RGH/RAH 181–303
SINGLE PACKAGE ROOFTOP
GAS HEATING/ELECTRIC COOLING UNIT
& COOLING ONLY/ELECTRIC HEAT UNIT
WITH R–410A REFRIGERANT

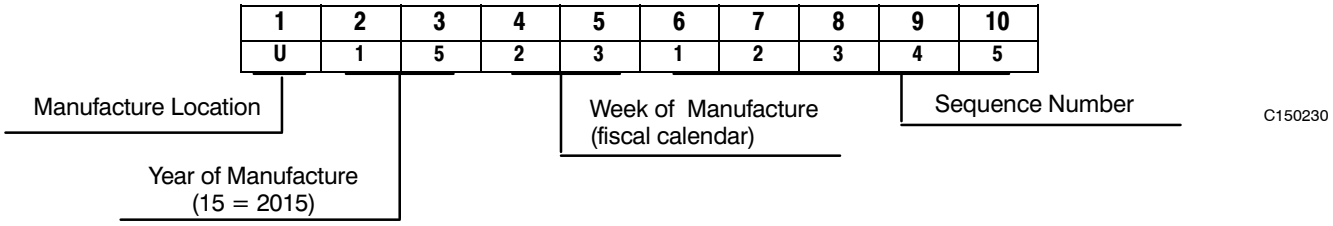
ELECTRICAL DATA SUPPLEMENT

FOR MODELS PRODUCED ON OR AFTER JUNE 1, 2015 ONLY!

NOTE: Read the entire instruction manual before starting the installation

This supplement only applies to RGH/RAH181–303 units manufactured on or after June 1, 2015. To confirm the date of manufacture of a RGH/RAH 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 1523 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



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/NFPA70, 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 RGH/RAH 181–303 units manufactured on or after June 1, 2015. 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 1523 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 – RGH181 – 303 Unit 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.							
			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	
					FLA	LRA			FLA	LRA
RGH181 & 183	208/230–3–60	STD	68.3	90	71	393	80.1	100	85	413
		MED	71.4	90	75	423	83.2	100	88	443
		HIGH	74.4/73.5	90/90	78/77	425	86.2/85.3	100/100	92/91	445
	460–3–60	STD	34.9	45	36	234	41.1	50	44	246
		MED	36.8	45	39	249	43.0	50	46	261
		HIGH	37.9	50	40	250	44.1	50	47	262
	575–3–60	STD	26.2	30	27	184	31.0	40	33	192
		MED	26.2	30	27	184	31.0	40	33	192
		HIGH	29.0	35	31	198	33.8	40	36	206
RGH210 & 213	208/230–3–60	STD	75.7	100	79	440	87.5	100	93	460
		MED	79.1/78.2	100/100	83/82	455	90.9/90.0	100/100	97/96	475
		HIGH–High Efficiency	82.6	100	87	451	94.4	110	101	471
	460–3–60	STD	36.6	45	38	245	42.8	50	46	257
		MED	38.2	50	40	252	44.4	50	47	264
		HIGH–High Efficiency	40.4	50	43	250	46.6	50	50	262
	575–3–60	STD	26.2	30	27	186	31.0	40	33	194
		MED	29.0	35	31	200	33.8	40	36	208
		HIGH–High Efficiency	31.0	40	33	198	35.8	45	38	206
RGH240 & 243	208/230–3–60	STD	90.8	100	96	546	102.6	125	109	566
		MED–High Efficiency	90.8	100	96	546	102.6	125	109	566
		HIGH–High Efficiency	102.2	125	109	625	114.0	125	122	645
	460–3–60	STD	49.8	60	52	278	56.0	70	60	290
		MED–High Efficiency	49.8	60	52	278	56.0	70	60	290
		HIGH–High Efficiency	55.5	60	59	318	61.7	70	66	330
	575–3–60	STD	35.5	45	37	204	40.3	50	43	212
		MED–High Efficiency	37.5	45	40	202	42.3	50	45	210
		HIGH–High Efficiency	39.4	50	42	229	44.2	50	47	237
RGH300 & 303 [1]	208/230–3–60	STD	116.0/115.1	150/150	120/119	590	127.8/126.9	175/175	133/132	610
		MED–High Efficiency	119.5	150	124	586	131.3	175	137	606
		HIGH–High Efficiency	130.9	175	137	665	142.7	175	150	685
	460–3–60	STD	53.0	60	56	306	59.2	70	63	318
		MED–High Efficiency	55.2	60	58	304	61.4	70	65	316
		HIGH–High Efficiency	60.9	70	65	344	67.1	80	72	356
	575–3–60	STD	40.4	50	42	228	45.2	50	48	236
		MED–High Efficiency	42.4	50	45	226	47.2	60	50	234
		HIGH–High Efficiency	44.3	50	47	253	49.1	60	52	261

[1] – STD static is not available on RGH300 & 303 horizontal.

See: Legend and Notes for Tables 1 – 4 on page 12.

Table 2 – RGH181 – 303 Unit 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.							
			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	
					FLA	LRA			FLA	LRA
RGH181 & 183	208/230–3–60	STD	69.4/68.6	90/90	73/72	390	81.2/80.4	100/100	86/85	410
		MED	71.6/70.6	90/90	75/74	414	83.4/82.4	100/100	89/88	434
		HIGH	74.4/73.5	90/90	78/77	425	86.2/85.3	100/100	92/91	445
	460–3–60	STD	35.3	45	37	233	41.5	50	44	245
		MED	36.4	45	38	245	42.6	50	45	257
		HIGH	37.9	50	40	250	44.1	50	47	262
	575–3–60	STD	27.9	35	29	184	32.7	40	35	192
		MED	27.9	35	29	184	32.7	40	35	192
		HIGH	29.6	35	31	198	34.4	40	37	206
RGH210 & 213	208/230–3–60	STD	76.3/75.3	100/100	80/79	444	88.1/87.1	100/100	93/92	464
		MED	79.1/78.2	100/100	83/82	455	90.9/90.0	100/100	97/96	475
		HIGH	82.6	100	87	451	94.4	110	101	471
	460–3–60	STD	36.7	45	39	247	42.9	50	46	259
		MED	38.2	50	40	252	44.4	50	47	264
		HIGH	40.4	50	43	250	46.6	50	50	262
	575–3–60	STD	27.9	35	29	186	32.7	40	35	194
		MED	29.6	35	31	200	34.4	40	37	208
		HIGH	31.0	40	33	198	35.8	45	38	206
RGH240 & 243	208/230–3–60	STD	87.3/86.4	100/100	92/91	550	99.1/98.2	125/125	105/104	570
		MED	90.8	100	96	546	102.6	125	109	566
		HIGH	102.2	125	109	625	114.0	125	122	645
	460–3–60	STD	47.6	60	50	280	53.8	60	57	292
		MED	49.8	60	52	278	56.0	70	60	290
		HIGH	55.5	60	59	318	61.7	70	66	330
	575–3–60	STD	36.1	45	38	204	40.9	50	43	212
		MED	37.5	45	40	202	42.3	50	45	210
		HIGH	39.4	50	42	229	44.2	50	47	237
RGH300 & 303 [1]	208/230–3–60	STD	116.0/115.1	150/150	120/119	590	127.8/126.9	175/175	133/132	610
		MED	119.5	150	124	586	131.3	175	137	606
		HIGH	130.9	175	137	665	142.7	175	150	685
	460–3–60	STD	53.0	60	56	306	59.2	70	63	318
		MED	55.2	60	58	304	61.4	70	65	316
		HIGH	60.9	70	65	344	67.1	80	72	356
	575–3–60	STD	41.0	50	43	228	45.8	60	48	236
		MED	42.4	50	45	226	47.2	60	50	234
		HIGH	44.3	50	47	253	49.1	60	52	261

[1] – STD static is not available on RGH300 & 303 horizontal.

See: Legend and Notes for Tables 1 – 4 on page 12.

Table 3 – RAH181 – 303 Unit Wire/Fuse or HACR Breaker Sizing Data – Single Speed Indoor Fan Motor

UNIT	NO M. V–Ph–HZ	IFM-TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00 VERT/HZ	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA
RAH181 & 183	208/230–3–60	STD	NONE	–	–	68.3	90	71	393	80.1	100	85	413
			279/270A00	18.8/25.0	52.1/60.1	74.5/84.5	90/90	71/78	393/393	89.3/99.3	100/100	85/91	413/413
			280/271A00	37.6/50.0	104.2/120.3	139.6/129.7	150/150	128/147	393/393	154.4/144.4	175/150	142/161	413/413
			281/272A00	56.3/75.0	156.4/180.4	165.8/189.8	175/200	188/216	393/393	180.5/204.5	200/225	202/230	413/413
		MED	NONE	–	–	71.4	90	75	423	83.2	100	88	443
			279/270A00	18.8/25.0	52.1/60.1	78.4/88.4	90/90	75/81	423/423	93.1/103.1	100/110	88/95	443/443
			280/271A00	37.6/50.0	104.2/120.3	143.5/133.6	150/150	132/151	423/423	158.3/148.3	175/175	146/164	443/443
			281/272A00	56.3/75.0	156.4/180.4	169.7/193.7	200/225	192/220	423/423	184.4/208.4	200/225	206/233	443/443
		HIGH	NONE	–	–	74.4/73.5	90/90	78/77	425	86.2/85.3	100/100	92/91	445
			279/270A00	18.8/25.0	52.1/60.1	82.1/91.0	90/100	78/84	425/425	96.9/105.8	100/110	92/97	445/445
			280/271A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	425/425	162.0/150.9	175/175	149/167	445/445
			281/272A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	425/425	188.2/211.0	200/225	209/236	445/445
	460–3–60	STD	NONE	–	–	34.9	45	36	234	41.1	50	44	246
			282/273A00	25.0	30.1	41.9	45	39	234	49.6	50	46	246
			283/274A00	50.0	60.1	64.4	70	73	234	72.1	80	80	246
			284/275A00	75.0	90.2	94.5	100	108	234	102.2	110	115	246
		MED	NONE	–	–	36.8	45	39	249	43.0	50	46	261
			282/273A00	25.0	30.1	44.3	45	41	249	52.0	60	48	261
			283/274A00	50.0	60.1	66.7	80	75	249	74.5	80	82	261
			284/275A00	75.0	90.2	96.8	100	110	249	104.6	110	117	261
		HIGH	NONE	–	–	37.9	50	40	250	44.1	50	47	262
			282/273A00	25.0	30.1	45.6	50	42	250	53.4	60	49	262
			283/274A00	50.0	60.1	68.1	80	76	250	75.9	80	84	262
			284/275A00	75.0	90.2	98.2	100	111	250	106.0	125	118	262
	575–3–60	STD	NONE	–	–	26.2	30	27	184	31.0	40	33	192
			285/276A00	24.8	23.9	33.4	35	31	184	39.4	40	36	192
			286/277A00	49.6	47.7	63.1	70	58	184	69.1	70	64	192
			287/278A00	74.4	71.6	75.1	80	86	184	81.1	90	91	192
		MED	NONE	–	–	26.2	30	27	184	31.0	40	33	192
			285/276A00	24.8	23.9	33.4	35	31	184	39.4	40	36	192
			286/277A00	49.6	47.7	63.1	70	58	184	69.1	70	64	192
			287/278A00	74.4	71.6	75.1	80	86	184	81.1	90	91	192
		HIGH	NONE	–	–	29.0	35	31	198	33.8	40	36	206
			285/276A00	24.8	23.9	36.9	40	34	198	42.9	45	39	206
			286/277A00	49.6	47.7	66.6	70	61	198	72.6	80	67	206
			287/278A00	74.4	71.6	78.6	90	89	198	84.6	90	94	206

See: Legend and Notes for Tables 1 – 4 on page 12.

Table 3 – RAH181 – 303 Unit Wire/Fuse or HACR Breaker Sizing Data – Single Speed Indoor Fan Motor (cont)

UNIT	NO M. V–Ph–HZ	IFM-TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00 VERT/HZ	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA
RAH210 & 213	208/230–3–60	STD	NONE	–	–	75.7	100	79	440	87.5	100	93	460
			279/270A00	18.8/25.0	52.1/60.1	77.9/87.9	100/100	79/81	440/440	92.6/102.6	100/110	93/94	460/460
			280/271A00	37.6/50.0	104.2/120.3	143.0/133.1	150/150	132/150	440/440	157.8/147.8	175/175	145/164	460/460
			281/272A00	56.3/75.0	156.4/180.4	169.2/193.2	200/225	192/219	440/440	183.9/207.9	200/225	205/233	460/460
		MED	NONE	–	–	79.1/78.2	100/100	83/82	455	90.9/90.0	100/100	97/96	475
			279/270A00	18.8/25.0	52.1/60.1	82.1/91.0	100/100	83/84	455/455	96.9/105.8	100/110	97/97	475/475
			280/271A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	455/455	162.0/150.9	175/175	149/167	475/475
			281/272A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	455/455	188.2/211.0	200/225	209/236	475/475
		HIGH–High Effi-ciency	NONE	–	–	82.6	100	87	451	94.4	110	101	471
			279/270A00	18.8/25.0	52.1/60.1	86.5/96.5	100/100	87/89	451/451	101.3/111.3	110/125	101/102	471/471
			280/271A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	451/451	166.4/156.4	175/175	153/172	471/471
			281/272A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	451/451	192.5/216.5	200/250	213/241	471/471
	460–3–60	STD	NONE	–	–	36.6	45	38	245	42.8	50	46	257
			282/273A00	25.0	30.1	43.6	45	40	245	51.4	60	47	257
			283/274A00	50.0	60.1	66.1	80	75	245	73.9	80	82	257
			284/275A00	75.0	90.2	96.2	100	109	245	104.0	110	116	257
		MED	NONE	–	–	38.2	50	40	252	44.4	50	47	264
			282/273A00	25.0	30.1	45.6	50	42	252	53.4	60	49	264
			283/274A00	50.0	60.1	68.1	80	76	252	75.9	80	84	264
			284/275A00	75.0	90.2	98.2	100	111	252	106.0	125	118	264
		HIGH–High Effi-ciency	NONE	–	–	40.4	50	43	250	46.6	50	50	262
			282/273A00	25.0	30.1	48.4	50	45	250	56.1	60	52	262
			283/274A00	50.0	60.1	70.9	80	79	250	78.6	80	86	262
			284/275A00	75.0	90.2	101.0	110	114	250	108.7	125	121	262
	575–3–60	STD	NONE	–	–	26.2	30	27	186	31.0	40	33	194
			285/276A00	24.8	23.9	33.4	35	31	186	39.4	40	36	194
			286/277A00	49.6	47.7	63.1	70	58	186	69.1	70	64	194
			287/278A00	74.4	71.6	75.1	80	86	186	81.1	90	91	194
		MED	NONE	–	–	29.0	35	31	200	33.8	40	36	208
			285/276A00	24.8	23.9	36.9	40	34	200	42.9	45	39	208
			286/277A00	49.6	47.7	66.6	70	61	200	72.6	80	67	208
			287/278A00	74.4	71.6	78.6	90	89	200	84.6	90	94	208
		HIGH–High Effi-ciency	NONE	–	–	31.0	40	33	198	35.8	45	38	206
			285/276A00	24.8	23.9	39.4	40	36	198	45.4	50	42	206
			286/277A00	49.6	47.7	69.1	70	64	198	75.1	80	69	206
			287/278A00	74.4	71.6	81.1	90	91	198	87.1	90	97	206

See: Legend and Notes for Tables 1 – 4 on page 12.

Table 3 – RAH181 – 303 Unit Wire/Fuse or HACR Breaker Sizing Data – Single Speed Indoor Fan Motor (cont)

UNIT	NO M. V–Ph–HZ	IFM-TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00 VERT/HZ	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA
RAH240 & 243	208/230–3–60	STD	NONE	–	–	90.8	100	96	546	102.6	125	109	566
			279/270A00	18.8/25.0	52.1/60.1	90.8/96.5	100/100	96/96	546/546	102.6/111.3	125/125	109/109	566/566
			280/271A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	546/546	166.4/156.4	175/175	153/172	566/566
			281/272A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	546/546	192.5/216.5	200/250	213/241	566/566
		MED–High Efficiency	NONE	–	–	90.8	100	96	546	102.6	125	109	566
			279/270A00	18.8/25.0	52.1/60.1	90.8/96.5	100/100	96/96	546/546	102.6/111.3	125/125	109/109	566/566
			280/271A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	546/546	166.4/156.4	175/175	153/172	566/566
			281/272A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	546/546	192.5/216.5	200/250	213/241	566/566
		HIGH–High Efficiency	NONE	–	–	102.2	125	109	625	114.0	125	122	645
			279/270A00	18.8/25.0	52.1/60.1	102.2/110.8	125/125	109/109	625/625	115.5/125.5	125/150	122/122	645/645
			280/271A00	37.6/50.0	104.2/120.3	165.9/155.9	175/175	153/171	625/625	180.6/170.7	200/175	166/185	645/645
			281/272A00	56.3/75.0	156.4/180.4	192.0/216.0	200/250	213/240	625/625	206.8/230.8	225/250	226/254	645/645
	460–3–60	STD	NONE	–	–	49.8	60	52	278	56.0	70	60	290
			282/273A00	25.0	30.1	49.8	60	52	278	56.1	70	60	290
			283/274A00	50.0	60.1	70.9	80	79	278	78.6	80	86	290
			284/275A00	75.0	90.2	101.0	110	114	278	108.7	125	121	290
		MED–High Efficiency	NONE	–	–	49.8	60	52	278	56.0	70	60	290
			282/273A00	25.0	30.1	49.8	60	52	278	56.1	70	60	290
			283/274A00	50.0	60.1	70.9	80	79	278	78.6	80	86	290
			284/275A00	75.0	90.2	101.0	110	114	278	108.7	125	121	290
		HIGH–High Efficiency	NONE	–	–	55.5	60	59	318	61.7	70	66	330
			282/273A00	25.0	30.1	55.5	60	59	318	63.3	70	66	330
			283/274A00	50.0	60.1	78.0	90	86	318	85.7	90	93	330
			284/275A00	75.0	90.2	108.1	125	120	318	115.8	125	127	330
	575–3–60	STD	NONE	–	–	35.5	45	37	204	40.3	50	43	212
			285/276A00	24.8	23.9	36.9	45	37	204	42.9	50	43	212
			286/277A00	49.6	47.7	66.6	70	61	204	72.6	80	67	212
			287/278A00	74.4	71.6	78.6	90	89	204	84.6	90	94	212
		MED–High Efficiency	NONE	–	–	37.5	45	40	202	42.3	50	45	210
			285/276A00	24.8	23.9	39.4	45	40	202	45.4	50	45	210
			286/277A00	49.6	47.7	69.1	70	64	202	75.1	80	69	210
			287/278A00	74.4	71.6	81.1	90	91	202	87.1	90	97	210
		HIGH–High Efficiency	NONE	–	–	39.4	50	42	229	44.2	50	47	237
			285/276A00	24.8	23.9	41.8	50	42	229	47.8	50	47	237
			286/277A00	49.6	47.7	71.5	80	66	229	77.5	80	71	237
			287/278A00	74.4	71.6	83.5	90	93	229	89.5	100	99	237

See: Legend and Notes for Tables 1 – 4 on page 12.

Table 3 – RAH181 – 303 Unit Wire/Fuse or HACR Breaker Sizing Data – Single Speed Indoor Fan Motor (cont)

UNIT	NO M. V–Ph–HZ	IFM-TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00 VERT/HZ	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA
RAH300 & 303	208/230–3–60	STD	NONE	–	–	116.0/115.1	150/150	120/119	590	127.8/126.9	175/175	133/132	610
			279/270A00	18.8/25.0	52.1/60.1	116.0/115.1	150/150	120/119	590/590	127.8/126.9	175/175	133/132	610/610
			280/271A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	590/590	162.0/150.9	175/175	149/167	610/610
			281/272A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	590/590	188.2/211.0	200/225	209/236	610/610
		MED–High Efficiency	NONE	–	–	119.5	150	124	586	131.3	175	137	606
			279/270A00	18.8/25.0	52.1/60.1	119.5/119.5	150/150	124/124	586/586	131.3/131.3	175/175	137/137	606/606
			280/271A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	586/586	166.4/156.4	175/175	153/172	606/606
			281/272A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	586/586	192.5/216.5	200/250	213/241	606/606
		HIGH–High Efficiency	NONE	–	–	130.9	175	137	665	142.7	175	150	685
			279/270A00	18.8/25.0	52.1/60.1	130.9/130.9	175/175	137/137	665/665	142.7/142.7	175/175	150/150	685/685
			280/271A00	37.6/50.0	104.2/120.3	165.9/155.9	175/175	153/171	665/665	180.6/170.7	200/175	166/185	685/685
			281/272A00	56.3/75.0	156.4/180.4	192.0/216.0	200/250	213/240	665/665	206.8/230.8	225/250	226/254	685/685
	460–3–60	STD	NONE	–	–	53.0	60	56	306	59.2	70	63	318
			282/273A00	25.0	30.1	53.0	60	56	306	59.2	70	63	318
			283/274A00	50.0	60.1	68.1	80	76	306	75.9	80	84	318
			284/275A00	75.0	90.2	98.2	100	111	306	106.0	125	118	318
		MED–High Efficiency	NONE	–	–	55.2	60	58	304	61.4	70	65	316
			282/273A00	25.0	30.1	55.2	60	58	304	61.4	70	65	316
			283/274A00	50.0	60.1	70.9	80	79	304	78.6	80	86	316
			284/275A00	75.0	90.2	101.0	110	114	304	108.7	125	121	316
		HIGH–High Efficiency	NONE	–	–	60.9	70	65	344	67.1	80	72	356
			282/273A00	25.0	30.1	60.9	70	65	344	67.1	80	72	356
			283/274A00	50.0	60.1	78.0	90	86	344	85.7	90	93	356
			284/275A00	75.0	90.2	108.1	125	120	344	115.8	125	127	356
	575–3–60	STD	NONE	–	–	40.4	50	42	228	45.2	50	48	236
			285/276A00	24.8	23.9	40.4	50	42	228	45.2	50	48	236
			286/277A00	49.6	47.7	66.6	70	61	228	72.6	80	67	236
			287/278A00	74.4	71.6	78.6	90	89	228	84.6	90	94	236
		MED–High Efficiency	NONE	–	–	42.4	50	45	226	47.2	60	50	234
			285/276A00	24.8	23.9	42.4	50	45	226	47.2	60	50	234
			286/277A00	49.6	47.7	69.1	70	64	226	75.1	80	69	234
			287/278A00	74.4	71.6	81.1	90	91	226	87.1	90	97	234
		HIGH–High Efficiency	NONE	–	–	44.3	50	47	253	49.1	60	52	261
			285/276A00	24.8	23.9	44.3	50	47	253	49.1	60	52	261
			286/277A00	49.6	47.7	71.5	80	66	253	77.5	80	71	261
			287/278A00	74.4	71.6	83.5	90	93	253	89.5	100	99	261

See: Legend and Notes for Tables 1 – 4 on page 12.

Table 4 – RAH181 – 303 Unit Wire/Fuse or HACR Breaker Sizing Data – 2–Speed Indoor Fan Motor

UNIT	NO M. V–Ph–HZ	IFM-TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00 VERT/HZ	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA
RAH181 & 183	208/230–3–60	STD	NONE	–	–	69.4/68.6	90/90	73/72	390	81.2/80.4	100/100	86/85	410
			279/270A00	18.8/25.0	52.1/60.1	75.9/84.9	90/90	73/78	390/390	90.6/99.6	100/100	86/92	410/410
			280/271A00	37.6/50.0	104.2/120.3	141.0/130.1	150/150	130/147	390/390	155.8/144.8	175/150	143/161	410/410
			281/272A00	56.3/75.0	156.4/180.4	167.2/190.2	200/200	190/216	390/390	181.9/204.9	200/225	203/230	410/410
		MED	NONE	–	–	71.6/70.6	90/90	75/74	414	83.4/82.4	100/100	89/88	434
			279/270A00	18.8/25.0	52.1/60.1	78.6/87.4	90/90	75/80	414/414	93.4/102.1	100/110	89/94	434/434
			280/271A00	37.6/50.0	104.2/120.3	143.8/132.6	150/150	132/150	414/414	158.5/147.3	175/175	146/163	434/434
			281/272A00	56.3/75.0	156.4/180.4	169.9/192.7	200/225	192/219	414/414	184.7/207.4	200/225	206/232	434/434
		HIGH	NONE	–	–	74.4/73.5	90/90	78/77	425	86.2/85.3	100/100	92/91	445
			279/270A00	18.8/25.0	52.1/60.1	82.1/91.0	90/100	78/84	425/425	96.9/105.8	100/110	92/97	445/445
			280/271A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	425/425	162.0/150.9	175/175	149/167	445/445
			281/272A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	425/425	188.2/211.0	200/225	209/236	445/445
	460–3–60	STD	NONE	–	–	35.3	45	37	233	41.5	50	44	245
			282/273A00	25.0	30.1	42.4	45	39	233	50.1	60	46	245
			283/274A00	50.0	60.1	64.9	70	73	233	72.6	80	81	245
			284/275A00	75.0	90.2	95.0	100	108	233	102.7	110	115	245
		MED	NONE	–	–	36.4	45	38	245	42.6	50	45	257
			282/273A00	25.0	30.1	43.8	45	40	245	51.5	60	47	257
			283/274A00	50.0	60.1	66.2	80	75	245	74.0	80	82	257
			284/275A00	75.0	90.2	96.3	100	109	245	104.1	110	116	257
		HIGH	NONE	–	–	37.9	50	40	250	44.1	50	47	262
			282/273A00	25.0	30.1	45.6	50	42	250	53.4	60	49	262
			283/274A00	50.0	60.1	68.1	80	76	250	75.9	80	84	262
			284/275A00	75.0	90.2	98.2	100	111	250	106.0	125	118	262
	575–3–60	STD	NONE	–	–	27.9	35	29	184	32.7	40	35	192
			285/276A00	24.8	23.9	35.5	40	33	184	41.5	45	38	192
			286/277A00	49.6	47.7	65.3	70	60	184	71.3	80	66	192
			287/278A00	74.4	71.6	77.2	90	88	184	83.2	90	93	192
		MED	NONE	–	–	27.9	35	29	184	32.7	40	35	192
			285/276A00	24.8	23.9	35.5	40	33	184	41.5	45	38	192
			286/277A00	49.6	47.7	65.3	70	60	184	71.3	80	66	192
			287/278A00	74.4	71.6	77.2	90	88	184	83.2	90	93	192
		HIGH	NONE	–	–	29.6	35	31	198	34.4	40	37	206
			285/276A00	24.8	23.9	37.6	40	35	198	43.6	45	40	206
			286/277A00	49.6	47.7	67.4	70	62	198	73.4	80	68	206
			287/278A00	74.4	71.6	79.4	90	89	198	85.4	90	95	206

See: Legend and Notes for Tables 1 – 4 on page 12.

Table 4 – RAH181 – 303 Unit Wire/Fuse or HACR Breaker Sizing Data – 2–Speed Indoor Fan Motor (cont)

UNIT	NO M. V–Ph–HZ	IFM-TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00 VERT/HZ	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA
RAH210 & 213	208/230–3–60	STD	NONE	–	–	76.3/75.3	100/100	80/79	444	88.1/87.1	100/100	93/92	464
			279/270A00	18.8/25.0	52.1/60.1	78.6/87.4	100/100	80/80	444/444	93.4/102.1	100/110	93/94	464/464
			280/271A00	37.6/50.0	104.2/120.3	143.8/132.6	150/150	132/150	444/444	158.5/147.3	175/175	146/163	464/464
			281/272A00	56.3/75.0	156.4/180.4	169.9/192.7	200/225	192/219	444/444	184.7/207.4	200/225	206/232	464/464
		MED	NONE	–	–	79.1/78.2	100/100	83/82	455	90.9/90.0	100/100	97/96	475
			279/270A00	18.8/25.0	52.1/60.1	82.1/91.0	100/100	83/84	455/455	96.9/105.8	100/110	97/97	475/475
			280/271A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	455/455	162.0/150.9	175/175	149/167	475/475
			281/272A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	455/455	188.2/211.0	200/225	209/236	475/475
		HIGH	NONE	–	–	82.6	100	87	451	94.4	110	101	471
			279/270A00	18.8/25.0	52.1/60.1	86.5/96.5	100/100	87/89	451/451	101.3/111.3	110/125	101/102	471/471
			280/271A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	451/451	166.4/156.4	175/175	153/172	471/471
			281/272A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	451/451	192.5/216.5	200/250	213/241	471/471
	460–3–60	STD	NONE	–	–	36.7	45	39	247	42.9	50	46	259
			282/273A00	25.0	30.1	43.8	45	40	247	51.5	60	47	259
			283/274A00	50.0	60.1	66.2	80	75	247	74.0	80	82	259
			284/275A00	75.0	90.2	96.3	100	109	247	104.1	110	116	259
		MED	NONE	–	–	38.2	50	40	252	44.4	50	47	264
			282/273A00	25.0	30.1	45.6	50	42	252	53.4	60	49	264
			283/274A00	50.0	60.1	68.1	80	76	252	75.9	80	84	264
			284/275A00	75.0	90.2	98.2	100	111	252	106.0	125	118	264
		HIGH	NONE	–	–	40.4	50	43	250	46.6	50	50	262
			282/273A00	25.0	30.1	48.4	50	45	250	56.1	60	52	262
			283/274A00	50.0	60.1	70.9	80	79	250	78.6	80	86	262
			284/275A00	75.0	90.2	101.0	110	114	250	108.7	125	121	262
	575–3–60	STD	NONE	–	–	27.9	35	29	186	32.7	40	35	194
			285/276A00	24.8	23.9	35.5	40	33	186	41.5	45	38	194
			286/277A00	49.6	47.7	65.3	70	60	186	71.3	80	66	194
			287/278A00	74.4	71.6	77.2	90	88	186	83.2	90	93	194
		MED	NONE	–	–	29.6	35	31	200	34.4	40	37	208
			285/276A00	24.8	23.9	37.6	40	35	200	43.6	45	40	208
			286/277A00	49.6	47.7	67.4	70	62	200	73.4	80	68	208
			287/278A00	74.4	71.6	79.4	90	89	200	85.4	90	95	208
		HIGH	NONE	–	–	31.0	40	33	198	35.8	45	38	206
			285/276A00	24.8	23.9	39.4	40	36	198	45.4	50	42	206
			286/277A00	49.6	47.7	69.1	70	64	198	75.1	80	69	206
			287/278A00	74.4	71.6	81.1	90	91	198	87.1	90	97	206

See: Legend and Notes for Tables 1 – 4 on page 12.

Table 4 – RAH181 – 303 Unit Wire/Fuse or HACR Breaker Sizing Data – 2–Speed Indoor Fan Motor (cont)

UNIT	NO M. V–Ph–HZ	IFM-TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00 VERT/HZ	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA
RAH240 & 243	208/230–3–60	STD	NONE	–	–	87.3/86.4	100/100	92/91	550	99.1/98.2	125/125	105/104	570
			279/270A00	18.8/25.0	52.1/60.1	87.3/91.0	100/100	92/91	550/550	99.1/105.8	125/125	105/104	570/570
			280/271A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	550/550	162.0/150.9	175/175	149/167	570/570
			281/272A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	550/550	188.2/211.0	200/225	209/236	570/570
		MED	NONE	–	–	90.8	100	96	546	102.6	125	109	566
			279/270A00	18.8/25.0	52.1/60.1	90.8/96.5	100/100	96/96	546/546	102.6/111.3	125/125	109/109	566/566
			280/271A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	546/546	166.4/156.4	175/175	153/172	566/566
			281/272A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	546/546	192.5/216.5	200/250	213/241	566/566
		HIGH	NONE	–	–	102.2	125	109	625	114.0	125	122	645
			279/270A00	18.8/25.0	52.1/60.1	102.2/110.8	125/125	109/109	625/625	115.5/125.5	125/150	122/122	645/645
			280/271A00	37.6/50.0	104.2/120.3	165.9/155.9	175/175	153/171	625/625	180.6/170.7	200/175	166/185	645/645
			281/272A00	56.3/75.0	156.4/180.4	192.0/216.0	200/250	213/240	625/625	206.8/230.8	225/250	226/254	645/645
	460–3–60	STD	NONE	–	–	47.6	60	50	280	53.8	60	57	292
			282/273A00	25.0	30.1	47.6	60	50	280	53.8	60	57	292
			283/274A00	50.0	60.1	68.1	80	76	280	75.9	80	84	292
			284/275A00	75.0	90.2	98.2	100	111	280	106.0	125	118	292
		MED	NONE	–	–	49.8	60	52	278	56.0	70	60	290
			282/273A00	25.0	30.1	49.8	60	52	278	56.1	70	60	290
			283/274A00	50.0	60.1	70.9	80	79	278	78.6	80	86	290
			284/275A00	75.0	90.2	101.0	110	114	278	108.7	125	121	290
		HIGH	NONE	–	–	55.5	60	59	318	61.7	70	66	330
			282/273A00	25.0	30.1	55.5	60	59	318	63.3	70	66	330
			283/274A00	50.0	60.1	78.0	90	86	318	85.7	90	93	330
			284/275A00	75.0	90.2	108.1	125	120	318	115.8	125	127	330
	575–3–60	STD	NONE	–	–	36.1	45	38	204	40.9	50	43	212
			285/276A00	24.8	23.9	37.6	45	38	204	43.6	50	43	212
			286/277A00	49.6	47.7	67.4	70	62	204	73.4	80	68	212
			287/278A00	74.4	71.6	79.4	90	89	204	85.4	90	95	212
		MED	NONE	–	–	37.5	45	40	202	42.3	50	45	210
			285/276A00	24.8	23.9	39.4	45	40	202	45.4	50	45	210
			286/277A00	49.6	47.7	69.1	70	64	202	75.1	80	69	210
			287/278A00	74.4	71.6	81.1	90	91	202	87.1	90	97	210
		HIGH	NONE	–	–	39.4	50	42	229	44.2	50	47	237
			285/276A00	24.8	23.9	41.8	50	42	229	47.8	50	47	237
			286/277A00	49.6	47.7	71.5	80	66	229	77.5	80	71	237
			287/278A00	74.4	71.6	83.5	90	93	229	89.5	100	99	237

See: Legend and Notes for Tables 1 – 4 on page 12.

Table 4 – RAH181 – 303 Unit Wire/Fuse or HACR Breaker Sizing Data – 2–Speed Indoor Fan Motor (cont)

UNIT	NO M. V–Ph–HZ	IFM-TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER ***A00 VERT/HZ	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA
RAH300 & 303	208/230–3–60	STD	NONE	–	–	116.0/115.1	150/150	120/119	590	127.8/126.9	175/175	133/132	610
			279/270A00	18.8/25.0	52.1/60.1	116.0/115.1	150/150	120/119	590/590	127.8/126.9	175/175	133/132	610/610
			280/271A00	37.6/50.0	104.2/120.3	147.3/136.2	150/150	135/153	590/590	162.0/150.9	175/175	149/167	610/610
			281/272A00	56.3/75.0	156.4/180.4	173.4/196.3	200/225	196/222	590/590	188.2/211.0	200/225	209/236	610/610
		MED	NONE	–	–	119.5	150	124	586	131.3	175	137	606
			279/270A00	18.8/25.0	52.1/60.1	119.5/119.5	150/150	124/124	586/586	131.3/131.3	175/175	137/137	606/606
			280/271A00	37.6/50.0	104.2/120.3	151.6/141.7	175/175	139/158	586/586	166.4/156.4	175/175	153/172	606/606
			281/272A00	56.3/75.0	156.4/180.4	177.8/201.8	200/225	200/227	586/586	192.5/216.5	200/250	213/241	606/606
		HIGH	NONE	–	–	130.9	175	137	665	142.7	175	150	685
			279/270A00	18.8/25.0	52.1/60.1	130.9/130.9	175/175	137/137	665/665	142.7/142.7	175/175	150/150	685/685
			280/271A00	37.6/50.0	104.2/120.3	165.9/155.9	175/175	153/171	665/665	180.6/170.7	200/175	166/185	685/685
			281/272A00	56.3/75.0	156.4/180.4	192.0/216.0	200/250	213/240	665/665	206.8/230.8	225/250	226/254	685/685
	460–3–60	STD	NONE	–	–	53.0	60	56	306	59.2	70	63	318
			282/273A00	25.0	30.1	53.0	60	56	306	59.2	70	63	318
			283/274A00	50.0	60.1	68.1	80	76	306	75.9	80	84	318
			284/275A00	75.0	90.2	98.2	100	111	306	106.0	125	118	318
		MED	NONE	–	–	55.2	60	58	304	61.4	70	65	316
			282/273A00	25.0	30.1	55.2	60	58	304	61.4	70	65	316
			283/274A00	50.0	60.1	70.9	80	79	304	78.6	80	86	316
			284/275A00	75.0	90.2	101.0	110	114	304	108.7	125	121	316
		HIGH	NONE	–	–	60.9	70	65	344	67.1	80	72	356
			282/273A00	25.0	30.1	60.9	70	65	344	67.1	80	72	356
			283/274A00	50.0	60.1	78.0	90	86	344	85.7	90	93	356
			284/275A00	75.0	90.2	108.1	125	120	344	115.8	125	127	356
	575–3–60	STD	NONE	–	–	41.0	50	43	228	45.8	60	48	236
			285/276A00	24.8	23.9	41.0	50	43	228	45.8	60	48	236
			286/277A00	49.6	47.7	67.4	70	62	228	73.4	80	68	236
			287/278A00	74.4	71.6	79.4	90	89	228	85.4	90	95	236
		MED	NONE	–	–	42.4	50	45	226	47.2	60	50	234
			285/276A00	24.8	23.9	42.4	50	45	226	47.2	60	50	234
			286/277A00	49.6	47.7	69.1	70	64	226	75.1	80	69	234
			287/278A00	74.4	71.6	81.1	90	91	226	87.1	90	97	234
		HIGH	NONE	–	–	44.3	50	47	253	49.1	60	52	261
			285/276A00	24.8	23.9	44.3	50	47	253	49.1	60	52	261
			286/277A00	49.6	47.7	71.5	80	66	253	77.5	80	71	261
			287/278A00	74.4	71.6	83.5	90	93	253	89.5	100	99	261

See: Legend and Notes for Tables 1 – 4 on page 12.

Legend and Notes for Tables 1 – 4

LEGEND:

BRKR	–	Circuit breaker
CO	–	Convenience outlet
DISC	–	Disconnect
FLA	–	Full load amps
IFM	–	Indoor fan motor
LRA	–	Locked rotor amps
MCA	–	Minimum circuit amps
MOCP	–	MAX FUSE or HACR Breaker
PE	–	Power exhaust
PWRD CO	–	Powered convenient 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. **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.