

TECHNICAL SPECIFICATIONS

P8SE Series

14 SEER, Three Phase, Single Packaged Air Conditioning

3, 4, 5 Ton Units

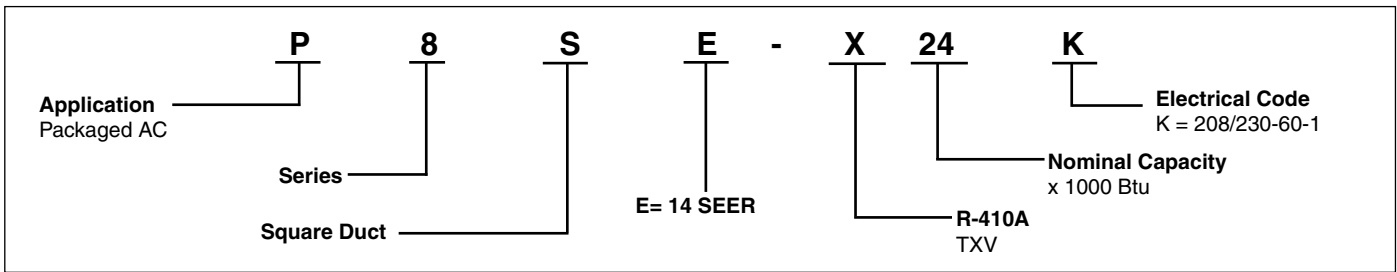
The P8 Series single packaged air conditioners are high efficiency self contained cooling units that can be installed on a roof or on a slab. The convertible unit design makes installations simple in all applications. Units are ETL and ETLc listed.



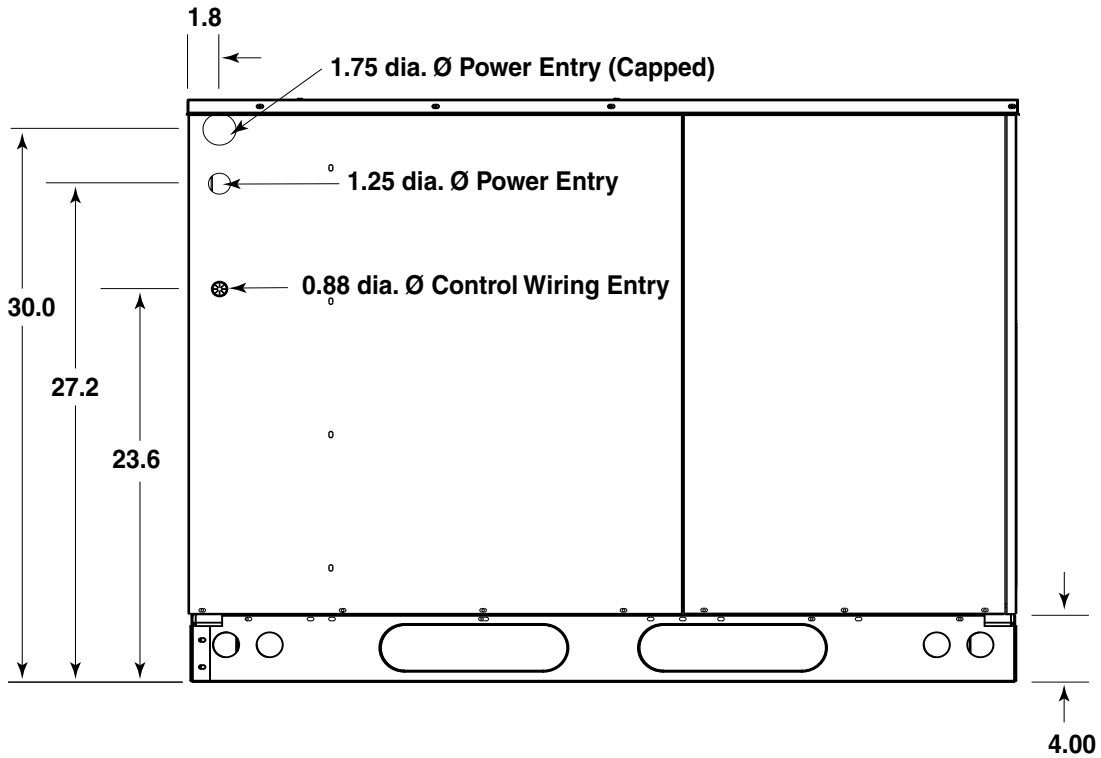
FEATURES and BENEFITS

- **5-Speed ECM Blower Motor:** Provides wide range of airflows.
- **State-of-the-art Copeland Scroll Compressor** is standard equipment.
- **Both Coils are Anteater Micro-Channel** to prevent formicary corrosion.
- **Proven, Industry Standard Components:** Easier service and availability.
- **TXV Externally Equalized:** Provides precise refrigerant control under varying load conditions.
- **High and Low Pressure Switches:** Protect against abnormally high system pressures and loss of refrigerant.
- **Liquid Line Filter Drier:** Insures clean and dry refrigeration system.
- **Externally Accessible Service Ports:** Quick access to refrigerant system without disrupting operation.
- **Compact Footprint/Low Profile:** Easy to handle and transport.
- **Convertible Air Delivery:** Horizontal or downflow to accommodate rooftop or horizontal application.
- **Heavy-Gauge, Full Perimeter Base Rails:** Facilitate forklift handling and curb mounting.
- **Galvanized Steel Cabinet:** Polyurethane finish provides 950 hours salt spray protection.
- **Wire Guard Coated with Earth Friendly Epoxy and Mesh Hail Guard:** Will never rust and protects the coil from being damaged by balls, lawnmowers, hail etc.
- **Corrosion-Resistant and Covered Drain Pan:** Quickly drains away evaporator condensate and prevents infiltration air.
- **Quiet Operation and Low Vibration:** 20" fan blade combined with custom venturi condenser fan.
- **Access to Controls and Major Components:** Easy in and out service.
- **Service Access Panels:** Allows easy access to all major components and the compressor. Designed to make servicing easier for the Contractor.
- **Easy to Install:** Electric heat strip provides up to 20 KW of heat output.
- **Accessories:** Roof curbs, economizers, fresh air dampers and more.

MODEL IDENTIFICATION CODE



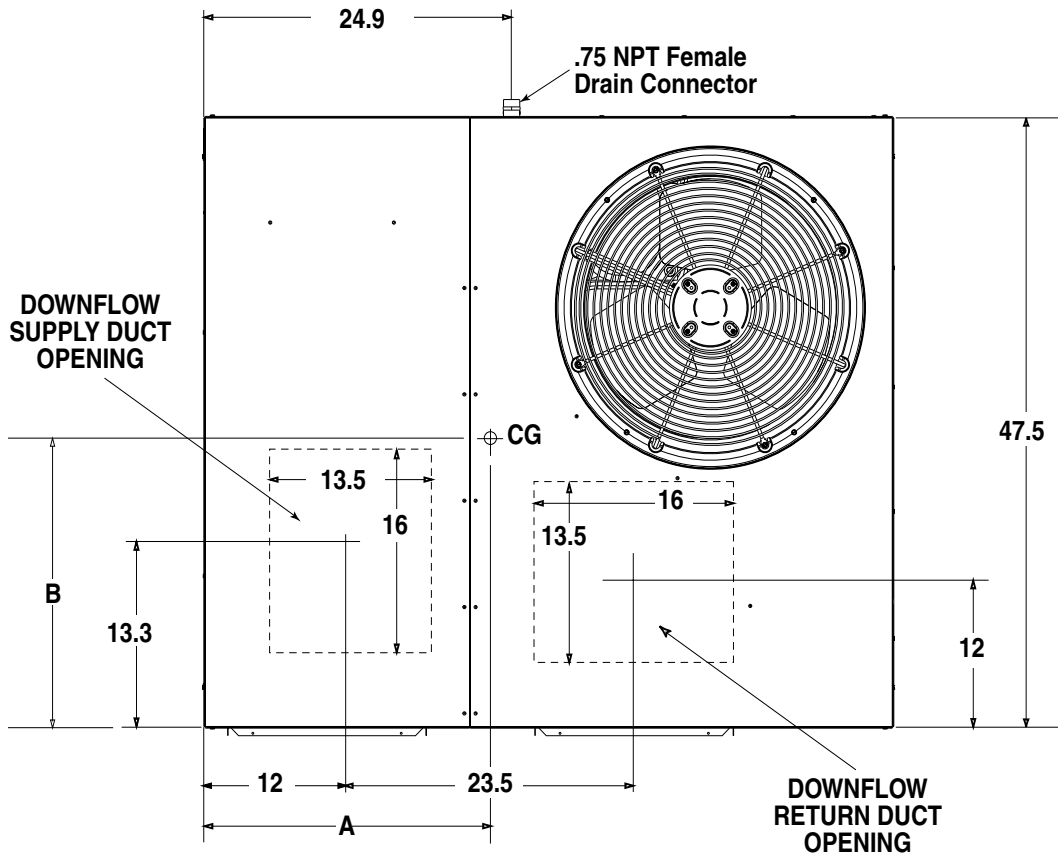
DIMENSIONS (inches and pounds)



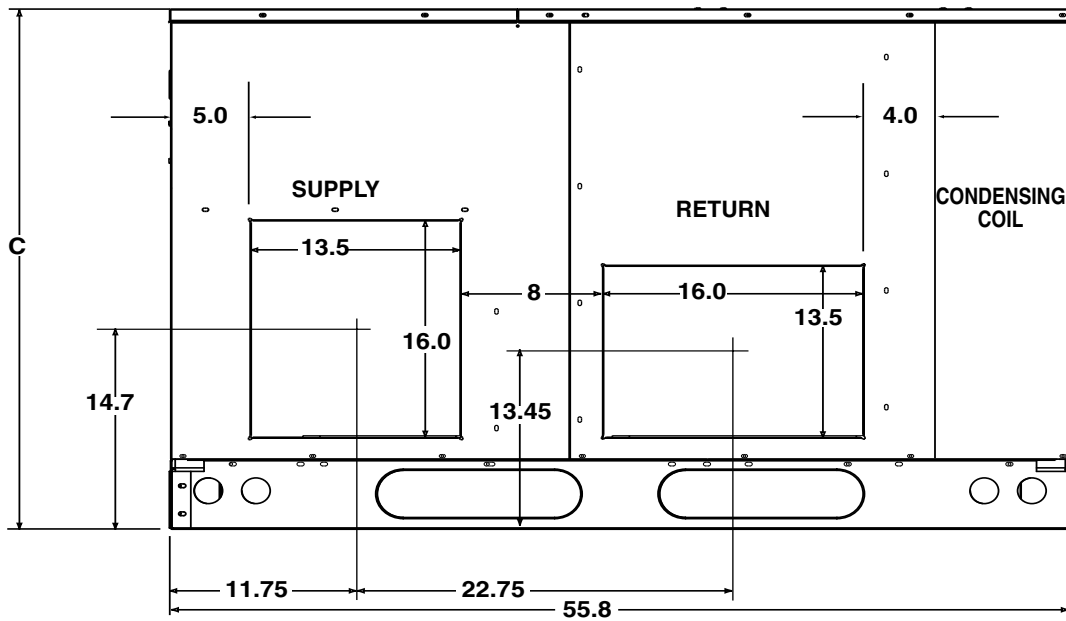
Side View

Model Number P8SE-	Net Weight	Ship Weight	Center of Gravity		Height (in inches) C with base rails
			A	B	
X36	405	415	29.5	26.0	35.3
X48	415	425	29.5	26.5	35.3
X60	480	490	30.0	27.5	39.3

DIMENSIONS (Continued)



Top View



Back (Duct) View

SPECIFICATIONS

P8SE Models - 208/230V Three Phase

Model Number	P8SE		
	X36C	X48C	X60C
Performance			
Capacity -Cooling BTUH	34,200	46,000	58,000
Efficiency - SEER	14.0	14.0	14.0
EER (Btuh/watt)	11.0	11.0	11.0
Electrical Rating - 60 Hz			
Phase	3	3	3
Operating Voltage Range	187 - 253	187 - 253	187 - 253
Compressor Data			
Volts	208 / 230	208 / 230	208 / 230
Rated Load Amps	11.6	15.3	17.4
Lock Rotor Amps	73	83	110
Indoor Blower			
Type / No. of Speeds	Fixed Torque / 5	Fixed Torque / 5	Fixed Torque / 5
Motor - HP	1/2	3/4	3/4
Motor - Amps	3.6	5.0	5.0
Outdoor Fan			
Motor - HP - RPM	1/4 - 1100	1/4 - 1100	1/4 - 1100
Motor - Amps	1.2	1.2	1.2
Fan Diameter (in.) / CFM	20/3600	20/3800	20/3800
Refrigerant Charge - Oz.	57.6	59.2	70.4
Net Weight lbs.	405	415	480
Shipping Weight lbs.	415	425	490
Filters (Field Installed)			
Style	Disposable	Disposable	Disposable
Size (Qty)	16 x 25 x 1 (2)		18 x 25 x 1 (2)
	Field convertible to two inches		

BLOWER PERFORMANCE

Model Number	External Static Pressure Drop - inches water column								
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	
X36C	** Tap 1	1126	1065	1024	940	853	768	702	637
	* Tap 2	1315	1268	1206	1144	1076	987	907	839
	Tap 3	1492	1438	1386	1337	1287	1230	1171	1062
	Tap 4	1587	1534	1494	1439	1388	1338	1280	1216
	Tap 5	1684	1638	1591	1541	1492	1444	1390	1336
X48C	** Tap 1	1238	1170	1108	1051	986	890	817	755
	Tap 2	1403	1351	1301	1232	1175	1125	997	955
	* Tap 3	1772	1727	1670	1621	1568	1509	1463	1399
	Tap 4	1968	1926	1873	1823	1774	1717	1665	1619
	Tap 5	2242	2183	2143	2098	2044	1995	1953	1907
X60C	** Tap 1	1161	1116	1084	1031	954	895	834	779
	Tap 2	1553	1521	1474	1437	1379	1335	1276	1183
	* Tap 3	1862	1818	1766	1731	1678	1635	1599	1539
	Tap 4	2009	1973	1923	1887	1838	1796	1752	1703
	Tap 5	2288	2246	2210	2170	2132	2094	2050	2014

Airflow performance is with a dry coil

* Denotes factory set cooling speed

** Denotes factory set electric heating speed

SPECIFICATIONS

P8SE Models - 460V Three Phase

Model Number	P8SE		
	X36D	X48D	X60D
Performance			
Capacity - Cooling BTUH	34,200	46,000	58,000
Efficiency - SEER	14.0	14.0	14.0
EER (Btuh/watt)	11.0	11.0	11.0
Electrical Rating - 60 Hz			
Phase	3	3	3
Operating Voltage Range	414 - 506	414 - 506	414 - 506
Compressor Data			
Volts	460	460	460
Rated Load Amps	6.4	6.9	8.6
Lock Rotor Amps	38	41	52
Indoor Blower			
Type / No. of Speeds	Fixed Torque / 5	Fixed Torque / 5	Fixed Torque / 5
Motor - HP	1/2	1	1
Motor - Amps	1.9	3.3	3.3
Outdoor Fan			
Motor - HP - RPM	1/4 - 1100	1/4 - 1100	1/4 - 1100
Motor - Amps	0.6	0.6	0.6
Fan Diameter (in.) / CFM	20/3600	20/3800	20/3800
Refrigerant Charge - Oz.	57.6	60.8	70.4
Net Weight lbs.	405	415	480
Shipping Weight lbs.	415	425	490
Filters (Field Installed)			
Style	Disposable	Disposable	Disposable
Size (Qty)	16 x 25 x 1 (2)		18 x 25 x 1 (2)
	Field convertible to two inches		

BLOWER PERFORMANCE

Model Number	External Static Pressure Drop - inches water column								
	P8SE-	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
X36D	** Tap 1	1124	1040	981	908	824	750	687	623
	* Tap 2	1320	1266	1210	1159	1100	1029	945	884
	Tap 3	1542	1479	1443	1386	1329	1283	1234	1182
	Tap 4	1642	1594	1533	1492	1441	1396	1340	1300
	Tap 5	1750	1694	1642	1600	1560	1510	1467	1421
X48D	** Tap 1	1279	1214	1134	1078	1034	944	855	800
	Tap 2	1510	1452	1399	1338	1294	1236	1174	1059
	* Tap 3	1760	1711	1641	1597	1545	1488	1435	1386
	Tap 4	1949	1912	1858	1789	1748	1701	1646	1603
	Tap 5	2242	2153	2110	2063	2016	1965	1922	1870
X60D	** Tap 1	1228	1150	1074	1014	956	867	769	705
	Tap 2	1670	1617	1551	1497	1458	1417	1342	1303
	* Tap 3	1926	1891	1850	1783	1741	1680	1634	1579
	Tap 4	2087	2029	1981	1939	1885	1834	1780	1721
	Tap 5	2278	2233	2193	2141	2098	2046	2001	1943

Airflow performance is with a dry coil

* Denotes factory set cooling speed

** Denotes factory set electric heating speed

AIR CONDITIONER ELECTRICAL DATA

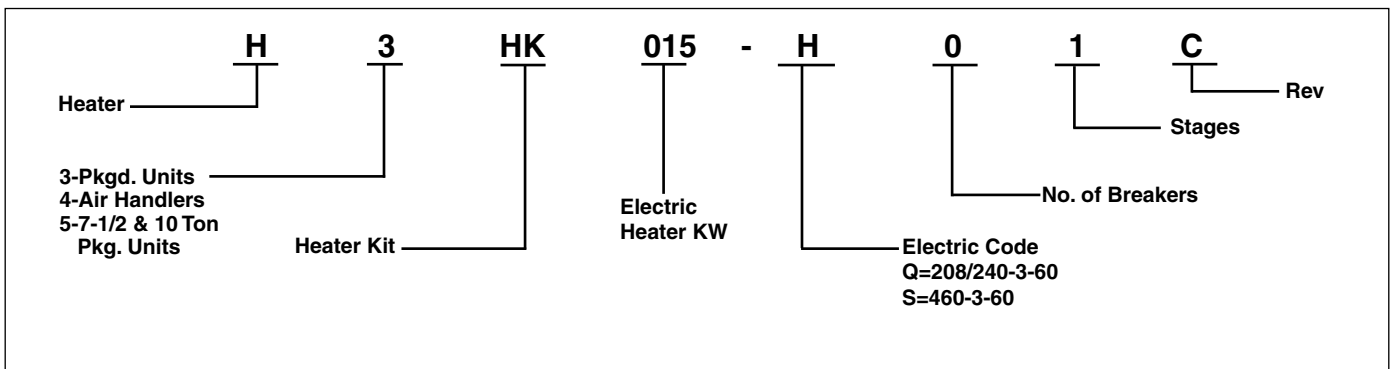
P8SE SERIES - 208/230V - 3 PHASE MODELS			
MODEL NUMBER	HEATER INSTALLED NOMINAL KW	SINGLE CIRCUIT	
		MCA	MOP
X36C	0	17.0	25
	9	28.7	30
	15	46.8	50
X48C	0	21.6	35
	9	28.7	35
	15	46.8	50
X60C	0	29	45
	9	29	45
	15	46.7	50

P8SE SERIES - 460V - 3 PHASE MODELS			
MODEL NUMBER	HEATER INSTALLED NOMINAL KW	SINGLE CIRCUIT	
		MCA	MOP
X36D	0	9.4	15
	9	15.1	15
	15	24.5	25
X48D	0	10.9	15
	9	16.2	15
	15	25.7	30
X60D	0	14.6	15
	9	14.9	15
	15	24.3	25

HEATER APPLICATION MATRIX

TONNAGE & PHASE	UNIT	NOMINAL KW	HEATER KIT MODEL	HEATER KIT PART NUMBER	BREAKERS REQUIRED
3,4, & 5 TON 3 Phase 208/230V	P8SE	9	H3HK-009Q-01C	903854C	None
		15	H3HK-015Q-01C	903855C	None
3,4, & 5 TON 3 Phase 460V	P8SE	9	H3HK-009S-01C	903850C	None
		15	H3HK-015S-01C	903851C	None

MODEL IDENTIFICATION CODE



ACCESSORIES

Description	Part Number
Roof Curb (8")	547830
Roof Curb (14")	547831
Roof Curb (18")	547850
Roof Curb (24")	547851
Supply/return transition, 16"	547834
Supply/return transition, 18"	547835
Concentric diffuser, flush, 16"	547836
Concentric diffuser, flush, 18"	547837
Concentric diffuser, step down 16"	547838
Concentric diffuser, step down 18"	547839
Manual Fresh Air Damper	547832
Motorized Fresh Air Damper	547840
Economizer, downflow w/filter modulating, enthalpy controlled, title 24 compliant	563209
Economizer, horizontal modulating, enthalpy controlled, title 24 compliant	562534
Differential enthalpy sensor kit for title 24 compliant economizer	922431
Power Exhaust for use with downflow economizer (208/230 3 Phase) Special Order	555578
Power Exhaust for use with horizontal economizer (208/230 3 Phase) Special Order	555580
Power Exhaust for use with downflow economizer (460V 3 Phase) Special Order	555579
Power Exhaust for use with horizontal economizer (460V 3 Phase) Special Order	555581
Hood Type Hail Guard 34" X 76" (3 or 4 Ton)	547846
Hood Type Hail Guard 38" X 76" (5 Ton)	547847
Control, CO2 sensor, wall mount	920317
Control, CO2 sensor, duct mount	920318
Duct Smoke Detector Photo Elec	558863
Multi Signal Control	558866
Sampling Tube DST 3, 2-4'	558864
Sampling Tube DST 5, 4-8'	558865
Low Pressure Switch Kit	913551
Low Ambient Kit	918837
Duct Adaptor, 14" Round (2 each)	913812A
Circuit Breaker, Three Phase (3-Pole)	913740

COOLING EXPANDED RATINGS

P8SE-X36K

O.D.T		85°F									95°F			105°F			115°F			
CFM	E.D.B.	E.W.B.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.
1100	80	62	38.6	31.3	1.94	36.0	30.1	2.22	33.5	29.0	2.50	30.9	27.8	2.78	28.3	26.6	3.05	25.7	25.5	3.33
	80	67	41.4	26.0	1.93	38.8	24.8	2.21	36.2	23.6	2.48	33.7	22.5	2.76	31.1	21.3	3.04	28.5	20.1	3.32
	80	72	44.2	20.7	1.92	41.6	19.5	2.19	39.0	18.3	2.47	36.4	17.2	2.75	33.9	16.0	3.03	31.3	14.8	3.30
	75	63	39.2	25.3	1.94	36.7	24.2	2.21	34.1	23.0	2.49	31.5	21.8	2.77	28.9	20.7	3.05	26.4	19.5	3.33
1200	80	62	40.1	33.0	1.98	37.5	31.8	2.26	35.0	30.6	2.54	32.4	29.5	2.81	29.8	28.3	3.09	27.2	27.1	3.37
	80	67	42.9	27.6	1.97	40.3	26.5	2.24	37.7	25.3	2.52	35.2	24.1	2.80	32.6	23.0	3.08	30.0	21.8	3.36
	80	72	45.7	22.3	1.95	43.1	21.2	2.23	40.5	20.0	2.51	37.9	18.8	2.79	35.4	17.7	3.06	32.8	16.5	3.34
	75	63	40.8	27.0	1.97	38.2	25.8	2.25	35.6	24.7	2.53	33.0	23.5	2.81	30.4	22.3	3.08	27.9	21.2	3.36
1400	80	62	40.7	33.9	2.05	38.1	32.7	2.33	35.5	31.5	2.61	33.0	30.4	2.89	30.4	29.2	3.17	27.8	27.8	3.44
	80	67	43.5	28.6	2.04	40.9	27.4	2.32	38.3	26.2	2.60	35.8	25.1	2.87	33.2	23.9	3.15	30.6	22.7	3.43
	80	72	46.3	23.2	2.03	43.7	22.1	2.31	41.1	20.9	2.58	38.5	19.7	2.86	36.0	18.6	3.14	33.4	17.4	3.42
	75	63	41.3	27.9	2.05	38.8	26.8	2.33	36.2	25.6	2.60	33.6	24.4	2.88	31.0	23.3	3.16	28.5	22.1	3.44

P8SE-X48K

O.D.T		85°F									95°F			105°F			115°F			
CFM	E.D.B.	E.W.B.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.
1300	80	62	50.1	38.4	2.71	47.6	37.4	3	44.8	36.1	3.36	41.6	34.5	3.77	38.1	32.5	4.25	34.2	30.2	4.79
	80	67	53	32.3	2.72	50.5	31.3	3.02	47.6	30	3.39	44.4	28.3	3.82	40.9	26.3	4.31	37.1	24	4.86
	80	72	55.9	26.2	2.73	53.4	25.2	3.04	50.5	23.8	3.42	47.3	22.2	3.86	43.8	20.2	4.36	40	17.9	4.92
	75	63	51.3	31.7	2.61	48.3	30.8	2.9	45	29.5	3.26	41.4	28	3.67	37.5	26.1	4.14	33.2	23.9	4.68
1500	80	62	51.1	40.5	2.7	48.9	39.8	2.99	46.3	38.8	3.35	43.4	37.4	3.76	40.2	35.7	4.24	36.7	33.7	4.78
	80	67	54.9	34.4	2.71	52.6	33.7	3.01	50	32.6	3.38	47.1	31.3	3.8	43.9	29.6	4.29	40.4	27.6	4.84
	80	72	58.6	28.3	2.71	56.3	27.6	3.03	53.8	26.5	3.4	50.9	25.2	3.84	47.6	23.5	4.34	44.1	21.4	4.91
	75	63	52.9	33.1	2.6	50.2	32.5	2.89	47.2	31.5	3.24	43.9	30.3	3.66	40.3	28.7	4.13	36.3	26.8	4.67
1700	80	62	48.7	39.2	2.87	46.8	38.8	3.17	44.5	38.1	3.52	41.9	37	3.94	39	35.6	4.42	35.7	33.9	4.96
	80	67	53.3	33.1	2.88	51.4	32.7	3.19	49.1	31.9	3.55	46.5	30.9	3.98	43.5	29.5	4.47	40.3	27.7	5.02
	80	72	57.9	27	2.89	55.9	26.5	3.2	53.6	25.8	3.58	51	24.7	4.02	48.1	23.3	4.52	44.8	21.6	5.08
	75	63	51.1	31.1	2.78	48.8	30.8	3.07	46.1	30.1	3.42	43	29.2	3.83	39.7	27.9	4.31	36	26.3	4.84

P8SE-X60K

O.D.T		85°F									95°F			105°F			115°F			
CFM	E.D.B.	E.W.B.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.
1600	80	62	61.4	47.3	3.45	57.8	45.4	3.81	54.1	43.5	4.26	50.4	41.6	4.81	46.7	39.6	5.46	42.9	37.6	6.2
	80	67	66.9	41	3.53	63.3	39.1	3.88	59.6	37.2	4.33	55.9	35.2	4.88	52.1	33.3	5.52	48.4	31.3	6.26
	80	72	72.4	34.6	3.6	68.7	32.7	3.95	65	30.8	4.39	61.3	28.9	4.94	57.6	26.9	5.58	53.8	24.9	6.32
	75	63	62.1	39.7	3.45	58.5	37.9	3.81	54.9	36.1	4.27	51.3	34.3	4.82	47.7	32.4	5.48	44	30.5	6.22
1750	80	62	62.6	48.8	3.54	58.8	46.8	3.9	55.1	44.8	4.35	51.2	42.8	4.9	47.4	40.7	5.54	43.5	38.6	6.29
	80	67	68	42.5	3.61	64.3	40.5	3.96	60.5	38.4	4.41	56.7	36.4	4.96	52.9	34.3	5.6	49	32.2	6.35
	80	72	73.5	36.1	3.68	69.7	34.1	4.03	66	32.1	4.48	62.1	30	5.02	58.3	28	5.67	54.4	25.9	6.4
	75	63	62.8	40.8	3.54	59.1	38.9	3.9	55.5	37	4.35	51.7	35	4.91	48	33.1	5.56	44.2	31	6.31
1900	80	62	63.4	50	3.6	59.6	47.9	3.96	55.7	45.8	4.41	51.8	43.6	4.96	47.8	41.5	5.61	43.9	39.2	6.35
	80	67	68.9	43.6	3.67	65	41.5	4.03	61.1	39.4	4.48	57.2	37.3	5.03	53.3	35.1	5.67	49.3	32.9	6.41
	80	72	74.3	37.3	3.74	70.5	35.2	4.1	66.6	33.1	4.54	62.7	30.9	5.09	58.7	28.7	5.73	54.8	26.5	6.47
	75	63	63.2	41.6	3.6	59.5	39.6	3.96	55.7	37.6	4.42	51.9	35.5	4.97	48	33.4	5.63	44.1	31.3	6.37



GENERAL TERMS OF LIMITED WARRANTY

Nortek Global HVAC LLC will furnish a replacement for any part of this product which fails in normal use and service within the terms and conditions of the warranty.

For complete details of the Limited Warranty, including applicable terms and conditions, see your local installer or contact the Nortek Global HVAC LLC warranty department for a copy.

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations. Printed in U.S.A (09/2015)