RGS/RAS 181 & 210
SINGLE PACKAGE ROOFTOP
GAS HEATING/ELECTRIC COOLING UNIT
& COOLING ONLY/ELECTRIC HEAT UNIT
WITH R-410A REFRIGERANT

ELECTRICAL DATA SUPPLEMENT

FOR MODELS PRODUCED ON OR AFTER APRIL 18, 2016 ONLY!

NOTE: Read the entire instruction manual before starting the installation.

This supplement only applies to RGS/RAS 181 and 210 units manufactured on or after April 18, 2016. To confirm the date of manufacture of the unit, locate the unit nameplate and check the second thru fifth digits of the Serial Number. If the number listed in the 2nd thru 5th digits of the Serial Number is 1617 or higher KEEP THIS DOCUMENT and use it along with the furnished Installation Instructions. The Serial Number is located directly below the unit's Model Number.

SERIAL NUMBER NOMENCLATURE

Position:	1	**2**	**3**	**4**	**5**	6	7	8	9	10
Example:	X	**1**	**6**	**1**	**7**	1	2	3	4	5

Manufacturing Location

Year of Manufacture ("16" = 2016)

Week of Manufacture (fiscal calendar)

Sequence Number

C160051

SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing.

Follow all safety codes. Wear safety glasses and work gloves. Use quenching cloths for brazing operations and have a fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions attached to the unit. Consult local building codes and appropriate national electrical codes (in USA, ANSI/NFPA 70, National Electrical Code (NEC); in Canada, CSA C22.1) for special requirements.

It is important to recognize safety information. This is the safety-alert symbol ⚠. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, CAUTION, and NOTE. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices, which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

⚠ CAUTION

ELECTRICAL HAZARD

Failure to follow this caution may result in personal injury or product and property damage.

The electrical data contained in this document is only for use with RGS/RAS 181 and 210 units manufactured on or after April 18, 2016. Check the second thru fifth digits of the Serial Number. If the number listed in the 2nd thru 5th digits of the Serial Number is 1617 or higher, keep this document.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could cause personal injury or death.

Before performing service or maintenance operations on unit, always turn off main power switch to unit and install lockout tag. Unit may have more than one power switch.

Table 1 – RGS181 & 210 Units Wire/Fuse or HACR Breaker Sizing Data - Single-Speed Indoor Fan Motor

UNIT	NOM. V–Ph–Hz	IFM TYPE	NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
			NO P.E.				w/ P.E. (pwrd fr/ unit)				NO P.E.				w/ P.E. (pwrd fr/ unit)			
			MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
					FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
RGS181	208/230–3–60	STD	78.0/77.9	100/100	81/81	515	89.8/89.7	100/100	95/95	535	82.8/82.7	100/100	87/87	520	94.6/94.5	110/110	100/100	540
		MED	80.2	100	84	529	92.0	100	97	549	85.0	100	89	534	96.8	125	103	554
		HIGH	83.2/82.3	100/100	87/86	531	95.0/94.1	110/110	101/100	551	88.0/87.1	100/100	93/92	536	99.8/98.9	125/125	106/105	556
	460–3–60	STD	40.0	50	42	267	46.2	60	49	279	42.2	50	44	269	48.4	60	51	281
		MED	41.1	50	43	274	47.3	60	50	286	43.3	50	46	276	49.5	60	53	288
		HIGH	42.2	50	44	275	48.4	60	51	287	44.4	50	47	277	50.6	60	54	289
	575–3–60	STD	31.2	40	32	202	36.0	45	38	210	32.9	45	34	204	37.7	45	40	212
		MED	31.2	40	32	202	36.0	45	38	210	32.9	45	34	204	37.7	45	40	212
		HIGH	34.0	45	36	216	38.8	50	41	224	35.7	45	37	218	40.5	50	43	226
RGS210	208/230–3–60	STD	80.2	100	84	529	92.0	100	97	549	85.0	100	89	534	96.8	125	103	554
		MED	86.7	100	91	527	98.5	125	105	547	91.5	100	97	532	103.3	125	110	552
		HIGH–High Efficiency	86.7	100	91	527	98.5	125	105	547	91.5	100	97	532	103.3	125	110	552
	460–3–60	STD	41.1	50	43	274	47.3	60	50	286	43.3	50	46	276	49.5	60	53	288
		MED	44.4	50	47	273	50.6	60	54	285	46.6	60	49	275	52.8	60	56	287
		HIGH–High Efficiency	44.4	50	47	273	50.6	60	54	285	46.6	60	49	275	52.8	60	56	287
	575–3–60	STD	31.2	40	32	202	36.0	45	38	210	32.9	45	34	204	37.7	45	40	212
		MED	34.0	45	36	216	38.8	50	41	224	35.7	45	37	218	40.5	50	43	226
		HIGH–High Efficiency	36.0	45	38	214	40.8	50	43	222	37.7	45	40	216	42.5	50	45	224

See: “Legend and Notes for Tables 1 – 4” on page 8.

Table 2 – RGS181 & 210 Units Wire/Fuse or HACR Breaker Sizing Data - 2-Speed Indoor Fan Motor

UNIT	NOM. V–Ph–Hz	IFM TYPE	NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
			NO P.E.				w/ P.E. (pwrd fr/ unit)				NO P.E.				w/ P.E. (pwrd fr/ unit)			
			MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
					FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
RGS181	208/230–3–60	STD	78.2/77.4	100/100	81/81	496	90.0/89.2	100/100	95/94	516	83.0/82.2	100/100	87/86	501	94.8/94.0	110/110	101/100	521
		MED	80.4/79.4	100/100	84/83	520	92.2/91.2	100/100	98/96	540	85.2/84.2	100/100	89/88	525	97.0/96.0	125/125	103/102	545
		HIGH	83.2/82.3	100/100	87/86	531	95.0/94.1	110/110	101/100	551	88.0/87.1	100/100	93/92	536	99.8/98.9	125/125	106/105	556
	460–3–60	STD	39.6	50	41	258	45.8	60	48	270	41.8	50	44	260	48.0	60	51	272
		MED	40.7	50	43	270	46.9	60	50	282	42.9	50	45	272	49.1	60	52	284
		HIGH	42.2	50	44	275	48.4	60	51	287	44.4	50	47	277	50.6	60	54	289
	575–3–60	STD	32.9	45	34	202	37.7	45	40	210	34.6	45	36	204	39.4	50	42	212
		MED	32.9	45	34	202	37.7	45	40	210	34.6	45	36	204	39.4	50	42	212
		HIGH	34.6	45	36	216	39.4	50	42	224	36.3	45	38	218	41.1	50	44	226
RGS210	208/230–3–60	STD	80.4/79.4	100/100	84/83	520	92.2/91.2	100/100	98/96	540	85.2/84.2	100/100	89/88	525	97.0/96.0	125/125	103/102	545
		MED	83.2/82.3	100/100	87/86	531	95.0/94.1	110/110	101/100	551	88.0/87.1	100/100	93/92	536	99.8/98.9	125/125	106/105	556
		HIGH	86.7	100	91	527	98.5	125	105	547	91.5	100	97	532	103.3	125	110	552
	460–3–60	STD	40.7	50	43	270	46.9	60	50	282	42.9	50	45	272	49.1	60	52	284
		MED	42.2	50	44	275	48.4	60	51	287	44.4	50	47	277	50.6	60	54	289
		HIGH	44.4	50	47	273	50.6	60	54	285	46.6	60	49	275	52.8	60	56	287
	575–3–60	STD	32.9	45	34	202	37.7	45	40	210	34.6	45	36	204	39.4	50	42	212
		MED	34.6	45	36	216	39.4	50	42	224	36.3	45	38	218	41.1	50	44	226
		HIGH	36.0	45	38	214	40.8	50	43	222	37.7	45	40	216	42.5	50	45	224

See: “Legend and Notes for Tables 1 – 4” on page 8.

Table 3 – RAS181 & 210 Unit Wire/Fuse or HACR Breaker Sizing Data - Single-Speed Indoor Fan Motor

UNIT	NOM. V–Ph–Hz	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
RAS181	208/230–3–60	STD	NONE	–	–	78.0/77.9	100/100	81/81	515	89.8/89.7	100/100	95/95	535	82.8/82.7	100/100	87/87	520	94.6/94.5	110/110	100/100	540
			279A00	18.8/25.0	52.1/60.1	78.0/85.5	100/100	81/81	515/515	90.4/100.3	100/110	95/95	535/535	82.8/91.5	100/100	87/87	520/520	96.4/106.3	110/110	100/100	540/540
			280A00	37.6/50.0	104.2/120.3	140.8/130.7	150/150	129/148	515/515	155.5/145.4	175/175	143/161	535/535	146.8/136.7	150/150	135/153	520/520	161.5/151.4	175/175	149/167	540/540
			281A00	56.3/75.0	156.4/180.4	166.9/190.8	200/200	190/217	515/515	181.7/205.5	200/225	203/231	535/535	172.9/196.8	200/225	195/223	520/520	187.7/211.5	200/225	209/236	540/540
		MED	NONE	–	–	80.2	100	84	529	92.0	100	97	549	85.0	100	89	534	96.8	125	103	554
			279A00	18.8/25.0	52.1/60.1	80.2/88.4	100/100	84/84	529/529	93.1/103.1	100/110	97/97	549/549	85.0/94.4	100/100	89/89	534/534	99.1/109.1	125/125	103/103	554/554
			280A00	37.6/50.0	104.2/120.3	143.5/133.6	150/150	132/151	529/529	158.3/148.3	175/175	146/164	549/549	149.5/139.6	150/150	138/156	534/534	164.3/154.3	175/175	151/170	554/554
			281A00	56.3/75.0	156.4/180.4	169.7/193.7	200/225	192/220	529/529	184.4/208.4	200/225	206/233	549/549	175.7/199.7	200/225	198/225	534/534	190.4/214.4	200/225	211/239	554/554
		HIGH	NONE	–	–	83.2/82.3	100/100	87/86	531	95.0/94.1	110/110	101/100	551	88.0/87.1	100/100	93/92	536	99.8/98.9	125/125	106/105	556
			279A00	18.8/25.0	52.1/60.1	83.2/91.0	100/100	87/86	531/531	96.9/105.8	110/110	101/100	551/551	88.1/97.0	100/100	93/92	536/536	102.9/111.8	125/125	106/105	556/556
			280A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	531/531	162.0/150.9	175/175	149/167	551/551	153.3/142.2	175/175	141/158	536/536	168.0/156.9	175/175	155/172	556/556
			281A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	531/531	188.2/211.0	200/225	209/236	551/551	179.4/202.3	200/225	201/228	536/536	194.2/217.0	200/250	215/241	556/556
	460–3–60	STD	NONE	–	–	40.0	50	42	267	46.2	60	49	279	42.2	50	44	269	48.4	60	51	281
			282A00	25.0	30.1	42.9	50	42	267	50.6	60	49	279	45.6	50	44	269	53.4	60	51	281
			283A00	50.0	60.1	65.4	70	74	267	73.1	80	81	279	68.1	80	76	269	75.9	80	84	281
			284A00	75.0	90.2	95.5	100	109	267	103.2	110	116	279	98.2	100	111	269	106.0	110	118	281
		MED	NONE	–	–	41.1	50	43	274	47.3	60	50	286	43.3	50	46	276	49.5	60	53	288
			282A00	25.0	30.1	44.3	50	43	274	52.0	60	50	286	47.0	50	46	276	54.8	60	53	288
			283A00	50.0	60.1	66.7	80	75	274	74.5	80	82	286	69.5	80	78	276	77.2	80	85	288
			284A00	75.0	90.2	96.8	100	110	274	104.6	110	117	286	99.6	110	112	276	107.3	125	119	288
		HIGH	NONE	–	–	42.2	50	44	275	48.4	60	51	287	44.4	50	47	277	50.6	60	54	289
			282A00	25.0	30.1	45.6	50	44	275	53.4	60	51	287	48.4	50	47	277	56.1	60	54	289
			283A00	50.0	60.1	68.1	80	76	275	75.9	80	84	287	70.9	80	79	277	78.6	80	86	289
			284A00	75.0	90.2	98.2	100	111	275	106.0	125	118	287	101.0	110	114	277	108.7	125	121	289
	575–3–60	STD	NONE	–	–	31.2	40	32	202	36.0	45	38	210	32.9	45	34	204	37.7	45	40	212
			285A00	24.8	23.9	33.4	40	32	202	39.4	45	38	210	35.5	45	34	204	41.5	45	40	212
			286A00	49.6	47.7	63.1	70	58	202	69.1	70	64	210	65.3	70	60	204	71.3	80	66	212
			287A00	74.4	71.6	75.1	80	86	202	81.1	90	91	210	77.2	80	88	204	83.2	90	93	212
		MED	NONE	–	–	31.2	40	32	202	36.0	45	38	210	32.9	45	34	204	37.7	45	40	212
			285A00	24.8	23.9	33.4	40	32	202	39.4	45	38	210	35.5	45	34	204	41.5	45	40	212
			286A00	49.6	47.7	63.1	70	58	202	69.1	70	64	210	65.3	70	60	204	71.3	80	66	212
			287A00	74.4	71.6	75.1	80	86	202	81.1	90	91	210	77.2	80	88	204	83.2	90	93	212
		HIGH	NONE	–	–	34.0	45	36	216	38.8	50	41	224	35.7	45	37	218	40.5	50	43	226
			285A00	24.8	23.9	36.9	45	36	216	42.9	50	41	224	39.0	45	37	218	45.0	50	43	226
			286A00	49.6	47.7	66.6	70	61	216	72.6	80	67	224	68.8	70	63	218	74.8	80	69	226
			287A00	74.4	71.6	78.6	90	89	216	84.6	90	94	224	80.7	90	91	218	86.7	90	96	226

See: “Legend and Notes for Tables 1 – 4” on page 8.

Table 3 – RAS181 & 210 Unit Wire/Fuse or HACR Breaker Sizing Data – Single-Speed Indoor Fan Motor (cont.)

UNIT	NOM. V–Ph–Hz	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
RAS210	208/230–3–60	STD	NONE	–	–	80.2	100	84	529	92.0	100	97	549	85.0	100	89	534	96.8	125	103	554
			279A00	18.8/25.0	52.1/60.1	80.2/88.4	100/100	84/84	529/529	93.1/103.1	100/110	97/97	549/549	85.0/94.4	100/100	89/89	534/534	99.1/109.1	125/125	103/103	554/554
			280A00	37.6/50.0	104.2/120.3	143.5/133.6	150/150	132/151	529/529	158.3/148.3	175/175	146/164	549/549	149.5/139.6	150/150	138/156	534/534	164.3/154.3	175/175	151/170	554/554
			281A00	56.3/75.0	156.4/180.4	169.7/193.7	200/225	192/220	529/529	184.4/208.4	200/225	206/233	549/549	175.7/199.7	200/225	198/225	534/534	190.4/214.4	200/225	211/239	554/554
		MED	NONE	–	–	86.7	100	91	527	98.5	125	105	547	91.5	100	97	532	103.3	125	110	552
			279A00	18.8/25.0	52.1/60.1	86.7/96.5	100/100	91/91	527/527	101.3/111.3	125/125	105/105	547/547	92.5/102.5	100/110	97/97	532/532	107.3/117.3	125/125	110/110	552/552
			280A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	527/527	166.4/156.4	175/175	153/172	547/547	157.6/147.7	175/175	145/164	532/532	172.4/162.4	175/175	159/177	552/552
			281A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	527/527	192.5/216.5	200/250	213/241	547/547	183.8/207.8	200/225	205/233	532/532	198.5/222.5	200/250	219/246	552/552
		HIGH–High Efficiency	NONE	–	–	86.7	100	91	527	98.5	125	105	547	91.5	100	97	532	103.3	125	110	552
			279A00	18.8/25.0	52.1/60.1	86.7/96.5	100/100	91/91	527/527	101.3/111.3	125/125	105/105	547/547	92.5/102.5	100/110	97/97	532/532	107.3/117.3	125/125	110/110	552/552
			280A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	527/527	166.4/156.4	175/175	153/172	547/547	157.6/147.7	175/175	145/164	532/532	172.4/162.4	175/175	159/177	552/552
			281A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	527/527	192.5/216.5	200/250	213/241	547/547	183.8/207.8	200/225	205/233	532/532	198.5/222.5	200/250	219/246	552/552
	460–3–60	STD	NONE	–	–	41.1	50	43	274	47.3	60	50	286	43.3	50	46	276	49.5	60	53	288
			282A00	25.0	30.1	44.3	50	43	274	52.0	60	50	286	47.0	50	46	276	54.8	60	53	288
			283A00	50.0	60.1	66.7	80	75	274	74.5	80	82	286	69.5	80	78	276	77.2	80	85	288
			284A00	75.0	90.2	96.8	100	110	274	104.6	110	117	286	99.6	110	112	276	107.3	125	119	288
		MED	NONE	–	–	44.4	50	47	273	50.6	60	54	285	46.6	60	49	275	52.8	60	56	287
			282A00	25.0	30.1	48.4	50	47	273	56.1	60	54	285	51.1	60	49	275	58.9	60	56	287
			283A00	50.0	60.1	70.9	80	79	273	78.6	80	86	285	73.6	80	82	275	81.4	90	89	287
			284A00	75.0	90.2	101.0	110	114	273	108.7	125	121	285	103.7	125	116	275	111.5	125	123	287
		HIGH–High Efficiency	NONE	–	–	44.4	50	47	273	50.6	60	54	285	46.6	60	49	275	52.8	60	56	287
			282A00	25.0	30.1	48.4	50	47	273	56.1	60	54	285	51.1	60	49	275	58.9	60	56	287
			283A00	50.0	60.1	70.9	80	79	273	78.6	80	86	285	73.6	80	82	275	81.4	90	89	287
			284A00	75.0	90.2	101.0	110	114	273	108.7	125	121	285	103.7	125	116	275	111.5	125	123	287
	575–3–60	STD	NONE	–	–	31.2	40	32	202	36.0	45	38	210	32.9	45	34	204	37.7	45	40	212
			285A00	24.8	23.9	33.4	40	32	202	39.4	45	38	210	35.5	45	34	204	41.5	45	40	212
			286A00	49.6	47.7	63.1	70	58	202	69.1	70	64	210	65.3	70	60	204	71.3	80	66	212
			287A00	74.4	71.6	75.1	80	86	202	81.1	90	91	210	77.2	80	88	204	83.2	90	93	212
		MED	NONE	–	–	34.0	45	36	216	38.8	50	41	224	35.7	45	37	218	40.5	50	43	226
			285A00	24.8	23.9	36.9	45	36	216	42.9	50	41	224	39.0	45	37	218	45.0	50	43	226
			286A00	49.6	47.7	66.6	70	61	216	72.6	80	67	224	68.8	70	63	218	74.8	80	69	226
			287A00	74.4	71.6	78.6	90	89	216	84.6	90	94	224	80.7	90	91	218	86.7	90	96	226
		HIGH–High Efficiency	NONE	–	–	36.0	45	38	214	40.8	50	43	222	37.7	45	40	216	42.5	50	45	224
			285A00	24.8	23.9	39.4	45	38	214	45.4	50	43	222	41.5	45	40	216	47.5	50	45	224
			286A00	49.6	47.7	69.1	70	64	214	75.1	80	69	222	71.3	80	66	216	77.3	80	71	224
			287A00	74.4	71.6	81.1	90	91	214	87.1	90	97	222	83.2	90	93	216	89.2	90	99	224

See: “Legend and Notes for Tables 1 – 4” on page 8.

Table 4 – RAS181 & 210 Unit Wire/Fuse or HACR Breaker Sizing Data - 2-Speed Indoor Fan Motor

UNIT	NOM. V–Ph–Hz	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
RAS181	208/230–3–60	STD	NONE	–	–	78.2/77.4	100/100	81/81	496	90.0/89.2	100/100	95/94	516	83.0/82.2	100/100	87/86	501	94.8/94.0	110/110	101/100	521
			279A00	18.8/25.0	52.1/60.1	78.2/84.9	100/100	81/81	496/496	90.6/99.6	100/100	95/94	516/516	83.0/90.9	100/100	87/86	501/501	96.6/105.6	110/110	101/100	521/521
			280A00	37.6/50.0	104.2/120.3	141.0/130.1	150/150	130/147	496/496	155.8/144.8	175/150	143/161	516/516	147.0/136.1	150/150	135/153	501/501	161.8/150.8	175/175	149/166	521/521
			281A00	56.3/75.0	156.4/180.4	167.2/190.2	200/200	190/216	496/496	181.9/204.9	200/225	203/230	516/516	173.2/196.2	200/225	195/222	501/501	187.9/210.9	200/225	209/236	521/521
		MED	NONE	–	–	80.4/79.4	100/100	84/83	520	92.2/91.2	100/100	98/96	540	85.2/84.2	100/100	89/88	525	97.0/96.0	125/125	103/102	545
			279A00	18.8/25.0	52.1/60.1	80.4/87.4	100/100	84/83	520/520	93.4/102.1	100/110	98/96	540/540	85.2/93.4	100/100	89/88	525/525	99.4/108.1	125/125	103/102	545/545
			280A00	37.6/50.0	104.2/120.3	143.8/132.6	150/150	132/150	520/520	158.5/147.3	175/175	146/163	540/540	149.8/138.6	150/150	138/155	525/525	164.5/153.3	175/175	151/169	545/545
			281A00	56.3/75.0	156.4/180.4	169.9/192.7	200/225	192/219	520/520	184.7/207.4	200/225	206/232	540/540	175.9/198.7	200/225	198/224	525/525	190.7/213.4	200/225	211/238	545/545
		HIGH	NONE	–	–	83.2/82.3	100/100	87/86	531	95.0/94.1	110/110	101/100	551	88.0/87.1	100/100	93/92	536	99.8/98.9	125/125	106/105	556
			279A00	18.8/25.0	52.1/60.1	83.2/91.0	100/100	87/86	531/531	96.9/105.8	110/110	101/100	551/551	88.1/97.0	100/100	93/92	536/536	102.9/111.8	125/125	106/105	556/556
			280A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	531/531	162.0/150.9	175/175	149/167	551/551	153.3/142.2	175/175	141/158	536/536	168.0/156.9	175/175	155/172	556/556
			281A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	531/531	188.2/211.0	200/225	209/236	551/551	179.4/202.3	200/225	201/228	536/536	194.2/217.0	200/250	215/241	556/556
	460–3–60	STD	NONE	–	–	39.6	50	41	258	45.8	60	48	270	41.8	50	44	260	48.0	60	51	272
			282A00	25.0	30.1	42.4	50	41	258	50.1	60	48	270	45.1	50	44	260	52.9	60	51	272
			283A00	50.0	60.1	64.9	70	73	258	72.6	80	81	270	67.6	80	76	260	75.4	80	83	272
			284A00	75.0	90.2	95.0	100	108	258	102.7	110	115	270	97.7	100	111	260	105.5	110	118	272
		MED	NONE	–	–	40.7	50	43	270	46.9	60	50	282	42.9	50	45	272	49.1	60	52	284
			282A00	25.0	30.1	43.8	50	43	270	51.5	60	50	282	46.5	50	45	272	54.3	60	52	284
			283A00	50.0	60.1	66.2	80	75	270	74.0	80	82	282	69.0	80	77	272	76.7	80	84	284
			284A00	75.0	90.2	96.3	100	109	270	104.1	110	116	282	99.1	100	112	272	106.8	110	119	284
		HIGH	NONE	–	–	42.2	50	44	275	48.4	60	51	287	44.4	50	47	277	50.6	60	54	289
			282A00	25.0	30.1	45.6	50	44	275	53.4	60	51	287	48.4	50	47	277	56.1	60	54	289
			283A00	50.0	60.1	68.1	80	76	275	75.9	80	84	287	70.9	80	79	277	78.6	80	86	289
			284A00	75.0	90.2	98.2	100	111	275	106.0	125	118	287	101.0	110	114	277	108.7	125	121	289
	575–3–60	STD	NONE	–	–	32.9	45	34	202	37.7	45	40	210	34.6	45	36	204	39.4	50	42	212
			285A00	24.8	23.9	35.5	45	34	202	41.5	45	40	210	37.6	45	36	204	43.6	50	42	212
			286A00	49.6	47.7	65.3	70	60	202	71.3	80	66	210	67.4	70	62	204	73.4	80	68	212
			287A00	74.4	71.6	77.2	90	88	202	83.2	90	93	210	79.4	90	89	204	85.4	90	95	212
		MED	NONE	–	–	32.9	45	34	202	37.7	45	40	210	34.6	45	36	204	39.4	50	42	212
			285A00	24.8	23.9	35.5	45	34	202	41.5	45	40	210	37.6	45	36	204	43.6	50	42	212
			286A00	49.6	47.7	65.3	70	60	202	71.3	80	66	210	67.4	70	62	204	73.4	80	68	212
			287A00	74.4	71.6	77.2	90	88	202	83.2	90	93	210	79.4	90	89	204	85.4	90	95	212
		HIGH	NONE	–	–	34.6	45	36	216	39.4	50	42	224	36.3	45	38	218	41.1	50	44	226
			285A00	24.8	23.9	37.6	45	36	216	43.6	50	42	224	39.8	45	38	218	45.8	50	44	226
			286A00	49.6	47.7	67.4	70	62	216	73.4	80	68	224	69.5	70	64	218	75.5	80	69	226
			287A00	74.4	71.6	79.4	90	89	216	85.4	90	95	224	81.5	90	91	218	87.5	90	97	226

See: “Legend and Notes for Tables 1 – 4” on page 8.

Table 4 – RAS181 & 210 Unit Wire/Fuse or HACR Breaker Sizing Data – 2-Speed Indoor Fan Motor (cont.)

UNIT	NOM. V–Ph–Hz	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
RAS210	208/230–3–60	STD	NONE	–	–	80.4/79.4	100/100	84/83	520	92.2/91.2	100/100	98/96	540	85.2/84.2	100/100	89/88	525	97.0/96.0	125/125	103/102	545
			279A00	18.8/25.0	52.1/60.1	80.4/87.4	100/100	84/83	520/520	93.4/102.1	100/110	98/96	540/540	85.2/93.4	100/100	89/88	525/525	99.4/108.1	125/125	103/102	545/545
			280A00	37.6/50.0	104.2/120.3	143.8/132.6	150/150	132/150	520/520	158.5/147.3	175/175	146/163	540/540	149.8/138.6	150/150	138/155	525/525	164.5/153.3	175/175	151/169	545/545
			281A00	56.3/75.0	156.4/180.4	169.9/192.7	200/225	192/219	520/520	184.7/207.4	200/225	206/232	540/540	175.9/198.7	200/225	198/224	525/525	190.7/213.4	200/225	211/238	545/545
		MED	NONE	–	–	83.2/82.3	100/100	87/86	531	95.0/94.1	110/110	101/100	551	88.0/87.1	100/100	93/92	536	99.8/98.9	125/125	106/105	556
			279A00	18.8/25.0	52.1/60.1	83.2/91.0	100/100	87/86	531/531	96.9/105.8	110/110	101/100	551/551	88.1/97.0	100/100	93/92	536/536	102.9/111.8	125/125	106/105	556/556
			280A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	531/531	162.0/150.9	175/175	149/167	551/551	153.3/142.2	175/175	141/158	536/536	168.0/156.9	175/175	155/172	556/556
			281A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	531/531	188.2/211.0	200/225	209/236	551/551	179.4/202.3	200/225	201/228	536/536	194.2/217.0	200/250	215/241	556/556
		HIGH	NONE	–	–	86.7	100	91	527	98.5	125	105	547	91.5	100	97	532	103.3	125	110	552
			279A00	18.8/25.0	52.1/60.1	86.7/96.5	100/100	91/91	527/527	101.3/111.3	125/125	105/105	547/547	92.5/102.5	100/110	97/97	532/532	107.3/117.3	125/125	110/110	552/552
			280A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	527/527	166.4/156.4	175/175	153/172	547/547	157.6/147.7	175/175	145/164	532/532	172.4/162.4	175/175	159/177	552/552
			281A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	527/527	192.5/216.5	200/250	213/241	547/547	183.8/207.8	200/225	205/233	532/532	198.5/222.5	200/250	219/246	552/552
	460–3–60	STD	NONE	–	–	40.7	50	43	270	46.9	60	50	282	42.9	50	45	272	49.1	60	52	284
			282A00	25.0	30.1	43.8	50	43	270	51.5	60	50	282	46.5	50	45	272	54.3	60	52	284
			283A00	50.0	60.1	66.2	80	75	270	74.0	80	82	282	69.0	80	77	272	76.7	80	84	284
			284A00	75.0	90.2	96.3	100	109	270	104.1	110	116	282	99.1	100	112	272	106.8	110	119	284
		MED	NONE	–	–	42.2	50	44	275	48.4	60	51	287	44.4	50	47	277	50.6	60	54	289
			282A00	25.0	30.1	45.6	50	44	275	53.4	60	51	287	48.4	50	47	277	56.1	60	54	289
			283A00	50.0	60.1	68.1	80	76	275	75.9	80	84	287	70.9	80	79	277	78.6	80	86	289
			284A00	75.0	90.2	98.2	100	111	275	106.0	125	118	287	101.0	110	114	277	108.7	125	121	289
		HIGH	NONE	–	–	44.4	50	47	273	50.6	60	54	285	46.6	60	49	275	52.8	60	56	287
			282A00	25.0	30.1	48.4	50	47	273	56.1	60	54	285	51.1	60	49	275	58.9	60	56	287
			283A00	50.0	60.1	70.9	80	79	273	78.6	80	86	285	73.6	80	82	275	81.4	90	89	287
			284A00	75.0	90.2	101.0	110	114	273	108.7	125	121	285	103.7	125	116	275	111.5	125	123	287
	575–3–60	STD	NONE	–	–	32.9	45	34	202	37.7	45	40	210	34.6	45	36	204	39.4	50	42	212
			285A00	24.8	23.9	35.5	45	34	202	41.5	45	40	210	37.6	45	36	204	43.6	50	42	212
			286A00	49.6	47.7	65.3	70	60	202	71.3	80	66	210	67.4	70	62	204	73.4	80	68	212
			287A00	74.4	71.6	77.2	90	88	202	83.2	90	93	210	79.4	90	89	204	85.4	90	95	212
		MED	NONE	–	–	34.6	45	36	216	39.4	50	42	224	36.3	45	38	218	41.1	50	44	226
			285A00	24.8	23.9	37.6	45	36	216	43.6	50	42	224	39.8	45	38	218	45.8	50	44	226
			286A00	49.6	47.7	67.4	70	62	216	73.4	80	68	224	69.5	70	64	218	75.5	80	69	226
			287A00	74.4	71.6	79.4	90	89	216	85.4	90	95	224	81.5	90	91	218	87.5	90	97	226
		HIGH	NONE	–	–	36.0	45	38	214	40.8	50	43	222	37.7	45	40	216	42.5	50	45	224
			285A00	24.8	23.9	39.4	45	38	214	45.4	50	43	222	41.5	45	40	216	47.5	50	45	224
			286A00	49.6	47.7	69.1	70	64	214	75.1	80	69	222	71.3	80	66	216	77.3	80	71	224
			287A00	74.4	71.6	81.1	90	91	214	87.1	90	97	222	83.2	90	93	216	89.2	90	99	224

See: “Legend and Notes for Tables 1 – 4” on page 8.

Legend and Notes for Tables 1 – 4

LEGEND:

BRKR	–	Circuit breaker
C.O.	–	Convenience outlet
DISC	–	Disconnect
FLA	–	Full load amps
IFM	–	Indoor fan motor
LRA	–	Locked rotor amps
MCA	–	Minimum circuit amps
P.E.	–	Power exhaust
pwrd fr/ unit	–	Powered from unit
PWRD C.O.	–	Powered convenience outlet
UNPWR C.O.	–	Unpowered convenience outlet

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. For 208/230 v units, where one value is shown it is the same for either 208 or 230 volts.
3. **Unbalanced 3-Phase Supply Voltage**
   Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

$$\%\ \text{Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 230-3-60

AB = 224 v
BC = 231 v
AC = 226 v

$$\text{Average Voltage} = \frac{(224 + 231 + 226)}{3} = \frac{681}{3}$$

$$= 227$$

Determine maximum deviation from average voltage.
(AB) 227 – 224 = 3 v
(BC) 231 – 227 = 4 v
(AC) 227 – 226 = 1 v
Maximum deviation is 4 v.
Determine percent of voltage imbalance.

$$\%\ \text{Voltage Imbalance} = 100 \times \frac{4}{227}$$

$$= 1.76\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.