

**50HC-D
Single Package Rooftop
Cooling Only
with Puron® (R-410A) Refrigerant
Sizes: 20, 24, 28**



Electrical Data Supplement

NOTE: Read the entire instruction manual before starting the installation

This supplement only applies to 50HC-D size 20, 24 & 28 units when the 10th digit of the Model Number is either a 2, 3, 6, or 7 as shown in the Model Number Nomenclature diagram below. Check the Unit Nameplate (see Figs. 1 & 2). If the digit in the 10th position is not either a 2, 3, 6, or 7 discard this document.

MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
5	0	H	C	-	D	2	4	A	2	A	6	-	0	A	0	A	0

Unit Heat Type

50 = Electric Heat
Packaged Rooftop

Model Series - WeatherMaster

HC = High Efficiency

Heat Size

- = None (Field Installed Accessory)

Refrig. Systems Options

D = Two Stage Cooling Models

Cooling Tons

17 = 15 ton
20 = 17.5 ton
24 = 20 ton
28 = 25 ton

Indoor Fan Options & Air Flow Configuration:

17.5, 20 & 25 Ton Models Only

1 = Standard Static / Vertical Supply, Return Air Flow
2 = Medium Static / Vertical Supply, Return Air Flow
3 = High Static / Vertical Supply, Return Air Flow

5 = Standard Static / Horizontal Supply, Return Air Flow
6 = Medium Static / Horizontal Supply, Return Air Flow
7 = High Static / Horizontal Supply, Return Air Flow


Sensor Options

A = None
B = RA Smoke Detector
C = SA Smoke Detector
D = RA + SA Smoke Detector
E = CO2
F = RA Smoke Detector and CO2
G = SA Smoke Detector and CO2
H = RA + SA Smoke Detector and CO2

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.

Nameplate Location

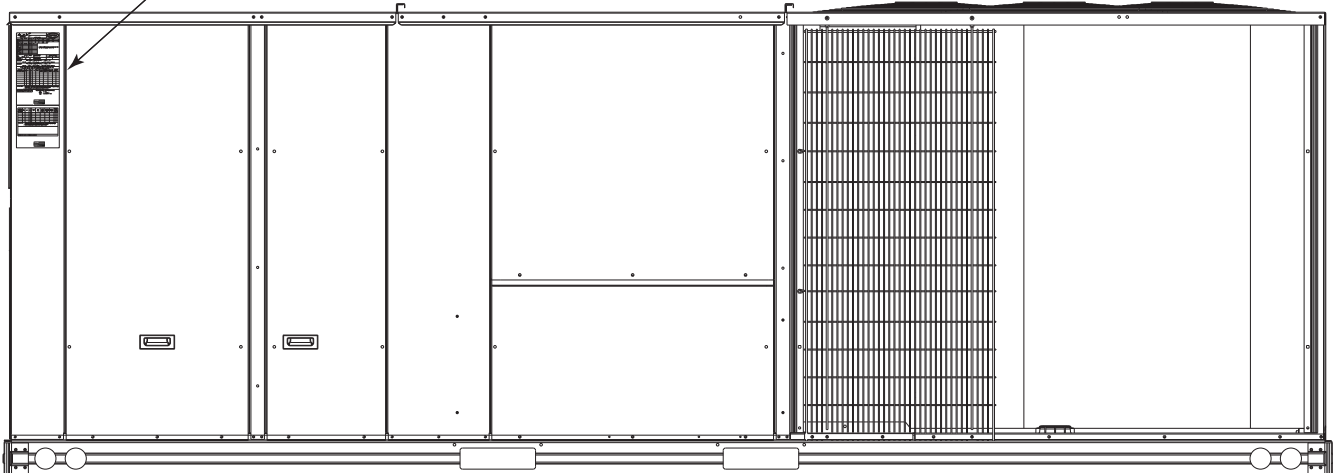


Fig. 1 - Location of Unit Nameplate

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 50HC size 20, 24 and 28 units which display either a 2, 3, 6, or 7 in the 10th position of the 18 digit model number as displayed on the unit's nameplate.

See Fig. 1 for location of the unit's nameplate.




See Fig. 2 for details of the 18 digit model number.

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.

Carrier Corporation 7310 WEST MORRIS STREET INDIANAPOLIS IN 46231 USA		MODEL 50HC-D24A2A6-0A0A0		SERIAL		FACTORY CHARGED		Carrier		
COMPR A	QTY	VOLTS AC	PH	HZ	RLA	LRA	REF. SYSTEM R-410A	TEST PRESSURE GAGE		
COMPR B							LBS kg	HI PSI	kPa	
COMPR C							LBS kg	LO PSI	kPa	
FAN MTR	QTY	VOLTS AC	PH	HZ	FLA	CHARGE SYSTEM PER INSTALLATION INSTRUCTIONS SUITABLE FOR OUTDOOR INSTALLATION				
OUTDOOR										
INDOOR										
PWR EXHAUST										
ERV SUPPLY										
ERV EXHAUST										
ERV WHEEL										
CONV. OUTLET										
ELEC. HEAT										
POWER SUPPLY	VOLTS	PH	HZ	MIN. CKT AMPS	MAX FUSE OR HACR BREAKER PER NEC					MIN UNIT DISCONNECT
PERMISSIBLE VOLTAGE AT UNIT		MAX	MIN	MAX OVERCURRENT PROTECTION DEVICE		FLA	LRA			
DOWN SUPPLY	MIN. CLEARANCE TO COMBUSTIBLE MATERIALSINCHES.....mm.									
FOR FIRSTINCHES.....mm. OF DUCT WHENkW. ELECTRIC HEATER IS INSTALLED.										
SIDE SUPPLY	MIN. CLEARANCE TO COMBUSTIBLE MATERIALSINCHES.....mm.									
FOR FIRSTINCHES.....mm. OF DUCT WHENkW. ELECTRIC HEATER IS INSTALLED.										
*FOR INSTALLATION ON COMBUSTIBLE FLOORING OR CLASS A, B, OR C ROOFING MATERIAL										
ACCESSORY HEATER/PWR EXHAUST OR HEATER MODEL NUMBER	CHK HERE	VOLTS	PH	HZ	FLA	MIN. CKT. AMPS	FUSE OR HACR BREAKER	MAXIMUM OVERCURRENT PROTECTION DEVICE	SINGLE PT. BOX MODEL NUMBER	MINIMUM UNIT DISCONNECT
										FLA LRA
INSTALLER NOTE: 1. INSTALL ACCESS HEATER AND/OR POWER EXHAUST PER INSTALL INSTR ENCLOSED WITH HEATER AND POWER EXHAUST. MARK SPACE "CHECK HERE" FOR MODEL USED. USE MIN CKT AMPS AND MAX OVERCURRENT DEVICE AMPS LISTED FOR ACCESSORY HEATER AND POWER EXHAUST.										
2. HEATERS ARE MANUFACTURED BY EMERSON HEATING PRODUCTS OR TUTCO.										
THIS EQUIPMENT COMPLIES WITH THE 2004 REQUIREMENTS OF ASHRAE 90.1					ENGINEERED IN USA, ASSEMBLED IN MEXICO					
					 ETL LISTED <small>CONFORMS TO UL-1995, CSA C22.2 236-05</small>					
										
ACCESSORY HEATER/PWR EXHAUST MODEL NUMBER	CHK HERE	VOLTS	PH	HZ	HEATER FLA	MIN CKT AMPS	FUSE OR HACR BREAKER PER NEC	MAXIMUM OVERCURRENT PROTECTION DEVICE	SINGLE PT. BOX MODEL NUMBER	MINIMUM UNIT DISCONNECT
										FLA LRA
INSTALLER NOTE: 1. INSTALL ACCESS HEATER AND/OR POWER EXHAUST PER INSTALL INSTR ENCLOSED WITH HEATER AND POWER EXHAUST. MARK SPACE "CHECK HERE" FOR MODEL USED. USE MIN CKT AMPS AND MAX OVERCURRENT DEVICE AMPS LISTED FOR ACCESSORY HEATER AND POWER EXHAUST.										
2. HEATERS ARE MANUFACTURED BY EMERSON HEATING PRODUCTS OR TUTCO.										
ENGINEERED IN USA, ASSEMBLED IN MEXICO										
										

50HC-D

Model Number

50HC - D24A2A6 - 0A0A0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Position of Digit

Fig. 2 - Example of Nameplate with Model Number

Table 1 – Unit Wire/Fuse or HACR Breaker Sizing Data

UNIT	NO M. V – Ph – HZ	IFM TYPE	ELEC. HTR			PE.	NO C.O. or UNPWR C.O.							
			CRHEATER***A00	Nom (kW)	FLA	FLA	NO RE.				w/ RE. (pwrd fr/unit)			
							MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50HC-D20	208/230-3-60	STD	NONE	-	-	5.9	75.7	100.0	79	440	87.5	100.0	93	460
			279A00	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
			280A00	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
			281A00	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	-	-	5.9	80.5	100.0	85	449	92.3	100.0	98	469
			279A00	18.8/25.0	52.1/60.1		83.9/93.9	100/100	85/86	449/449	98.6/108.6	100/110	98/100	469/469
			280A00	37.6/50.0	104.2/120.3		149.0/139.1	150/175	137/156	449/449	163.8/153.8	175/175	151/169	469/469
			281A00	56.3/75.0	156.4/180.4		175.2/199.2	200/225	197/225	449/449	189.9/213.9	200/250	211/238	469/469
		HIGH	NONE	-	-	5.9	78.3	100.0	82	451	90.1	100.0	96	471
			279A00	18.8/25.0	52.1/60.1		81.1/91.1	100/100	82/84	451/451	95.9/105.9	100/110	96/97	471/471
			280A00	37.6/50.0	104.2/120.3		146.3/136.3	150/150	135/153	451/451	161.0/151.1	175/175	148/167	471/471
			281A00	56.3/75.0	156.4/180.4		172.4/196.4	200/225	195/222	451/451	187.2/211.2	200/225	208/236	471/471
50HC-D20	460-3-60	STD	NONE	-	-	3.1	36.6	45.0	38	245	42.8	50.0	46	257
			282A00	25.0	30.1		43.6	45.0	40	245	51.4	60.0	47	257
			283A00	50.0	60.1		66.1	80.0	75	245	73.9	80.0	82	257
			284A00	75.0	90.2		96.2	100	109	245	104.0	110	116	257
		MED	NONE	-	-	3.1	39.2	50.0	41	249	45.4	50.0	49	261
			282A00	25.0	30.1		46.9	50.0	43	249	54.6	60.0	50	261
			283A00	50.0	60.1		69.4	80.0	78	249	77.1	80.0	85	261
			284A00	75.0	90.2		99.5	110	112	249	107.2	125	119	261
		HIGH	NONE	-	-	3.1	38.2	50.0	40	250	44.4	50.0	47	262
			282A00	25.0	30.1		45.6	50.0	42	250	53.4	60.0	49	262
			283A00	50.0	60.1		68.1	80.0	76	250	75.9	80.0	84	262
			284A00	75.0	90.2		98.2	100	111	250	106.0	125	118	262
50HC-D20	575-3-60	STD	NONE	-	-	2.4	26.2	30.0	27	186	31.0	40.0	33	194
			285A00	24.8	23.9		33.4	35.0	31	186	39.4	40.0	36	194
			286A00	49.6	47.7		63.1	70.0	58	186	69.1	70.0	64	194
			287A00	74.4	71.6		75.1	80	86	186	81.1	90	91	194
		MED	NONE	-	-	2.4	29.0	35.0	31	200	33.8	40.0	36	208
			285A00	24.8	23.9		36.9	40.0	34	200	42.9	45.0	39	208
			286A00	49.6	47.7		66.6	70.0	61	200	72.6	80.0	67	208
			287A00	74.4	71.6		78.6	90	89	200	84.6	90	94	208
		HIGH	NONE	-	-	2.4	28.5	35.0	30	189	33.3	40.0	36	197
			285A00	24.8	23.9		36.3	40.0	33	189	42.3	45.0	39	197
			286A00	49.6	47.7		66.0	70.0	61	189	72.0	80.0	66	197
			287A00	74.4	71.6		78.0	90	88	189	84.0	90	94	197

NOTE: See page 10 for table legend and notes

Table 1 — Unit Wire/Fuse or HACR Breaker Sizing Data (cont)

UNIT	NO M. V - Ph - HZ	IFM TYPE	ELEC. HTR			RE.	w/ PWRD C.O.							
			CRHEATER***A00	Nom (kW)	FLA	FLA	NO PE.				w/ RE. (pwrd fr/unit)			
							MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50HC-D20	208/230-3-60	STD	NONE	-	-	5.9	80.5	100.0	85	445	92.3	100.0	98	465
			279A00	18.8/25.0	52.1/60.1		83.9/93.9	100/100	85/86	445/445	98.6/108.6	100/110	98/100	465/465
			280A00	37.6/50.0	104.2/120.3		149.0/139.1	150/150	137/156	445/445	163.8/153.8	175/175	151/169	465/465
			281A00	56.3/75.0	156.4/180.4		175.2/199.2	200/225	197/225	445/445	189.9/213.9	200/225	211/238	465/465
		MED	NONE	-	-	5.9	85.3	100.0	90	454	97.1	110.0	104	474
			279A00	18.8/25.0	52.1/60.1		89.9/99.9	100/100	90/92	454/454	104.6/114.6	110/125	104/105	474/474
			280A00	37.6/50.0	104.2/120.3		155.0/145.1	175/175	143/161	454/454	169.8/159.8	175/175	156/175	474/474
			281A00	56.3/75.0	156.4/180.4		181.2/205.2	200/225	203/230	454/454	195.9/219.9	200/250	216/244	474/474
		HIGH	NONE	-	-	5.9	83.1	100.0	88	456	94.9	110.0	101	476
			279A00	18.8/25.0	52.1/60.1		87.1/97.1	100/100	88/89	456/456	101.9/111.9	110/125	101/103	476/476
			280A00	37.6/50.0	104.2/120.3		152.3/142.3	175/175	140/159	456/456	167.0/157.1	175/175	154/172	476/476
			281A00	56.3/75.0	156.4/180.4		178.4/202.4	200/225	200/228	456/456	193.2/217.2	200/250	214/241	476/476
	460-3-60	STD	NONE	-	-	3.1	38.8	50.0	41	247	45.0	50.0	48	259
			282A00	25.0	30.1		46.4	50.0	43	247	54.1	60.0	50	259
			283A00	50.0	60.1		68.9	80.0	77	247	76.6	80.0	84	259
			284A00	75.0	90.2		99.0	100	112	247	106.7	110	119	259
		MED	NONE	-	-	3.1	41.4	50.0	44	251	47.6	60.0	51	263
			282A00	25.0	30.1		49.6	50.0	46	251	57.4	60.0	53	263
			283A00	50.0	60.1		72.1	80.0	80	251	79.9	80.0	87	263
			284A00	75.0	90.2		102.2	110	115	251	110.0	125	122	263
		HIGH	NONE	-	-	3.1	40.4	50.0	43	252	46.6	50.0	50	264
			282A00	25.0	30.1		48.4	50.0	45	252	56.1	60.0	52	264
			283A00	50.0	60.1		70.9	80.0	79	252	78.6	80.0	86	264
			284A00	75.0	90.2		101.0	110	114	252	108.7	125	121	264
575-3-60	STD	NONE	-	-	2.4	27.9	35.0	29	188	32.7	40.0	35	196	
		285A00	24.8	23.9		35.5	40.0	33	188	41.5	45.0	38	196	
		286A00	49.6	47.7		65.3	70.0	60	188	71.3	80.0	66	196	
		287A00	74.4	71.6		77.2	80	88	188	83.2	90	93	196	
	MED	NONE	-	-	2.4	30.7	40.0	33	202	35.5	45.0	38	210	
		285A00	24.8	23.9		39.0	40.0	36	202	45.0	50.0	41	210	
		286A00	49.6	47.7		68.8	70.0	63	202	74.8	80.0	69	210	
		287A00	74.4	71.6		80.7	90	91	202	86.7	90	96	210	
	HIGH	NONE	-	-	2.4	30.2	35.0	32	191	35.0	40.0	37	199	
		285A00	24.8	23.9		38.4	40.0	35	191	44.4	45.0	41	199	
		286A00	49.6	47.7		68.1	70.0	63	191	74.1	80.0	68	199	
		287A00	74.4	71.6		80.1	90	90	191	86.1	90	96	199	

50HC-D

NOTE: See page 10 for table legend and notes

Table 1 — Unit Wire/Fuse or HACR Breaker Sizing Data (cont)

UNIT	NO M. V - Ph - HZ	IFM TYPE	ELEC. HTR			PE.	NO C.O. or UNPWR C.O.							
			CRHEATER***A00	Nom (kW)	FLA	FLA	NO RE.				w/ RE. (pwrd fr/unit)			
							MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50HC-D24	208/230-3-60	STD	NONE	-	-	5.9	88.7	100.0	93	544	100.5	125.0	107	564
			279A00	18.8/25.0	52.1/60.1		88.7/93.9	100/100	93/93	544/544	100.5/108.6	125/125	107/107	564/564
			280A00	37.6/50.0	104.2/120.3		149.0/139.1	150/175	137/156	544/544	163.8/153.8	175/175	151/169	564/564
			281A00	56.3/75.0	156.4/180.4		175.2/199.2	200/225	197/225	544/544	189.9/213.9	200/250	211/238	564/564
		MED	NONE	-	-	5.9	86.5	100.0	91	546	98.3	125.0	104	566
			279A00	18.8/25.0	52.1/60.1		86.5/91.1	100/100	91/91	546/546	98.3/105.9	125/125	104/104	566/566
			280A00	37.6/50.0	104.2/120.3		146.3/136.3	150/150	135/153	546/546	161.0/151.1	175/175	148/167	566/566
			281A00	56.3/75.0	156.4/180.4		172.4/196.4	200/225	195/222	546/546	187.2/211.2	200/225	208/236	566/566
		HIGH	NONE	-	-	5.9	93.1	110.0	98	582	104.9	125.0	112	602
			279A00	18.8/25.0	52.1/60.1		93.1/99.4	110/110	98/98	582/582	104.9/114.1	125/125	112/112	602/602
			280A00	37.6/50.0	104.2/120.3		154.5/144.6	175/175	142/161	582/582	169.3/159.3	175/175	156/174	602/602
			281A00	56.3/75.0	156.4/180.4		180.7/204.7	200/225	202/230	582/582	195.4/219.4	200/250	216/243	602/602
50HC-D24	460-3-60	STD	NONE	-	-	3.1	48.6	60.0	51	277	54.8	60.0	58	289
			282A00	25.0	30.1		48.6	60.0	51	277	54.8	60.0	58	289
			283A00	50.0	60.1		69.4	80.0	78	277	77.1	80.0	85	289
			284A00	75.0	90.2		99.5	110	112	277	107.2	125	119	289
		MED	NONE	-	-	3.1	47.6	60.0	50	278	53.8	60.0	57	290
			282A00	25.0	30.1		47.6	60.0	50	278	53.8	60.0	57	290
			283A00	50.0	60.1		68.1	80.0	76	278	75.9	80.0	84	290
			284A00	75.0	90.2		98.2	100	111	278	106.0	125	118	290
		HIGH	NONE	-	-	3.1	50.9	60.0	54	296	57.1	70.0	61	308
			282A00	25.0	30.1		50.9	60.0	54	296	57.5	70.0	61	308
			283A00	50.0	60.1		72.2	80.0	80	296	80.0	90.0	87	308
			284A00	75.0	90.2		102.3	125	115	296	110.1	125	122	308
50HC-D24	575-3-60	STD	NONE	-	-	2.4	35.5	45.0	37	204	40.3	50.0	43	212
			285A00	24.8	23.9		36.9	45.0	37	204	42.9	50.0	43	212
			286A00	49.6	47.7		66.6	70.0	61	204	72.6	80.0	67	212
			287A00	74.4	71.6		78.6	90	89	204	84.6	90	94	212
		MED	NONE	-	-	2.4	35.0	45.0	37	193	39.8	50.0	42	201
			285A00	24.8	23.9		36.3	45.0	37	193	42.3	50.0	42	201
			286A00	49.6	47.7		66.0	70.0	61	193	72.0	80.0	66	201
			287A00	74.4	71.6		78.0	90	88	193	84.0	90	94	201
		HIGH	NONE	-	-	2.4	37.7	45.0	40	219	42.5	50.0	45	227
			285A00	24.8	23.9		39.6	45.0	40	219	45.6	50.0	45	227
			286A00	49.6	47.7		69.4	70.0	64	219	75.4	80.0	69	227
			287A00	74.4	71.6		81.4	90	91	219	87.4	90	97	227

NOTE: See page 10 for table legend and notes

Table 1 — Unit Wire/Fuse or HACR Breaker Sizing Data (cont)

UNIT	NO M. V - Ph - HZ	IFM TYPE	ELEC. HTR			PE.	w/ PWRD C.O.							
			CRHEATER***A00	Nom (kW)	FLA	FLA	NO PE.				w/ RE. (pwrd fr/unit)			
							MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50HC-D24	208/230-3-60	STD	NONE	-	-	5.9	93.5	110.0	99	549	105.3	125.0	112	569
			279A00	18.8/25.0	52.1/60.1		93.5/99.9	110/110	99/99	549/549	105.3/114.6	125/125	112/112	569/569
			280A00	37.6/50.0	104.2/120.3		155.0/145.1	175/175	143/161	549/549	169.8/159.8	175/175	156/175	569/569
			281A00	56.3/75.0	156.4/180.4		181.2/205.2	200/225	203/230	549/549	195.9/219.9	200/250	216/244	569/569
		MED	NONE	-	-	5.9	91.3	100.0	96	551	103.1	125.0	110	571
			279A00	18.8/25.0	52.1/60.1		91.3/97.1	100/100	96/96	551/551	103.1/111.9	125/125	110/110	571/571
			280A00	37.6/50.0	104.2/120.3		152.3/142.3	175/175	140/159	551/551	167.0/157.1	175/175	154/172	571/571
			281A00	56.3/75.0	156.4/180.4		178.4/202.4	200/225	200/228	551/551	193.2/217.2	200/250	214/241	571/571
		HIGH	NONE	-	-	5.9	97.9	125.0	104	587	109.7	125.0	118	607
			279A00	18.8/25.0	52.1/60.1		97.9/105.4	125/125	104/104	587/587	110.1/120.1	125/125	118/118	607/607
			280A00	37.6/50.0	104.2/120.3		160.5/150.6	175/175	148/166	587/587	175.3/165.3	200/175	161/180	607/607
			281A00	56.3/75.0	156.4/180.4		186.7/210.7	200/250	208/235	587/587	201.4/225.4	225/250	221/249	607/607
50HC-D24	460-3-60	STD	NONE	-	-	3.1	50.8	60.0	54	279	57.0	70.0	61	291
			282A00	25.0	30.1		50.8	60.0	54	279	57.4	70.0	61	291
			283A00	50.0	60.1		72.1	80.0	80	279	79.9	80.0	87	291
			284A00	75.0	90.2		102.2	110	115	279	110.0	125	122	291
		MED	NONE	-	-	3.1	49.8	60.0	52	280	56.0	70.0	60	292
			282A00	25.0	30.1		49.8	60.0	52	280	56.1	70.0	60	292
			283A00	50.0	60.1		70.9	80.0	79	280	78.6	80.0	86	292
			284A00	75.0	90.2		101.0	110	114	280	108.7	125	121	292
		HIGH	NONE	-	-	3.1	53.1	60.0	56	298	59.3	70.0	63	310
			282A00	25.0	30.1		53.1	60.0	56	298	60.3	70.0	63	310
			283A00	50.0	60.1		75.0	80.0	83	298	82.7	90.0	90	310
			284A00	75.0	90.2		105.1	125	117	298	112.8	125	125	310
50HC-D24	575-3-60	STD	NONE	-	-	2.4	37.2	45.0	39	206	42.0	50.0	45	214
			285A00	24.8	23.9		39.0	45.0	39	206	45.0	50.0	45	214
			286A00	49.6	47.7		68.8	70.0	63	206	74.8	80.0	69	214
			287A00	74.4	71.6		80.7	90	91	206	86.7	90	96	214
		MED	NONE	-	-	2.4	36.7	45.0	39	195	41.5	50.0	44	203
			285A00	24.8	23.9		38.4	45.0	39	195	44.4	50.0	44	203
			286A00	49.6	47.7		68.1	70.0	63	195	74.1	80.0	68	203
			287A00	74.4	71.6		80.1	90	90	195	86.1	90	96	203
		HIGH	NONE	-	-	2.4	39.4	50.0	42	221	44.2	50.0	47	229
			285A00	24.8	23.9		41.8	50.0	42	221	47.8	50.0	47	229
			286A00	49.6	47.7		71.5	80.0	66	221	77.5	80.0	71	229
			287A00	74.4	71.6		83.5	90	93	221	89.5	90	99	229

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NOTE: See page 10 for table legend and notes

Table 1 — Unit Wire/Fuse or HACR Breaker Sizing Data (cont)

UNIT	NO M. V - Ph - HZ	IFM TYPE	ELEC. HTR			PE.	NO C.O. or UNPWR C.O.							
			CRHEATER***A00	Nom (kW)	FLA	FLA	NO RE.				w/ RE. (pwrd fr/unit)			
							MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50HC-D28	208/230-3-60	STD	NONE	-	-	5.9	117.4	150.0	121	584	129.2	175.0	135	604
			279A00	18.8/25.0	52.1/60.1		117.4/117.4	150/150	121/121	584/584	129.2/129.2	175/175	135/135	604/604
			280A00	37.6/50.0	104.2/120.3		149.0/139.1	150/175	137/156	584/584	163.8/153.8	175/175	151/169	604/604
			281A00	56.3/75.0	156.4/180.4		175.2/199.2	200/225	197/225	584/584	189.9/213.9	200/250	211/238	604/604
		MED	NONE	-	-	5.9	115.2	150.0	119	586	127.0	175.0	132	606
			279A00	18.8/25.0	52.1/60.1		115.2/115.2	150/150	119/119	586/586	127.0/127.0	175/175	132/132	606/606
			280A00	37.6/50.0	104.2/120.3		146.3/136.3	150/150	135/153	586/586	161.0/151.1	175/175	148/167	606/606
			281A00	56.3/75.0	156.4/180.4		172.4/196.4	200/225	195/222	586/586	187.2/211.2	200/225	208/236	606/606
		HIGH	NONE	-	-	5.9	121.8	150.0	126	622	133.6	175.0	140	642
			279A00	18.8/25.0	52.1/60.1		121.8/121.8	150/150	126/126	622/622	133.6/133.6	175/175	140/140	642/642
			280A00	37.6/50.0	104.2/120.3		154.5/144.6	175/175	142/161	622/622	169.3/159.3	175/175	156/174	642/642
			281A00	56.3/75.0	156.4/180.4		180.7/204.7	200/225	202/230	622/622	195.4/219.4	200/250	216/243	642/642
50HC-D28	460-3-60	STD	NONE	-	-	3.1	54.0	60.0	57	303	60.2	70.0	64	315
			282A00	25.0	30.1		54.0	60.0	57	303	60.2	70.0	64	315
			283A00	50.0	60.1		69.4	80.0	78	303	77.1	80.0	85	315
			284A00	75.0	90.2		99.5	110	112	303	107.2	125	119	315
		MED	NONE	-	-	3.1	53.0	60.0	56	304	59.2	70.0	63	316
			282A00	25.0	30.1		53.0	60.0	56	304	59.2	70.0	63	316
			283A00	50.0	60.1		68.1	80.0	76	304	75.9	80.0	84	316
			284A00	75.0	90.2		98.2	100	111	304	106.0	125	118	316
		HIGH	NONE	-	-	3.1	56.3	70.0	59	322	62.5	80.0	66	334
			282A00	25.0	30.1		56.3	70.0	59	322	62.5	80.0	66	334
			283A00	50.0	60.1		72.2	80.0	80	322	80.0	90.0	87	334
			284A00	75.0	90.2		102.3	125	115	322	110.1	125	122	334
50HC-D28	575-3-60	STD	NONE	-	-	2.4	40.4	50.0	42	228	45.2	50.0	48	236
			285A00	24.8	23.9		40.4	50.0	42	228	45.2	50.0	48	236
			286A00	49.6	47.7		66.6	70.0	61	228	72.6	80.0	67	236
			287A00	74.4	71.6		78.6	90	89	228	84.6	90	94	236
		MED	NONE	-	-	2.4	39.9	50.0	42	217	44.7	50.0	47	225
			285A00	24.8	23.9		39.9	50.0	42	217	44.7	50.0	47	225
			286A00	49.6	47.7		66.0	70.0	61	217	72.0	80.0	66	225
			287A00	74.4	71.6		78.0	90	88	217	84.0	90	94	225
		HIGH	NONE	-	-	2.4	42.6	50.0	45	243	47.4	60.0	50	251
			285A00	24.8	23.9		42.6	50.0	45	243	47.4	60.0	50	251
			286A00	49.6	47.7		69.4	70.0	64	243	75.4	80.0	69	251
			287A00	74.4	71.6		81.4	90	91	243	87.4	90	97	251

NOTE: See page 10 for table legend and notes

Table 1 — Unit Wire/Fuse or HACR Breaker Sizing Data (cont)

UNIT	NO M. V - Ph - HZ	IFM TYPE	ELEC. HTR			PE.	w/ PWRD C.O.							
			CRHEATER***A00	Nom (kW)	FLA	FLA	NO PE.				w/ RE. (pwrd fr/unit)			
							MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50HC-D28	208/230-3-60	STD	NONE	-	-	5.9	122.2	150.0	127	589	134.0	175.0	140	609
			279A00	18.8/25.0	52.1/60.1		122.2/122.2	150/150	127/127	589/589	134.0/134.0	175/175	140/140	609/609
			280A00	37.6/50.0	104.2/120.3		155.0/145.1	175/175	143/161	589/589	169.8/159.8	175/175	156/175	609/609
			281A00	56.3/75.0	156.4/180.4		181.2/205.2	200/225	203/230	589/589	195.9/219.9	200/250	216/244	609/609
		MED	NONE	-	-	5.9	120.0	150.0	124	591	131.8	175.0	138	611
			279A00	18.8/25.0	52.1/60.1		120.0/120.0	150/150	124/124	591/591	131.8/131.8	175/175	138/138	611/611
			280A00	37.6/50.0	104.2/120.3		152.3/142.3	175/175	140/159	591/591	167.0/157.1	175/175	154/172	611/611
			281A00	56.3/75.0	156.4/180.4		178.4/202.4	200/225	200/228	591/591	193.2/217.2	200/250	214/241	611/611
		HIGH	NONE	-	-	5.9	126.6	150.0	132	627	138.4	175.0	145	647
			279A00	18.8/25.0	52.1/60.1		126.6/126.6	150/150	132/132	627/627	138.4/138.4	175/175	145/145	647/647
			280A00	37.6/50.0	104.2/120.3		160.5/150.6	175/175	148/166	627/627	175.3/165.3	200/175	161/180	647/647
			281A00	56.3/75.0	156.4/180.4		186.7/210.7	200/250	208/235	627/627	201.4/225.4	225/250	221/249	647/647
50HC-D28	460-3-60	STD	NONE	-	-	3.1	56.2	70.0	59	305	62.4	80.0	66	317
			282A00	25.0	30.1		56.2	70.0	59	305	62.4	80.0	66	317
			283A00	50.0	60.1		72.1	80.0	80	305	79.9	80.0	87	317
			284A00	75.0	90.2		102.2	110	115	305	110.0	125	122	317
		MED	NONE	-	-	3.1	55.2	60.0	58	306	61.4	70.0	65	318
			282A00	25.0	30.1		55.2	60.0	58	306	61.4	70.0	65	318
			283A00	50.0	60.1		70.9	80.0	79	306	78.6	80.0	86	318
			284A00	75.0	90.2		101.0	110	114	306	108.7	125	121	318
		HIGH	NONE	-	-	3.1	58.5	70.0	62	324	64.7	80.0	69	336
			282A00	25.0	30.1		58.5	70.0	62	324	64.7	80.0	69	336
			283A00	50.0	60.1		75.0	80.0	83	324	82.7	90.0	90	336
			284A00	75.0	90.2		105.1	125	117	324	112.8	125	125	336
50HC-D28	575-3-60	STD	NONE	-	-	2.4	42.1	50.0	44	230	46.9	60.0	50	238
			285A00	24.8	23.9		42.1	50.0	44	230	46.9	60.0	50	238
			286A00	49.6	47.7		68.8	70.0	63	230	74.8	80.0	69	238
			287A00	74.4	71.6		80.7	90	91	230	86.7	90	96	238
		MED	NONE	-	-	2.4	41.6	50.0	44	219	46.4	60.0	49	227
			285A00	24.8	23.9		41.6	50.0	44	219	46.4	60.0	49	227
			286A00	49.6	47.7		68.1	70.0	63	219	74.1	80.0	68	227
			287A00	74.4	71.6		80.1	90	90	219	86.1	90	96	227
		HIGH	NONE	-	-	2.4	44.3	50.0	47	245	49.1	60.0	52	253
			285A00	24.8	23.9		44.3	50.0	47	245	49.1	60.0	52	253
			286A00	49.6	47.7		71.5	80.0	66	245	77.5	80.0	71	253
			R287A00	74.4	71.6		83.5	90	93	245	89.5	90	99	253

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NOTE: See page 10 for table legend and notes

Legend and Notes for Table 1

LEGEND:

BRKR	-	Circuit breaker
CO	-	Convenient outlet
DISC	-	Disconnect
FLA	-	Full load amps
LRA	-	Locked rotor amps
MCA	-	Minimum circuit amps
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.

