat. To obtain NET cooling capacity subtract indoor fan heat.
 ■ TGC=Total Gross Capacity (Unit: kBtu/h).
 ■ SHC=Sensible Heat Capacity (Unit: kBtu/h).

Heating capacity for 6.2ton

Outdoor Temp (°F) 70% RH	Air Flow	CFM	Net Capacities (kW)-2400 CFM					Net Capacities (kW)-2600 CFM				
			Peak Net Heating (kW) at Indicated Dry Bulb (°F)	Peak Total Power (kW) at Indicated Dry Bulb (°F)	Peak Net Heating (kW) at Indicated Dry Bulb (°F)	Peak Total Power (kW) at Indicated Dry Bulb (°F)	Peak Net Heating (kW) at Indicated Dry Bulb (°F)	Peak Total Power (kW) at Indicated Dry Bulb (°F)				
59	68	75.2	80.6	68	75.2	80.6						
23	15.7	15.2	14.8	14.3	6.0	6.3	6.5	6.7				
26.6	17.4	16.9	16.4	6.3	6.6	6.8	7.0					
32	19.3	18.8	18.2	17.7	6.7	6.9	7.2	7.4				
37.4	22.8	22.1	21.4	20.8	7.0	7.3	7.5	7.8				
44.6	26.8	26.0	25.2	24.5	7.4	7.6	7.9	8.2				
48.2	28.7	27.8	27.0	26.2	7.5	7.8	8.1	8.4				
53.6	30.4	29.5	28.6	27.7	7.8	8.1	8.4	8.7				
59	32.2	31.3	30.3	29.4	7.9	8.2	8.5	8.9				
64.4	34.1	33.1	32.1	31.2	8.3	8.6	8.9	9.3				
69.8	36.2	35.1	34.1	33.0	8.3	8.6	8.9	9.3				
75.2	38.3	37.2	36.1	35.0	8.5	8.8	9.1	9.5				

Notes:
 ■ For other airflows, see heating capacity correction factor tables.
 ■ Heating capacities and power are integrated to include the effects of defrost in the frost region.

Cooling capacity for 7.5ton

Ambient Temperature(°F)	Air Flow	CFM	2800					3000					3200								
			75	80	85	90	95	75	80	85	90	95	75	80	85	90					
85	61	TGC	82.5	84.2	85.8	87.5	87.3	89	90.8	92.6	89.3	91.1	92.9	94.8							
		SHC	72.7	80.4	85.3	87.5	77.4	84.3	88.2	91.1	82	84.5	87.9	92.3							
		TGC	94.8	96.7	98.6	100.6	95.9	97.8	101.8	101.8	96.7	98.6	100.6	102.6							
		SHC	55.6	68.8	81.8	94.3	58	72.6	85.4	96.3	59.5	73.8	83.2	100.1							
		TGC	98.6	100.6	102.6	104.6	99.2	103.2	105.2	105.2	99.4	101.4	103.4	105.5							
	73	SHC	36.8	51	62	72.4	37.3	50.7	62.3	75.1	37.8	54.8	63.3	75.4							
		TGC	78.6	80.2	81.8	83.4	81	82.6	84.3	86	83.3	85	86.7	88.4							
		SHC	69.6	75.6	78	81.4	72.3	78.6	81.2	85.3	75.2	79.3	83.5	86.7							
		TGC	85.6	87.3	89.1	90.8	87.1	89	90.6	98	91.2	93.1	95.8	99.8							
		SHC	53.9	67.7	81.6	86.2	56.3	71.6	86.5	91.3	58.7	75	90.8	92							
	95	67	TGC	97.8	99.8	101.8	103.8	98.3	100.3	102.3	104.3	98.7	100.7	102.7	104.7						
			SHC	35.7	50.2	62.3	74.5	36.2	51.2	64.1	77.3	36.8	52	65.6	79.2						
			TGC	72.1	73.5	75	76.5	74.4	75.9	77.4	79	76.5	78	79.6	81.2						
			SHC	66.4	68.3	71.3	73.2	71.2	72.4	76.3	78.4	75.3	76.5	77.9	80.4						
			TGC	84.4	86.1	87.8	89.6	86.3	88	89.8	91.6	87.8	89.6	91.3	93.2						
67		SHC	51	65	79.2	86.3	53.7	66.2	85	90.3	56.3	73.3	90.6	92.3							
		TGC	95.3	97.2	99.2	101.1	95.2	97.1	99	101	96.7	98.6	100.6	102.6							
		SHC	34.2	48.9	64.2	76.8	34.1	50.4	65.6	78.8	35.4	52.2	67.2	80.9							
		TGC	65.3	66.6	67.9	69.3	67.2	68.5	69.9	71.3	69.8	71.2	72.6	74.1							
		SHC	63.2	64.6	66.4	68.6	61.2	64.3	67.6	68.1	67.3	69.1	71	73.2							
105		67	TGC	76.7	78.2	79.8	81.4	78.5	80.1	81.7	83.3	80.1	81.7	83.3	85						
			SHC	47.8	62.1	75.4	80.2	50.5	66	78.3	82.1	53.1	70.2	82.1	84.6						
			TGC	90.8	92.6	94.5	96.4	86	87.7	89.5	91.3	92.9	94.8	96.6	98.6						
			SHC	32.4	46.3	61.2	76.4	33	48.4	63.5	78.1	33.7	50.4	66.6	82.3						
			TGC	59.9	61.1	62.3	63.6	61.7	62.9	64.1	65.4	64	65.3	66.6	68						
	67	SHC	58	59.3	60.9	62.9	56.1	59	62	63.4	61.7	63.5	65.1	67.2							
		TGC	70.4	71.8	73.2	74.7	72	73.5	74.9	76.4	73.5	75	76.5	78							
		SHC	43.9	57	69.2	73.6	46.3	60.6	71.8	75.3	48.7	64.4	75.3	77.6							
		TGC	83.3	85	86.7	88.4	78.9	80.5	82.1	83.7	85.2	86.9	88.7	90.4							
		SHC	29.7	42.5	56.1	70.1	30.3	44.4	58.3	71.7	30										

Cooling capacity for 30ton:

Ambient Temperature (°F)	Air Flow (CFM)	11000					12000					13000				
		75	80	85	90	95	75	80	85	90	95	75	80	85	90	
61	SHC	289.0	292.9	307.0	326.0	297.5	304.5	318.8	337.6	301.2	309.5	330.6	347.0			
	TGC	231.3	278.2	298.0	315.9	245.2	312.7	324.8	295.8	300.3	320.6	336.4				
	SHC	327.1	331.4	335.4	340.5	337.6	340.1	342.2	344.7	342.0	344.9	347.0	349.9			
67	SHC	179.4	224.1	266.6	311.3	188.3	233.6	290.8	325.4	192.0	240.7	290.2	319.7			
	TGC	347.0	354.2	359.0	363.7	351.3	356.5	363.7	368.1	356.1	361.3	365.8	370.6			
	SHC	116.6	164.2	203.2	240.7	119.3	168.4	208.3	245.0	121.8	170.2	212.1	254.8			
61	TGC	269.3	276.5	290.8	311.8	273.0	313.2	304.7	323.4	283.6	290.8	314.2	332.9			
	SHC	193.3	266.6	285.4	305.9	233.6	276.0	299.1	317.3	247.9	285.4	308.2	326.6			
	TGC	315.0	319.8	324.5	331.4	329.1	331.0	336.3	338.6	340.9	343.6	345.9	347.9			
67	SHC	170.2	214.8	259.5	304.1	230.3	278.4	301.8	313.1	233.0	249.8	293.9	319.2			
	TGC	337.8	342.2	346.8	351.9	340.5	344.3	350.1	356.5	343.7	348.4	353.2	355.5			
	SHC	110.4	157.0	199.0	238.4	113.3	163.2	204.8	247.9	115.8	166.3	210.4	254.8			
61	TGC	246.6	255.8	270.1	293.9	258.1	265.3	289.0	303.3	262.9	274.7	300.6	322.3			
	SHC	206.3	248.7	262.4	285.2	224.3	257.7	280.6	294.3	238.6	269.9	295.3	311.9			
	TGC	289.0	293.9	300.8	303.3	291.4	298.5	308.0	312.8	306.0	312.8	317.6	322.3			
73	SHC	159.9	205.4	250.2	297.4	187.8	217.1	266.6	306.9	175.4	228.9	280.8	316.1			
	TGC	331.8	334.3	336.6	338.9	336.6	338.9	341.4	346.1	341.4	343.7	346.1	348.0			
	SHC	103.9	149.5	193.0	233.8	106.6	155.5	200.3	245.6	109.1	161.3	206.3	252.3			
61	TGC	234.8	244.3	268.1	291.9	242.0	256.3	280.1	303.9	248.2	254.2	274.5	315.7			
	SHC	198.4	230.7	253.9	276.9	212.1	239.6	262.4	285.2	224.3	238.3	251.0	289.9			
	TGC	290.1	294.7	297.0	301.9	292.4	299.6	302.2	309.0	309.0	313.9	320.8	329.1			
67	SHC	192.9	221.9	266.5	291.0	202.3	234.4	283.2	287.0	216.8	250.3	290.1	324.0			
	TGC	309.0	312.8	317.6	320.0	317.6	322.3	324.6	327.1	324.6	327.1	329.4	331.8			
	SHC	97.1	142.5	187.6	231.5	102.8	150.6	195.9	240.9	105.4	155.5	205.4	255.2			
61	TGC	215.2	224.3	247.1	266.8	221.9	235.7	256.5	281.5	228.9	244.8	270.1	292.9			
	SHC	189.9	201.0	223.2	242.2	203.2	232.0	254.3	276.5	214.8	230.9	258.3	285.5			
	TGC	256.5	263.1	265.4	270.1	260.8	267.8	272.2	276.9	276.9	281.5	286.3	295.8			
67	SHC	146.4	187.8	230.9	254.4	168.4	199.9	246.9	262.1	176.3	210.2	258.3	286.4			
	TGC	295.2	299.7	304.3	306.6	304.3	308.9	311.1	313.4	311.1	313.4	315.7	318.0			
	SHC	92.4	136.1	179.4	221.6	95.0	143.9	187.4	230.9	100.6	148.5	196.5	244.6			

Notes:
 ■ All capacities are gross and have not considered indoor fan heat. To obtain NET cooling capacity subtract indoor fan heat.
 ■ TGC= Total Gross Capacity (Unit: Btu/h).
 ■ SHC= Sensible Heat Capacity (Unit: Btu/h).

Heating capacity for 30ton

Outdoor Temp (°F)	70% RH	Net Capacities (KW)-12000 CFM														
		Peak Net Heating (KW) at Indicated Dry Bulb (°F)					Peak Total Power (KW) at Indicated Dry Bulb (°F)									
5	59.4	68	75.2	80.6	88	59	68	75.2	80.8	34	34	34	34	34	34	34
	64	61.2	60	59.4	28.2	31	32.4	32.8	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
	67.8	66	65.4	65.4	28.6	31.2	31.6	33.4	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
21.2	71.2	69	68.4	67.6	28.8	31.6	31.6	33.4	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
	74.2	73.6	72.4	29.2	31.8	31.8	34	36.4	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
	79.8	78.6	77.8	29.4	32.4	32.4	34.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
37.4	93.4	92.4	91	89.8	30	33	35.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2
	107.4	105.0	104.8	104.2	31.2	34.8	36.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4
	122.2	120.6	119.4	118.2	32.4	36	38.2	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6
53.6	129.6	134.2	133.6	132.4	33.6	37.6	39.6	42	42	42	42	42	42	42	42	42
	139.8	137.8	136.8	135.4	34.6	38.4	40.6	43	43	43	43	43	43	43	43	43
	148.2	145.6	144	142.8	35.4	39.4	41.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
69.8	159	155.8	153.6	151.6	36	40	42	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2
	168	163.6	160.8	159	37	40.6	43.6	45	45	45	45	45	45	45	45	45
	188	183.6	180.6	179.4	37	40.6	43.6	45	45	45	45	45	45	45	45	45

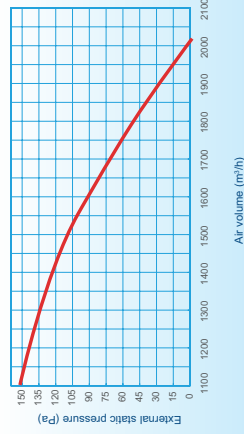
Notes:
 ■ For other airflows, see heating capacity correction factor tables.
 ■ Heating capacities and power are integrated to include the effects of defrost in the frost region.

Static pressure chart for air volume

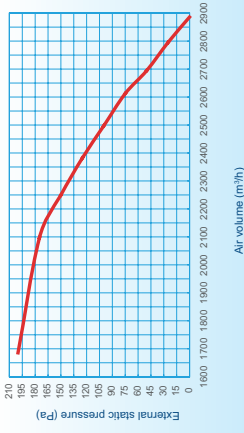
T1 Condition - R22

MRA

2&3ton

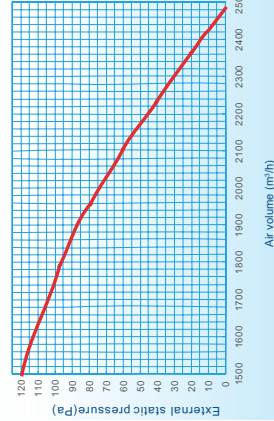


4&5ton

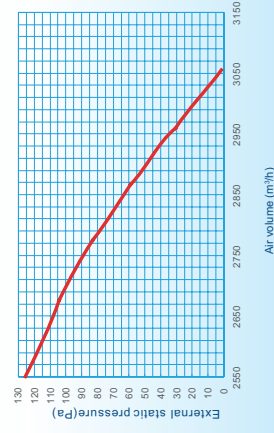


MRC

3ton



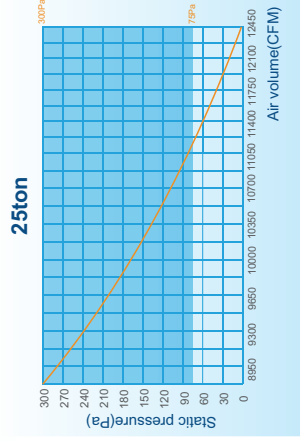
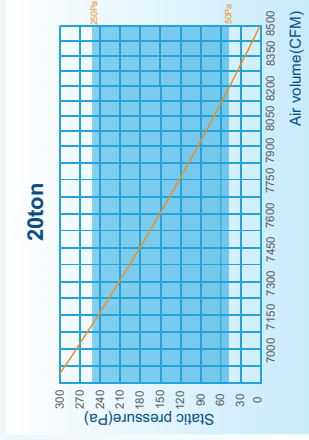
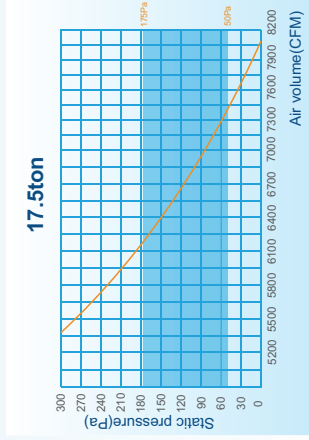
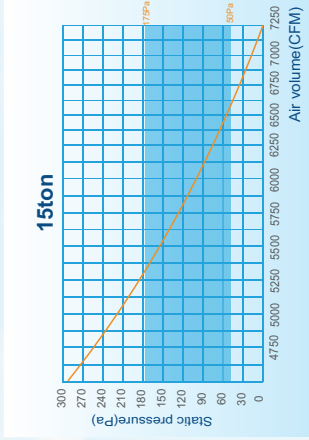
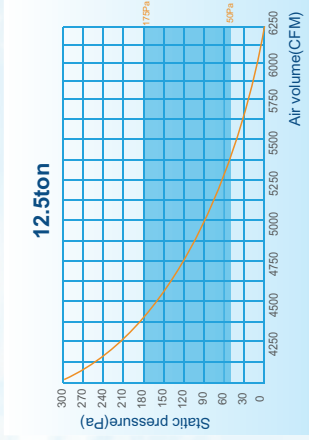
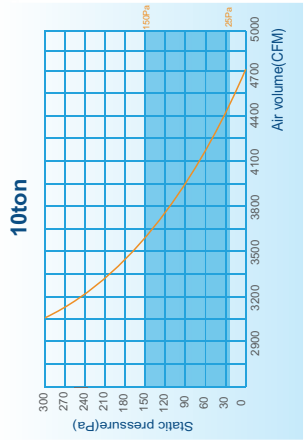
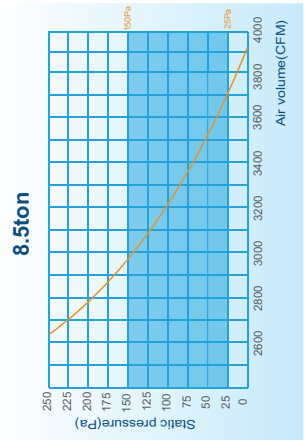
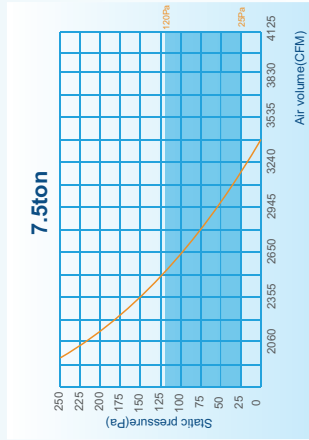
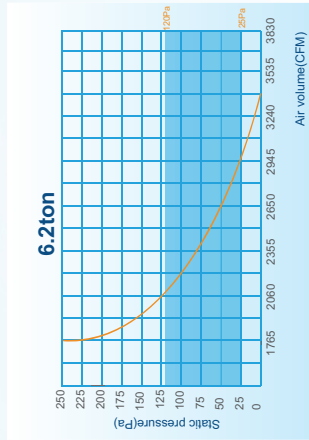
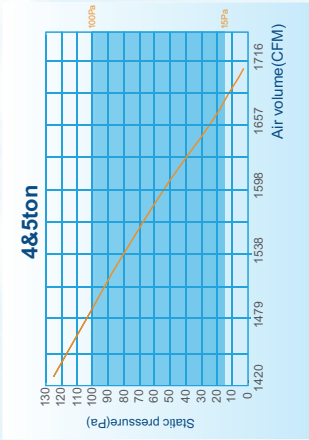
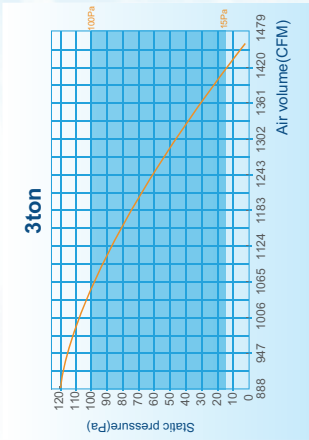
4&5ton



Notes:
 The static pressure is recommended to use within shadow, the outer static pressure is available, but the user will be obligated risk himself.

T3 Condition-R22

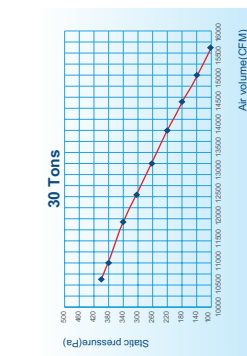
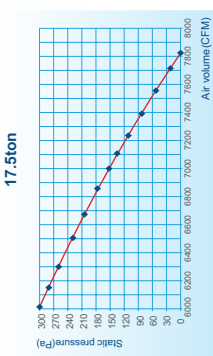
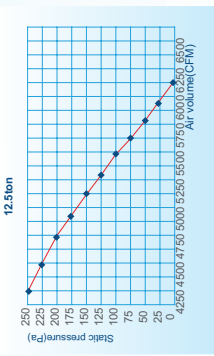
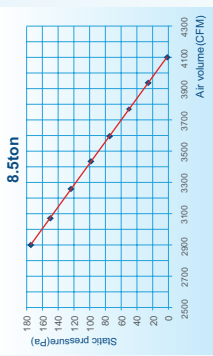
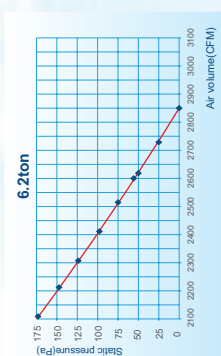
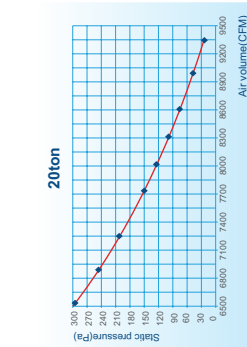
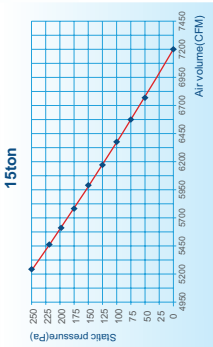
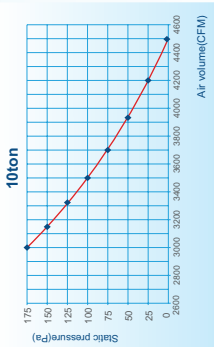
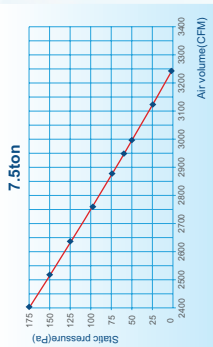
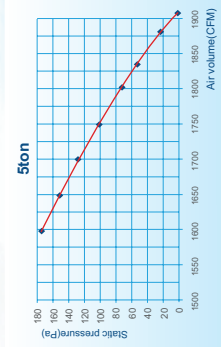
Heating capacity for 6.2 ton



Notes:
The static pressure is recommended to use within shadow, the outer static pressure is available, but the user will be obligated risk himself.

Notes:
The static pressure is recommended to use within shadow, the outer static pressure is available, but the user will be obligated risk himself.

T3 Condition-R410A



Static pressure chart for air volume

Electrical data

T1 Condition-R22

Model	Power Supply			Compressor			Evaporator fan motor			Condenser fan motor			
	MCA	TOCA	MFA	STC	RNC	IPT	QTY	FLA	IPT	QTY	FLA	IPT	QTY
MRA-24HW-Q	18	15	40	55	12.0	2.45	1	2.8	0.65	1	1.2	0.24	1
MRA-36HW-Q	30	22	70	122	17.4	3.75	1	2.8	0.65	1	1.2	0.24	1
MRA-36HW-R	10	8	25	48	6.8	3.8	1	2.8	0.65	1	1.2	0.24	1
MRA-48HW-R	11	9	30	52	7.2	4.45	1	3.8	0.86	1	1.2	0.24	1
MRA-60HW-R	14	11	40	66	9.3	5.45	1	3.8	0.86	1	1.2	0.26	1
MRC-36HW	25	28	35	19.3	11.2	3.75	1	1.5	0.33	1	1.2	0.25	1
MRC-36HW-R	9	10	15	6.9	4.5	3.8	1	1.5	0.33	1	1.2	0.25	1
MRC-48HW-R	12	13	18	8.2	5.5	4.45	1	3.6	0.76	1	1.2	0.25	1
MRC-60HW-R	14	15	20	9.7	6.9	5.45	1	3.6	0.76	1	1.2	0.25	1

T3 Condition-R22

Model	Power Supply			Compressor(Each)			Evaporator fan motor(Each)			Condenser fan motor(Each)			
	MCA	TOCA	MFA	STC	RNC	IPT	QTY	FLA(A)	IPT(WK)	QTY	FLA(A)	IPT(WK)	QTY
MRCT-36CW	12	16.8	17	65.5	8.2	3.15	1	2.1	0.48	1	1.17	0.255	1
MRCT-36CW-R	22	28	30	97	17.1	3.09	1	2.1	0.48	1	1.17	0.255	1
MRCT-48CW-R	9.5	10.8	13	41	7.14	4.16	1	4.5	0.99	1	1.17	0.255	1
MRCT-60CW-R	14	18	20	67	10	4.97	1	4.5	0.99	1	1.17	0.255	1
MRBT-062CW-R	37	43	62	39	12.6	7	2	3.6	1.8	1	1.7	0.7	1
MRCT-062EW-R	37	43	62	39	12.6	7	2	3.6	1.8	1	1.7	0.7	1
MRBT-075CW-R	30	35	50	58	10	4.6	2	3.6	2.5	1	1.7	1	1
MRCT-075EW-R	30	35	50	58	10	4.6	2	3.6	2.5	1	1.7	1	1
MRBT-075EW-R	30	35	50	58	10	4.6	2	3.6	2.5	1	1.7	1	1
MRBT-075HW-R	30	35	50	58	10	4.6	2	3.6	2.5	1	1.7	1	1
MRBT-085CW-R	28	33	47	55	9.2	5.3	2	3.6	2.2	1	1.7	0.75	1
MRCT-085EW-R	28	33	47	55	9.2	5.3	2	3.6	2.2	1	1.7	0.75	1
MRBT-100CW-R	28	33	47	58	9.2	5.3	2	3.6	2.2	1	1.7	0.75	1
MRCT-100EW-R	28	33	47	58	9.2	5.3	2	3.6	2.2	1	1.7	0.75	1
MRBT-100HW-R	28	33	47	60	9.2	5.3	2	3.6	2.2	1	1.7	0.75	1
MRBT-100HW-R	28	33	47	74	9.2	5.3	2	3.6	2.2	1	1.7	0.75	1
MRBT-125CW-R	47	54	74	110/74	17.6/9.2	10.1+5.3	2	11.6	6	1	1.7	0.75	2
MRCT-125EW-R	47	54	74	110/74	17.6/9.2	10.1+5.3	2	11.6	6	1	1.7	0.75	2
MRBT-125EW-R	47	54	74	110/74	17.6/9.2	10.1+5.3	2	11.6	6	1	1.7	0.75	2
MRBT-150CW-R	47	54	74	110/74	17.6/9.2	10.1+5.3	2	11.6	6	1	1.7	0.75	2
MRCT-150EW-R	47	54	74	110/74	17.6/9.2	10.1+5.3	2	11.6	6	1	1.7	0.75	2
MRBT-150HW-R	47	54	74	110/74	17.6/9.2	10.1+5.3	2	11.6	6	1	1.7	0.75	2
MRBT-150HW-R	54	62	85	110	15.8	9	2	11.6	6	1	2.75	1.3	2
MRCT-175EW-R	54	62	85	110	15.8	9	2	11.6	6	1	2.75	1.3	2
MRBT-200CW-R	58	67	94	110	17.6	10.1	2	11.6	6	1	2.75	1.3	2
MRCT-200EW-R	58	67	94	110	17.6	10.1	2	11.6	6	1	2.75	1.3	2
MRBT-200HW-R	58	67	94	110	17.6	10.1	2	11.6	6	1	2.75	1.3	2
MRCT-250CW-R	83	95	134	174	25.6	13.6	2	15.4	8	1	3.25	1.7	2
MRCT-250EW-R	83	95	134	174	25.6	13.6	2	15.4	8	1	3.25	1.7	2
MRCT-250HW-R	83	95	134	174	25.6	13.6	2	15.4	8	1	3.25	1.7	2

Notes:

■ Voltage imbalance between phases to be <2%

MCA: Min. Current Amps. (A) TOCA: Total Over-current Amps. (A) MFA: Max. Fuse Amps. (A)

STC: Starting Current (A) RNC: Running Current (A) IPT: Input Power(kW) FLA: Full Load Amps. (A)

T3 Condition-R410A

Model	Power Supply		Compressor			Evaporator fan motor			Condenser fan motor				
	MCA	TOCA	MFA	STC	RNC	IPT	Qty	RNC	IPT	Qty	RNC	IPT	Qty
MRBT-60CWN1-R	19.75	21.5	25	74	11.8	5.2	1	3.5	0.8	1	1.5	0.35	1
MRBT-062CWN1-R	23	29	38	98	14.3	7.185	1	3.7	1.5	1	1.7	0.6	1
MRCT-062EWN1-R	23	29	38	98	14.3	7.185	1	3.7	1.5	1	1.7	0.6	1
MRBT-062HWN1-R	23	29	38	98	14.3	7.185	1	3.7	1.5	1	1.7	0.6	1
MRBT-075CWN1-R	26	32	42	142	16.4	8.47	1	3.7	1.9	1	1.7	0.85	1
MRCT-075EWN1-R	26	32	42	142	16.4	8.47	1	3.7	1.9	1	1.7	0.85	1
MRBT-075HWN1-R	26	32	42	142	16.4	8.47	1	3.7	1.9	1	1.7	0.85	1
MRBT-085CWN1-R	32	39	53	142	20.7	9.5	1	3.4	1.66	1	3.5	1.02	1
MRCT-085EWN1-R	32	39	53	142	20.7	9.5	1	3.4	1.66	1	3.5	1.02	1
MRBT-085HWN1-R	32	39	53	142	20.7	9.5	1	3.4	1.66	1	3.5	1.02	1
MRBT-100CWN1-R	33	40	55	147	29.5	10.8	1	3.7	1.9	1	2.7	1.3	1
MRCT-100EWN1-R	33	40	55	147	29.5	10.8	1	3.7	1.9	1	2.7	1.3	1
MRBT-100HWN1-R	33	40	55	147	29.5	10.8	1	3.7	1.9	1	2.7	1.3	1
MRBT-125CWN1-R													
MRBT-125HWN1-R													
MRBT-150CWN1-R	56	67	89	110	32.8	16.8	2	9.2	4.65	1	1.7	0.85	2
MRCT-150EWN1-R	56	67	89	110	32.8	16.8	2	9.2	4.65	1	1.7	0.85	2
MRBT-150HWN1-R	56	67	89	110	32.8	16.8	2	9.2	4.65	1	1.7	0.85	2
MRBT-175CWN1-R	66	79	108	142	20.7	9.5	2	10.3	5.3	1	2.7	1.3	2
MRCT-175EWN1-R	66	79	108	142	20.7	9.5	2	10.3	5.3	1	2.7	1.3	2
MRBT-175HWN1-R	66	79	108	142	20.7	9.5	2	10.3	5.3	1	2.7	1.3	2
MRBT-200CWN1-R	72	85	115	140	42.8	21.6	2	11.8	5.5	1	3.3	1.7	2
MRCT-200EWN1-R	72	85	115	140	42.8	21.6	2	11.8	5.5	1	3.3	1.7	2
MRBT-200HWN1-R	72	85	115	140	42.8	21.6	2	11.8	5.5	1	3.3	1.7	2
MRCT-300CWN1-R	91	109	146	197	55.2	27.4	2	13	7.0	1	6.5	3.4	2
MRCT-300EWN1-R	91	109	146	197	55.2	27.4	2	13	7.0	1	6.5	3.4	2
MRCT-300HWN1-R	91	109	146	197	55.2	27.4	2	13	7.0	1	6.5	3.4	2

Notes:
 ■ Voltage imbalance between phases to be <2%
MCA: Min. Current Amps. (A) **TOCA:** Total Over-current Amps. (A) **MFA:** Max. Fuse Amps. (A)
STC: Starting Current (A) **RNC:** Running Current (A) **IPT:** Input Power(kW) **FLA:** Full Load Amps.(A)

Error code

Error code for 5ton

Type	Content	Code	Remarks
Normal	Standby	-	
Normal	Constraint cooling	On	
Normal	Run	10.	
Error	Compressor phase sequence error or phase failure	E0	Manual reset
Error	Outdoor coil temp. sensor T3-1 error	E1	Manual reset
Error	Outdoor coil temp. sensor T3-2 error	E2	Manual reset
Error	Indoor coil temp. sensor T2-1 error	E5	Manual reset
Error	Indoor coil temp. sensor T2-2 error	E6	Manual reset
Error	Indoor temp. sensor T1 error	E9	Manual reset
Error	Outdoor ambient temp. sensor T4 error	EA	Manual reset
Error	Wired controller output error	Eb	Manual reset
Protection	Overcurrent protection	P0	Auto reset
Protection	Comprehensive protection for outdoor fan	P3	Auto reset
Protection	Protection for hi/lo pressure or exhaust temperature(system 1)	P4	Auto reset
Protection	Protection for hi/lo pressure or exhaust temperature(system 2)	P5	Auto reset
Protection	Protection for high temperature of the outdoor condenser	P8	Auto reset

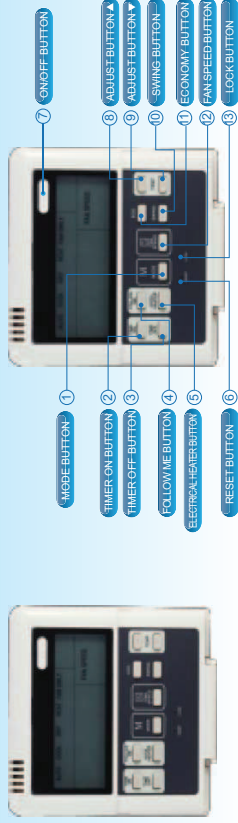
Error code for 6.2ton and above

Type	Content	Code	Remarks
Normal	Standby	-	
Normal	Constraint cooling	On	
Normal	Running	10.	
Error	Compressor phase sequence error or phase default	E0	Manual reset
Error	Outdoor coil temp. sensor in sys. A error	E1	Manual reset
Error	Outdoor coil temp. sensor in sys. B error	E2	Manual reset
Error	Indoor coil temp. sensor in sys. A error	E5	Manual reset
Error	Indoor coil temp. sensor in sys. B error	E6	Manual reset
Error	Indoor temp. sensor error	E9	Manual reset
Error	Outdoor ambient temp. sensor error	EA	Manual reset
Protection	Wired controller output error	Eb	Manual reset
Protection	Overcurrent protection in sys. A	P0	Auto reset
Protection	Overcurrent protection in sys. B	P1	Auto reset
Protection	Overcurrent protection for indoor fan	P2	Auto reset
Protection	Comprehensive protection for outdoor fan	P3	Auto reset
Protection	Protection for Hi/Lo. Pressure or exhaust temp. in sys. A	P4	Comprehensive protection in sys. A
Protection	Protection for Hi/Lo. Pressure or exhaust temp. in sys. B	P5	Comprehensive protection in sys. B
Protection	T2 evaporator Hi-temperature protection stop outdoor unit fan	P6	Auto reset
Protection	T2 evaporator Hi-temperature protection then stop outdoor unit fan and compressor	P7	Auto reset
Protection	Protection for condenser Hi-temp. in sys. A	P8	Auto reset
Protection	Protection for condenser Hi-temp. in sys. B	P9	Auto reset
Protection	Anti-freezing protection for evaporator in sys. A	Pc	Auto reset
Protection	Anti-freezing protection for evaporator in sys. B	Pd	Auto reset
Protection	Defrosting	dF	Auto reset

Wired controller

Wired controller is a human-machine interaction(HMI) used for the communication between indoor & outdoor and main board. The setting and operation can be sent to main board and the running condition can be displayed by the wired controller.

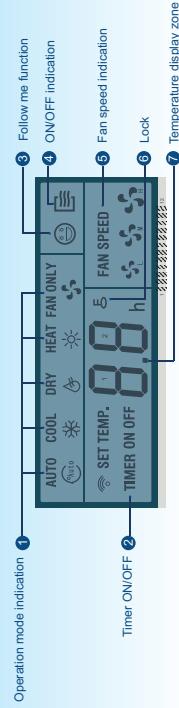
Standard wired controller:KJR-12B/DP (T)-E



Feature

- Easier to read because LCD screen is larger.
- Digital display lets you set temperature in 1°C units.
- Built in a thermostat sensor that makes more comfortable room temperature control.
- Simply and conveniently select cool/heat/fan operation mode
- Economical operation power supply 5V DC.
- Wide operation temperature from -15°C to +43°C.
- Wide operation humidity from 40% to 90%, RH.
- Timer for rest time.

Name and function of indicators on the controller



Optional wired controller

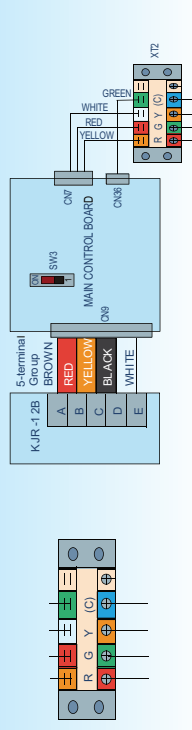


Field wiring

To connect with wired controller

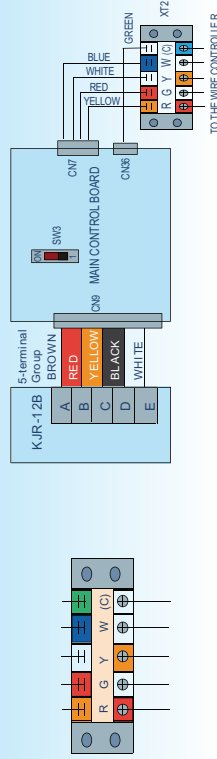
Set the dial code SW3 of PCB in roof-top unit's wired control box as per the wired controller you are in using. After settings, please shut off the power supply and then power to it again, otherwise, the new settings function couldn't work.

For cooling units



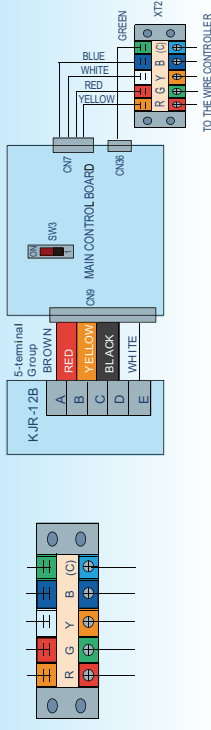
- When SW3 has been set in "ON", please select KJR-12B wired controller.
- When SW3 has been set in "1", please select the wired controller be recommended.

For cooling +EAH units



- See the upper figure:**
- When SW3 has been set in "ON", please select KJR-12B wired controller.
 - When SW3 has been set in "1", please select the wired controller be recommended.

For heating & cooling units



- See the upper figure:**
- When SW3 has been set in "ON", please select KJR-12B wired controller.
 - When SW3 has been set in "1", please select the wired controller be recommended.

Mechanical specifications

General

The units are convertible airflow. All units shall be factory assembled, internally wired, fully charged refrigerant and 100% run tested to check cooling and heating operation, fan and blower rotation, and control sequence before leaving the factory. Wiring internal to the unit shall be colored and numbered for simplified identification. The unit is provided with an integral weather resistant control panel.

Casing

Unit casing shall be constructed of zinc coated, heavy gauge, galvanized steel. Exterior surfaces shall be cleaned, G90 galvanized heavy gauge plate conforming to ASTM A 653, followed by baked on electrostatic polyester dry powder coat paint on all external panels, completely weatherized for outdoor installation and properly reinforced and brazed. Salt spray test for steel sheet under 1000 hours, specially treated can be up to 2000 hours and even more. Cabinet construction shall allow for all maintenance on one side of the unit, only the unit with auxiliary electrical heater shall allow for maintenance on two sides. Service panels shall be removed easily and reinstalled by removing bolts. All panels and top covers indoor side of the unit shall be insulated with 16 mm, foam-faced (foil-faced only for 5ton), closed-cell insulation. The unit has provisions for forklift and crane lifting, with forklift capabilities on four sides of the unit.

Compressors

All units shall have direct-drive, hermetic, scroll type compressors with centrifugal type oil pumps. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of unit nameplate voltage. Internal overloads shall be provided with the scroll compressors. Compressors used in Rooftop package unit are hermetically sealed reciprocating type. They are equipped with a crankcase heater as standard.

The compressors, incorporating a built in muffler, are mounted on springs within a heavy gauge steel housing to give a low noise level.

The unit contains the best compressor technology available to achieve the highest possible performance. Dual compressors are outstanding for humidity control, light load cooling conditions and system back-up applications. Dual compressors are available on 12.5 to 20 ton models.

Controls

The unit shall be completely factory-wired with necessary controls and terminal block for power wiring. The unit shall provide an external location for mounting a fused disconnect device.

Microprocessor controls provide for all 24V control functions. The precision control shall make all heating, cooling, or ventilating decisions in response to electronic signals from sensors measuring indoor and outdoor temperatures. The control maintains accurate temperature control, minimizes drift from set point, and provides better building comfort. A centralized microprocessor shall provide a higher level of machine protection.

Evaporator and condenser coils

Internally finned, 7.94 mm (5/16 inch) copper tubes mechanically bonded to a configured hydrophilic aluminum fin shall be standard. Coils shall be leak tested at the factory to ensure the pressure integrity. The evaporator coil and condenser coil shall be leak tested to 3100 kPa (450 psig). A removable, double-sloped condensate drain pan with through the base condensate drain is standard.

Filters

Washable filters shall be standard on all units.

Evaporator fan

Evaporator fan is of centrifugal forward-curved blade design capable of handling total required CFM and static pressure in the low and the medium ranges. Casings are made of galvanized steel. Blower motors are of open drip proof type (totally enclosed types are optional) and conform to NEMA MG-1 and MG-2. Blower motor is mounted on adjustable base and secured by locking device. Fan wheels shafts and bearing are selected to operate at 25% below first critical speed. Pillow block bearing are selected for at 200,000 hours average life at design operating conditions. Shaft is turned, ground and polished from solid steel. Fans and pulleys are keyed to shaft and designed for continuous operation at maximum motor horse power and fan speed. All rotating components and assemblies are statically and dynamically balanced and every unit is vibration tested before shipment from the factory.

Condenser fan

The fan is direct drive by weatherproof motor to ensure reliable continuous operation. Statically and dynamically balanced drive motor design with maintenance-free bearings for outdoor installation. The fan is multi-blade vane-axial type, made of metal material for quiet operation and durability.

Electronic thermostats

General information: A dedicated electronic thermostat is supplied with unit controls as standard. This thermostat controls one or two stage heating and cooling applications. The thermostat normally displays room temperature and mode of operation.

The temperature can be set by up/down buttons for both cooling and heating cycles. The thermostat also allows you to select continuous fan operation, or have the fan on intermittent operation with the equipment. It also displays the status of unit, thus providing maximum information for the end user.