

TECHNICAL SPECIFICATIONS

P6SD Series

13 SEER, Three Phase, Packaged Air Conditioning with R-410A 3-5 Ton Units

The P6SD Series packaged units 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. The unit is truly designed with the contractor and the end user in mind.



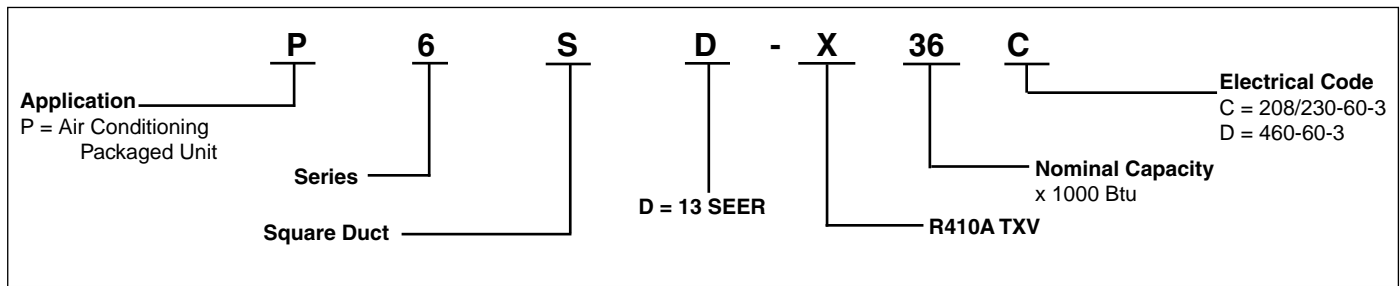
WARRANTY

- One Year Commercial Parts Warranty
- 5 year limited Compressor Warranty

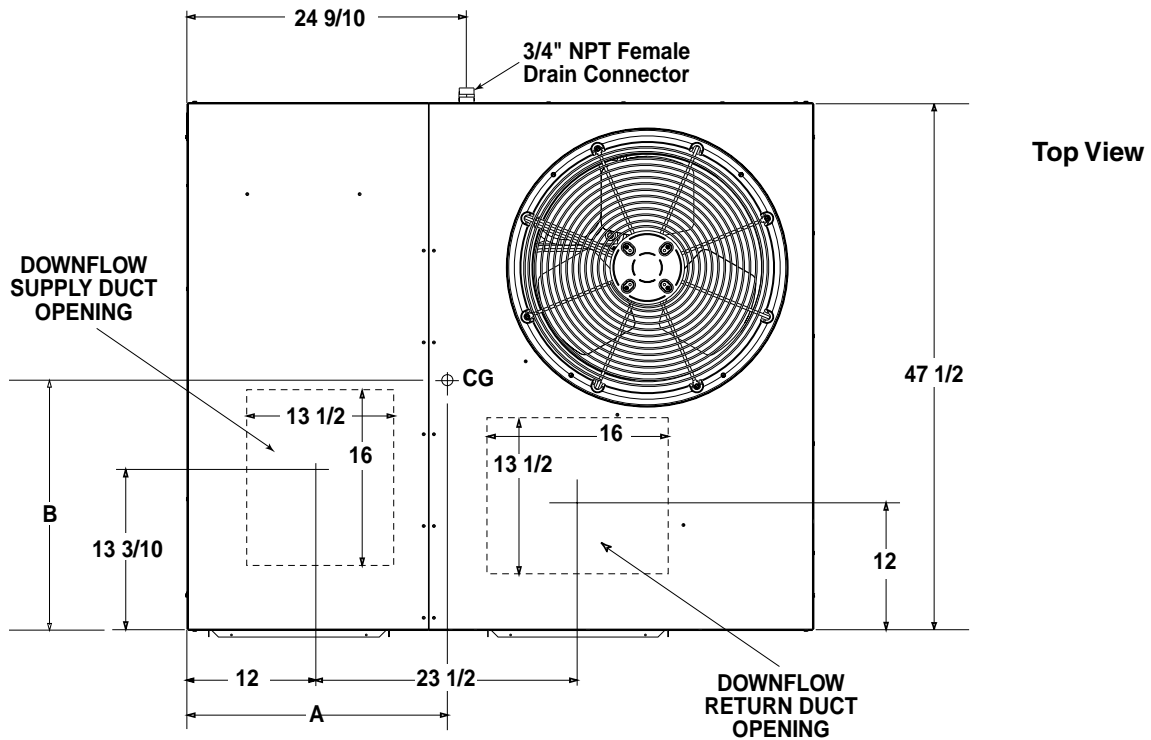
FEATURES and BENEFITS

- **State-of-the-art Copeland Scroll** compressor is standard equipment.
- **R-410A Refrigerant** Earth Friendly non-ozone depleting refrigerant.
- **Proven, Industry Standard Components** Easier service and availability.
- **TXV** Externally equalized. Provides precise refrigerant control under varying load conditions.
- **High Pressure Switch** Protects against abnormally high system pressures.
- **Liquid Line Filter/Drier** Insures clean and dry refrigeration system.
- **Externally Accessible Service Ports** Quick access to refrigerant system without disrupting operation.
- **Compact Footprint** Easy to handle and transport.
- **Convertible Air Delivery** Horizontal or downflow to accommodate rooftop or horizontal application.
- **Heavy-Gauge, Full Perimeter Base Rails** Facilitates forklift handling and curb mounting.
- **Galvanized Steel Cabinet** with polyurethane finish provides 950 hour salt spray protection.
- **Plastic Mesh Hail Guard** will never rust and protect the coil from being damaged by balls, lawnmowers, hail etc.
- **Corrosion-Resistant Drain Pan** Quickly drains away evaporator condensate.
- **Quiet Operation Low Vibration.** 20" fan blade combined with custom venture condenser fan opening.
- **Access to Controls and Major Components** Easy in and out service.
- **Service Access Panels** To all major components and the compressor. Designed to make servicing easier for the Contractor.
- **Factory Installed Filter Rack** 1" or 2" Capable.
- **Easy to Install** Electric heat strip provides 9 or 15 KW of heat output.
- **Accessories** Roof curbs, economizers, fresh air dampers and more.

MODEL IDENTIFICATION CODE



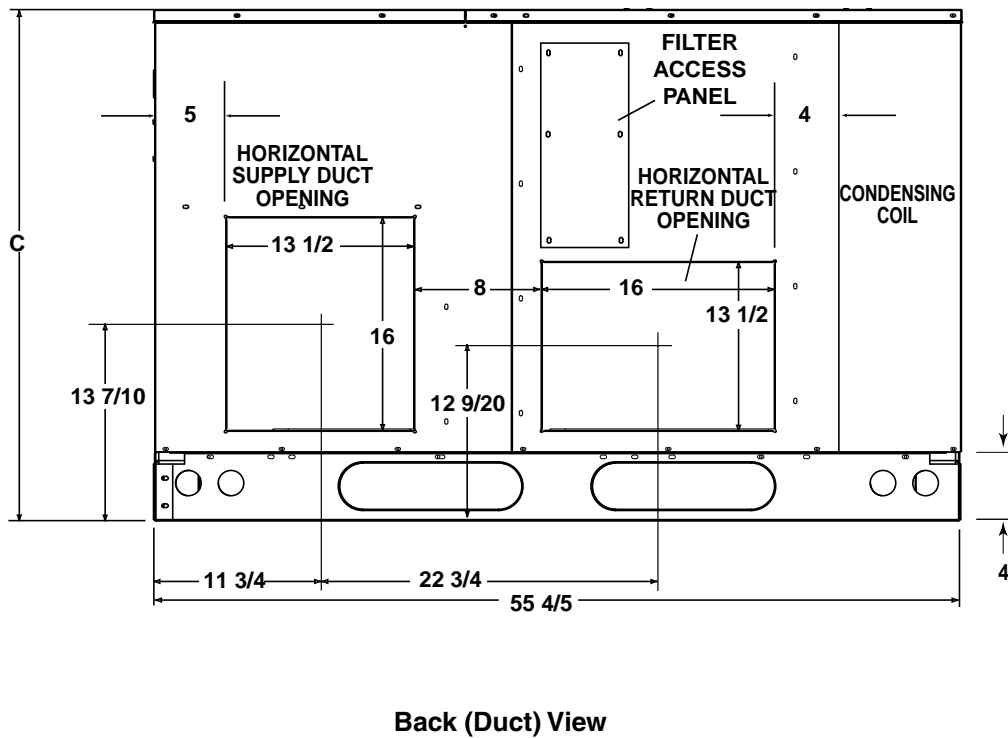
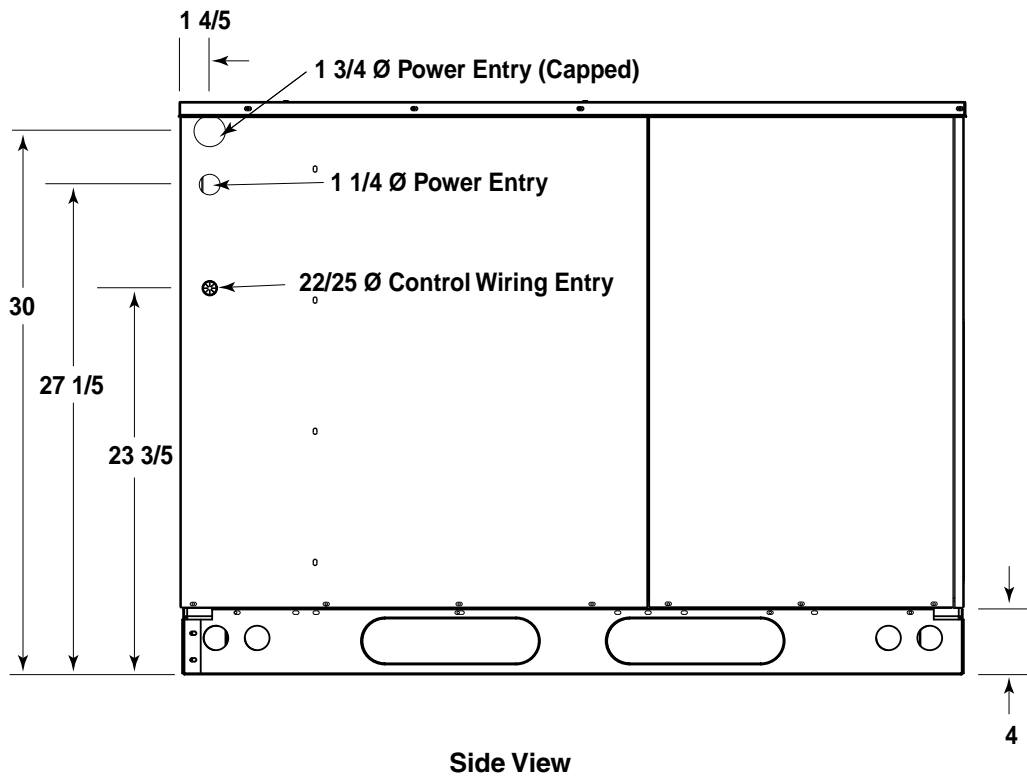
DIMENSIONS



P6SD Models

Model Number P6SD-	Unit Weight	Center of Gravity		Height (in inches)
		A	B	C with base rails
X36	330	27.5	26.5	39.0
X48	345	28.0	26.0	39.0
X60	415	29.5	26.5	43.0

DIMENSIONS (Continued)



SPECIFICATIONS

P6SD Models - 208/230V Three Phase

Model Number	P6SD		
	X36C	X48C	X60C
Performance			
Capacity -Cooling BTUH	34,200	46,000	58,000
Efficiency - SEER	13.30	13.00	13.30
EER (Btuh/watt)	11.2	11.5	11.00
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	DD / 3	DD / 3	Fixed Torque
Motor - HP / RPM	1/4 - 1075	1/2 - 1080	3/4
Motor - Amps	1.3	3.1	6.0
Outdoor Fan			
Motor - HP / RPM	1/4 - 1100	1/4 - 1100	1/4 - 1100
Motor - Amps	1.2	1.2	1.2
Fan Diameter / CFM	20/3600	20/3800	20/3800
Refrigerant Charge - Oz. R-410A	110	168	192
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

P6SD Models

Model Number P6SD-		External Static Pressure Drop - inches water column							
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
X36	High	1610	1562	1504	1442	1365	1295	1214	1109
	Medium	1367	1320	1271	1205	1138	1065	968	845
	* Low	1153	1102	1043	990	912	831	731	618
X48	High	2361	2278	2218	2141	2066	1976	1870	1758
	Medium	2026	1982	1935	1889	1822	1744	1660	1554
	* Low	1584	1568	1532	1489	1445	1387	1322	1236
X60	** Tap T1	1515	1450	1380	1350	1300	1250	1200	1160
	** Tap T2	1580	1520	1460	1400	1360	1300	1260	1230
	* Tap T3	1740	1690	1650	1600	1540	1500	1460	1390
	Tap T4	1960	1910	1840	1820	1780	1740	1700	1600
	Tap T5	2090	2050	2010	1975	1940	1900	1850	1790

* Denotes factory set cooling speed

** Denotes factory set electric heating speed

NOTE: Airflow performance is with a dry coil

SPECIFICATIONS

P6SD Models - 460V Three Phase

Model Number	P6SD		
	X36D	X48D	X60D
Performance			
Capacity -Cooling BTUH	34,200	46,000	58,000
Efficiency - SEER	13.30	13.00	13.30
EER (Btuh/watt)	11.2	11.5	11.00
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	DD / 3	DD / 3	Fixed Torque
Motor - HP / RPM	1/4 - 1075	1/2 - 1080	3/4
Motor - Amps	0.8	1.7	3.2
Outdoor Fan			
Motor - HP / RPM	1/4 - 1100	1/4 - 1100	1/4 - 1100
Motor - Amps	0.6	0.6	0.6
Fan Diameter / CFM	20/3600	20/3800	20/3800
Refrigerant Charge - Oz. R-410A	110	168	192
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		

AIR CONDITIONER ELECTRICAL DATA

P6SD SERIES - 208/230V - 3 PHASE MODELS				
MODEL NUMBER P6SD-	HEATER INSTALLED NOMINAL KW	SINGLE CIRCUIT		
		MCA	REC, WIRE GAGE (90° C CU)	MOP
X36C	0	17.0	12	25
	9	28.7	10	30
	15	46.8	8	50
X48C	0	21.6	10	35
	9	28.7	10	35
	15	46.8	8	50
X60C	0	29	10	45
	9	29	10	45
	15	46.7	8	50

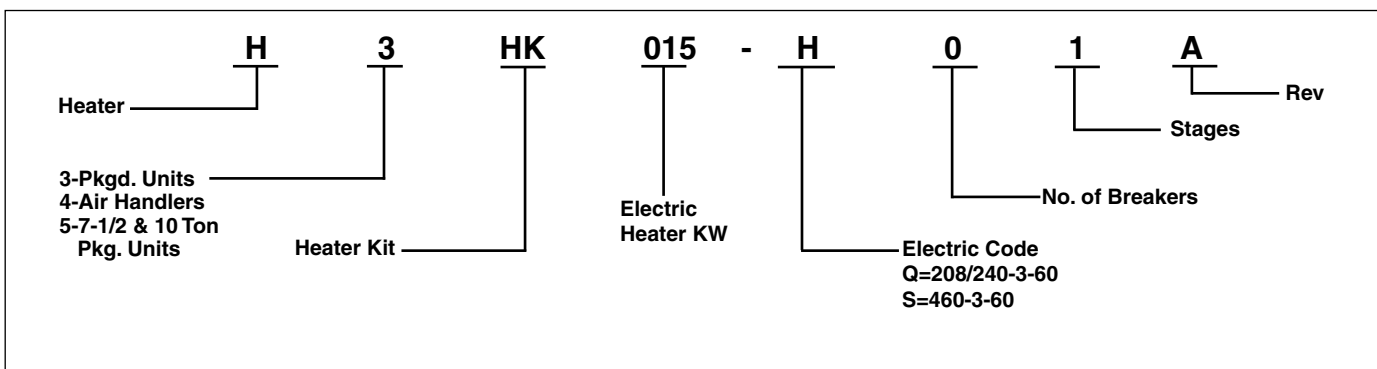
P6SD SERIES - 460V - 3 PHASE MODELS				
MODEL NUMBER P6SD-	HEATER INSTALLED NOMINAL KW	SINGLE CIRCUIT		
		MCA	REC, WIRE GAGE (90° C CU)	MOP
X36D	0	9.4	14	15
	9	15.1	12	15
	15	24.5	10	25
X48D	0	10.9	14	15
	9	16.2	12	15
	15	25.7	10	30
X60D	0	14.6	14	15
	9	14.9	14	15
	15	24.3	10	25

NOTE: P6SD 3 & 4 ton models have PSC motors. Since the power wires run through the heater plug, keep the blower and heater on different circuits when adding a heater kit.

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	P6SD	9	H3HK-009Q-01B	903854B	None
		15	H3HK-015Q-01B	903855B	None
3,4, & 5 TON 3 Phase 460V	P6SD	9	H3HK-009S-01B	903850B	None
		15	H3HK-015S-01B	903851B	None

MODEL IDENTIFICATION CODE



P6SD 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	558870
Economizer, horizontal modulating	547841
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
Differential enthalpy sensor kit	920233
Control, CO2 sensor, wall mount	547848
DUCT SMOKE DETECTOR PHOTO ELEC	558863
MULTI SIGNAL CONTROL	547893
SAMPLING TUBE DST 3, 2-4'	558864
SAMPLING TUBE DST 5, 4-8'	558865
Low Pressure Switch Kit	913551
Low Ambient Kit	918837
Freezestat	917108
Duct Adaptor, 14" Round (2 each)	913812A
Outdoor Thermostat Kit	913852
Extreme Wind Mounting Kit (roof curb mount)	903696
Circuit Breaker, Three Phase (3-Pole)	913740

P6SD EXPANDED RATINGS

P6SD-X36

CFM	O.D.T			65°F			75°F			85°F			95°F			105°F			115°F		
	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.	
900	80	62	35.5	27.4	2.20	34.2	27.2	2.42	32.8	27.3	2.67	31.2	26.8	2.95	29.6	28.3	3.27	27.9	26.6	3.64	
	80	67	38.7	22.3	2.23	37.1	22.2	2.45	35.5	22.4	2.70	33.9	22.0	2.98	32.1	21.7	3.30	30.1	20.4	3.67	
	80	72	42.3	17.3	2.27	40.6	17.2	2.49	38.9	17.6	2.75	37.1	17.2	3.03	35.2	17.0	3.34	33.1	17.4	3.71	
	75	63	36.0	21.7	2.21	34.6	21.6	2.43	33.1	21.7	2.68	31.5	21.3	2.95	29.8	19.7	3.28	28.0	21.2	3.64	
1000	80	62	36.4	29.1	2.22	35.0	29.7	2.43	33.5	29.1	2.68	31.9	28.8	2.96	30.3	28.7	3.28	28.7	28.4	3.65	
	80	67	39.4	23.6	2.24	37.8	24.3	2.46	36.2	23.7	2.71	34.4	23.5	2.99	32.6	23.5	3.31	30.7	23.7	3.67	
	80	72	43.1	18.1	2.27	41.4	18.9	2.50	39.6	18.4	2.76	37.8	18.2	3.04	35.8	18.4	3.35	33.7	18.5	3.72	
	75	63	36.7	22.9	2.21	35.2	23.5	2.43	33.7	22.9	2.68	32.0	22.7	2.96	30.4	22.8	3.28	28.6	22.7	3.65	
1100	80	62	37.7	31.9	2.22	36.2	32.1	2.44	34.7	31.4	2.69	33.1	31.2	2.97	31.6	30.5	3.30	29.9	29.8	3.66	
	80	67	40.7	26.0	2.25	39.0	26.3	2.48	37.3	25.7	2.73	35.5	25.6	3.00	33.6	25.5	3.32	31.6	25.6	3.69	
	80	72	44.4	19.7	2.29	42.6	20.1	2.52	40.7	19.6	2.77	38.8	19.6	3.05	36.7	19.6	3.37	34.5	19.9	3.73	
	75	63	37.9	25.2	2.22	36.4	25.4	2.45	34.8	24.8	2.70	33.1	24.7	2.97	31.3	24.4	3.29	29.4	24.5	3.66	

P6SD-X48

CFM	O.D.T			65°F			75°F			85°F			95°F			105°F			115°F		
	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.	
1250	80	62	47.9	37.2	2.82	46.1	37.0	3.12	44.2	37.2	3.45	42.1	36.6	3.84	40.0	38.5	4.27	37.7	36.3	4.77	
	80	67	52.0	30.2	2.84	49.9	30.0	3.15	47.7	30.3	3.49	45.5	29.8	3.87	43.1	29.4	4.31	40.6	28.0	4.80	
	80	72	56.7	23.3	2.86	54.4	23.2	3.18	51.9	23.6	3.54	49.5	23.1	3.92	46.9	22.8	4.35	44.2	23.4	4.85	
	75	63	48.5	29.4	2.82	46.5	29.2	3.12	44.5	29.4	3.46	42.4	28.8	3.84	40.2	26.8	4.28	37.9	29.0	4.77	
1400	80	62	49.1	39.8	2.82	47.3	40.6	3.13	45.2	39.7	3.46	43.1	39.3	3.85	41.0	39.2	4.29	39.0	38.6	4.78	
	80	67	53.1	32.0	2.84	51.0	33.0	3.16	48.7	32.2	3.50	46.3	31.9	3.88	43.9	32.3	4.32	41.4	32.3	4.81	
	80	72	57.8	24.5	2.87	55.4	25.6	3.19	52.9	24.8	3.54	50.4	24.6	3.93	47.7	24.8	4.36	44.9	25.0	4.86	
	75	63	49.5	31.2	2.83	47.5	32.0	3.13	45.5	31.2	3.46	43.3	30.8	3.85	41.0	31.1	4.29	38.6	31.1	4.78	
1550	80	62	50.2	42.8	2.83	48.4	43.1	3.14	46.2	42.1	3.47	44.2	41.8	3.86	42.2	40.8	4.30	40.1	39.9	4.80	
	80	67	54.1	34.4	2.85	51.9	34.8	3.16	49.6	34.4	3.51	47.1	34.3	3.89	44.6	34.1	4.33	42.0	34.4	4.82	
	80	72	58.9	26.2	2.87	56.4	26.7	3.20	53.8	25.9	3.55	51.1	26.0	3.95	48.4	26.0	4.37	45.5	26.4	4.86	
	75	63	50.5	33.4	2.83	48.4	33.7	3.14	46.3	33.2	3.47	44.0	33.1	3.86	41.7	32.8	4.29	39.2	33.0	4.79	

P6SD-X60

CFM	O.D.T			65°F			75°F			85°F			95°F			105°F			115°F		
	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	61.8	47.9	3.74	59.4	47.5	4.11	56.8	47.7	4.53	54.1	46.9	5.02	51.3	49.2	5.57	48.4	46.4	6.19	
	80	67	66.8	39.3	3.83	63.9	39.1	4.19	61.1	39.4	4.61	58.1	38.6	5.09	55.0	38.0	5.65	51.7	36.0	6.26	
	80	72	72.9	30.5	3.92	69.7	30.3	4.29	66.4	30.8	4.72	63.1	30.1	5.20	59.5	29.7	5.75	55.7	30.4	6.36	
	75	63	62.1	38.2	3.74	59.6	38.0	4.11	56.9	38.2	4.54	54.2	37.3	5.02	51.2	34.5	5.57	48.2	37.0	6.18	
1750	80	62	63.0	50.5	3.79	60.5	51.4	4.16	57.8	50.2	4.59	55.1	49.6	5.07	52.2	49.4	5.62	49.3	48.8	6.24	
	80	67	67.8	41.2	3.87	64.9	42.3	4.24	62.0	41.2	4.67	58.9	40.7	5.14	55.7	40.7	5.70	52.3	40.6	6.31	
	80	72	73.7	31.6	3.97	70.4	33.0	4.35	67.0	32.0	4.77	63.5	31.7	5.24	59.9	31.8	5.79	56.2	31.9	6.41	
	75	63	63.2	40.0	3.81	60.6	41.0	4.16	57.8	39.8	4.59	54.9	39.3	5.07	51.9	39.2	5.62	48.8	39.0	6.23	
1900	80	62	64.0	53.6	3.85	61.4	53.8	4.21	58.7	52.6	4.64	56.0	52.2	5.13	53.1	51.3	5.68	50.4	50.1	6.30	
	80	67	68.7	43.6	3.92	65.8	44.1	4.29	62.7	42.9	4.72	59.6	42.8	5.20	56.3	42.4	5.75	52.8	42.6	6.36	
	80	72	74.3	33.5	4.02	70.8	34.1	4.39	67.5	33.1	4.81	64.0	33.0	5.29	60.5	32.8	5.84	56.7	33.1	6.46	
	75	63	64.1	42.3	3.85	61.4	42.6	4.21	58.5	41.4	4.64	55.6	41.2	5.12	52.5	40.7	5.66	49.3	40.8	6.28	

We Encourage Professionalism



Through Technician Certification by NATE



Industry Small AC AHRI Standard 210/240 Certification applies only when the complete system is listed with AHRI.

GENERAL TERMS OF LIMITED WARRANTY

NORDYNE will furnish a replacement for any part of this product in accordance with the terms of the warranty.

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

NORDYNE

COMPLETE COMFORT. GENUINE VALUE.

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716C-0910 (Replaces 716C-0509)