

**48/50TC 3 to 6 Nominal Tons  
Single Package Rooftop  
Gas Heating/Electric Cooling Unit  
& Cooling Only/Electric Heat Unit  
with Puron® (R-410A) Refrigerant  
Sizes: 04-07**



## Electrical Data Supplement

**FOR MODELS PRODUCED ON OR AFTER MAY 18, 2015 ONLY!**

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

This supplement only applies to 48/50TC size 04 to 07 units manufactured on or after May 18, 2015. To confirm the date of manufacture of the unit, locate the unit nameplate and check the first four digits of the Serial Number which is located directly below the unit's Model Number at the top of the nameplate. If the number listed in the first 4 digits of the Serial Number is 2115 or higher KEEP THIS DOCUMENT and use it along with the furnished Installation Instructions.

### SERIAL NUMBER NOMENCLATURE

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


  

Week of manufacture (fiscal calendar)	Sequence number
Year of manufacture ("15" = 2015)	Manufacturing location

### 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.

C150230

### 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 48/50TC size 04 to 07 units manufactured on or after May 18, 2015. Check the first 4 digits of the unit's Serial Number (located on the unit's nameplate) if the number listed is 2115 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 – 48TC 04-07 Unit Wire/Fuse or HACR Breaker Sizing Data

UNIT	NOM. V-Ph-Hz	IFM TYPE	NO C.O. or UNPWR C.O.						w/ PWRD C.O.							
			NO PE.			w/ P.E. (pwrd fr/ unit)			NO PE.			w/ P.E. (pwrd fr/ unit)				
			MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA		
48TC**04	208/230-3-60	DD-STD	21	30	21	83	23	30	23	85	26	88	28	30	28	90
		STD	20	30	20	96	22	30	22	98	25	101	27	30	27	103
		MED	20	30	20	96	22	30	22	98	25	101	27	30	27	103
	460-3-60	HIGH	20	30	20	107	22	30	22	109	25	112	27	30	27	114
		STD	11	15	11	49	12	15	12	50	13	51	14	20	14	52
		MED	11	15	11	49	12	15	12	50	13	51	14	20	14	52
48TC**05	208/230-1-60	HIGH	11	15	11	55	12	15	56	13	57	14	20	14	58	
		STD	8	15	8	46	10	15	10	48	10	48	12	15	12	50
		MED	8	15	8	46	10	15	10	48	10	48	12	15	12	50
	208/230-3-60	HIGH	8	15	7	50	10	15	10	52	9	52	11	15	12	54
		STD	34	50	32	133	36	50	35	135	39	135	45	50	32	100
		MED	34	50	32	133	36	50	35	135	39	135	45	50	32	100
48TC**05	208/230-3-60	DD-STD	25	30	24	93	27	30	27	95	30	98	32	45	32	100
		STD	24	30	23	106	26	30	26	108	29	111	31	40	31	113
		MED	24	30	23	106	26	30	26	108	29	111	31	40	31	113
	460-3-60	HIGH	24	30	23	117	26	30	26	119	29	122	31	40	31	124
		STD	12	15	11	52	13	15	12	53	14	54	15	20	15	55
		MED	12	15	11	52	13	15	12	53	14	54	15	20	15	55
575-3-60	HIGH	9	15	9	42	11	15	11	44	11	44	13	15	13	46	
	STD	9	15	9	42	11	15	11	44	11	44	13	15	13	46	
	MED	9	15	9	42	11	15	11	44	11	44	13	15	13	46	

See: "Legend and Notes for Tables 1 and 2" on page 8.

**Table 1 - 48TC 04-07 Unit Wire/Fuse or HACR Breaker Sizing Data (cont)**

UNIT	NOM. V-Ph-Hz	IFM TYPE	NO C.O. or UNPWR C.O.						w/ PWRD C.O.									
			NO PE.			w/ P.E. (pwrdr fr/ unit)			NO PE.			w/ P.E. (pwrdr fr/ unit)						
			MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA				
48TC**06	208/230-3-60	DD-STD	29	40	28	122	31	45	31	124	34	45	34	127	36	50	36	129
		STD	27	40	26	133	29	40	28	135	31	45	31	138	33	45	33	140
		MED	28/28	40/40	28/27	171	30/30	45/45	30/30	173	33/33	45/45	33/33	176	35/35	50/50	35/35	178
		HIGH	29	40	28	170	31	45	30	172	34	45	34	175	36	50	36	177
	STD	13	20	13	63	14	20	14	64	16	20	15	65	17	20	16	16	66
	MED	14	20	14	82	15	20	15	83	16	20	16	84	17	20	17	17	85
	HIGH	14	20	14	82	15	20	15	83	16	20	16	84	17	20	17	17	85
	STD	11	15	10	48	13	15	12	50	12	15	12	50	14	20	14	14	52
	MED	10	15	10	52	12	15	12	54	12	15	12	54	14	15	14	14	56
	HIGH	11	15	11	63	13	15	13	65	13	15	13	65	15	20	15	15	67
	STD	32	50	30	170	34	50	32	172	36	50	36	175	38	50	38	50	177
	MED	35/35	50/50	34/34	212	37/37	50/50	36/36	214	40/40	50/50	39/39	217	42/41	60/60	42/42	219	
HIGH	37	50	36	226	39	50	39	228	42	60	42	231	44	60	44	233		
STD	14	20	13	83	15	20	14	84	16	20	16	85	17	25	17	17	86	
MED	16	20	15	104	17	20	16	105	18	25	18	106	19	25	19	19	107	
HIGH	17	20	16	111	18	25	18	112	19	25	19	113	20	25	20	20	114	
STD	11	15	11	68	13	15	13	70	13	15	13	70	15	20	15	15	72	
MED	12	15	12	79	14	20	14	81	14	20	14	81	16	20	16	16	83	
HIGH	12	15	12	79	14	20	14	81	14	20	14	81	16	20	16	16	83	

See: "Legend and Notes for Tables 1 and 2" on page 8.

**Table 2 – 50TC 04-07 Unit Wire/Fuse or HACR Breaker Sizing Data**

UNIT	NO M, V-PH-HZ	IFM-TYPE	ELEC. HTR		NO C.O. or UNPWR C.O.										W/ PWRD C.O.									
			CRHEATER**A00	Nom (kW)	FLA	NO RE.			w/ P.E. (pwrdr fr/unit)			NO RE.			w/ PWRD C.O.			w/ RE. (pwrdr fr/unit)						
						MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA							
50TC**04		DD-STD	NONE	-	-	21	30	21	83	23	23	85	26	30	26	88	28	30	28	90				
			101A	3.3/4.4	9.2/10.6	21/21	83/83	23/23	85/85	26/27	30/30	23/23	85/85	26/27	30/30	26/26	88/88	28/30	30/30	27/27	103/103			
			102A	4.9/6.5	13.6/15.6	23/25	83/83	27/30	83/83	25/27	30/30	25/27	85/85	31/33	30/30	28/30	88/88	33/36	35/40	30/33	90/90			
			103B	6.5/8.7	18.1/20.9	28/31	83/83	33/36	83/83	30/33	35/40	30/33	85/85	37/40	40/40	33/36	88/88	39/42	40/45	35/39	90/90			
			104B	7.9/10.5	21.9/25.3	32/36	83/83	38/42	83/83	34/38	40/45	34/38	85/85	41/46	45/50	38/42	88/88	44/48	45/50	40/44	90/90			
			105A	12.0/16.0	33.4/38.5	45/51	83/83	52/58	83/83	47/53	60/60	47/53	85/85	56/62	60/70	51/57	88/88	58/64	60/70	53/59	90/90			
			NONE	-	-	20	30	20	96	22	22	98	25	25	30	25	101	27	30	27	103			
			101A	3.3/4.4	9.2/10.6	20/20	96/96	22/23	96/96	22/22	30/30	22/22	98/98	25/26	30/30	25/25	101/101	27/29	30/30	27/27	103/103			
			102A	4.9/6.5	13.6/15.6	24/26	96/96	26/29	96/96	24/26	30/30	24/26	98/98	30/32	30/32	30/35	101/101	32/35	35/35	29/32	103/103			
			103B	6.5/8.7	18.1/20.9	30/33	96/96	32/35	96/96	29/32	35/40	29/32	98/98	36/39	40/40	32/36	101/101	38/41	40/45	35/38	103/103			
104B	7.9/10.5	21.9/25.3	34/39	96/96	37/41	96/96	33/37	40/45	33/37	98/98	40/45	40/45	37/41	101/101	43/47	45/50	39/43	103/103						
105A	12.0/16.0	33.4/38.5	44/50	96/96	51/57	96/96	47/52	60/60	47/52	98/98	55/61	60/70	50/56	101/101	57/63	60/70	52/58	103/103						
460-3-60		STD	NONE	-	-	20	30	20	107	22	22	109	25	30	25	112	27	30	27	114				
			101A	3.3/4.4	9.2/10.6	20/20	107/107	22/23	107/107	22/22	30/30	22/22	109/109	25/26	30/30	25/25	112/112	27/29	30/30	27/27	114/114			
			102A	4.9/6.5	13.6/15.6	24/26	107/107	26/29	107/107	24/26	30/30	24/26	109/109	30/32	30/35	27/29	112/112	32/35	35/35	29/32	114/114			
			103B	6.5/8.7	18.1/20.9	30/33	107/107	32/35	107/107	29/32	35/40	29/32	109/109	36/39	40/40	32/36	112/112	38/41	40/45	35/38	114/114			
			104B	7.9/10.5	21.9/25.3	34/39	107/107	37/41	107/107	33/37	40/45	33/37	109/109	40/45	40/45	37/41	112/112	43/47	45/50	39/43	114/114			
			105A	12.0/16.0	33.4/38.5	44/50	107/107	51/57	107/107	47/52	60/60	47/52	109/109	55/61	60/70	50/56	112/112	57/63	60/70	52/58	114/114			
			NONE	-	-	11	15	11	49	12	12	50	13	13	15	15	51	14	20	14	52			
			106A	6.0	7.2	11	49	14	49	12	15	12	50	15	15	15	51	17	20	15	52			
			107A	8.8	10.6	17	49	18	49	16	20	16	50	20	20	20	51	21	25	19	52			
			108A	11.5	13.8	21	49	22	49	20	25	20	50	24	25	25	51	25	25	23	52			
109A	14.0	16.8	25	49	26	49	23	30	23	50	27	30	30	51	29	30	26	52						
575-3-60		STD	NONE	-	-	8	15	8	46	10	10	48	10	15	10	48	12	15	12					
			106A	6.0	7.2	11	49	14	49	12	15	12	50	15	15	51	17	20	15	52				
			107A	8.8	10.6	17	49	18	49	16	20	16	50	20	20	51	21	25	19	52				
			108A	11.5	13.8	21	49	22	49	20	25	20	50	24	25	25	51	25	25	23	52			
			109A	14.0	16.8	25	49	26	49	23	30	23	50	27	30	30	51	29	30	26	52			
			NONE	-	-	11	15	11	55	12	12	56	13	13	15	15	57	14	20	14	58			
			106A	6.0	7.2	13	55	14	55	12	15	12	56	15	15	15	57	17	20	15	58			
			107A	8.8	10.6	17	55	18	55	16	20	16	56	20	20	20	57	21	25	19	58			
			108A	11.5	13.8	21	55	22	55	20	25	20	56	24	25	25	57	25	25	23	58			
			109A	14.0	16.8	25	55	26	55	23	30	23	56	27	30	30	57	29	30	26	58			

See: "Legend and Notes for Tables 1 and 2" on page 8.



**Table 2 - 50TC 04-07 Unit Wire/Fuse or HACR Breaker Sizing Data (cont)**

UNIT	NO M, V - Ph - HZ	ELEC. HTR					NO C.O. or UNPWR C.O.					w/ PWRD C.O.								
		IFM-TYPE	CRHEATER**A00	Nom (kW)	FLA	MCA	NO PE.		w/ P.E. (pwrdr fr/unit)		NO PE.		w/ P.E. (pwrdr fr/unit)							
							MAX FUSE or BRKR	DISC. SIZE	FLA	LRA	MAX FUSE or BRKR	MCA	DISC. SIZE	FLA	LRA	MAX FUSE or BRKR	MCA	DISC. SIZE	FLA	LRA
50TC**06		DD-STD	NONE	-	-	29	40	28	122	31	34	45	34	127	36	50	36	129		
			102A	4.9/6.5	13.6/15.6	28/28	40/40	28/28	133/133	31/31	124/124	31/31	34/34	45/45	34/34	127/127	36/36	50/50	129/129	
		STD	104B	7.9/10.5	21.9/25.3	34/38	40/45	34/38	122/122	36/40	124/124	36/40	45/50	39/43	127/127	46/50	50/50	42/46	129/129	
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	133/133	51/57	135/135	55/61	60/70	53/59	138/138	60/70	60/70	55/61	129/129	
			104B+104B	15.8/21.0	43.8/50.5	59/67	70/80	56/64	133/133	64/72	135/135	68/76	70/80	80/80	138/138	70/80	80/80	67/75	129/129	
			104B+105A	19.9/26.5	55.2/63.8	72/82	80/90	69/79	133/133	78/89	135/135	82/93	90/100	90/100	138/138	84/95	90/100	80/90	129/129	
		MED	NONE	-	-	28/28	40/40	28/27	171	30/30	173	33/33	45/45	33/33	176	35/35	50/50	35/35	178	
			102A	4.9/6.5	13.6/15.6	28/27	40/40	28/27	171/171	30/31	173/173	33/34	45/45	33/33	176/176	35/37	50/50	35/35	178/178	
			104B	7.9/10.5	21.9/25.3	36/40	40/45	33/37	171/171	39/43	173/173	42/46	45/50	39/42	176/176	45/49	50/50	41/45	178/178	
			105A	12.0/16.0	33.4/38.5	46/52	50/60	46/52	171/171	53/59	173/173	57/63	60/70	52/58	176/176	59/65	60/70	54/60	178/178	
		HIGH	104B+104B	15.8/21.0	43.8/50.5	64/72	70/80	58/66	171/171	66/74	173/173	70/78	70/80	80/80	176/176	72/80	80/80	66/73	178/178	
			104B+105A	19.9/26.5	55.2/63.8	78/89	80/90	71/81	171/171	80/91	173/173	84/95	90/100	90/100	176/176	86/97	90/100	79/89	178/178	
		460-3-60		STD	NONE	-	-	13	20	13	63	14	16	20	15	65	20	20	16	66
					106A	6.0	7.2	13	20	13	63	14	64	16	20	15	65	17	20	16
MED	108A			11.5	13.8	21	25	19	83	22	83	24	25	25	84	26	25	23	85	
	109A			14.0	16.8	25	25	22	83	26	83	27	30	30	84	29	30	26	86	
	108A+108A			23.0	27.7	38	40	35	83	40	83	41	45	45	84	42	45	39	86	
	108A+109A			25.5	30.7	42	45	38	83	43	83	44	45	45	84	46	45	42	86	
HIGH	NONE			-	-	14	20	14	82	15	83	16	20	16	84	17	20	17	85	
	106A			6.0	7.2	14	20	14	82	15	83	16	20	16	84	18	20	17	85	
	108A			11.5	13.8	22	25	20	82	23	83	25	25	25	84	26	30	23	85	
	109A			14.0	16.8	26	30	23	82	27	83	28	30	30	84	30	30	27	85	
STD	108A+108A			23.0	27.7	39	40	36	82	41	83	42	45	45	84	43	45	39	85	
	108A+109A			25.5	30.7	43	45	39	82	44	83	46	50	50	84	47	50	43	85	
575-3-60				NONE	-	-	11	15	10	48	12	50	12	15	12	50	14	20	14	52
				106A	6.0	7.2	10	15	10	48	12	50	12	15	12	50	14	20	14	56
		108A	11.5	13.8	11	15	11	63	13	65	13	15	15	65	15	20	15	67		
		109A	14.0	16.8	11	15	11	63	13	65	13	15	15	65	15	20	15	67		

See: "Legend and Notes for Tables 1 and 2" on page 8.

**Table 2 - 50TC 04-07 Unit Wire/Fuse or HACR Breaker Sizing Data (cont)**

UNIT	NO M, V-PH-HZ	ELEC. HTR			NO C.O. or UNPWR C.O.						NO PE.						w/ PWRD C.O.											
		IFM-TYPE	CRHEATER**A00	Nom (kW)	FLA	NO PE.		DISC. SIZE		MCA	MAX FUSE or HACR BRKR	MCA	DISC. SIZE		MAX FUSE or HACR BRKR	MCA	DISC. SIZE		MAX FUSE or HACR BRKR	MCA	DISC. SIZE							
						FLA	BRKR	FLA	LRA				FLA	LRA			FLA	LRA			FLA	LRA	FLA	LRA				
50TC*07		STD	NONE	-	-	32	50	30	170	34	50	32	172	36	50	36	175	38	50	38	177	38	177					
			102A	4.9/6.5	13.6/15.6	32/32	50/50	30/30	170/170	34/34	50/50	32/32	172/172	36/36	175/175	38/38	50/50	36/36	175/175	38/38	50/50	38/38	177/177	38/38	177/177			
			104B	7.9/10.5	21.9/25.3	34/39	50/50	31/35	170/170	37/41	50/50	33/37	172/172	40/45	175/175	43/47	50/50	37/41	175/175	43/47	50/50	39/43	43/47	177/177	43/47	177/177		
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	170/170	51/57	60/60	47/52	172/172	55/61	175/175	57/63	60/70	50/56	175/175	57/63	60/70	52/58	57/63	177/177	57/63	177/177		
			104B+104B	15.8/21.0	43.8/50.5	62/70	70/70	56/64	170/170	64/72	70/80	59/66	172/172	68/76	175/175	70/78	70/80	62/70	175/175	70/78	70/80	64/72	70/80	64/72	177/177	70/80	177/177	
			104B+105A	19.9/26.5	55.2/63.8	76/87	80/90	69/79	170/170	78/89	80/90	72/82	172/172	82/93	175/175	84/95	90/100	75/85	175/175	84/95	90/100	77/87	84/95	77/87	84/95	177/177	84/95	177/177
			NONE	-	-	35/35	50/50	34/34	212	37/37	50/50	36/36	214	40/40	217	39/39	50/50	39/39	217	42/41	60/60	42/42	60/60	42/42	219	42/42	219	
			102A	4.9/6.5	13.6/15.6	35/35	50/50	34/34	212/212	37/37	50/50	36/36	214/214	40/40	217/217	42/41	60/60	40/40	217/217	42/41	60/60	42/42	60/60	42/42	219/219	42/42	219/219	
			104B	7.9/10.5	21.9/25.3	38/42	50/50	35/39	212/212	41/45	50/50	37/41	214/214	44/48	217/217	47/51	60/60	40/44	217/217	47/51	60/60	43/46	60/60	43/46	219/219	43/46	219/219	
			105A	12.0/16.0	33.4/38.5	53/59	60/60	48/54	212/212	55/61	60/70	50/56	214/214	59/65	217/217	61/67	70/70	54/59	217/217	61/67	70/70	56/62	70/70	56/62	219/219	56/62	219/219	
104B+104B	15.8/21.0	43.8/50.5	66/74	70/80	60/68	212/212	68/76	70/80	62/70	214/214	72/80	217/217	74/82	80/90	66/73	217/217	74/82	80/90	68/75	80/90	68/75	219/219	68/75	219/219				
104B+105A	19.9/26.5	55.2/63.8	80/91	80/100	73/83	212/212	82/93	90/100	75/85	214/214	86/97	217/217	88/99	90/100	79/88	217/217	88/99	90/100	81/91	90/100	81/91	219/219	81/91	219/219				
460-3-60		STD	NONE	-	-	14	20	13	83	15	20	14	84	16	20	16	85	17	25	17	25	17	86					
			106A	6.0	7.2	14	20	13	83	15	20	14	84	16	20	16	85	17	25	17	25	17	86					
			108A	11.5	13.8	21	25	19	83	22	25	20	84	24	25	21	25	21	85	25	25	25	23	86				
			109A	14.0	16.8	25	25	22	83	26	30	23	84	27	30	25	30	25	85	29	30	26	26	86				
			108A+108A	23.0	27.7	38	40	35	83	40	40	36	84	41	45	37	45	37	85	42	45	39	39	86				
			108A+109A	25.5	30.7	42	45	38	83	43	45	39	84	45	45	41	45	41	85	46	50	42	45	86				
			NONE	-	-	16	20	15	104	17	20	16	105	18	106	19	25	18	106	19	25	19	25	107				
			106A	6.0	7.2	16	20	15	104	17	20	16	105	18	106	19	25	18	106	19	25	19	25	107				
			108A	11.5	13.8	23	25	21	104	24	25	22	105	26	30	23	30	23	106	27	30	24	30	107				
			109A	14.0	16.8	27	30	24	104	28	30	25	105	29	30	27	30	27	106	31	35	28	28	107				
108A+108A	23.0	27.7	40	40	37	104	42	45	38	105	43	45	39	45	39	106	44	45	40	45	107							
108A+109A	25.5	30.7	44	45	40	104	45	45	41	105	47	50	43	50	43	106	48	50	44	50	107							
575-3-60		STD	NONE	-	-	17	20	16	111	18	25	18	112	19	25	19	113	20	25	20	25	114						
			106A	6.0	7.2	17	20	16	111	18	25	18	112	19	25	19	113	20	25	20	25	114						
			108A	11.5	13.8	24	25	22	111	26	30	23	112	27	30	24	30	24	113	28	30	26	114					
			109A	14.0	16.8	28	30	25	111	29	30	27	112	31	35	28	35	28	113	32	35	29	114					
			108A+108A	23.0	27.7	42	45	38	111	43	45	39	112	44	45	40	45	40	113	46	50	42	114					
			108A+109A	25.5	30.7	45	50	41	111	47	50	43	112	48	50	44	50	44	113	49	50	45	114					
			NONE	-	-	11	15	11	68	13	15	13	70	13	70	15	15	13	70	15	20	15	72					
			106A	6.0	7.2	12	15	12	79	14	20	14	81	14	81	16	20	13	81	16	20	16	83					
			108A	11.5	13.8	12	15	12	79	14	20	14	81	14	81	16	20	13	81	16	20	16	83					
			109A	14.0	16.8	12	15	12	79	14	20	14	81	14	81	16	20	13	81	16	20	16	83					
108A+108A	23.0	27.7	12	15	12	79	14	20	14	81	14	81	16	20	13	81	16	20	16	83								
108A+109A	25.5	30.7	12	15	12	79	14	20	14	81	14	81	16	20	13	81	16	20	16	83								

See: "Legend and Notes for Tables 1 and 2" on page 8.

## Legend and Notes for Tables 1 and 2

### LEGEND:

BRKR	-	Circuit breaker
CO	-	Convenience outlet
DD	-	Direct drive (indoor fan motor)
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
UNPWR CO	-	Unpowered convenient outlet

### NOTES:

- 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

$$\begin{aligned} \text{Average Voltage} &= \frac{(224 + 231 + 226)}{3} = \frac{681}{3} \\ &= 227 \end{aligned}$$

Determine maximum deviation from average voltage.

$$(AB) 227 - 224 = 3 \text{ v}$$

$$(BC) 231 - 227 = 4 \text{ v}$$

$$(AC) 227 - 226 = 1 \text{ v}$$

Maximum deviation is 4 v.

Determine percent of voltage imbalance.

$$\begin{aligned} \% \text{ Voltage Imbalance} &= 100 \times \frac{4}{227} \\ &= 1.76\% \end{aligned}$$

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.