COMMERCIAL

PAN4

Product Specifications

14 SEER R-410A PACKAGE AIR CONDITIONER, 2½ - 5 TONS

3-Phase, 208/230V and 460V, 60 Hz

REFRIGERATION CIRCUIT

- Environmentally sound R-410A refrigerant
- Copper tube/aluminum fin condenser and evaporator coils
- Scroll compressors standard on all models

EASY TO INSTALL AND SERVICE

- Installs easily on a rooftop or at ground level
- Easy single-panel accessibility for maintenance and installation
- Easily converts to down discharge applications with duct covers provided

BUILT TO LAST

- Wire grille
- Pre-painted steel cabinet
- High efficiency X-13 indoor blower motor on all models
- Vertical condenser fan discharge
- Rust-proof base with integral sloping drain

LIMITED WARRANTY

- 10-year compressor limited warranty
- 5-year parts limited warranty



ENERGY STAR PARTNER

As an Energy Star® Partner, International Comfort Products has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

ARI PERFORMANCE CERTIFIED
ARI Standard 210/240
Unitary Air Conditioners

c UL us LISTED

UNIT PERFORMANCE DATA

Model Number	COOLING			Voltage 3 Ph - 60Hz.	Unit Dimensions Height x Width x Depth	Operating Weight (lbs)
	Nominal Capacity BTU/h	S.E.E.R	E.E.R.			
PAN430000H00A	28,400	14.3	12.0	208/230	38 x 48 x 33	277
PAN436000H00A	34,200	14.2	12.0	208/230	44 x 48 x 33	335
PAN436000L00A	34,200	14.2	12.0	460	44 x 48 x 33	349
PAN442000H00A	40,500	14.3	12.0	208/230	48 x 48 x 44	384
PAN442000L00A	40,500	14.3	12.0	460	48 x 48 x 44	398
PAN448000H00A	48,000	14.3	12.0	208/230	48 x 48 x 44	402
PAN448000L00A	48,000	14.3	12.0	460	48 x 48 x 44	416
PAN460000H00A	59,000	14.0	12.0	208/230	52 x 48 x 44	430
PAN460000L00A	59,000	14.0	12.0	460	52 x 48 x 44	446

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11/19/08

Not yet approved for sale in California (not yet listed with CEC - California Energy Commision)

UNIT SPECIFICATIONS

UNIT SIZE	030	036	042	048	060
NOMINAL CAPACITY (ton)	2-1/2	3	3-1/2	4	5
SHIPPING WEIGHT lb (kg)*	331 (150.1)	389 (178.4)	446 (202.3)	464 (210.5)	492 (223.2)
COMPRESSOR (1 each)	Scroll				
REFRIGERANT (R-410A) Quantity lb (kg)	7.8 (3.5)	9.8 (4.4)	11.0 (5.0)	10.5 (4.8)	14.5 (6.6)
REFRIGERANT METERING DEVICE	TXV				
CONDENSER COIL					
Rows—Fins/in.	2…21	2…21	2…21	2…21	2…21
Face Area (sq ft)	10.2	15.25	19.4	19.4	23.3
CONDENSER FAN					
Nominal Cfm	2350	2350	2350	3300	3300
Diameter in. (mm)	22 (558.8)	22 (558.8)	22 (558.8)	22 (558.8)	22 (558.8)
Motor Hp (Rpm)	1/8…825	1/8…825	1/8…825	1/4…1100	1/4…1100
EVAPORATOR COIL					
Rows—Fins/in.	3…17	4…15	3…17	3…17	4…17
Face Area (sq ft)	3.70	3.70	4.70	5.70	5.70
EVAPORATOR BLOWER					
Nominal Airflow (Cfm)	1000	1200	1200	1600	1750
Size in.	10 x 10	11 x 10	11 x 10	11 x 10	11 x 10
(mm)	(254 x 254)	(279 x 254)	(279 x 254)	(279 x 254)	(279 x 254)
Motor (Hp) (RPM)	1/2…1050	3/4…1000	3/4…1075	1…1075	1…1040
RETURN-AIR FILTERS (in.)†‡ Throwaway	20 x 24 x 1	20 x 30 x 1	24 x 30 x 1	24 x 36 x 1	24 x 36 x 1
(mm.)†‡	508x610x25	610x762x25	610x762x25	610x914x25	610x914x25

*For 460 volt units add 14 lb (6.35 kg) to the shipping weight.
† Required filter sizes shown are based on the larger of the ARI (Air Conditioning and Refrigeration Institute) rated cooling airflow or the heating airflow velocity of 300 ft/minute for throwaway type or 450 ft/minute for high-capacity type. Air filter pressure drop for non-standard filters must not exceed 0.08 IN. W.C..
‡ If using accessory filter rack refer to the filter rack installation instructions for correct filter sizes and quantity.

PRESSURE SWITCHES

Switch Type	Cut-out Pressure (PSIG)	Reset (automatic) Pressure (PSIG)
High	650 +/- 15	420 +/- 15
Loss of Charge (Low)	20 +/- 5	45 +/- 10

ELECTRIC HEATER PRESSURE DROP

Small Cabinet - Model Sizes 30, 36

Heater Size	CFM											
	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
	Static Pressure Drop Due to Electric Heater (inches water column)											
5 kW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.07
10 kW	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.07	0.09	0.10	0.11
15 kW	0.00	0.00	0.00	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18
20 kW	0.00	0.00	0.02	0.04	0.06	0.08	0.09	0.11	0.13	0.15	0.17	0.19

Large Cabinet - Model Sizes 42, 48, 60

Heater Size	CFM														
	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
	Static Pressure Drop Due to Electric Heater (inches water column)														
5 kW	0.00	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12
10 kW	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13
15 kW	0.00	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15
20 kW	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16

UNIT PERFORMANCE DATA (230V - 3 Phase - 60 Hz)

Model Number	COOLING			
	Rated Capacity (BTU/h)	S.E.E.R	E.E.R.	S/T Ratio
PAN430	28,400	14.3	12.0	.75
PAN436	34,200	14.2	12.0	.76
PAN442	40,500	14.3	12.0	.75
PAN448	48,000	14.3	12.0	.75
PAN460	59,000	14.0	12.0	.76

UNIT AIRFLOW, Horizontal and Downflow Discharge, 230 Volts, Dry Coil											
Model	Motor Speed	Wire Color	CFM at External Static Pressure (Inches Water Column)								
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
PAN430	Low	Blue	741	638	547	415	--	--	--	--	--
	Med-Low	Pink	898	820	738	662	536	--	--	--	--
	Medium	Red	973	887	823	733	665	538	451	--	--
	Med-High[1]	Orange	1140	1064	996	915	840	758	687	564	480
	High	Black	1202	1140	1082	1015	961	881	810	732	631
PAN436	Low	Blue	1206	1151	1085	1033	961	901	839	769	694
	Med-Low[1]	Pink	1369	1317	1262	1208	1152	1095	1037	979	919
	Medium	Red	1419	1370	1315	1269	1209	1161	1101	1043	984
	Med-High	Orange	1557	1507	1464	1412	1365	1310	1265	1212	1154
	High	Black	1599	1553	1505	1460	1410	1361	1310	1262	1203
PAN442	Low	Blue	1295	1234	1182	1126	1075	1016	955	898	857
	Med-Low	Pink	1345	1282	1235	1194	1140	1095	1027	974	921
	Medium	Red	1505	1452	1413	1358	1323	1282	1234	1169	1130
	Med-High[1]	Orange	1545	1492	1449	1411	1362	1313	1278	1231	1188
	High	Black	1705	1643	1607	1568	1518	1483	1448	1404	1360
PAN448	Low	Blue	1445	1389	1341	1281	1236	1189	1139	1072	1027
	Med-Low[1]	Pink	1678	1635	1602	1558	1513	1474	1438	1404	1349
	Medium	Red	1962	1915	1880	1843	1794	1753	1711	1675	1628
	Med-High	Orange	2131	2088	2065	2013	1982	1941	1888	1860	1785
	High	Black	2461	2409	2339	2286	2192	2140	2062	1968	1874
PAN460	Low	Blue	1448	1362	1296	1226	1168	1108	1071	998	905
	Med-Low	Pink	1722	1675	1614	1543	1499	1442	1408	1356	1308
	Medium[1]	Red	1887	1847	1783	1726	1677	1625	1578	1527	1432
	Med-High	Orange	2055	2008	1958	1927	1900	1768	1685	1581	1458
	High	Black	2292	2238	2158	2049	1935	1840	1732	1635	1513

* Air delivery values are without air filter and are for dry coil (See Pressure Drop tables). Deduct field-supplied air filter pressure drop and wet coil pressure drop to obtain external static pressure available for ducting.

1. Factory-shipped cooling speed

WET COIL PRESSURE DROP (IN. W.C.)															
MODEL SIZE	STANDARD CFM (S.C.F.M.)														
	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
	Pressure Drop (inches water column)														
30	-	-	0.12	0.15	0.19	0.23	0.27	-	-	-	-	-	-	-	-
36	-	-	-	-	0.07	0.11	0.18	0.26	0.35	-	-	-	-	-	-
42	-	-	-	-	-	-	0.04	0.07	0.10	0.15	0.21	-	-	-	-
48	-	-	-	-	-	-	-	-	0.11	0.14	0.17	0.22	0.28	-	-
60	-	-	-	-	-	-	-	-	-	-	0.10	0.17	0.23	0.31	0.36

FILTER PRESSURE DROP																			
FILTER SIZE	CFM																		
	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	Pressure Drop (inches water column)																		
20 x 24 x 1	—	—	—	0.09	0.10	0.11	0.13	0.14	0.15	0.16	—	—	—	—	—	—	—	—	—
24 x 30 x 1	—	—	—	0.04	0.05	0.06	0.07	0.07	0.08	0.09	0.10	—	—	—	—	—	—	—	—
24 x 36 x 1	—	—	—	—	—	—	—	0.06	0.07	0.07	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.14	0.14

MINIMUM AIRFLOW FOR RELIABLE ELECTRIC HEATER OPERATION (CFM)					
Model Size:	**30**	**36**	**42**	**48**	**60**
Airflow:	1000	1200	1400	1600	1750

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ELECTRIC HEATER USAGE, 208/230-3-60

Electric Heater Model Number	Nominal Capacity (kW)	Fuses	Used With Model Sizes				
			30	36	42	48	60
EHNA05H0N	5.0	0	✓	✓	✓	✓	✓
EHNA10H0N	10.0	0	✓	✓	✓	✓	✓
EHNA15H0N	15.0	0	✓	✓	✓	✓	✓
EHNA20H6F	20.0	6			✓	✓	✓

ELECTRIC HEATER USAGE, 460-3-60

Electric Heater Model Number	Nominal Capacity (kW)	Fuses	Used With Model Sizes				
			30	36	42	48	60
EHNA05L0N	5.0	0	N/A	✓	✓	✓	✓
EHNA10L0N	10.0	0	N/A	✓	✓	✓	✓
EHNA15L0N	15.0	0	N/A	✓	✓	✓	✓
EHNA20L0N	20.0	0	N/A		✓	✓	✓

ELECTRIC HEATER ELECTRICAL DATA

MODEL SIZE	NOMINAL V-PH-HZ	VOLTAGE RANGE		ELECTRIC HEAT (208V / 230V)		POWER SUPPLY (208V / 230V)	
		MIN	MAX	NOMINAL kW	Full Load Ampacity	Minimum Circuit Ampacity	Maximum Over-Current Protection
PAN430	208 / 230-3-60	187	253	- / -	- / -	15.4 / 15.4	20 / 20
				3.8 / 5	10.4 / 12	18.1 / 20.1	20 / 25
				7.5 / 10	20.8 / 24.1	31.1 / 35.3	35 / 40
				11.3 / 15	31.3 / 36.1	44.3 / 50.3	45 / 60
PAN436	208 / 230-3-60	187	253	- / -	- / -	18.2 / 18.2	25 / 25
				3.8 / 5	10.4 / 12	20.5 / 22.5	25 / 25
				7.5 / 10	20.8 / 24.1	33.5 / 37.6	35 / 40
				11.3 / 15	31.3 / 36.1	46.6 / 52.6	50 / 60
	460-3-60	414	506	-	-	10.6	15
				5.0	6.0	11.3	15
				10.0	12.0	18.8	20
				15.0	18.0	26.3	30
PAN442	208 / 230-3-60	187	253	3.8 / 5	10.4 / 12	23.8 / 23.8	35 / 35
				7.5 / 10	20.8 / 24.1	33.5 / 37.6	35 / 40
				11.3 / 15	31.3 / 36.1	46.6 / 52.6	50 / 60
				15 / 20	41.4 / 47.9	59.3 / 67.4	60 / 70
	460-3-60	414	506	-	-	11.1	15
				5.0	6.0	11.3	15
				10.0	12.0	18.8	20
				15.0	18.0	26.3	30
				20.0	24.1	33.9	35
PAN448	208 / 230-3-60	187	253	- / -	- / -	26.2 / 26.2	35 / 35
				3.8 / 5	10.4 / 12	26.2 / 26.2	35 / 35
				7.5 / 10	20.8 / 24.1	35.5 / 39.6	40 / 40
				11.3 / 15	31.3 / 36.1	48.6 / 54.6	50 / 60
				15 / 20	41.4 / 47.9	61.3 / 69.4	70 / 70
	460-3-60	414	506	-	-	12.5	15
				5.0	6.0	12.5	15
				10.0	12.0	19.8	20
				15.0	18.0	27.3	30
				20.0	24.1	34.9	35
PAN460	208 / 230-3-60	187	253	- / -	- / -	29.5 / 29.5	40 / 40
				3.8 / 5	10.4 / 12	29.5 / 29.5	40 / 40
				7.5 / 10	20.8 / 24.1	35.5 / 39.6	40 / 40
				11.3 / 15	31.3 / 36.1	48.6 / 54.6	50 / 60
				15 / 20	41.4 / 47.9	61.3 / 69.4	70 / 70
	460-3-60	414	506	-	-	14.6	20
				5.0	6.0	14.6	20
				10.0	12.0	19.8	20
				15.0	18.0	27.3	30
				20.0	24.1	34.9	35

PAN430 COOLING PERFORMANCE

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
CFM / BF	Ewb	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
875 / 0.03	57	28.46	28.46	1.82	26.75	26.75	2.05	24.89	24.89	2.31	22.87	22.87	2.60	20.70	20.70	2.91	18.40	18.40	3.25
	62	29.16	24.94	1.82	27.05	24.24	2.05	24.89	24.89	2.31	22.86	22.86	2.60	20.70	20.70	2.91	18.39	18.39	3.25
	63*	29.82	20.37	1.82	27.65	19.70	2.06	25.25	18.93	2.31	22.60	18.05	2.59	19.73	17.05	2.89	16.70	15.92	3.21
	67	32.32	21.11	1.81	30.19	20.56	2.06	27.78	19.87	2.33	25.09	19.05	2.63	22.19	18.13	2.93	19.08	17.11	3.26
	72	35.18	16.93	1.82	33.30	16.52	2.06	31.09	15.99	2.33	28.50	15.30	2.63	25.62	14.49	2.97	22.41	13.55	3.33
1000 / 0.04	57	29.83	29.83	1.85	28.06	28.06	2.10	26.12	26.12	2.37	24.01	24.01	2.65	21.74	21.74	2.97	19.33	19.33	3.31
	62	30.00	26.83	1.85	28.06	28.06	2.10	26.11	26.11	2.37	24.00	24.00	2.65	21.74	21.74	2.97	19.33	19.33	3.31
	63*	30.52	21.77	1.85	28.31	21.13	2.10	25.84	20.35	2.36	23.13	19.46	2.64	20.21	18.43	2.94	17.36	17.36	3.26
	67	32.96	22.50	1.85	30.84	22.03	2.09	28.40	21.37	2.37	25.67	20.57	2.67	22.69	19.62	2.99	19.55	18.54	3.31
	72	35.69	17.67	1.85	33.82	17.32	2.10	31.62	16.85	2.37	29.05	16.22	2.67	26.12	15.44	3.01	22.85	14.52	3.37
1125 / 0.05	57	30.95	30.95	1.88	29.15	29.15	2.13	27.15	27.15	2.41	24.97	24.97	2.71	22.62	22.62	3.03	20.12	20.12	3.37
	62	30.94	30.94	1.88	29.15	29.15	2.13	27.15	27.15	2.41	24.96	24.96	2.71	22.62	22.62	3.03	20.12	20.12	3.37
	63*	31.04	23.08	1.88	28.81	22.48	2.13	26.30	21.70	2.40	23.56	20.78	2.68	20.65	20.48	2.99	18.05	18.05	3.32
	67	33.41	23.79	1.88	31.32	23.40	2.13	28.87	22.80	2.40	26.11	22.00	2.71	23.10	21.02	3.04	20.11	20.11	3.37
	72	36.05	18.34	1.89	34.17	18.04	2.13	31.98	17.63	2.41	29.41	17.06	2.71	26.48	16.33	3.05	23.17	15.44	3.41

– refer to Legend, Notes, and Formulas at the end of the chart –

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

PAN436 COOLING PERFORMANCE

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
CFM / BF	Ewb	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
1050 / 0.02	57	33.74	33.74	2.21	31.86	31.86	2.47	29.86	29.86	2.76	27.71	27.71	3.08	25.42	25.42	3.42	23.00	23.00	3.79
	62	34.63	29.69	2.22	32.34	29.18	2.48	29.93	29.78	2.76	27.71	27.71	3.08	25.42	25.42	3.42	23.00	23.00	3.79
	63*	35.42	24.26	2.23	33.09	23.73	2.49	30.56	23.09	2.77	27.82	22.33	3.08	24.86	21.44	3.40	21.70	20.43	3.75
	67	38.42	25.21	2.23	36.04	24.74	2.50	33.47	24.17	2.80	30.67	23.47	3.13	27.66	22.66	3.47	24.44	21.74	3.83
	72	42.11	20.41	2.24	39.77	19.99	2.51	37.26	19.49	2.81	34.52	18.88	3.14	31.52	18.16	3.50	28.25	17.30	3.89
1200 / 0.03	57	35.34	35.34	2.28	33.39	33.39	2.55	31.30	31.30	2.84	29.06	29.06	3.16	26.68	26.68	3.50	24.14	24.14	3.88
	62	35.58	32.00	2.28	33.39	33.39	2.55	31.30	31.30	2.84	29.06	29.06	3.16	26.67	26.67	3.50	24.14	24.14	3.88
	63*	36.26	25.97	2.28	33.86	25.44	2.55	31.25	24.80	2.83	28.44	24.04	3.14	25.41	23.15	3.47	22.21	22.09	3.82
	67	39.24	26.97	2.28	36.82	26.54	2.55	34.20	26.00	2.85	31.34	25.31	3.18	28.25	24.49	3.54	24.96	23.55	3.90
	72	42.80	21.39	2.29	40.39	20.99	2.56	37.86	20.53	2.86	35.10	19.97	3.19	32.08	19.29	3.55	28.76	18.46	3.95
1350 / 0.03	57	36.70	36.70	2.33	34.69	34.69	2.60	32.53	32.53	2.90	30.20	30.20	3.23	27.73	27.73	3.59	25.09	25.09	3.96
	62	36.70	36.70	2.33	34.69	34.69	2.60	32.52	32.52	2.90	30.20	30.20	3.23	27.72	27.72	3.59	25.09	25.09	3.96
	63*	36.89	27.59	2.33	34.44	27.08	2.60	31.78	26.44	2.90	28.92	25.68	3.21	25.86	24.75	3.54	22.78	22.78	3.90
	67	39.83	28.62	2.33	37.38	28.23	2.60	34.73	27.73	2.90	31.84	27.07	3.23	28.71	26.25	3.60	25.40	25.24	3.97
	72	43.27	22.31	2.35	40.81	21.92	2.62	38.24	21.49	2.92	35.47	20.97	3.25	32.45	20.35	3.61	29.11	19.57	4.00

PAN442 COOLING PERFORMANCE

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
CFM / BF	Ewb	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
1225 / 0.03	57	39.18	39.18	2.56	36.42	36.42	2.90	33.76	33.76	3.28	31.03	31.03	3.70	28.30	28.30	4.17	25.52	25.52	4.68
	62	40.87	35.89	2.57	37.42	34.32	2.91	34.11	32.73	3.28	31.02	31.02	3.70	28.29	28.29	4.17	25.52	25.52	4.68
	63*	42.42	29.68	2.58	38.64	28.15	2.92	35.18	26.75	3.29	31.48	25.22	3.70	27.69	23.63	4.16	23.81	21.97	4.65
	67	46.44	30.98	2.60	42.97	29.69	2.95	39.60	28.41	3.33	36.16	27.09	3.75	32.63	25.72	4.22	28.89	24.22	4.72
	72	50.49	25.03	2.63	47.40	24.14	2.98	43.83	22.99	3.36	40.24	21.81	3.79	36.59	20.60	4.26	32.85	19.35	4.77
1400 / 0.04	57	41.90	41.90	2.62	38.93	38.93	2.96	36.19	36.19	3.34	33.33	33.33	3.77	30.43	30.43	4.24	27.48	27.48	4.75
	62	42.97	39.09	2.63	39.22	37.25	2.96	36.18	36.18	3.34	33.33	33.33	3.77	30.42	30.42	4.24	27.48	27.48	4.75
	63*	43.96	31.91	2.63	40.21	30.40	2.97	36.67	28.96	3.35	32.87	27.39	3.76	28.97	25.74	4.22	24.93	23.97	4.71
	67	47.54	33.05	2.65	43.97	31.76	2.99	40.50	30.45	3.38	36.96	29.10	3.80	33.35	27.69	4.27	29.66	26.21	4.78
	72	51.19	26.03	2.68	48.08	25.20	3.03	44.60	24.15	3.41	40.91	22.95	3.84	37.20	21.73	4.31	33.39	20.47	4.83
1575 / 0.05	57	44.01	44.01	2.67	41.03	41.03	3.02	38.13	38.13	3.40	35.17	35.17	3.83	32.15	32.15	4.30	29.08	29.08	4.82
	62	44.16	43.83	2.67	41.03	41.03	3.02	38.12	38.12	3.40	35.17	35.17	3.83	32.15	32.15	4.30	29.08	29.08	4.82
	63*	44.80	33.83	2.68	41.29	32.44	3.02	37.88	31.05	3.40	34.03	29.43	3.82	30.01	27.70	4.27	25.94	25.82	4.77
	67	48.33	34.96	2.69	44.73	33.72	3.04	41.17	32.38	3.42	37.57	30.99	3.85	33.89	29.55	4.31	30.16	28.02	4.83
	72	51.62	26.90	2.73	48.32	25.98	3.08	45.11	25.19	3.46	41.35	23.97	3.89	37.59	22.76	4.36	33.74	21.50	4.88

– refer to Legend, Notes, and Formulas at the end of the chart –

PAN448 COOLING PERFORMANCE

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
CFM / BF	Ewb	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
1400 / 0.03	57	48.44	48.44	3.27	45.41	45.41	3.60	42.35	42.35	3.93	39.25	39.25	4.28	36.07	36.07	4.64	34.18	34.18	4.51
	62	50.26	44.05	3.27	46.66	42.03	3.60	43.09	40.02	3.94	39.52	37.98	4.28	36.06	36.06	4.64	34.18	34.18	4.51
	63*	51.28	36.22	3.27	47.58	34.38	3.60	43.89	32.55	3.94	40.18	30.72	4.28	36.42	28.87	4.64	34.30	27.73	4.51
	67	55.09	37.36	3.27	51.09	35.48	3.60	47.11	33.62	3.94	43.10	31.75	4.29	39.02	29.87	4.65	34.78	27.92	5.01
	72	60.45	30.62	3.26	56.04	28.88	3.60	51.64	27.15	3.95	47.22	25.42	4.30	42.71	23.67	4.67	40.74	22.84	4.59
1600 / 0.04	57	50.64	50.64	3.33	47.39	47.39	3.66	44.12	44.12	3.99	40.81	40.81	4.34	38.97	38.97	4.15	33.81	33.81	5.06
	62	51.54	47.47	3.33	47.82	45.31	3.66	44.17	43.97	3.99	40.81	40.81	4.34	38.97	38.97	4.15	33.81	33.81	5.06
	63*	52.46	38.62	3.33	48.59	36.69	3.66	44.75	34.79	4.00	40.90	32.88	4.34	38.86	31.74	4.15	32.95	28.95	5.05
	67	56.33	39.90	3.32	52.15	37.94	3.66	48.00	36.00	4.00	43.84	34.06	4.35	39.61	32.09	4.71	35.22	30.06	5.07
	72	61.77	32.23	3.32	57.17	30.43	3.66	52.59	28.64	4.00	48.00	26.86	4.36	43.32	25.05	4.72	38.45	23.18	5.08
1800 / 0.04	57	52.49	52.49	3.39	49.05	49.05	3.71	45.59	45.59	4.05	42.10	42.10	4.40	40.22	40.22	4.23	34.71	34.71	5.12
	62	52.66	50.62	3.39	49.04	49.04	3.71	45.59	45.59	4.05	42.09	42.09	4.40	38.49	38.49	4.76	36.60	36.60	4.65
	63*	53.37	40.93	3.39	49.37	38.93	3.71	45.40	36.94	4.05	41.44	34.96	4.40	37.42	32.94	4.75	33.28	30.85	5.11
	67	57.27	42.36	3.38	52.95	40.32	3.71	48.67	38.30	4.06	44.39	36.28	4.41	42.36	35.14	4.26	35.55	32.11	5.12
	72	62.77	33.77	3.37	58.02	31.92	3.71	53.29	30.08	4.06	48.56	28.24	4.42	43.75	26.38	4.78	38.76	24.47	5.14

PAN460 COOLING PERFORMANCE

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
CFM / BF	Ewb	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW	Capacity BTU/h x 1000		Total System kW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
1750 / 0.03	57	62.31	62.31	3.82	57.76	57.76	4.31	53.24	53.24	4.85	48.73	48.73	5.45	44.19	44.19	6.12	39.54	39.54	6.85
	62	64.27	54.67	3.84	59.06	52.70	4.32	53.94	50.71	4.86	48.90	48.64	5.45	44.19	44.19	6.12	39.54	39.54	6.85
	63*	65.55	44.79	3.85	60.20	42.97	4.33	54.93	41.12	4.87	49.72	39.25	5.46	44.51	37.32	6.12	39.24	35.29	6.84
	67	70.43	46.23	3.90	64.67	44.38	4.38	59.00	42.51	4.92	53.38	40.61	5.51	47.75	38.65	6.17	42.05	36.58	6.89
	72	77.30	37.72	3.97	70.97	35.99	4.45	64.73	34.24	4.99	58.53	32.45	5.59	52.31	30.59	6.24	45.98	28.62	6.96
2000 / 0.04	57	65.10	65.10	3.93	60.26	60.26	4.42	55.46	55.46	4.96	50.67	50.67	5.57	45.84	45.84	6.24	40.90	40.90	6.97
	62	65.85	59.03	3.94	60.50	56.90	4.42	55.46	55.46	4.96	50.67	50.67	5.57	45.84	45.84	6.24	40.90	40.90	6.97
	63*	66.98	47.84	3.95	61.43	45.94	4.43	55.96	44.02	4.97	50.56	42.07	5.56	45.18	40.06	6.22	39.75	37.95	6.95
	67	71.92	49.46	4.00	65.94	47.53	4.48	60.07	45.59	5.02	54.26	43.62	5.62	48.44	41.58	6.28	42.56	39.43	6.99
	72	78.87	39.76	4.07	72.31	37.97	4.55	65.85	36.16	5.09	59.44	34.32	5.69	53.01	32.41	6.34	46.48	30.38	7.06
2250 / 0.04	57	67.45	67.45	4.04	62.36	62.36	4.53	57.30	57.30	5.07	52.27	52.27	5.68	47.19	47.19	6.35	42.00	42.00	7.08
	62	67.45	67.45	4.04	62.35	62.35	4.53	57.30	57.30	5.07	52.27	52.27	5.68	47.19	47.19	6.35	41.99	41.99	7.08
	63*	68.06	50.78	4.04	62.35	48.81	4.53	56.73	46.83	5.06	51.19	44.81	5.66	45.68	42.72	6.32	40.13	40.51	7.05
	67	73.04	52.59	4.09	66.90	50.60	4.58	60.86	48.59	5.12	54.90	46.55	5.72	48.94	44.43	6.38	42.93	42.19	7.09
	72	80.04	41.72	4.16	73.30	39.89	4.65	66.66	38.03	5.19	60.09	36.14	5.79	53.50	34.18	6.44	46.81	32.11	7.16

* 63° F Ewb is at 75° F entering dry bulb – Tennessee Valley Authority [TVA] rating conditions; all others at 80° F entering dry bulb.

LEGEND: BF — Bypass Factor Ewb — Entering Wet Bulb kW — Total Unit Power Input SHC — Sensible Heat Capacity (x1000 Btuh) TC — Total Capacity (x1000 Btuh) (net)

NOTES:
1. Ratings are net; they account for the effects of the evaporator fan motor power and heat.
2. Direct interpolation is permissible. Do not extrapolate.
3. The following formulas may be used:

$$t_{Ldb} = t_{Edb} - \frac{\text{Sensible Capacity (BTU/h)}}{1.10 \times \text{cfm}}$$

$$h_{Lwb} = h_{Ewb} - \frac{\text{Total Capacity (BTU/h)}}{4.5 \times \text{cfm}}$$

Where: h_{Ewb} = Enthalpy of air entering evaporator coil

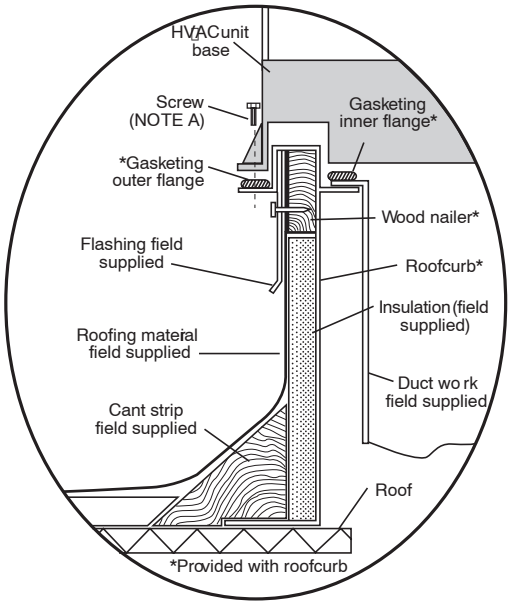
t_{Lwb} = Wet bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{Lwb})

4. The SHC is based on 80°F Edb temperature of air entering evaporator coil.
Below 80°F Edb, subtract (corr factor x cfm) from SHC.
Above 80°F Edb, add (corr factor x cfm) to SHC. Correction Factor = 1.10 x (1 + BF) x (Edb + 80).

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

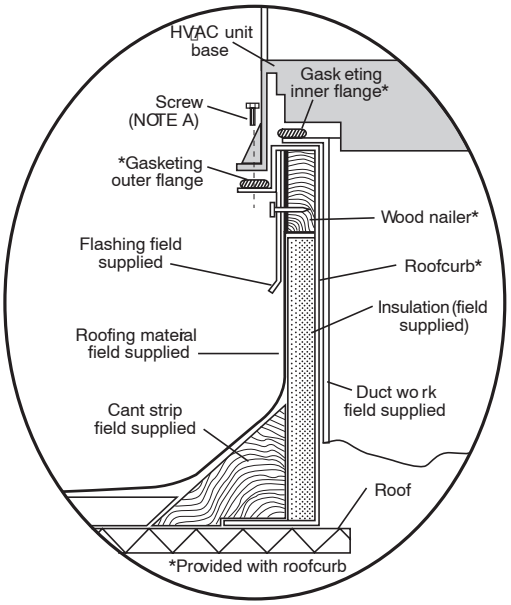
ACCESSORIES

ROOF CURBS



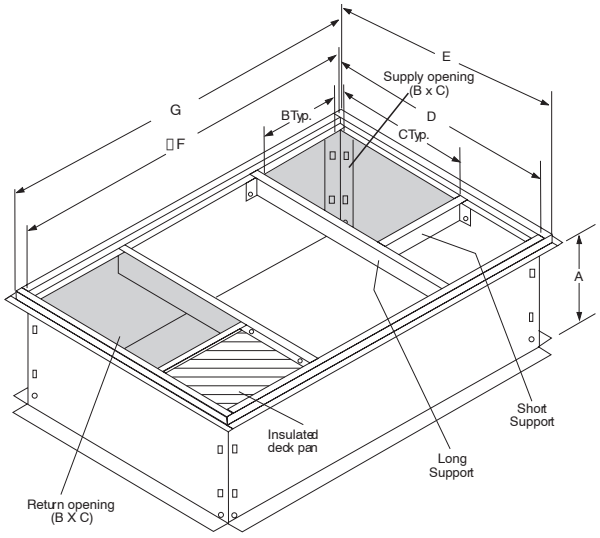
Roof Curb for Small Cabinet

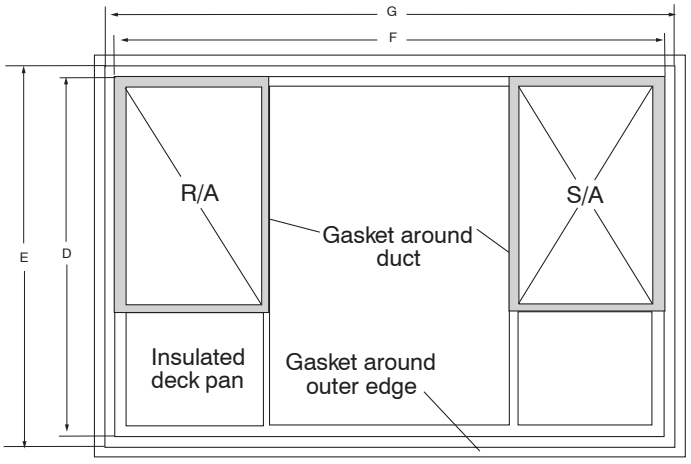
Note A: When unit mounting screw is used retainer bracket must also be used.



Roof Curb for Large Cabinet

Note A: When unit mounting screw is used retainer bracket must also be used.





UNIT SIZE	MODEL NUMBER	A IN. [MM]	B IN. [MM]	C IN. [MM]	D IN. [MM]	E IN. [MM]	F IN. [MM]	G IN. [MM]
30, 36	NPRFCURB006A00	8 [203]	11 [279]	16-1/2 [419]	28-3/4 [730]	30-3/8 [771]	44-5/16 [1126]	45-15/16 [1167]
	NPRFCURB007A00	14 [356]	11 [279]	16-1/2 [419]	28-3/4 [730]	30-3/8 [771]	44-5/16 [1126]	45-15/16 [1167]
42, 48, 60	NPRFCURB008A00	8 [203]	16-3/16 [411]	17-3/8 [441]	40-1/4 [1022]	41-15/16 [1065]	44-7/16 [1129]	46-1/16 [1169]
	NPRFCURB009A00	14 [356]	16-3/16 [411]	17-3/8 [441]	40-1/4 [1022]	41-15/16 [1065]	44-7/16 [1129]	46-1/16 [1169]

Notes:

1. Seal strip must be applied as required to unit being installed.
2. Roof curb is made of 16 gauge steel.
3. Attach ductwork to curb (flanges of duct rest on curb).
4. Insulated panels: 1—in. thick fiberglass 1 lb. density.
5. When unit mounting screw is used (see Note A), a retainer bracket must be used as well. This bracket must also be used when required by code for hurricane or seismic conditions. This bracket is available through Micrometl.

ACCESSORIES (continued)

ECONOMIZERS (ALL FULLY MODULATING)

Part Number	Application	Control	Use With Model Size
NPECOMZR003A00	Horizontal, convertible to Downflow	Dry Bulb (Enthalpy Control optional)	30
NPECOMZR004A00			36, 42
NPECOMZR006A00			48, 60

All Economizers include Filter Racks but do not include filters.

MANUAL FRESH AIR DAMPERS (use in DOWNFLOW application only) *

Model Number	Control	Use With Model Size
NPMANDPR004A00	Manual	30
NPMANDPR005A00		36, 42
NPMANDPR006A00		48, 60

* Unit must have internal filters to protect evaporator coil when Fresh Air Damper is installed.
All Manual Fresh Air Dampers shipped with Filter Racks but without Filters.

FILTER RACK and FILTER (shipped with 1" filters)

Model Number	Application	Filter Size	Use With Model Size
NPFILTRK004A00	Horizontal or Downflow	12" x 20" x 1" (quan. 2) or 12" x 20" x 2" (quan. 1) **PLUS** 10" x 20" x 2" (quan.1)	30
NPFILTRK005A00		12" x 24" x 1" or 2" (3 required)	36, 42
NPFILTRK006A00		12" x 24" x 1" or 2" (3 required)	48, 60

CONCENTRIC ADAPTER

Model Number	Description	Use With Model Size
AXB030CTA	Adapts downflow openings thru the curb into round duct (18" dia.)	ALL

CONCENTRIC DIFFUSER

Model Number	Description	Use With Model Size
AXB030CSA	STEP DOWN - Adapts round duct (18" dia.) to ceiling diffuser	ALL
AXB030CFA	FLUSH MOUNT - Adapts round duct (18" dia.) to ceiling diffuser	ALL

SQUARE to ROUND TRANSITION

Model Number	Round Size	Square Size	Use With Model Size
NPDUCFLG002A00	14"	14" x 16"	ALL

ANTI-CYCLE TIMER

Model Number	Description	Use With Model Size
NRTIMEGD001A00	5 minute anti-cycle timer (Note: many thermostats have inherent anti-cycle timer logic)	ALL

CRANKCASE HEATER

Model Number	Description	Use With Model Size
NPCRKHTR004A00	Belly-band type electric heater	ALL

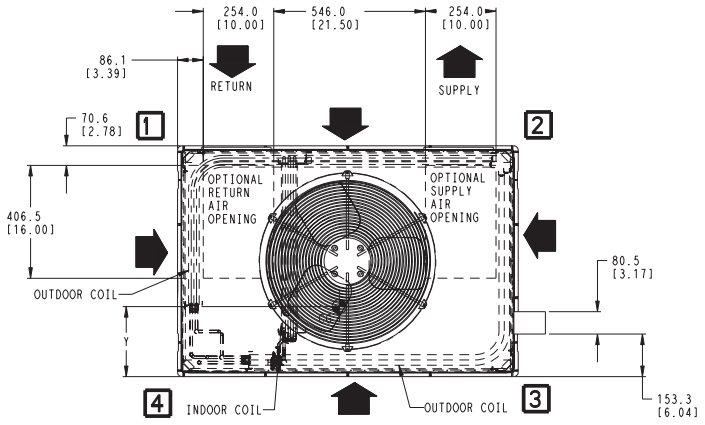
ELECTRIC HEATERS, 208/230-3-60

Electric Heater Model Number	Nominal Capacity (kW)	Fuses	Used With Model Sizes				
			30	36	42	48	60
EHNA05H0N	5.0	0	✓	✓	✓	✓	✓
EHNA10H0N	10.0	0	✓	✓	✓	✓	✓
EHNA15H0N	15.0	0	✓	✓	✓	✓	✓
EHNA20H6F	20.0	6			✓	✓	✓

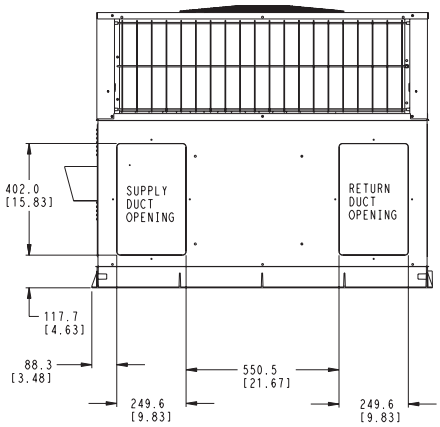
ELECTRIC HEATER USAGE, 460-3-60

Electric Heater Model Number	Nominal Capacity (kW)	Fuses	Used With Model Sizes				
			30	36	42	48	60
EHNA05L0N	5.0	0	N/A	✓	✓	✓	✓
EHNA10L0N	10.0	0	N/A	✓	✓	✓	✓
EHNA15L0N	15.0	0	N/A	✓	✓	✓	✓
EHNA20L0N	20.0	0	N/A		✓	✓	✓

UNIT DIMENSIONS, model sizes 30, 36



TOP VIEW



REAR VIEW

REQUIRED CLEARANCES TO COMBUSTIBLE MATL.

	MILLIMETERS [IN]
TOP OF UNIT	355.6 [14.00]
DUCT SIDE OF UNIT	50.8 [2.00]
SIDE OPPOSITE DUCTS	355.6 [14.00]
BOTTOM OF UNIT	12.7 [0.50]
FLUE PANEL	914.4 [36.00]

NEC. REQUIRED CLEARANCES.

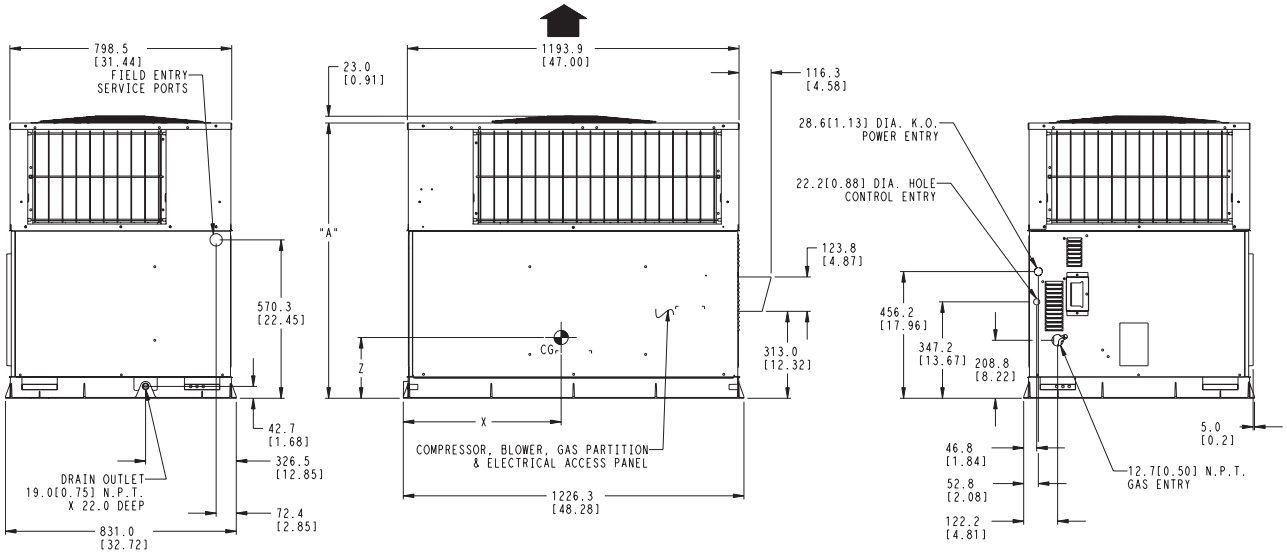
	MILLIMETERS [IN]
BETWEEN UNITS, POWER ENTRY SIDE	1066.8 [42.00]
UNIT AND UNGROUNDED SURFACES, POWER ENTRY SIDE	914.0 [36.00]
UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE	1066.8 [42.00]

REQUIRED CLEARANCE FOR OPERATION AND SERVICING

	MILLIMETERS [IN]
EVAP. COIL ACCESS SIDE	914.0 [36.00]
POWER ENTRY SIDE	1066.8 [42.00]
(EXCEPT FOR NEC REQUIREMENTS)	
UNIT TOP	1219.2 [48.00]
SIDE OPPOSITE DUCTS	914.0 [36.00]
DUCT PANEL	304.8 [12.00]*

*MINIMUM DISTANCES: IF UNIT IS PLACED LESS THAN 304.8 [12.00] FROM WALL SYSTEM, THEN SYSTEM PERFORMANCE MAYBE COMPROMISED.

DIMENSIONS IN [] ARE IN INCHES



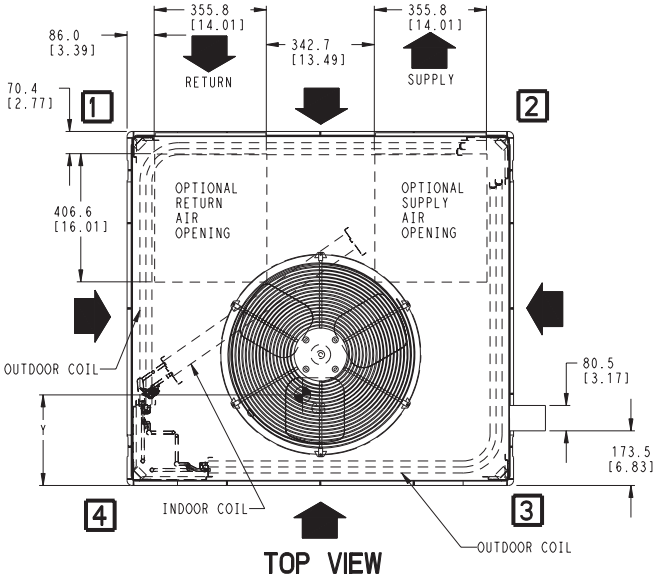
LEFT SIDE VIEW

FRONT VIEW

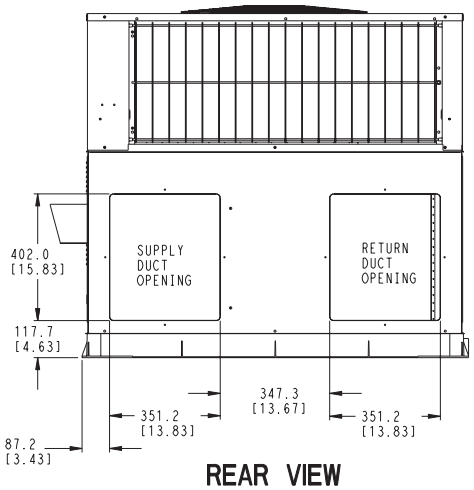
RIGHT SIDE VIEW

Model Size	UNIT HEIGHT inches [mm]	CENTER OF GRAVITY inches [mm]		
	A	X	Y	Z
30	37.02 [940]	24.2 [614.7]	16.5 [419.1]	16.0 [406.4]
36	41.02 [1042]	22.8 [579.1]	16.6 [421.6]	16.9 [429.3]

UNIT DIMENSIONS, model sizes 42, 48, 60



TOP VIEW



REAR VIEW

REQUIRED CLEARANCES TO COMBUSTIBLE MATL.

	MILLIMETERS [IN]
TOP OF UNIT	355.6 [14.00]
DUCT SIDE OF UNIT	50.8 [2.00]
SIDE OPPOSITE DUCTS	355.6 [14.00]
BOTTOM OF UNIT	12.7 [0.50]
FLUE PANEL	914.4 [36.00]

NEC. REQUIRED CLEARANCES.

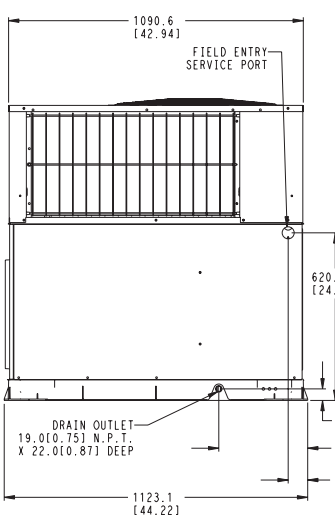
	MILLIMETERS [IN]
BETWEEN UNITS, POWER ENTRY SIDE	1066.8 [42.00]
UNIT AND UNGROUNDED SURFACES, POWER ENTRY SIDE	914.0 [36.00]
UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE	1066.8 [42.00]

REQUIRED CLEARANCE FOR OPERATION AND SERVICING

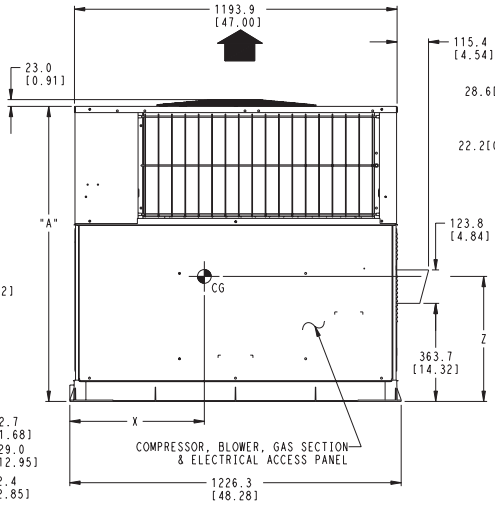
	MILLIMETERS [IN]
EVAP. COIL ACCESS SIDE	914.0 [36.00]
POWER ENTRY SIDE	1066.8 [42.00]
(EXCEPT FOR NEC REQUIREMENTS)	
UNIT TOP	1219.2 [48.00]
SIDE OPPOSITE DUCTS	914.0 [36.00]
DUCT PANEL	304.8 [12.00]*

*MINIMUM DISTANCES: IF UNIT IS PLACED LESS THAN 304.8 [12.00] FROM WALL SYSTEM, THEN SYSTEM PERFORMANCE MAYBE COMPROMISED.

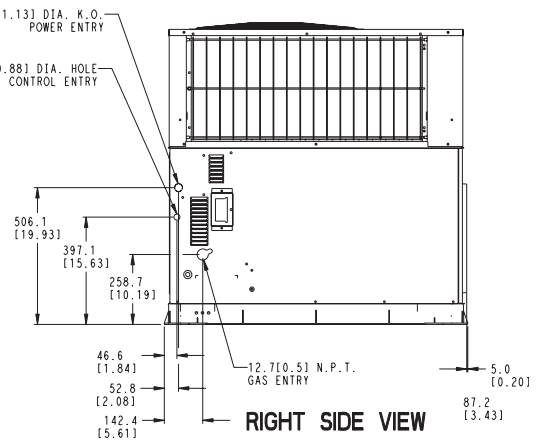
DIMENSIONS IN [] ARE IN INCHES



LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW

Model Size	UNIT HEIGHT inches [mm]	CENTER OF GRAVITY inches [mm]		
	A	X	Y	Z
42	46.98 [1193]	24.5 [622.3]	21.3 [541.0]	16.9 [429.3]
48	46.98 [1193]	24.6 [624.8]	22.0 [558.8]	17.5 [444.5]
60	50.98 [1295]	25.5 [647.7]	22.4 [568.9]	19.7 [500.4]

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

GUIDE SPECIFICATIONS

CABINET

Unit cabinet shall be constructed of phosphated, zinc-coated, pre-painted steel capable of with-standing 500 hours in salt spray. Normal service shall be through a single removable cabinet panel. The unit shall be constructed on a rust proof unit base that has an externally trapped, integrated sloped drain. Evaporator fan compartment top surface shall be insulated with a minimum ½" thick, flexible fiberglass insulation, coated on the air side and retained by adhesive and mechanical means. The evaporator wall sections will be insulated with a minimum semi-rigid foil-faced board capable of being wiped clean. Aluminum foil-faced fiberglass insulation shall be used in the entire indoor air cavity section.

COOLING SECTION

The unit is factory charged and operationally ready upon delivery. The unit refrigerant circuit has a high efficiency scroll compressor with internal overload protection, and copper tube / aluminum fin evaporator and condenser coils. The unit is designed for cooling operation to 40° F and will be capable of being wired for field installed economizer type accessories.

COILS

The evaporator and condenser coils are fabricated with aluminum fins mechanically bonded to copper tubing. Both coils are pressure tested prior to assembly into the unit and electronically leak tested after assembly into the unit.

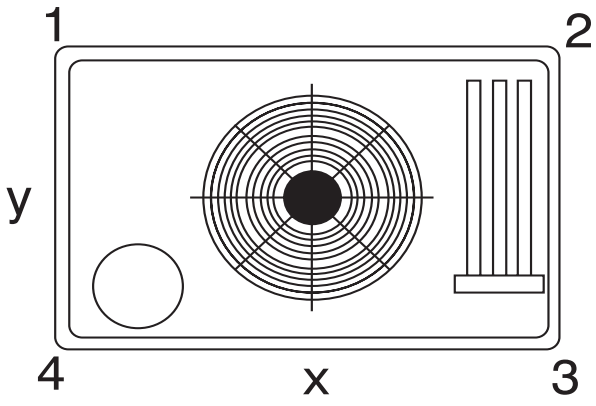
CONDENSER FAN

The unit has a single direct-drive propeller-fan / motor assembly. The assembly is mounted directly to a vertical-discharge grille that is easily removed for service. Motors are 1100 RPM with sleeve or ball bearings and internal overload protection.

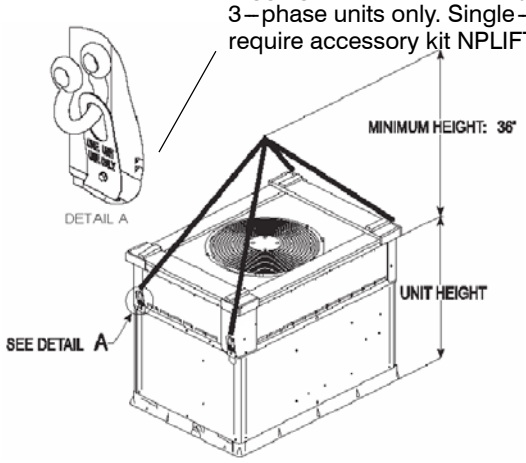
EVAPORATOR BLOWER

All units have a direct-drive X-13 evaporator blower motor as a standard. The direct-drive evaporator blower motor has sleeve bearings and internal overload protection.

CORNER WEIGHTS and RIGGING DETAILS



Rigging Brackets are factory installed on 3–phase units only. Single–phase units require accessory kit NPLIFTBK003A10



CORNER WEIGHTS										
Model Size:	**30**		**36**		**42**		**48**		**60**	
	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg
Unit Only Weight	277	125.6	335	151.9	384	174.2	402	182.3	430	195.0
Corner Weight 1	52	23.6	71	32.2	99	44.9	101	45.8	102	46.2
Corner Weight 2	68	30.8	80	36.3	98	44.5	101	45.8	106	48.1
Corner Weight 3*	67	30.4	81	36.7	98	44.5	101	45.8	106	48.1
Corner Weight 4**	90	40.8	103	46.7	128	58.1	138	62.6	147	66.7
Rigging Weight***	296	134.3	324	160.6	406	184.2	424	192.3	452	205
Shipping Weight***	331	150.1	389	176.4	446	202.3	464	210.5	492	223.2

* 460 Volt units add 5 lbs (2.2 kg) to Corner Weight 3.
** 460 Volt units add 9 lbs (4.08 kg) to Corner Weight 4.
*** 460 Volt units add 14 lbs (6.35 kg) to Shipping Weight.

MODEL NOMENCLATURE										
MODEL SERIES	**P**	**A**	**N**	**4**	**36**	**000**	**H**	**00**	**A**	**1**
P = Package										
A = Air Conditioner										
N = R-410A										
4 = 14 **SEER**										
30 = 30,000 BTUH = 2.5 Tons										
36 = 36,000 BTUH = 3 Tons										
42 = 42,000 BTUH = 3.5 Tons										
48 = 48,000 BTUH = 4 Tons **NOMINAL**										
60 = 60,000 BTUH = 5 Tons **COOLING BTUH**										
000 = N/A **NOMINAL HEATING BTUH**										
H = 208/230-3-60										
L = 460-3-60 **VOLTAGE**										
00 = Standard **FACTORY INSTALLED OPTIONS**										
Sales Model Digit										
Engineering Digit										

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE