

## P7TQ Series

### 6, 7½ and 10 Ton Packaged Electric/Electric Units

#### 12.9 IEER Commercial System ASHRAE 90.1 - 2013

##### Standard Features

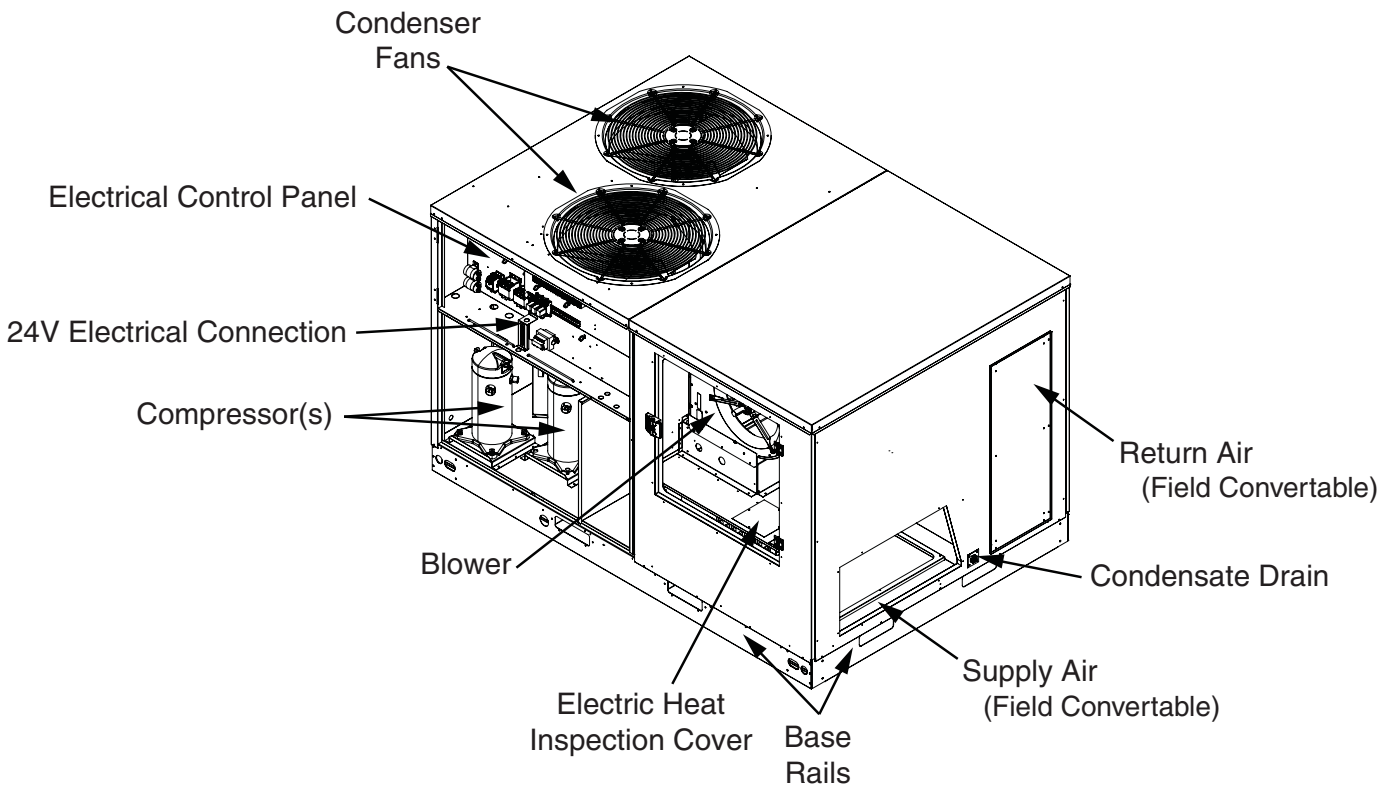
- Fits Carrier Pre-Existing Curbs
- High-Efficiency
- Micro-Channel Coils
- Foam Panel Wall Construction
- Hinged Access Doors
- Compatible Utility Connections



## FEATURES and BENEFITS

- **Quality Compressor:** State of the art scroll compressor is standard equipment.
- **Features Two-Stage Cooling & Single-Stage Heating:** Provides high/low operation.
- **High Efficient Blower Motor:** Meets the requirements of NEMA 12/19/2010
- **High-Pressure Switches:** Ensure long compressor life. Featuring manual reset high pressure control.
- **For Easy Service:** Hi/low service ports allow quick access without disrupting operation.
- **Permanently Lubricated Condenser Fan Motors:** A heavy duty PSC motor for long lasting reliability and quiet operation. Requires no maintenance and is completely protected from rain and snow.
- **90 VA Transformer:** Includes 4 Amp circuit breaker to protect the low voltage circuit.
- **Liquid Line Filter Driers:** Factory installed for convenience.
- **Crankcase Heater:** Protection from liquid flood back and future compressor failures.
- **Easy Compressor and Control Access:** Designed to make servicing easier for the contractor, access panels are provided to all controls and the compressor from the side of the unit.
- **Removable Top Grille Assembly:** Allows ease of service to the fan motor.
- **Full Perimeter Base Rail System:** Base rails have rigging holes and do not need to be removed for curb applications. Base rails have fork truck slots on three sides.
- **Durable Finish, Attractive Cabinet:** Designed using 20 gauge galvanized steel with a polyester urethane finish. The 950 hour salt spray finish is 1.5 mil thick and resists corrosion.
- **Unit Footprint:** Fits Carrier pre-existing curbs, eliminating the cost of an adaptor curb.
- **Compatible Connections:** Electrical connections align with many existing units installed today.
- **Foam Panel Wall Construction:** No exposed fiberglass insulation in air stream for increased air quality and suppressed mold growth; superior noise reduction.
- **Hinged Access Doors:** Easy access to blower, controls and filters with no leaks and no screws to lose.
- **Micro-Channel Coils:** All-aluminum for high corrosion resistance and increased heat transfer; 30% less refrigerant to reduce costs and save time.
- **High Efficiency:** 12.9 IEER meets ASHRAE Std - 90.1 - 2013 requirements.

# P7TQ COMPONENT LOCATIONS

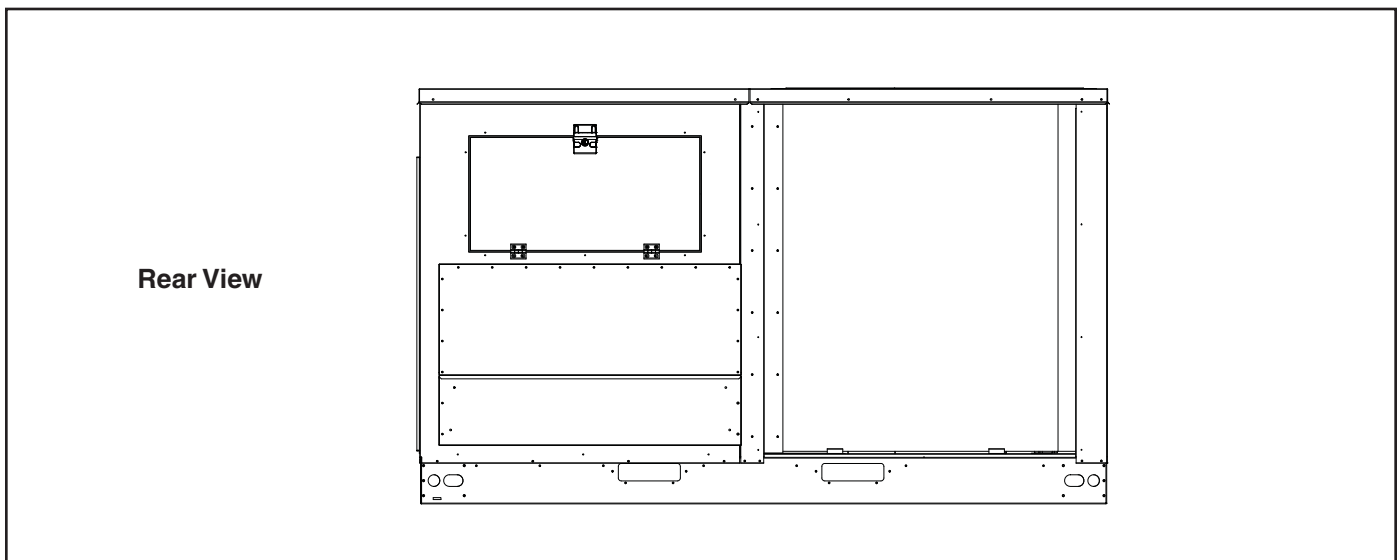
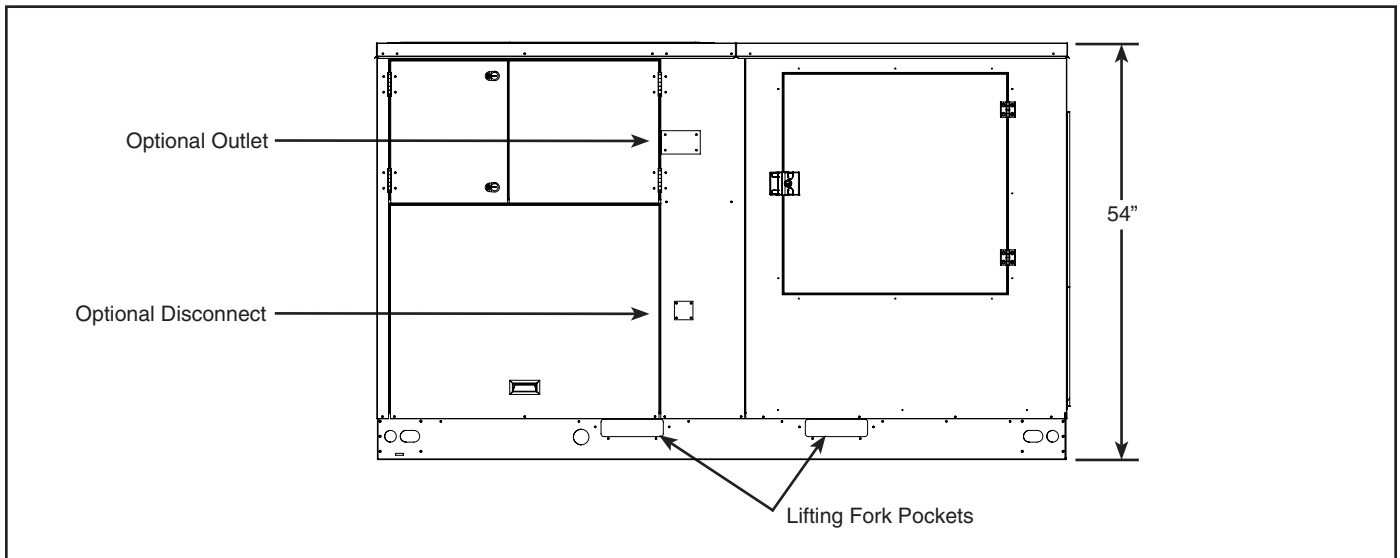
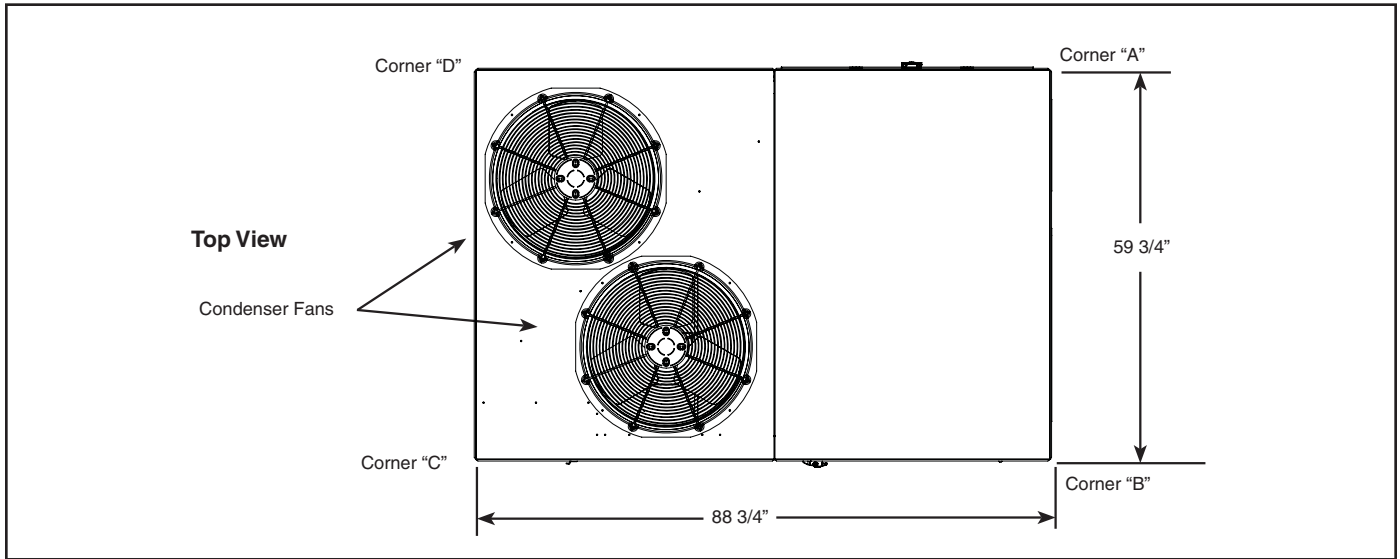


**Filter Sizes & Quantities**

UNIT	FACTORY FILTER SIZE	QTY
P7TQ072	20 x 20 x 2	4
P7TQ090	20 x 20 x 2	4
P7TQ120	20 x 20 x 2	4

# P7TQ – PHYSICAL DATA

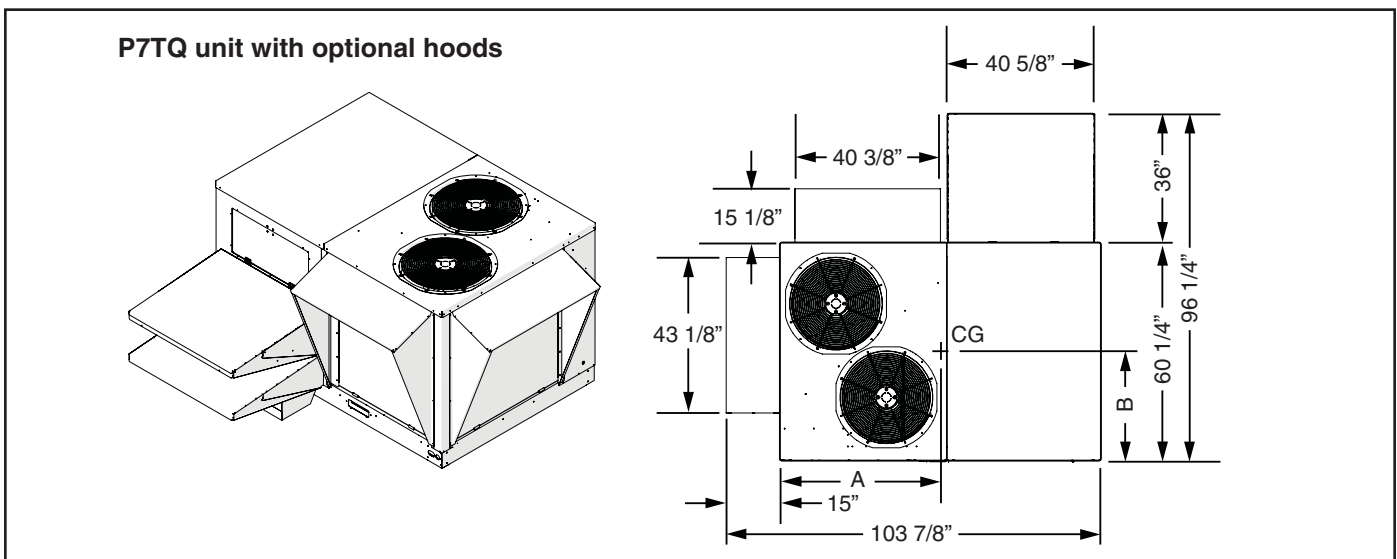
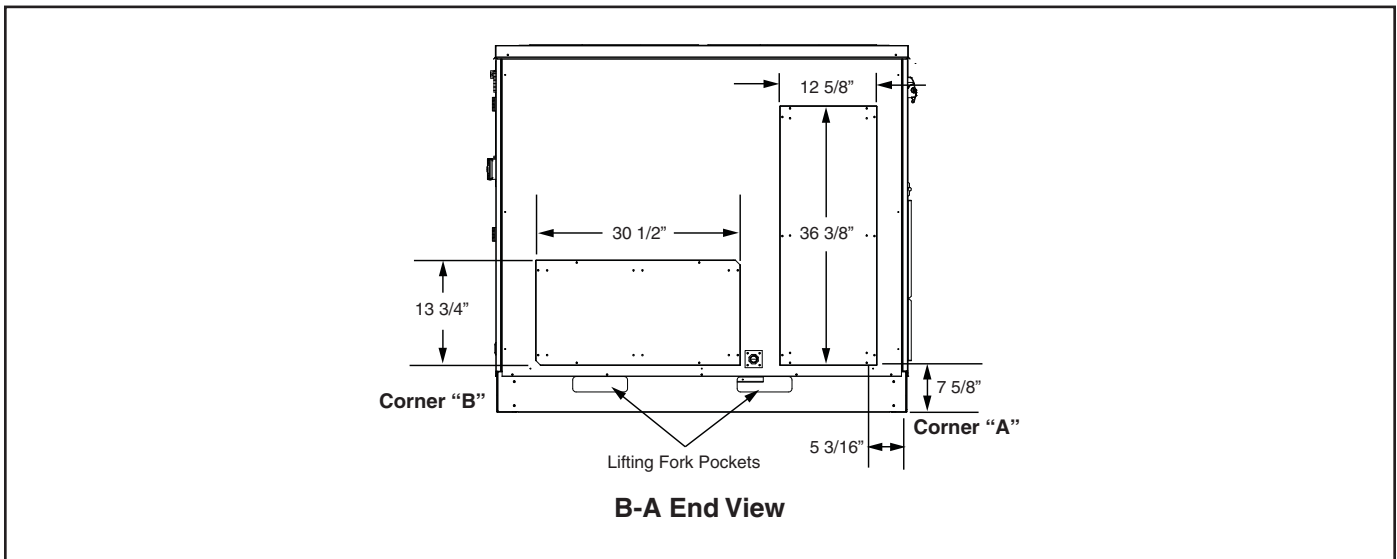
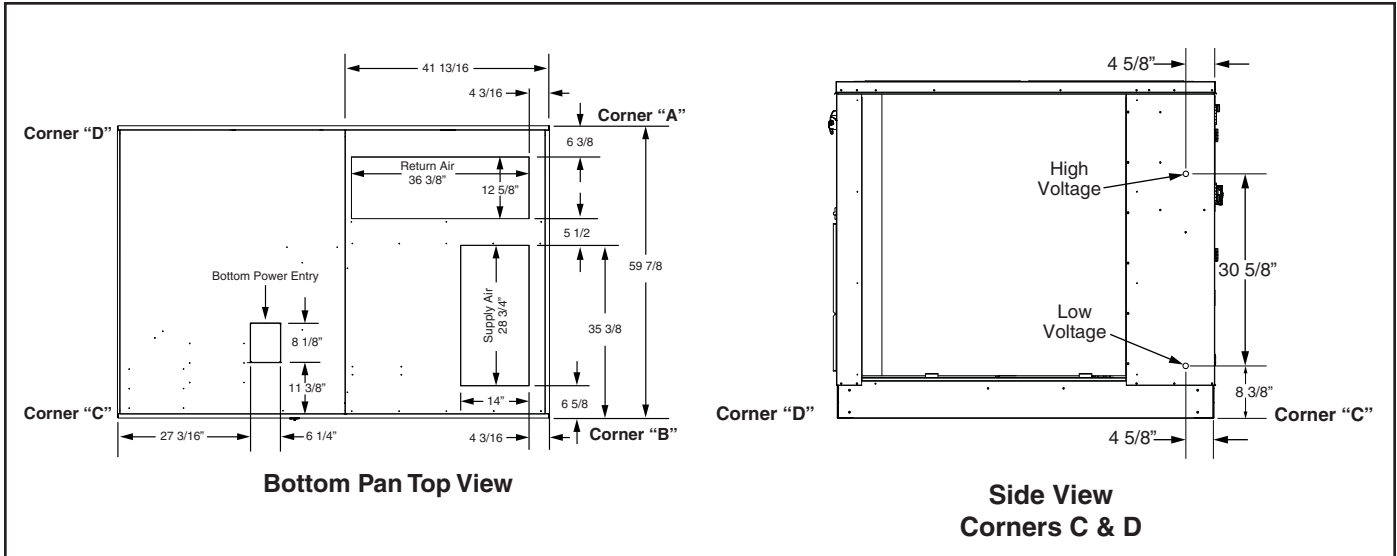
Dimensions shown in inches



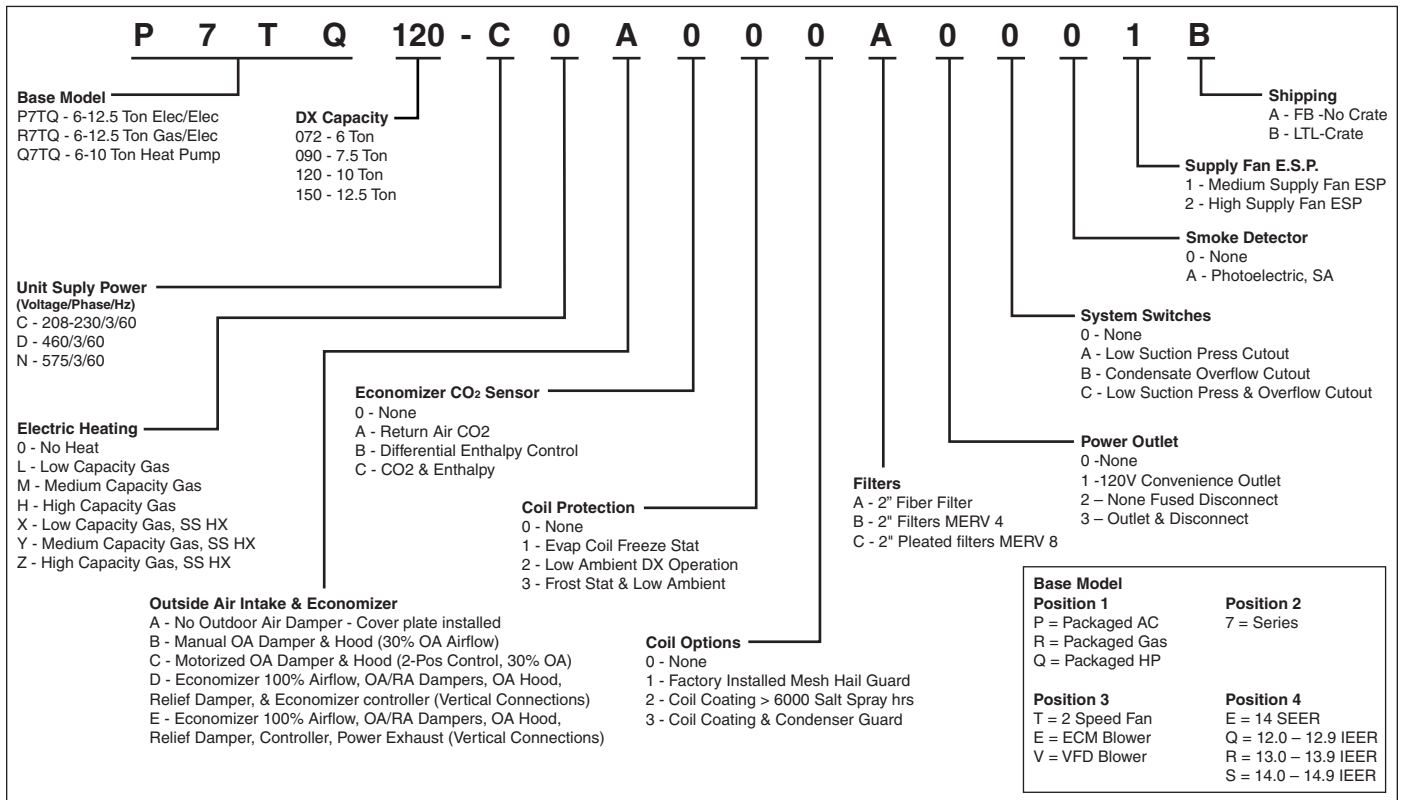
Physical Dimensions for P7TQ Units

# P7TQ – PHYSICAL DATA (CONTINUED)

Dimensions shown in inches



# MODEL IDENTIFICATION CODE



## CENTER OF GRAVITY & UNIT SHIPPING WEIGHTS

MODEL NUMBER	UNIT WEIGHT ‡		SHIPPING WEIGHT		CENTER OF GRAVITY INCHES (MM)		CORNER WEIGHTS								UNIT HEIGHT**	
							A		B		C		D		HORIZONTAL DUCT APPLICATIONS	VERTICAL DUCT APPLICATIONS
	LBS.	KG.	LBS.	KG.	A	B	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.		
P7TQ072	1017	462	1139	517	50.5"	27.0"	232	105	362	164	302	137	199	90	54"	48.5"
P7TQ090	1141	518	1263	574	46.5"	24.5"	291	132	346	157	298	135	249	113	54"	48.5"
P7TQ120	1155	525	1277	580	46.5"	24.0"	275	125	347	157	319	145	246	112	54"	48.5"

\*\*Baseraills are not intended to be removed. Information provided is total unit height for horizontal duct applications or height dimension added to selected roof curb height for vertical duct applications.

‡ Unit weight without packaging or field installed accessories.

## PHYSICAL SPECIFICATIONS DATA

Model P7TQ	072	090	120
Nominal Capacity (tons)	6	7.5	10.0
AHRI Number	10323840	10323841	10323842
<b>Performance Data <sup>1,2,3</sup></b>			
Rated Net Cooling Capacity (Btuh)	72,000	90,000	114,000
E.E.R. - Cooling Efficiency (Btuh/Watt)	11.2	11.2	11.2
IEER - Part Load Efficiency	12.9	12.9	12.9
Rated Airflow - CFM	2,550 / 1,650	3,150 / 2,000	3,450 / 2,200

- 1) Certified in accordance with AHRI Standard 340/360 at the rated airflow shown and the minimum external static duct pressure allowed by the standard. ARI Rating for units with dual voltages are shown at highest rated unit voltage.
- 2) E.E.R. - Energy Efficiency Ratio: The EER and Net Capacity is determined @ 95°F Outdoor DB and with air entering the evaporator at 80°F DB / 67°F WB
- 3) IEER - Integrated Energy Efficiency Ratio: a measure of merit for part load performance of the unit.

## REFRIGERANT CHARGE

NOMINAL TONNAGE	FACTORY CHARGE 1 <sup>ST</sup> STAGE / 2 <sup>ND</sup> STAGE
6	8.0 Lbs.
7 1/2	5.81 / 5.88 Lbs.
10	6.06 / 5.88 Lbs.

## SOUND POWER VALUES

P7TQ MBTU	Total Sound Power (dBA)	
	High Speed	Low Speed
072	83	82
090	84	84
120	84	84

All sound power values are referenced to 10<sup>-12</sup>W.

# ELECTRICAL DATA

## HEAT RISE & RANGE

Model Number	Nominal Rated CFM	* Temperature Rise °F (°C)			
		9 KW	18 KW	30 KW	35 KW
P7TQ072-*	2550	11° F (6° C)	22° F (12° C)	37° F (21° C)	43° F (24° C)
P7TQ090-*	3150	9° F (5° C)	18° F (10° C)	30° F (17° C)	35° F (19° C)
P7TQ120-*	3450	8° F (4° C)	16° F (9° C)	27° F (15° C)	32° F (18° C)

\* Temperature Rise (°F) calculation = (kW\*3413) / 1.08 / Nominal CFM.

**NOTE:** For 208-230V electric heat kits operating @ 208 Volts, the Kw rating is derated 25%, therefore temperature rise will be lower than the values in the table.

## HEATER KIT MODEL CROSS REFERENCE

NOMINAL TONNAGE	UNIT	NOMINAL KW	HEATER KIT MODEL	HEATER KIT PART NUMBER	BREAKERS	WIRING DIAGRAM NUMBER	LIMIT
6, 7.5, & 10 Ton 208/230V / 3Ph.	P7TQ(072/090/120-C) Q7TQ(072/090/120-C)	9	H9HK009Q-01	1011669	NONE	Figure 14	155° F
		18	H9HK018Q-11	1011672	1	Figure 17	155° F
		30	H9HK030Q-21	1011675	2	Figure 20	210° F
		35	H9HK035Q-21	1011678	2	Figure 20	210° F
6, 7.5, & 10 Ton 460V / 3Ph.	P7TQ(072/090/120-D) Q7TQ(072/090/120-D)	9	H9HK009S-01	1011670	NONE	Figure 15	155° F
		18	H9HK018S-01	1011673	NONE	Figure 18	155° F
		30	H9HK030S-01	1011676	NONE	Figure 21	210° F
		35	H9HK035S-01	1011679	NONE	Figure 21	210° F
6, 7.5, & 10 Ton 575V / 3Ph.	P7TQ(072/090/120-N) Q7TQ(072/090/120-N)	9	H9HK009N-01	1011671	NONE	Figure 16	170° F
		18	H9HK018N-01	1011674	NONE	Figure 19	170° F
		30	H9HK030N-01	1011677	NONE	Figure 22	155° F
		35	H9HK035N-01	1011680	NONE	Figure 23	155° F

## MCA /MOP DATA (SINGLE CIRCUIT)

SINGLE Circuit With No ELECTRIC HEAT					
COOLING TONNAGE (2),(3)	VOLTAGE (1)	2 HP MOTOR		3 HP ECM MOTOR (OPTIONAL)	
		MCA	MOP	MCA	MOP
6	208V - 230V	30.8	45	33.7	50
	460V	14.9	20	16.4	20
	575V	11.4	15	N/A	N/A
7 1/2	208V - 230V	40.1	50	43.0	50
	460V	19.2	25	20.7	25
	575V	14.3	15	N/A	N/A
10	208V - 230V	46.6	60	49.5	60
	460V	23.1	30	24.6	30
	575V	17.2	20	N/A	N/A

Single Circuit With Electric Heat									
COOLING TONNAGE (2),(3)	VOLTAGE (1)	2 HP MOTOR							
		MCA				MOP			
		9 KW	18KW	30KW	35KW	9 KW	18KW	30KW	35KW
6	208V - 230V	31 - 34.6	52.9 - 59.9	82.5 - 94.1	98.3 - 112.1	45 - 45	60 - 60	90 - 100	100 - 125
	460V	18.5	30.8	46.9	56.0	20	35	50	60
	575V	15.5	28.1	40.6	53.3	20	30	45	60
7 1/2	208V - 230V	40.1 - 40.1	52.9 - 59.9	82.5 - 94.1	98.3 - 112.1	50 - 50	60 - 60	90 - 100	100 - 125
	460V	19.2	30.8	46.9	56.0	25	35	50	60
	575V	15.5	28.1	40.6	53.3	20	30	45	60
10	208V - 230V	46.6 - 46.6	52.9 - 59.9	82.5 - 94.1	98.3 - 112.1	60 - 60	60 - 60	90 - 100	100 - 125
	460V	23.1	30.8	46.9	56.0	30	35	50	60
	575V	17.2	28.1	40.6	53.3	20	30	45	60

High Static Drive: Single Circuit With Electric Heat									
COOLING TONNAGE (2),(3)	VOLTAGE (1)	3 HP ECM MOTOR (OPTIONAL)							
		MCA				MOP			
		9 KW	18KW	30KW	35KW	9 KW	18KW	30KW	35KW
6	208V - 230V	34.6 - 38.3	56.5 - 63.5	86.1 - 97.8	101.9 - 115.8	50 - 50	60 - 70	90 - 100	110 - 125
	460V	20.4	32.6	48.8	57.9	25	35	50	60
	575V	---	---	---	---	---	---	---	---
7 1/2	208V - 230V	43.0 - 43.0	56.5 - 63.5	86.1 - 97.8	101.9 - 115.8	50 - 50	60 - 70	90 - 100	110 - 125
	460V	20.7	32.6	48.8	57.9	25	35	50	60
	575V	---	---	---	---	---	---	---	---
10	208V - 230V	49.5 - 49.5	56.5 - 63.5	86.1 - 97.8	101.9 - 115.8	60 - 60	60 - 70	90 - 100	110 - 125
	460V	24.6	32.6	48.8	57.9	30	35	50	60
	575V	---	---	---	---	---	---	---	---

**NOTES:**

- 1) To achieve the rated unit performance, unit voltage should be within 2% of nominal.
- 2) For C series units:  
 Nominal Unit Input Voltage = 208-230 Volt, 60 Hertz, 3 Phase  
 Minimum allowed unit voltage = 187V  
 Maximum allowed voltage = 253V
- 3) For D series units:  
 Nominal Unit Input Voltage = 460 Volt, 60 Hertz, 3 Phase  
 Minimum allowed unit voltage = 414V  
 Maximum allowed voltage = 506V

FLA = Full Load Amps; MCA = Minimum Circuit Ampacity; RLA = Rated Load Amps;  
 MOP = Maximum Over-Current Protection; LRA = Locked Rotor Amps

## MCA /MOP DATA (MULTIPLE CIRCUIT)

MULTIPLE CIRCUITS																	
FACTORY UNIT ELECTRICAL DATA																	
COOLING TONNAGE	UNIT VOLTAGE	COOLING CIRCUIT								HEATING CIRCUIT							
		9 KW		18 KW		30 KW		35 KW		9 KW		18 KW		30 KW		35 KW	
		MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
6	208-230 V	30.8 - 30.8	45 - 45	30.8 - 30.8	45 - 45	30.8 - 30.8	45 - 45	30.8 - 30.8	45 - 45	23.5 - 27.1	30 - 30	45.4 - 52.3	50 - 60	75.0 - 86.6	80 - 90	90.7 - 104.6	100 - 110
	460 V	14.9	20	14.9	20	14.9	20	14.9	20	18.6	15	27.1	30	43.3	50	52.3	60
	575 V	11.4	15	11.4	15	11.4	15	11.4	15	16.3	15	26	30	37.7	50	50.2	60
7.5	208-230 V	40.1 - 40.1	50 - 50	40.1 - 40.1	50 - 50	40.1 - 40.1	50 - 50	40.1 - 40.1	50 - 50	23.5 - 27.1	30 - 30	45.4 - 52.3	50 - 60	75.0 - 86.6	80 - 90	90.7 - 104.6	100 - 110
	460 V	19.2	25	19.2	25	19.2	25	19.2	25	18.6	15	27.1	30	43.3	50	52.3	60
	575 V	14.3	15	14.3	15	14.3	15	14.3	15	16.3	15	26	30	37.7	50	50.2	60
10	208-230 V	46.6 - 46.6	60 - 60	46.6 - 46.6	60 - 60	46.6 - 46.6	60 - 60	46.6 - 46.6	60 - 60	23.5 - 27.1	30 - 30	45.4 - 52.3	50 - 60	75.0 - 86.6	80 - 90	90.7 - 104.6	100 - 110
	460 V	23.1	30	23.1	30	23.1	30	23.1	30	18.6	15	27.1	30	43.3	50	52.3	60
	575 V	17.2	20	17.2	20	17.2	20	17.2	20	16.3	15	26	30	37.7	50	50.2	60

HIGH STATIC DRIVE ELECTRICAL DATA																	
COOLING TONNAGE	UNIT VOLTAGE	COOLING CIRCUIT								HEATING CIRCUIT							
		9 KW		18 KW		30 KW		35 KW		9 KW		18 KW		30 KW		35 KW	
		MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP	MCA	MOP
6	208-230 V	33.7 - 33.7	50 - 50	33.7 - 33.7	50 - 50	33.7 - 33.7	50 - 50	33.7 - 33.7	50 - 50	23.5 - 27.1	30 - 30	45.4 - 52.3	50 - 60	75.0 - 86.6	80 - 90	90.7 - 104.6	100 - 110
	460 V	16.4	20	16.4	20	16.4	20	16.4	20	18.6	15	27.1	30	43.3	50	52.3	60
	575 V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7.5	208-230 V	43.0 - 43.0	50 - 50	43.0 - 43.0	50 - 50	43.0 - 43.0	50 - 50	43.0 - 43.0	50 - 50	23.5 - 27.1	30 - 30	45.4 - 52.3	50 - 60	75.0 - 86.6	80 - 90	90.7 - 104.6	100 - 110
	460 V	20.7	25	20.7	25	20.7	25	20.7	25	18.6	15	27.1	30	43.3	50	52.3	60
	575 V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	208-230 V	49.5 - 49.5	60 - 60	49.5 - 49.5	60 - 60	49.5 - 49.5	60 - 60	49.5 - 49.5	60 - 60	23.5 - 27.1	30 - 30	45.4 - 52.3	50 - 60	75.0 - 86.6	80 - 90	90.7 - 104.6	100 - 110
	460 V	24.6	30	24.6	30	24.6	30	24.6	30	18.6	15	27.1	30	43.3	50	52.3	60
	575 V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

**NOTES:**

1) To achieve the rated unit performance, unit voltage should be within 2% of nominal.

2) For C series units:

Nominal Unit Input Voltage = 208-230 Volt, 60 Hertz, 3 Phase

Minimum allowed unit voltage = 187V

Maximum allowed voltage = 253V

3) For D series units:

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Maximum allowed voltage = 506V

FLA = Full Load Amps; MCA = Minimum Circuit Ampacity; RLA = Rated Load Amps;

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## BLOWER PERFORMANCE DATA

3493
1017
2.07

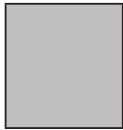
**Factory Low Static Setting:** Recommended operational point

<b>3862</b>
<b>1159</b>
<b>3.03</b>

**Medium Static Setting (Optional):** Recommended operational point

<i>2946</i>
<i>741</i>
<i>0.85</i>

*Italic font* Indicates an allowable setting that is not recommended for unit operation. These operational points should be carefully examined by the installer for proper unit setup and heater operation if used.



Indicates a setting that is not permitted for unit operation

# BLOWER PERFORMANCE DATA

## P7TQ072-C/D/N SERIES

## 2 HP, 2 SPEED DOWNFLOW BLOWER DATA Factory Standard & Medium Static Drive

HIGH SPEED OPERATION													
EXTERNAL UNIT STATIC (" WC)	OPERATING @ 230V, 460V, OR 575V	ADJUSTABLE MOTOR SHEAVE SETTING											
		FULLY CLOSED	1/2 TURN OPEN	1 TURN OPEN	1.5 TURN OPEN	2 TURNS OPEN*	2.5 TURNS OPEN	3 TURNS OPEN	3.5 TURNS OPEN	4 TURNS OPEN	4.5 TURNS OPEN	5 TURNS OPEN	
0.1	CFM					2780	2703	2626	2538	2460	2455	2450	
	RPM					887	866	845	821	869	848	826	
	kW					1.27	1.17	1.07	1.08	1.31	1.15	0.98	
0.2	CFM				2728	2640	2545	2450	<b>2555</b>	<b>2330</b>	<b>2310</b>	<b>2290</b>	
	RPM				907	888	867	846	<b>895</b>	<b>870</b>	<b>849</b>	<b>827</b>	
	kW				1.40	1.27	1.20	1.14	<b>1.20</b>	<b>1.19</b>	<b>1.13</b>	<b>1.07</b>	
0.3	CFM	2720	2670	2620	2535	2450	2380	2310	<b>2420</b>	<b>2170</b>	<b>2145</b>	<b>2120</b>	
	RPM	978	952	926	908	889	868	847	<b>896</b>	<b>871</b>	<b>850</b>	<b>828</b>	
	kW	1.39	1.38	1.36	1.29	1.23	1.17	1.11	<b>1.26</b>	<b>1.20</b>	<b>1.09</b>	<b>0.98</b>	
0.4	CFM	2560	2525	2490	2390	2290	2230	<b>2460</b>	<b>2300</b>				
	RPM	980	954	927	909	890	869	<b>921</b>	<b>897</b>				
	kW	1.32	1.31	1.30	1.24	1.19	1.12	<b>1.15</b>	<b>1.14</b>				
0.5	CFM	2460	2355	2250	2236	<b>2570</b>	<b>2460</b>	<b>2350</b>					
	RPM	982	955	928	910	<b>966</b>	<b>945</b>	<b>924</b>					
	kW	1.25	1.22	1.21	1.21	<b>1.33</b>	<b>1.26</b>	<b>1.19</b>					
0.6	CFM	2260	<b>2670</b>	<b>2575</b>	<b>2488</b>	<b>2400</b>	<b>2300</b>	<b>2200</b>					
	RPM	963	<b>1026</b>	<b>1005</b>	<b>987</b>	<b>968</b>	<b>947</b>	<b>925</b>					
	kW	1.23	<b>1.52</b>	<b>1.46</b>	<b>1.33</b>	<b>1.21</b>	<b>1.11</b>	<b>1.01</b>					
0.7	CFM	<b>2620</b>	<b>2530</b>	<b>2440</b>	<b>2335</b>	<b>2230</b>	<b>2120</b>	<b>2010</b>					
	RPM	<b>1048</b>	<b>1027</b>	<b>1006</b>	<b>988</b>	<b>969</b>	<b>948</b>	<b>926</b>					
	kW	<b>1.48</b>	<b>1.47</b>	<b>1.45</b>	<b>1.33</b>	<b>1.20</b>	<b>1.10</b>	<b>0.99</b>					
0.8	CFM	<b>2510</b>	<b>2400</b>	<b>2290</b>	<b>2185</b>	<b>2080</b>							
	RPM	<b>1049</b>	<b>1028</b>	<b>1007</b>	<b>989</b>	<b>970</b>							
	kW	<b>1.42</b>	<b>1.36</b>	<b>1.29</b>	<b>1.20</b>	<b>1.11</b>							
0.9	CFM	<b>2310</b>	<b>2225</b>	<b>2140</b>									
	RPM	<b>1051</b>	<b>1030</b>	<b>1008</b>									
	kW	<b>1.41</b>	<b>1.34</b>	<b>1.28</b>									
1.0	CFM	<b>2210</b>											
	RPM	<b>1052</b>											
	kW	<b>1.40</b>											
LOW SPEED OPERATION - FOR REFERENCE ONLY													
Low Static	0.1	CFM	1915	1828	1740	1715	1690	1619	1548	1486			
		RPM	657	639	620	585	550	556	561	547			
		kW	0.59	0.59	0.58	0.56	0.55	0.51	0.47	0.47			
	0.2	CFM	1680	1605	1530	1480	1430	1366	1302				
		RPM	658	640	621	589	556	559	562				
		kW	0.53	0.58	0.63	0.57	0.51	0.48	0.46				
	0.3	CFM	1440										
		RPM	659										
		kW	0.48										
Medium Static	0.2	CFM					<b>1920</b>	<b>1855</b>	<b>1790</b>	<b>1670</b>	<b>1550</b>	<b>1500</b>	<b>1450</b>
		RPM					<b>647</b>	<b>632</b>	<b>616</b>	<b>599</b>	<b>582</b>	<b>566.5</b>	<b>551</b>
		kW					<b>0.53</b>	<b>0.49</b>	<b>0.45</b>	<b>0.49</b>	<b>0.53</b>	<b>0.51</b>	<b>0.50</b>
	0.3	CFM	<b>1910</b>	<b>1855</b>	<b>1800</b>	<b>1780</b>	<b>1760</b>	<b>1660</b>	<b>1560</b>				
		RPM	<b>701</b>	<b>687</b>	<b>672</b>	<b>660</b>	<b>648</b>	<b>633</b>	<b>617</b>				
		kW	<b>0.65</b>	<b>0.63</b>	<b>0.61</b>	<b>0.56</b>	<b>0.51</b>	<b>0.52</b>	<b>0.53</b>				
	0.4	CFM	<b>1705</b>	<b>1653</b>	<b>1600</b>	<b>1560</b>	<b>1520</b>						
		RPM	<b>703</b>	<b>689</b>	<b>675</b>	<b>663</b>	<b>650</b>						
		kW	<b>0.59</b>	<b>0.59</b>	<b>0.58</b>	<b>0.53</b>	<b>0.49</b>						
0.5	CFM	<b>1510</b>											
	RPM	<b>705</b>											
	kW	<b>0.58</b>											

### NOTES:

- \* Denotes Recommended Sheave Setting.
- Boldface type indicates factory recommended blower operating range.
- Values include losses for 2" standard air filters, unit casing, and dry evaporator coil.
- For 208V operation deduct approximately 0.5% from CFM shown.

### FACTORY STANDARD DRIVE CONSISTS OF:

12" x 12" FC Blower, 2 HP / 2 Speed Motor  
1VP40 Sheave, BK77 Pulley Belt & B57 Belt

### MEDIUM STATIC DRIVE CONSISTS OF:

Same except uses 1VP44 Motor Sheave.

# BLOWER PERFORMANCE DATA

## P7TQ072-C/D/N SERIES

2 HP, 2 SPEED, HORIZONTAL BLOWER DATA  
Factory Standard & Medium Static Drive

HIGH SPEED OPERATION													
EXTERNAL UNIT STATIC (" WC)	OPERATING @ 230V, 460V, OR 575V	ADJUSTABLE MOTOR SHEAVE SETTING											
		FULLY CLOSED	0.5 TURN OPEN	1 TURN OPEN	1.5 TURN OPEN	2 TURNS OPEN*	2.5 TURNS OPEN	3 TURNS OPEN	3.5 TURNS OPEN	4 TURNS OPEN	4.5 TURNS OPEN	5 TURNS OPEN	
0.1	CFM												
	RPM												
	kW												
0.2	CFM											2800	
	RPM											740	
	kW											0.81	
0.3	CFM									2700	2650	2600	
	RPM									765	754	742	
	kW									0.85	0.84	0.82	
0.4	CFM									2735	2520	2460	2400
	RPM									802	767	756	744
	kW									0.88	0.86	0.85	0.83
0.5	CFM								2780	2525	2270	2205	2140
	RPM								838	804	769	758	746
	kW								0.90	0.89	0.87	0.86	0.84
0.6	CFM					2830	2685	2540	2255	1970	1880	1790	
	RPM					880	860	839	804.5	770	759	747	
	kW					0.89	0.90	0.91	0.89	0.87	0.86	0.85	
0.7	CFM				2735	2600	2435	2270					
	RPM				904	882	862	841					
	kW				0.91	0.89	0.90	0.91					
0.8	CFM		2805	2680	2505	2330	2140	1950					
	RPM		945	931	908	884	865	845					
	kW		0.90	0.92	0.91	0.90	0.90	0.90					
0.9	CFM	2680	2545	2410	2220	2030							
	RPM	963	948	932	910	887							
	kW	0.87	0.91	0.94	0.93	0.91							
1.0	CFM	2410	2265	2120									
	RPM	963	949	934									
	kW	0.87	0.91	0.95									
LOW SPEED OPERATION - FOR REFERENCE ONLY													
0.1	CFM	2460	2405	2350	2278	2205	2133	2060	1955	1850	1825	1800	
	RPM	639	629	618	604	589	575	560	537	514	509	503	
	kW	0.70	0.74	0.78	0.77	0.76	0.75	0.74	0.73	0.71	0.73	0.75	
0.2	CFM	2240	2200	2160	2070	1980	1890	1800	1675	1550	1500	1450	
	RPM	637	628	619	605	591	576	562	538	514	510	505	
	kW	0.71	0.74	0.78	0.77	0.76	0.75	0.75	0.73	0.72	0.74	0.76	
0.3	CFM	2000	1940	1880	1775	1670	1565	1460	1318	1175			
	RPM	639	630	621	607	592	578	563	539	515			
	kW	0.72	0.74	0.76	0.76	0.76	0.75	0.75	0.74	0.73			
0.4	CFM	1690	1610	1530									
	RPM	643	633	623									
	kW	0.72	0.74	0.77									

**NOTES:**

- Boldface type indicates factory recommended blower operating range.
- Values include losses for 2" standard air filters, unit casing, and dry evaporator coil.
- For 208V operation deduct approximately 0.5% from CFM shown.

**FACTORY DRIVE CONSISTS OF:**

12" x 12" FC Blower, 2 HP / 2 Speed Motor  
1VP40 Sheave, BK77 Pulley, and B57 Belt.

# BLOWER PERFORMANCE DATA

## P7TQ-090C/D/N SERIES

### 2 HP, 2 SPEED, DOWNFLOW BLOWER DATA

Factory Standard Static Drive

HIGH SPEED OPERATION													
EXTERNAL UNIT STATIC (IN WC)	OPERATING @ 230V, 460V OR 575V	ADJUSTABLE MOTOR SHEAVE SETTING											
		FULLY CLOSED	1/2 TURN OPEN	1 TURN OPEN	1.5 TURNS OPEN	2 TURNS OPEN	2.5 TURNS OPEN	3 TURNS OPEN*	3.5 TURNS OPEN	4 TURN OPEN	4.5 TURNS OPEN	5 TURNS OPEN	
0.1	CFM							3625	3520	3420	3320	3205	3090
	RPM							762	742	722	702	683	663
	kW							1.42	1.34	1.24	1.14	1.07	1.00
0.2	CFM				3700	3570	3495	3420	3275	3130	2985	2840	
	RPM				803	783	763	743	723	703	684	664	
	kW				1.52	1.40	1.33	1.25	1.16	1.06	1.00	0.94	
0.3	CFM		3725	3650	3525	3400	3300	3200	3085	2970	2815	2660	
	RPM		838	823	804	785	765	744	724	704	685	665	
	kW		1.70	1.60	1.49	1.38	1.30	1.22	1.12	1.02	0.93	0.84	
0.4	CFM	3630	3545	3460	3355	3250	3130	3010	2885	2760			
	RPM	853	839	824	806	787	766	745	725	705			
	kW	1.75	1.63	1.50	1.39	1.29	1.23	1.17	1.05	0.92			
0.5	CFM	3520	3425	3330	3205	3080	2940	2800					
	RPM	854	840	825	807	788	767	746					
	kW	1.67	1.55	1.44	1.35	1.27	1.19	1.11					
0.6	CFM	3310	3230	3150	3025	2900	2745	2600					
	RPM	855	841	826	808	789	768	747					
	kW	1.60	1.48	1.36	1.25	1.14	1.08	1.01					
0.7	CFM	3170	3040	2910	2790	2690							
	RPM	856	843	829	810	791							
	kW	1.51	1.40	1.28	1.19	1.10							
0.8	CFM	2940	2745	2550									
	RPM	857	844	831									
	kW	1.42	1.33	1.25									
0.9	CFM	2660											
	RPM	858											
	kW	1.37											
LOW SPEED OPERATION (FOR REFERENCE ONLY)													
0.1	CFM	2560	2505	2450	2375	2300	2215	2130	2050	1970	1930	1890	
	RPM	572	562	551	540	528	514	500	487	473	458	443	
	kW	0.73	0.69	0.65	0.59	0.54	0.53	0.52	0.63	0.73	0.56	0.39	
0.2	CFM	2320	2240	2160	2110	2060	1945	1830	1745	1660	1630	1600	
	RPM	573	563	552	541	530	516	501	488	474	459	444	
	kW	0.68	0.64	0.60	0.55	0.50	0.49	0.47	0.44	0.41	0.40	0.38	
0.3	CFM	2030	1965	1900	1710	1520	1500	1480	1430	1380			
	RPM	574	564	553	543	533	517	501	488	475			
	kW	0.62	0.58	0.54	0.49	0.44	0.43	0.43	0.40	0.37			
0.4	CFM	1680	1640	1600									
	RPM	575	565	554									
	kW	0.56	0.53	0.50									

#### NOTES:

- \* Denotes Recommended Sheave Setting.
- Boldface type indicates factory recommended blower operating range.
- Values include losses for 2" standard air filters, unit casing, and dry evaporator coil.
- For 208V operation deduct approximately 0.5% from CFM shown.

#### STANDARD FACTORY DRIVE CONSISTS OF:

15" x 15" FC Blower, 2 HP / 2 Speed Motor  
1VP4O Sheave, BK85 Pulley and B57 Belt.

# BLOWER PERFORMANCE DATA

## P7TQ090-C/D/N SERIES

2 HP, 2 SPEED HORIZONTAL BLOWER DATA  
Drive Change Required, See Note

HIGH SPEED OPERATION													
EXTERNAL UNIT STATIC (" WC)	OPERATING @ 230V, 460V, OR 575V	ADJUSTABLE MOTOR SHEAVE SETTING											
		FULLY CLOSED	1/2 TURN OPEN	1 TURN OPEN	1.5 TURN OPEN	2 TURNS OPEN*	2.5 TURNS OPEN	3 TURNS OPEN	3.5 TURNS OPEN	4 TURNS OPEN	4.5 TURNS OPEN	5 TURNS OPEN	
0.1	CFM									<b>3635</b>	<b>3480</b>	<b>3385</b>	<b>3290</b>
	RPM									<b>644</b>	<b>625</b>	<b>609</b>	<b>593</b>
	kW									<b>0.91</b>	<b>0.89</b>	<b>0.92</b>	<b>0.94</b>
0.2	CFM							<b>3675</b>	<b>3555</b>	<b>3400</b>	<b>3240</b>	<b>3135</b>	<b>3030</b>
	RPM							<b>682</b>	<b>665</b>	<b>645</b>	<b>625</b>	<b>610</b>	<b>594</b>
	kW							<b>0.90</b>	<b>0.94</b>	<b>0.92</b>	<b>0.90</b>	<b>0.91</b>	<b>0.93</b>
0.3	CFM				3720	<b>3580</b>	<b>3450</b>	<b>3320</b>	<b>3160</b>	<b>3000</b>	3525	3380	
	RPM				718	<b>705</b>	<b>686</b>	<b>666</b>	<b>645</b>	<b>624</b>	692	674	
	kW				0.88	<b>0.85</b>	<b>0.89</b>	<b>0.94</b>	<b>0.92</b>	<b>0.90</b>	0.91	0.89	
0.4	CFM		3724	<b>3630</b>	<b>3480</b>	<b>3330</b>	<b>3185</b>	<b>3040</b>	3620	3465	3298	3130	
	RPM		747	<b>733</b>	<b>719</b>	<b>705</b>	<b>686</b>	<b>667</b>	732	710	693	676	
	kW		0.91	<b>0.90</b>	<b>0.87</b>	<b>0.85</b>	<b>0.88</b>	<b>0.92</b>	0.90	0.93	0.92	0.90	
0.5	CFM	<b>3600</b>	<b>3500</b>	<b>3400</b>	<b>3240</b>	<b>3080</b>	<b>2920</b>	3570	3385	3200	3038	2875	
	RPM	<b>762</b>	<b>748</b>	<b>734</b>	<b>720</b>	<b>705</b>	<b>687</b>	755	733	711	695	678	
	kW	<b>0.91</b>	<b>0.89</b>	<b>0.88</b>	<b>0.86</b>	<b>0.85</b>	<b>0.87</b>	0.88	0.91	0.94	0.92	0.90	
0.6	CFM	<b>3325</b>	<b>3168</b>	<b>3010</b>	<b>2790</b>	3650	3495	3340	3113	2885			
	RPM	<b>763</b>	<b>749</b>	<b>736</b>	<b>720</b>	793	775	757	735	713			
	kW	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	<b>0.86</b>	0.93	0.92	0.92	0.92	0.91			
0.7	CFM	<b>3050</b>	<b>2835</b>	3760	3590	3420	3220	3020					
	RPM	<b>764</b>	<b>751</b>	832	813	794	775	756					
	kW	<b>0.86</b>	<b>0.87</b>	0.94	0.93	0.93	0.91	0.89					
0.8	CFM		3634	3500	3225	2950							
	RPM		849	836	816	797							
	kW		0.91	0.94	0.93	0.93							
0.9	CFM	3520	3345	3170									
	RPM	864	851	837									
	kW	0.88	0.91	0.93									
1.0	CFM	3025											
	RPM	867.5											
	kW	0.88											
LOW SPEED OPERATION - FOR REFERENCE ONLY													
Alternate Drive	0.1	CFM			<b>2526</b>	<b>2436</b>	<b>2345</b>	<b>2278</b>	<b>2211</b>	<b>2093</b>	<b>1975</b>	<b>1880</b>	<b>1785</b>
		RPM			<b>488</b>	<b>478</b>	<b>468</b>	<b>456</b>	<b>443</b>	<b>430</b>	<b>417</b>	<b>401</b>	<b>384</b>
		kW			<b>0.73</b>	<b>0.72</b>	<b>0.72</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.73</b>	<b>0.74</b>
	0.2	CFM	<b>2345</b>	<b>2249</b>	<b>2152</b>	<b>2062</b>	<b>1972</b>	<b>1803</b>	<b>1634</b>	<b>1502</b>	<b>1370</b>	<b>1268</b>	<b>1165</b>
		RPM	<b>509</b>	<b>499</b>	<b>489</b>	<b>479</b>	<b>469</b>	<b>457</b>	<b>445</b>	<b>431</b>	<b>417</b>	<b>402</b>	<b>386</b>
		kW	<b>0.71</b>	<b>0.72</b>	<b>0.73</b>	<b>0.73</b>	<b>0.72</b>	<b>0.72</b>	<b>0.71</b>	<b>0.71</b>	<b>0.72</b>	<b>0.73</b>	<b>0.74</b>
	0.3	CFM	<b>1780</b>	<b>1667</b>	<b>1553</b>	<b>1432</b>	<b>1310</b>	<b>1183</b>	<b>1056</b>				
		RPM	<b>513</b>	<b>503</b>	<b>493</b>	<b>482</b>	<b>471</b>	<b>459</b>	<b>447</b>				
		kW	<b>0.71</b>	<b>0.72</b>	<b>0.73</b>	<b>0.73</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>				
Factory Drive	0.2	CFM						2740	2650	2540	2430	2340	2250
		RPM						519	506	491	475	464	453
		kW						0.73	0.74	0.74	0.74	0.74	0.73
	0.3	CFM	2880	2815	2750	2640	2530	2430	2330	2195	2060	1955	1850
		RPM	577	568	559	546	532	520	507	492	476	465	454
		kW	0.71	0.72	0.73	0.72	0.72	0.72	0.73	0.73	0.74	0.74	0.74
	0.4	CFM	2605	2507	2409	2285	2160	2000	1840				
		RPM	578	570	561	547	533	521	508				
		kW	0.70	0.72	0.73	0.72	0.72	0.72	0.72				
0.5	CFM	2070	1955	1840									
	RPM	580	572	564									
	kW	0.71	0.72	0.73									

**NOTES:**

- Boldface type indicates factory recommended blower operating range.
- Values include losses for 2" standard air filters, unit casing, and dry evaporator coil.
- For 208V operation deduct approximately 0.5% from CFM shown.

**FACTORY DRIVE CONSISTS OF:**

15" x 15" FC Blower, 2 HP / 2 Speed Motor  
1VP40 Sheave, BK85 Pulley, and B57 Belt.

**ALTERNATE DRIVE SETING (OPTIONAL):**

Same except uses BK95 Blower Pulley and B59 Belt.

# BLOWER PERFORMANCE DATA

## P7TQ-120C/D/N SERIES

### 2 HP, 2 SPEED, DOWNFLOW BLOWER DATA

Factory Standard Static Drive:

HIGH SPEED OPERATION													
EXTERNAL UNIT STATIC (IN WC)	OPERATING @ 230V, 460V, OR 575V	ADJUSTABLE MOTOR SHEAVE SETTING											
		FULLY CLOSED	0.5 TURN OPEN	1 TURN OPEN	1.5 TURNS OPEN	2 TURNS OPEN	2.5 TURNS OPEN	3 TURNS OPEN	3.5 TURNS OPEN*	4 TURNS OPEN	4.5 TURNS OPEN	5 TURNS OPEN	
0.1	CFM								3830	3690	3585	3480	
	RPM								794	772	751	729	
	kW								1.60	1.43	1.34	1.25	
0.2	CFM							3840	3680	3520	3395	3270	
	RPM							819	797	774	752	730	
	kW							1.65	1.54	1.43	1.31	1.20	
0.3	CFM							3765	3630	3500	3370	3245	3120
	RPM							841	820	798	775	753	731
	kW							1.73	1.57	1.46	1.34	1.24	1.13
0.4	CFM					3780	3620	3460	3335	3210	3050	2890	
	RPM					860	841	821	800	778	755	732	
	kW					1.835	1.67	1.51	1.41	1.30	1.19	1.08	
0.5	CFM				3720	3560	3435	3310	3145	2980			
	RPM				884	861	842	823	801	779			
	kW				1.85	1.72	1.59	1.47	1.36	1.25			
0.6	CFM			3760	3575	3390	3260	3130	2960				
	RPM			908	885	862	843	824	802				
	kW			1.864	1.76	1.66	1.50	1.34	1.20				
0.7	CFM			3610	3420	3230	3095	2960					
	RPM			910	888	865	846	826					
	kW			1.87	1.72	1.57	0.85	0.13					
0.8	CFM		3565	3420	3225	3030	2830						
	RPM		929	912	889	866	847						
	kW		1.905	1.68	1.59	1.50	1.32						
0.9	CFM	3520	3395	3270	3035	2800							
	RPM	948	931	914	890.5	867							
	kW	1.94	1.781	1.622	1.503	1.38							
1.0	CFM	3270	3125	2980									
	RPM	951	933.5	916									
	kW	1.82	1.6485	1.477									
1.1	CFM	3080	3030										
	RPM	954	935										
	kW	1.73	1.6035										

LOW SPEED OPERATION - FOR REFERENCE ONLY												
EXTERNAL UNIT STATIC (IN WC)	OPERATING @ 230V, 460V, OR 575V	ADJUSTABLE MOTOR SHEAVE SETTING										
		FULLY CLOSED	0.5 TURN OPEN	1 TURN OPEN	1.5 TURNS OPEN	2 TURNS OPEN	2.5 TURNS OPEN	3 TURNS OPEN	3.5 TURNS OPEN*	4 TURNS OPEN	4.5 TURNS OPEN	5 TURNS OPEN
0.1	CFM	2920	2850	2780	2695	2610	2520	2430	2350	2270	2180	2090
	RPM	634	623	611	596	580	566	552	538	524	507	490
	kW	0.87	0.83	0.78	0.76	0.73	0.69	0.64	0.58	0.51	0.49	0.47
0.2	CFM	2700	2610	2520	2440	2360	2275	2190	2105	2020	1930	1840
	RPM	635	624	612	597	582	568	553	539	525	509	492
	kW	0.83	0.76	0.70	0.69	0.68	0.63	0.58	0.53	0.48	0.46	0.44
0.3	CFM	2500	2360	2220	2160	2100	2005	1910	1845	1780	1690	1600
	RPM	637	626	614	599	584	569	554	540	526	509	492
	kW	0.78	0.73	0.68	0.65	0.62	0.57	0.52	0.49	0.46	0.45	0.43
0.4	CFM	2253	2052	1850	1835	1820	1700	1580				
	RPM	639	627	615	600	585	571	556				
	kW	0.71	0.68	0.64	0.59	0.55	0.51	0.47				
0.5	CFM	1910										
	RPM	640										
	kW	0.64										

**NOTES:**

- \* Denotes Recommended Sheave Setting.
- Boldface type indicates factory recommended blower operating range.
- Values include losses for 2" standard air filters, unit casing, and dry evaporator coil.
- For 208V operation deduct approximately 0.5% from CFM shown.

**FACTORY DRIVE CONSISTS OF:**

15" x 15" FC Blower, 2 HP / 2 Speed Motor, 1VP40 Sheave, BK77 Pulley and B56 Belt

# BLOWER PERFORMANCE DATA

## P7TQ-120C/D/N SERIES

### 2 HP, 2 SPEED, HORIZONTAL BLOWER DATA

Drive Change Required, See Note

HIGH SPEED OPERATION																
EXTERNAL UNIT STATIC (IN WC)	OPERATING @ 230V, 460V, OR 575V	ADJUSTABLE MOTOR SHEAVE SETTING														
		FULLY CLOSED	0.5 TURN OPEN	1 TURN OPEN	1.5 TURNS OPEN	2 TURNS OPEN	2.5 TURNS OPEN	3 TURNS OPEN	3.5 TURNS OPEN	4 TURNS OPEN*	4.5 TURNS OPEN	5 TURNS OPEN	5.5 TURNS OPEN			
0.1	CFM											3958	3810	3670		
	RPM											690	672	651		
	kW											0.91	0.90	0.90		
0.2	CFM									4025	3890	3748	3605	3445		
	RPM									730	708	691	673	652		
	kW									0.92	0.97	0.94	0.90	0.91		
0.3	CFM									3985	3828	3670	3525	3380	3220	
	RPM									752	731	709	692	674	654	
	kW									0.89	0.91	0.92	0.91	0.89	0.89	
0.4	CFM									3923	3775	3620	3465	3298	3130	2940
	RPM									772	753	732	710	693	676	655
	kW									0.90	0.88	0.90	0.93	0.92	0.90	0.90
0.5	CFM				4020	3880	3725	3570	3385	3200	3038	2875				
	RPM				811	792	774	755	733	711	695	678				
	kW				0.94	0.93	0.90	0.88	0.91	0.94	0.92	0.90				
0.6	CFM			3960	3805	3650	3495	3340	3113	2885						
	RPM			830	812	793	775	757	735	713						
	kW			0.94	0.93	0.93	0.92	0.92	0.92	0.91						
0.7	CFM	4015	3888	3760	3590	3420	3220	3020								
	RPM	860	846	832	813	794	775	756								
	kW	0.89	0.91	0.94	0.93	0.93	0.91	0.89								
0.8	CFM	3768	3634	3500	3225	2950										
	RPM	862	849	836	816	797										
	kW	0.88	0.91	0.94	0.93	0.93										
0.9	CFM	3520	3345	3170												
	RPM	864	851	837												
	kW	0.88	0.91	0.93												
1.0	CFM	3025														
	RPM	867.5														
	kW	0.879														

LOW SPEED OPERATION - FOR REFERENCE ONLY														
EXTERNAL UNIT STATIC (IN WC)	OPERATING @ 230V, 460V, OR 575V	ADJUSTABLE MOTOR SHEAVE SETTING												
		FULLY CLOSED	0.5 TURN OPEN	1 TURN OPEN	1.5 TURNS OPEN	2 TURNS OPEN	2.5 TURNS OPEN	3 TURNS OPEN	3.5 TURNS OPEN	4 TURNS OPEN †	4.5 TURNS OPEN	5 TURNS OPEN	5.5 TURNS OPEN	
0.1	CFM							2740	2650	2540	2430	2340	2250	2145
	RPM							519	506	491	475	464	453	437
	kW							0.73	0.74	0.74	0.74	0.74	0.73	0.74
0.2	CFM	2880	2815	2750	2640	2530	2430	2330	2195	2060	1955	1850	1695	
	RPM	577	568	559	546	532	520	507	492	476	465	454	439	
	kW	0.71	0.72	0.73	0.72	0.72	0.72	0.73	0.73	0.73	0.74	0.74	0.74	0.75
0.3	CFM	2605	2507	2409	2285	2160	2000	1840						
	RPM	578	570	561	547	533	521	508						
	kW	0.70	0.72	0.73	0.72	0.72	0.72	0.72						
0.4	CFM	2070	1955	1840										
	RPM	580	572	564										
	kW	0.71	0.72	0.73										

**NOTES:**

- Boldface type indicates factory recommended blower operating range.
- Values include losses for 2" standard air filters, unit casing, and dry evaporator coil.
- For 208V operation deduct approximately 0.5% from CFM shown.

**ALTERNATE DRIVE CONSISTS OF:**

15" x 15" FC Blower, 2 HP / 2 Speed Motor  
1VP40 Sheave, BK85 Pulley, and B57 Belt.

## P7TQ090C/D/N\* Series High Static Drive

7.5 TON HIGH STATIC DRIVE - DOWNFLOW																						
ESP	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0			
SPEED TAP	TORQUE VALUE	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
7.5 TON HIGH STATIC DRIVE - HORIZONTAL																						
ESP	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0			
SPEED TAP	TORQUE VALUE	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						

**NOTES:**

1. Factory recommended settings are in bold.
2. Shaded areas are not recommended or approved for proper operation of equipment.
3. 7.5 Ton High Static Drive Consists of: 3 HP ECM Motor and Controller, BK45 Motor Pulley, BK77 Blower Pulley, and B56 Belt. See Accessory offering in Technical Sales Literature.

## P7TQ120C/D/N\* Series High Static Drive

10 TON HIGH STATIC DRIVE - DOWNFLOW																						
ESP	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0			
SPEED TAP	TORQUE VALUE	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
10 TON HIGH STATIC DRIVE - HORIZONTAL																						
ESP	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0			
SPEED TAP	TORQUE VALUE	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW	CFM	RPM	KW
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						
<b>DATA UNAVAILABLE AT TIME OF PRINT</b>																						

**NOTES:**

1. Factory recommended settings are in bold.
2. Shaded areas are not recommended or approved for proper operation of equipment.
3. 10 Ton High Static Drive Consists of: 3 HP ECM Motor and Controller, BK45 Motor Pulley, BK70 Blower Pulley, and B56 Belt. See Accessory offering in Technical Sales Literature.



# EXPANDED RATINGS - COOLING OPERATION

## P7TQ-072 (C/D/N) (Two-Stage Compressor-High Speed / High Speed Blower Operation)

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.
2400	75	62	68.6	53.4	5.83	63.2	50.5	6.20	57.5	47.7	6.78	51.5	44.9	7.55
		67	76.6	42.2	5.65	71.2	39.3	6.02	65.5	36.5	6.60	59.5	33.6	7.37
		72	83.9	27.9	5.78	78.5	25.1	6.15	72.8	22.2	6.73	66.8	19.4	7.50
	80	62	71.0	67.3	5.59	65.4	64.4	6.05	59.5	59.5*	6.70	53.2	53.2*	7.56
		67	79.0	56.1	5.41	73.4	53.1	5.87	67.5	50.2	6.52	61.2	47.2	7.38
		72	86.3	41.9	5.54	80.7	38.9	5.99	74.8	35.9	6.65	68.5	32.9	7.51
2550	75	62	69.8	55.0	5.92	64.8	52.5	6.26	59.5	49.9	6.79	53.9	47.4	7.53
		67	77.8	43.8	5.74	72.8	41.2	6.08	67.5	38.7	6.61	61.9	36.1	7.35
		72	85.1	29.6	5.87	80.1	27.0	6.20	74.8	24.4	6.74	69.2	21.9	7.48
	80	62	71.0	68.8	5.79	65.8	65.8*	6.21	60.3	60.3*	6.83	54.4	54.4*	7.65
		67	79.0	57.5	5.61	73.0	54.8	6.13	68.3	52.2	6.65	62.4	49.5	7.47
		72	86.3	43.3	5.74	81.1	40.6	6.16	75.6	37.9	6.78	69.7	35.2	7.59
2700	75	62	70.7	55.9	5.90	66.1	53.7	6.20	61.2	51.4	6.70	56.0	49.2	7.40
		67	78.7	44.7	5.73	74.1	42.4	6.02	69.2	40.2	6.52	64.0	37.9	7.22
		72	86.0	30.5	5.85	81.4	28.2	6.15	76.5	25.9	6.65	71.3	23.7	7.35
	80	62	70.7	69.5	5.89	65.9	65.9*	6.27	60.8	60.8*	6.85	55.3	55.3*	7.63
		67	78.7	58.3	5.71	73.9	55.8	6.09	68.8	53.5	6.67	63.3	51.1	7.45
		72	86.0	44.0	5.84	81.2	41.6	6.22	76.1	39.2	6.80	70.6	36.8	7.50

## P7TQ-072 (C/D/N) (Two-Stage Compressor-Low Speed / Low Speed Blower Operation)

O.D.T			55°F			65°F			75°F			85°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.
1550	75	62	62.0	39.0	2.67	62.1	39.6	2.98	60.2	39.2	3.33	56.3	37.7	3.71
		67	63.5	32.0	2.65	63.6	32.7	2.96	61.7	32.2	3.31	57.8	30.7	3.69
		72	64.3	22.3	2.65	64.3	23.0	2.96	62.4	22.5	3.31	58.6	21.0	3.69
	80	62	60.0	48.7	2.65	59.3	48.8	2.98	56.6	47.8	3.35	51.9	45.7	3.76
		67	64.2	41.0	2.59	63.5	41.1	2.92	60.8	40.1	3.29	56.1	38.0	3.70
		72	67.7	30.6	2.55	66.9	30.7	2.88	64.2	29.7	3.25	59.6	27.6	3.66
1650	75	62	62.6	40.9	2.70	62.7	41.5	2.99	60.8	41.0	3.32	56.9	39.4	3.70
		67	64.1	33.9	2.68	64.1	34.5	2.97	62.3	34.0	3.30	58.4	32.4	3.68
		72	64.8	24.2	2.68	64.9	24.8	2.97	63.0	24.3	3.30	59.2	22.8	3.68
	80	62	60.5	50.6	2.67	59.8	50.6	2.99	57.2	49.6	3.35	52.5	47.5	3.75
		67	64.7	42.9	2.61	64.0	42.9	2.93	61.4	41.9	3.29	56.7	39.8	3.69
		72	68.2	32.5	2.57	67.5	32.5	2.89	64.8	31.5	3.25	60.2	29.4	3.65
1750	75	62	64.1	42.3	2.69	64.2	42.9	2.97	62.4	42.4	3.29	58.5	40.8	3.65
		67	65.6	35.3	2.67	65.7	35.9	2.95	63.9	35.4	3.27	60.0	33.8	3.63
		72	66.4	25.7	2.67	66.5	26.2	2.95	64.6	25.7	3.27	60.8	24.1	3.63
	80	62	62.1	52.1	2.66	61.4	52.1	2.97	58.8	51.0	3.32	54.1	48.8	3.70
		67	66.3	44.3	2.60	65.6	44.3	2.91	63.0	43.3	3.26	58.3	41.1	3.64
		72	69.8	33.9	2.56	69.1	33.9	2.87	66.4	32.9	3.22	61.8	30.7	3.60

## P7TQ-090 (C/D/N) (Two Compressor / High Speed Blower Operation)

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.
2950	75	62	90.9	67.6	7.00	82.9	65.0	7.86	74.9	61.7	8.95	66.8	57.9	10.30
		67	99.3	53.6	7.06	91.3	50.9	7.91	83.3	47.6	9.00	75.2	43.8	10.30
		72	108.0	36.2	7.08	99.8	33.5	7.94	91.7	30.3	9.03	83.7	26.4	10.40
	80	62	91.4	83.1	6.97	83.6	80.1	7.59	75.8	75.8*	8.45	67.9	67.9*	9.54
		67	99.8	69.0	7.03	92.0	66.1	7.65	84.2	62.5	8.50	76.3	58.3	9.59
		72	108.0	51.7	7.05	100.0	48.7	7.67	92.6	45.1	8.53	84.8	40.9	9.62
3150	75	62	94.7	70.3	7.03	86.4	67.5	7.93	78.2	64.1	9.07	69.9	60.1	10.40
		67	103.0	56.2	7.09	94.8	53.4	7.99	86.6	50.0	9.13	78.3	46.0	10.50
		72	112.0	38.8	7.11	103.0	36.0	8.01	95.0	32.6	9.15	86.8	28.6	10.50
	80	62	92.7	85.2	7.13	84.7	82.1	7.80	76.6	76.6*	8.70	68.6	68.6*	9.84
		67	101.0	71.1	7.19	93.1	68.0	7.85	85.0	64.2	8.76	77.0	59.9	9.89
		72	110.0	53.8	7.21	102.0	50.6	7.88	93.5	46.9	8.78	85.5	42.5	9.92
3350	75	62	98.7	73.9	6.86	90.3	70.8	7.81	81.8	67.3	8.99	73.3	63.1	10.40
		67	107.0	59.8	6.92	98.6	56.8	7.87	90.2	53.2	9.05	81.7	49.0	10.50
		72	116.0	42.4	6.94	107.0	39.4	7.89	98.7	35.8	9.07	90.2	31.6	10.50
	80	62	94.3	88.2	7.09	86.1	84.9	7.80	77.8	77.8*	8.75	69.5	69.5*	9.94
		67	103.0	74.1	7.15	94.5	70.8	7.86	86.2	66.9	8.81	77.9	62.4	9.99
		72	111.0	56.7	7.17	103.0	53.4	7.88	94.7	49.5	8.83	86.4	45.0	10.00

# EXPANDED RATINGS - COOLING OPERATION

## P77Q-090 (C/D/N) (One Compressor / Low Speed Blower Operation)

O.D.T			55°F			65°F			75°F			85°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.
1900	75	62	53.7	27.8	3.09	52.1	26.4	3.28	49.3	24.6	3.54	45.3	22.4	3.86
		67	52.7	26.9	3.08	51.1	25.5	3.27	48.3	23.6	3.53	44.4	21.5	3.85
		72	55.8	20.5	3.11	54.2	19.0	3.30	51.5	17.2	3.56	47.5	15.0	3.88
	80	62	50.8	31.0	3.09	50.0	30.0	3.27	48.0	28.7	3.52	44.9	26.9	3.83
		67	50.6	30.8	3.10	49.8	29.9	3.28	47.8	28.5	3.53	44.7	26.8	3.84
		72	54.5	25.2	3.15	53.7	24.2	3.33	51.7	22.9	3.58	48.5	21.1	3.89
2000	75	62	54.2	28.4	3.09	52.5	26.8	3.27	49.7	24.9	3.52	45.6	22.6	3.83
		67	53.2	27.4	3.08	51.6	25.9	3.26	48.7	24.0	3.51	44.7	21.6	3.82
		72	56.4	21.0	3.11	54.7	19.5	3.29	51.9	17.5	3.54	47.9	15.2	3.84
	80	62	51.3	31.5	3.09	50.4	30.4	3.26	48.4	29.0	3.50	45.2	27.1	3.80
		67	51.1	31.4	3.10	50.2	30.3	3.27	48.2	28.8	3.51	45.0	27.0	3.81
		72	55.0	25.7	3.15	54.2	24.6	3.32	52.1	23.2	3.56	48.9	21.3	3.86
2100	75	62	56.2	30.2	3.21	54.5	28.5	3.38	51.6	26.5	3.61	47.5	24.1	3.91
		67	55.3	29.3	3.20	53.6	27.6	3.37	50.7	25.6	3.60	46.6	23.1	3.90
		72	58.5	22.9	3.23	56.8	21.2	3.40	53.9	19.1	3.63	49.8	16.7	3.93
	80	62	53.3	33.4	3.21	52.4	32.2	3.37	50.3	30.6	3.59	47.0	28.6	3.88
		67	53.2	33.2	3.22	52.3	32.0	3.38	50.2	30.4	3.60	46.9	28.5	3.89
		72	57.2	27.6	3.27	56.2	26.4	3.43	54.1	24.8	3.65	50.9	22.8	3.94

## P77Q-120 (C/D/N) (Two Compressor / High Speed Blower Operation)

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.
3250	75	62	108.0	78.9	9.11	102.0	77.0	10.10	92.9	72.5	11.10	81.2	65.4	12.40
		67	122.0	65.0	9.57	116.0	63.0	10.50	107.0	58.5	11.60	95.2	51.5	12.80
		72	138.0	50.4	9.69	131.0	48.5	10.60	122.0	44.0	11.70	111.0	36.9	13.00
	80	62	106.0	94.4	8.69	99.5	92.3	9.77	90.7	87.6	11.00	79.1	79.1*	12.30
		67	120.0	80.4	9.15	114.0	78.3	10.20	105.0	73.6	11.40	93.2	66.4	12.80
		72	135.0	65.9	9.28	129.0	63.8	10.40	120.0	59.1	11.60	109.0	51.8	12.90
3450	75	62	110.0	81.0	8.98	104.0	79.2	9.99	95.0	74.8	11.10	83.4	67.9	12.40
		67	124.0	67.0	9.44	118.0	65.2	10.40	109.0	60.9	11.60	97.4	54.0	12.90
		72	140.0	52.5	9.56	134.0	50.7	10.60	125.0	46.3	11.70	113.0	39.4	13.00
	80	62	108.0	95.5	8.68	102.0	93.6	9.81	93.4	89.0	11.10	81.8	81.8*	12.50
		67	122.0	81.6	9.14	116.0	79.6	10.30	107.0	75.0	11.50	95.8	67.9	13.00
		72	138.0	67.0	9.26	132.0	65.1	10.40	123.0	60.5	11.70	111.0	53.4	13.10
3650	75	62	111.0	85.5	9.02	105.0	83.8	10.10	96.2	79.6	11.30	84.6	72.9	12.60
		67	125.0	71.5	9.48	119.0	69.9	10.60	110.0	65.7	11.80	98.6	58.9	13.10
		72	141.0	57.0	9.61	135.0	55.3	10.70	126.0	51.1	11.90	114.0	44.4	13.20
	80	62	110.0	99.1	8.83	104.0	97.3	10.00	95.0	92.9	11.40	83.5	83.5*	12.80
		67	124.0	85.1	9.29	118.0	83.3	10.50	109.0	78.9	11.80	97.6	72.0	13.30
		72	139.0	70.6	9.42	133.0	68.8	10.60	125.0	64.4	12.00	113.0	57.4	13.40

## P77Q-120 (C/D/N) (One Compressor / Low Speed Blower Operation)

O.D.T			55°F			65°F			75°F			85°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.
2100	75	62	59.4	38.1	3.70	57.1	36.7	3.92	53.6	34.8	4.25	49.0	32.4	4.68
		67	63.8	31.6	3.89	61.4	30.2	4.11	57.9	28.3	4.44	53.3	25.9	4.87
		72	71.3	26.2	4.06	68.9	24.8	4.28	65.5	22.9	4.61	60.9	20.5	5.04
	80	62	58.6	42.7	3.68	56.5	41.5	3.91	53.2	39.9	4.25	48.9	37.7	4.69
		67	62.9	36.2	3.87	60.8	35.0	4.10	57.6	33.4	4.44	53.2	31.2	4.88
		72	70.4	30.8	4.04	68.3	29.6	4.27	65.1	27.9	4.61	60.7	25.8	5.05
2200	75	62	62.1	40.1	3.78	59.2	38.4	3.99	55.1	36.1	4.30	49.9	33.4	4.72
		67	66.5	33.6	3.97	63.5	31.9	4.18	59.5	29.6	4.49	54.3	26.9	4.91
		72	74.0	28.2	4.14	71.0	26.4	4.35	67.0	24.2	4.66	61.8	21.5	5.08
	80	62	61.3	44.7	3.76	58.6	43.2	3.98	54.8	41.2	4.30	49.8	38.7	4.73
		67	65.6	38.3	3.95	62.9	36.7	4.17	59.1	34.7	4.49	54.1	32.2	4.92
		72	73.1	32.8	4.12	70.4	31.3	4.34	66.6	29.2	4.66	61.6	26.7	5.09
2300	75	62	64.3	41.5	3.79	60.8	39.4	3.98	56.1	36.8	4.28	50.3	33.7	4.68
		67	68.6	35.0	3.98	65.1	32.9	4.17	60.5	30.3	4.47	54.7	27.2	4.87
		72	76.1	29.6	4.15	72.6	27.5	4.34	68.0	24.8	4.64	62.2	21.8	5.04
	80	62	63.4	46.1	3.77	60.2	44.2	3.97	55.7	41.8	4.28	50.2	39.0	4.69
		67	67.8	39.6	3.96	64.5	37.7	4.16	60.1	35.3	4.47	54.5	32.5	4.88
		72	75.3	34.2	4.13	72.0	32.3	4.33	67.6	29.9	4.64	62.0	27.0	5.05

- 1) T.C. = Total (Net) Cooling Capacity, S.C. = Sensible Cooling Capacity, kW = Kilowatts
- 2) Expanded Ratings are based on 230 Volt - 60 Hz operation
- 3) Expanded Ratings are based on Factory Standard Blower Drive
- 4) Bolded Values indicate ARI rating point
- 5) Energy Efficiency Ratio (EER) = T.C. / kW

## ACCESSORIES

DESCRIPTION	Field SKU
8" Curb	1011391
14" Curb	1011388
18" Curb	1011389
24" Curb	1011390
Convenience Outlet	1011383
Manual Outdoor Air Damper	1011416
Powered Outdoor Air Damper	1011417
Economizer, Vertical, with Enthalpy Controller	1011418
Differential Enthalpy Control	1011701
RA Mounted CO2 Sensor	1011410
Wall Mounted CO2 Sensor	1011411
Smoke Detector	1011404
Sampling Tubes 2-4ft	1011405
Sampling Tube 4-8ft	1011406
Filter Upgrade to MERV 8	1011407
Condensate Float Safety Switch	1011396
Low Ambient Control, 6 Ton	1011408
Low Ambient Control, 7.5, 10 Ton	1011409
Low Pressure Switch, 6 Ton	1011412
Low Pressure Switch, 7.5, 10 Ton	1011413
Freezestat, 6 Ton	1011414
Freezestat, 7.5, 10 Ton	1011415
Mesh Hail Guard Option, 6 Ton	1011385
Mesh Hail Guard Option, 7.5 Ton	1011386
Mesh Hail Guard Option, 10 Ton	1011387
Hooded Hail Guard	1006379
Disconnect Switch 60 Amp, 240 Volt, Fusible, USA	1011383
Disconnect Switch 60 Amp, 600 Volt, Fusible, USA	1011397
Disconnect Switch 60 Amp, 600 Volt, Fusible, Canada	1011402
BacNet Thermostat	1011394
LonWorks Thermostat	1011394
Burglar Bars - Return & Supply	1011382
High Static Drive, Up to 1" WC (7.5-10 Ton) 208/230 volt	1011379
High Static Drive, Up to 1" WC (7.5-10 Ton) 460 volt	1011380
Medium Static Drive, 6 Ton Downflow	1011993
Medium Static Drive, 6 Ton Horizontal	667405
H9HK009Q-01, Electric Heat-9kw, 208-230/60/3	1011669
H9HK018Q-11, Electric Heat-18kw, 208-230/60/3	1011672
H9HK030Q-21, Electric Heat-30kw, 208-230/60/3	1011675
H9HK035Q-21, Electric Heat-35kw, 208-230/60/3	1011678
H9HK009S-01, Electric Heat-9kw-, 460/60/3	1011670
H9HK018S-01, Electric Heat-18kw, 460/60/3	1011673
H9HK030S-01, Electric Heat-30kw, 460/60/3	1011676
H9HK035S-01, Electric Heat-35kw, 460/60/3	1011679
H9HK009N-01, Electric Heat-9kw, 575/60/3	1011671
H9HK018N-01, Electric Heat-18kw, 575/60/3	1011674
H9HK030N-01, Electric Heat-30kw, 575/60/3	1011677
H9HK035N-01, Electric Heat-35kw, 575/60/3	1011680

INVENTORIED BASE SKU'S		
Mat ID, SKU	Material Description	volts/Hz/phase
1011555	P7TQ072-C0A000A0001B	208-230/60/3
1011572	P7TQ090-C0A000A0001B	208-230/60/3
1011589	P7TQ120-C0A000A0001B	208-230/60/3
1011556	P7TQ072-D0A000A0001B	460/60/3
1011573	P7TQ090-D0A000A0001B	460/60/3
1011590	P7TQ120-D0A000A0001B	460/60/3

FACTORY INSTALLED OPTIONS		
UNPOWERED CONVENIENCE OUTLET		
Mat ID, SKU	Material Description	volts/Hz/phase
1011568	P7TQ072-C0A000A1001B	208-230/60/3
1011585	P7TQ090-C0A000A1001B	208-230/60/3
1011602	P7TQ120-C0A000A1001B	208-230/60/3
1011569	P7TQ072-D0A000A1001B	460/60/3
1011586	P7TQ090-D0A000A1001B	460/60/3
1011603	P7TQ120-D0A000A1001B	460/60/3

DISCONNECT AND OUTLET		
Mat ID, SKU	Material Description	volts/Hz/phase
1011566	P7TQ072-C0A000A3001B	208-230/60/3
1011583	P7TQ090-C0A000A3001B	208-230/60/3
1011600	P7TQ120-C0A000A3001B	208-230/60/3
1011567	P7TQ072-D0A000A3001B	460/60/3
1011584	P7TQ090-D0A000A3001B	460/60/3
1011601	P7TQ120-D0A000A3001B	460/60/3

COATED CONDENSER COIL		
Mat ID, SKU	Material Description	volts/Hz/phase
1011570	P7TQ072-C0A002A0001B	208-230/60/3
1011587	P7TQ090-C0A002A0001B	208-230/60/3
1011604	P7TQ120-C0A002A0001B	208-230/60/3
1011571	P7TQ072-D0A002A0001B	460/60/3
1011588	P7TQ090-D0A002A0001B	460/60/3
1011605	P7TQ120-D0A002A0001B	460/60/3

BUILD TO ORDER		
Mat ID, SKU	Material Description	volts/Hz/phase
1011557	P7TQ072-N0A000A0001B	575/60/3
1011574	P7TQ090-N0A000A0001B	575/60/3
1011591	P7TQ120-N0A000A0001B	575/60/3



For complete catalog information including submittals, energy calculations, dimension drawings, and more go to [www.ReznorHVAC.com](http://www.ReznorHVAC.com) or call 800-695-1901.

*Note: In keeping with our policy of continuous product improvement, we reserve the right to alter, at any time, the design, construction, dimensions, weights, etc., of equipment information shown here.*