

Q7RE Series

Single Packaged Heat Pump, Single Phase

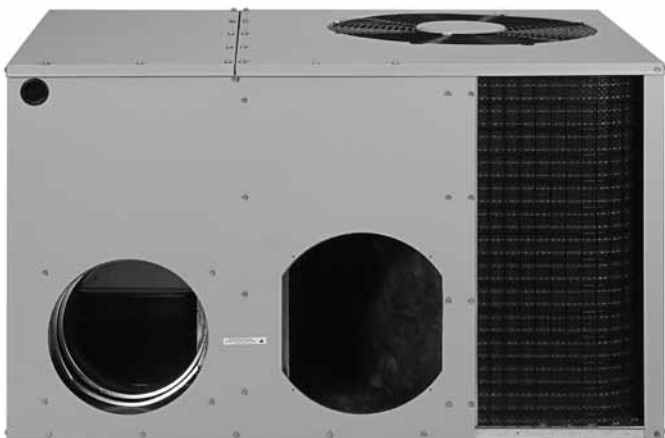
14 SEER, 8.0 HSPF

2 thru 5 Ton Units

Cooling: 23,400 to 55,500 Btuh

Heating: 21,800 to 56,000 Btuh

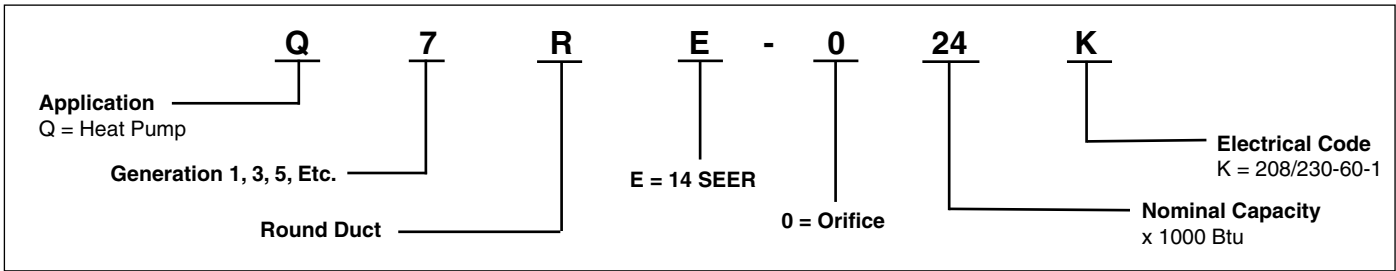
The Q7 Series single packaged heat pumps are high efficiency self contained cooling and heating units that can be installed on a slab. Units are ETL and ETLc listed.



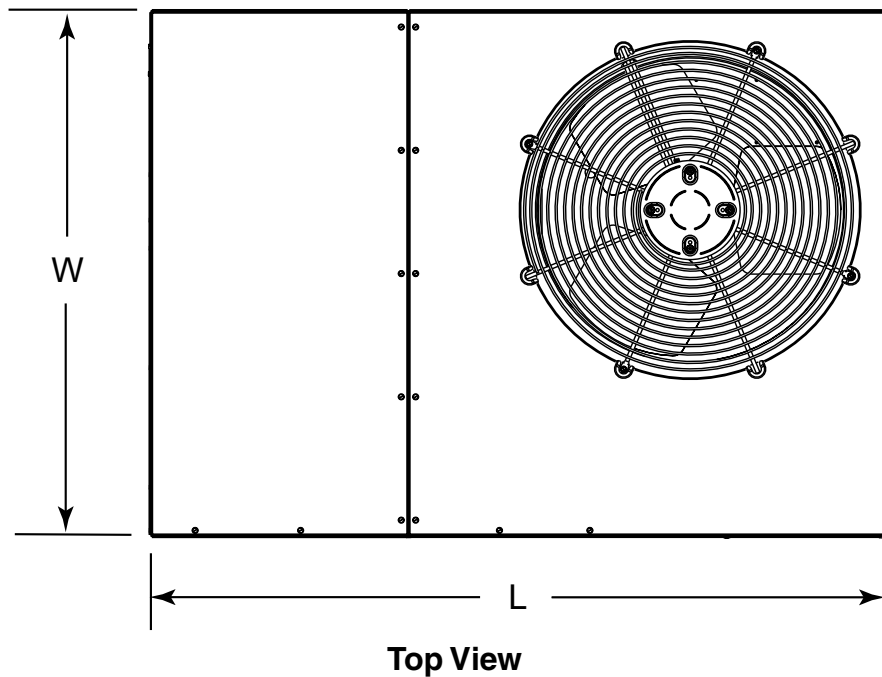
FEATURES and BENEFITS

- **First in Industry Patented Hot Gas Defrost:** Ensures complete, worry-free defrost.
- **Quality Compressor:** State of the art compressor is standard equipment.
- **Hi/Low Pressure Switches:** Ensure long compressor life.
- **All Aluminum Coils:** Provides high corrosion resistance, lower refrigerant volume.
- **Designed Using Galvanized Steel:** With a polyester urethane coat finish. The 950 hour salt spray finish is 1.5 mil thick and resists corrosion 50% better than comparable units.
- **Compact Footprint and Profile:** Make the Q7 Series easy to transport and install.
- **0" Clearance:** To combustibles on duct side of the unit allows for installations in tight areas.
- **Wire Guard Coated with Earth Friendly Epoxy and Plastic Mesh Hail Guard:** A guard that will never rust and protects the unit's coil from being damaged.
- **Raised Base Pan:** Allows water to drain away from away from the unit.
- **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.
- **Easy Access:** To the evaporator coil and blower assembly for cleaning and general maintenance.
- **Removable Top Grille Assembly:** Allows ease of service to the fan motor.
- **Five Minute Restart Time Delay:** When the units shuts down, a five minute delay keeps the unit from restarting, eliminating the highest cause of compressor failure.
- **Liquid Line Filter Drier:** Factory installed at a convenient location for service.
- **Accessible Service Valves:** Simplify servicing of the refrigeration system.
- **Suction Accumulator:** Provides protection from liquid flood back and future compressor failures.
- **Permanently Lubricated Condenser Motor:** A heavy duty PSC motor for long lasting reliability and quiet operation.
- **Low Voltage Transformer:** Includes 3 Amp fuse to protect low voltage circuit.
- **Drain Trap Included:** Design optimizes drainage capabilities.
- **Outdoor Thermostat:** Is standard equipment.
- **Optional Electric Heat:** Field installed 5 – 20 KW.

MODEL IDENTIFICATION CODE

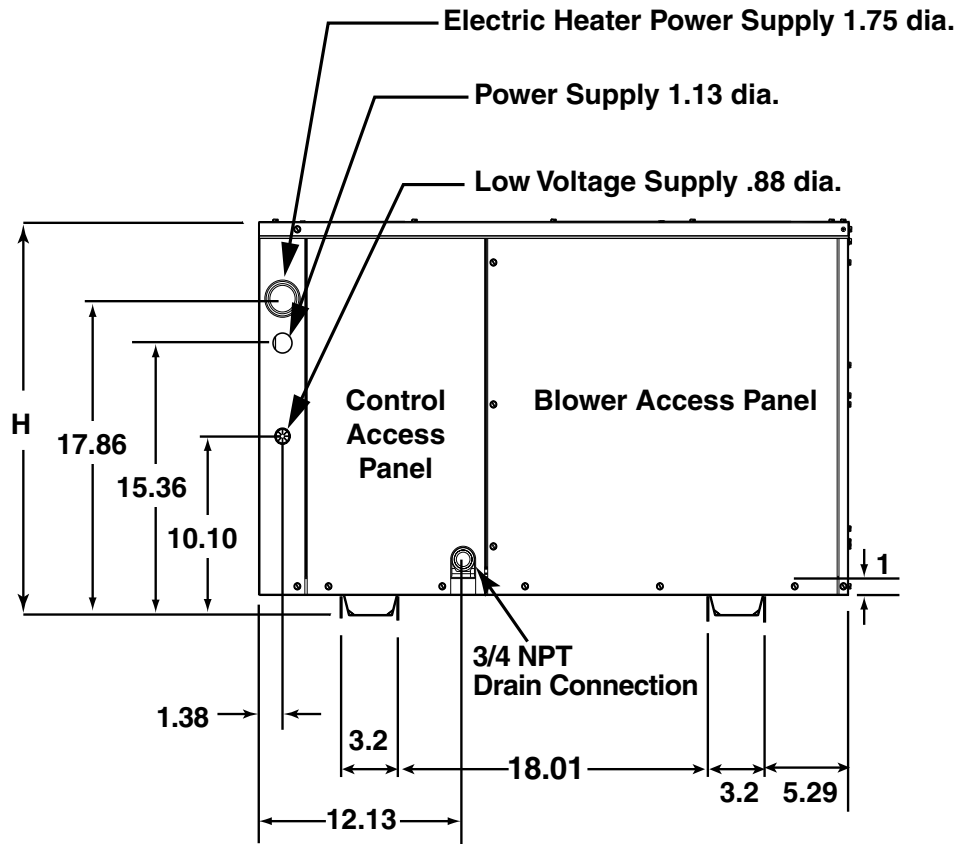


DIMENSIONS (all in lbs. and inches)



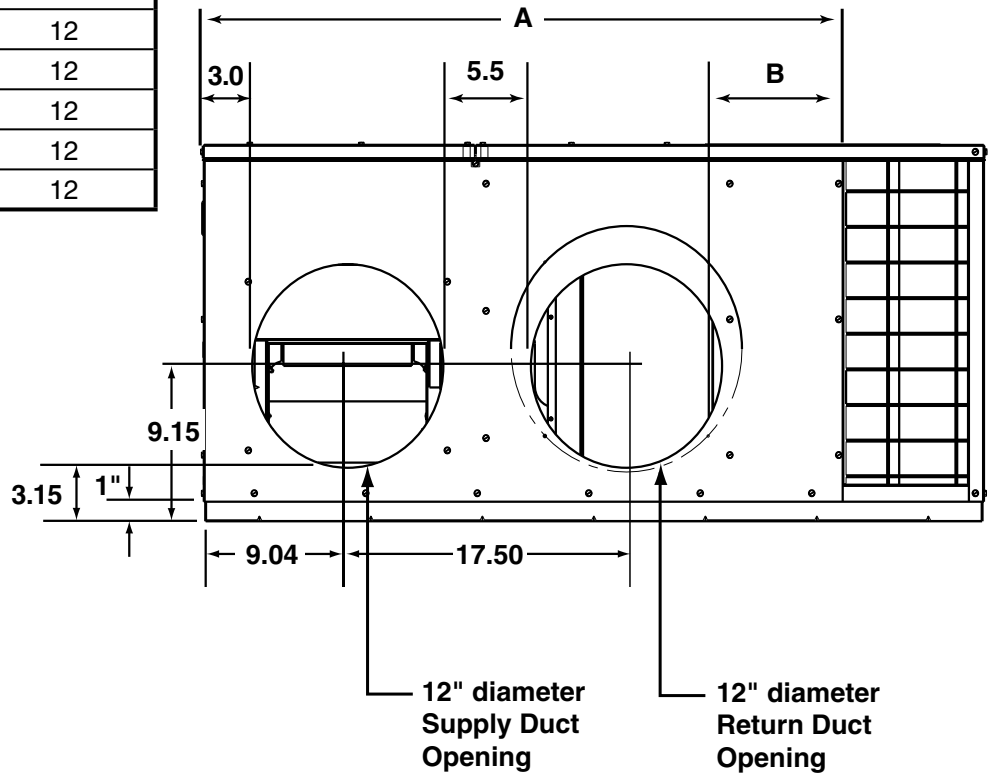
Model No. Q7RE	Weight		(L) Length	(W) Width	(H) Height	A	B
	Shipping	Net					
024K	277	263	49	35	30.2	35.02	2.48
030K	281	267	49	35	30.2	35.02	2.48
036K	277	263	49	35	30.2	35.02	2.48
042K	288	274	49	35	30.2	35.02	2.48
048K	346	330	63	35	38.2	35.02	2.48
060K	375	359	63	35	38.2	35.02	2.48

DIMENSIONS Continued (all in inches)



Side View

Model Number Q7RE-	Suggested Return Diameter	Supply Diameter
024K	14	12
030K	14	12
036K	14	12
042K	14	12
048K	14	12
060K	14	12



Back (Duct) View

PHYSICAL SPECIFICATIONS

Q7RE Models

Model No. Q7RE-	024K	030K	036K	042K	048K	060K
System Heating and Cooling Capacities						
Cooling Btuh	23,400	28,600	34,600	41,300	48,000	55,500
SEER	14	14	14	14	14	14
EER	11	11	11	11	11	11
Heating Btuh	21,800	27,400	34,800	39,000	48,000	56,000
HSPF	8	8	8	8	8	8
Electric Rating — 60 Hz (a)						
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Min. Circuit Ampacity (a)	15.3	17.3	28.2	31.9	37.3	42.2
Delay Fuse — Max. (b)	20	25	45	50	60	60
Total Unit — AMPS	13.2	14.8	23.5	26.9	31.2	35.6
Compressor						
Volts	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230
Rated Load Amps	8.3	9.9	18.6	20	24.3	26.4
Lock Rotor Amps	50	69	79	112	117	152.5
Condenser Motor						
Fan Motor — HP - RPM	1/8 - 1100	1/8 - 1100	1/8 - 1100	1/4 - 1100	1/4 - 1100	1/2 - 1100
Fan Motor — Amps	1.1	1.1	1.1	1.5	1.5	3.8
Fan Dia. — CFM	20" - 2800	20" - 2800	20" - 2800	20" - 3000	24" - 4000	24" - 4000
Evaporator Motor						
Blower Motor — HP - ECM	1/2	1/2	1/2	3/4	3/4	3/4
Blower Motor — Amps	3.8	3.8	3.8	5.4	5.4	5.4
Refrigerant (R410-A) — Oz.						
	69	71	64	84	101	121
Net Weight -- lbs						
	263	267	263	274	330	359
Shipping Weight -- lbs						
	277	281	277	288	346	375
Sound Ratings						
	74	74	74	76	79	79

- (a) Amperage and wire size based on refrigeration system only with 60° C wire, 50 ft. length. See Electrical Data tables for supplemental electric heaters. Refer to National Electric Code for additional derating factors for field installed conductors.
- (b) Use time delay fuse or "HACR" type circuit breaker.

ACCESSORIES

Description	Part Number
4-Pole single circuit adaptor	913350
6-Pole single circuit adaptor	913556
Circuit Breaker Single Phase (2-pole)	913554
Duct collars - 12"	917701
Duct collars - 14"	917702

COPPER WIRE SIZE — AWG (1% Voltage Drop)				
Supply Wire Length-Feet				Supply Circuit Ampacity
200	150	100	50	
6	8	10	14	15
4	6	8	12	20
4	6	8	10	25
4	4	6	10	30
3	4	6	8	35
3	4	6	8	40
2	3	4	6	45
2	3	4	6	50

Wire Size based on N.E.C. for 60° type copper conductors.

AIR FLOW DATA

Model Number Q7RE-	Motor Tap	External Static Pressure Drop (in WC)							
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
024K	T1*	930	875	818	761	704	645	585	525
	T2	1158	1119	1076	1028	977	921	861	796
	T3**	1308	1271	1230	1185	1136	1084	1027	967
	T4	1440	1406	1368	1326	1281	1232	1179	1122
	T5	1622	1587	1550	1510	1467	1422	1373	1323
030K	T1	930	875	818	761	704	645	585	525
	T2*	1158	1119	1076	1028	977	921	861	796
	T3**	1308	1271	1230	1185	1136	1084	1027	967
	T4	1440	1406	1368	1326	1281	1232	1179	1122
	T5	1622	1587	1550	1510	1467	1422	1373	1323
036K	T1	1158	1119	1076	1028	977	921	861	796
	T2	1308	1271	1230	1185	1136	1084	1027	967
	T3*	1366	1332	1291	1245	1192	1132	1067	995
	T4**	1518	1481	1442	1400	1355	1307	1256	1202
	T5	1686	1644	1601	1556	1509	1460	1410	1358
042K	T1	1339	1297	1254	1210	1166	1121	1075	1029
	T2**	1459	1422	1383	1342	1300	1256	1211	1164
	T3*	1569	1530	1491	1451	1410	1368	1325	1282
	T4	1709	1674	1638	1601	1562	1521	1479	1436
	T5	1820	1785	1748	1710	1671	1630	1589	1545
048K	T1**	1418	1385	1351	1316	1279	1242	1203	1163
	T2	1530	1500	1467	1433	1396	1358	1318	1275
	T3*	1679	1645	1611	1576	1541	1505	1469	1432
	T4	1787	1757	1726	1693	1658	1621	1582	1542
	T5	2006	1973	1939	1905	1870	1834	1798	1761
060K	T1	1147	1102	1053	1001	945	886	824	758
	T2	1645	1602	1557	1512	1466	1420	1372	1324
	T3*	2131	2090	2047	2001	1954	1906	1855	1802
	T4**	2182	2144	2104	2063	2020	1976	1930	1882
	T5	1921	2014	2084	2129	2152	2150	2125	2077

NOTES:

* Denotes Air Flow Setting for cooling & heating

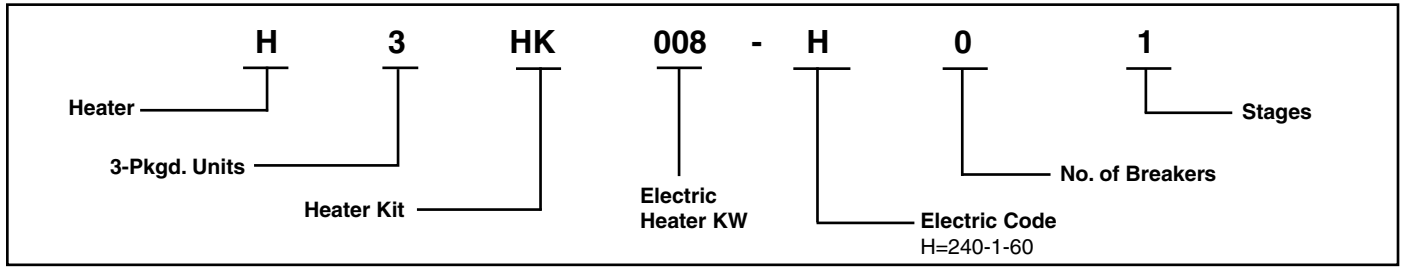
** Denotes Air Flow setting for electric heating (based on 10 KW heater)

Airflow performance is with a dry coil.

ELECTRIC HEAT SELECTION

Model Number Q7RE-	Heater kW	MCA	MOP	Circuit A (Compressor, Blower & Fan)		Circuit B (Heater Only)		Circuit C (Heater Only)	
				MCA	MOP	MCA	MOP	MCA	MOP
024K	0	15.3	20.0	-	-	-	-	-	-
	5	40.3	45.0	-	-	-	-	-	-
	8	54.9	60.0	15.3	20	39.6	40	-	-
	10	65.3	70.0	15.3	20	50	60	-	-
030K	0	17.3	25.0	-	-	-	-	-	-
	5	42.3	45.0	-	-	-	-	-	-
	8	56.9	60.0	17.3	25	39.6	40	-	-
	10	67.3	70.0	17.3	25	50	60	-	-
	15	92.3	100	42.3	45	50	60	-	-
036K	0	28.2	45.0	-	-	-	-	-	-
	5	53.2	60.0	-	-	-	-	-	-
	8	67.7	70.0	28.2	45	39.6	40	-	-
	10	78.2	80.0	28.2	45	50	60	-	-
	15	103.2	110	53.2	60	50	60	-	-
042K	0	31.9	50.0	-	-	-	-	-	-
	5	56.9	70.0	-	-	-	-	-	-
	8	71.5	80.0	31.9	50	39.6	40	-	-
	10	81.9	90.0	31.9	50	50	60	-	-
	15	106.9	110	56.9	70	50	60	-	-
	20	131.9	150	-	-	-	-	-	-
	20(3 circuit)	-	-	31.9	50	50	60	50	60
048K	0	37.3	60.0	-	-	-	-	-	-
	5	62.3	80.0	-	-	-	-	-	-
	8	76.9	90.0	37.3	60	39.6	40	-	-
	10	87.3	100.0	37.3	60	50	60	-	-
	15	112.3	125	62.3	80	50	60	-	-
	20	137.3	150	-	-	-	-	-	-
	20(3 circuit)	-	-	37.3	60	50	60	50	60
060K	0	42.2	60.0	-	-	-	-	-	-
	5	67.2	80.0	-	-	-	-	-	-
	8	81.8	100.0	42.2	60	39.6	40	-	-
	10	92.2	100.0	42.2	60	50	60	-	-
	15	117.2	125	67.2	80	50	60	-	-
	20	142.2	150	-	-	-	-	-	-
	20(3 circuit)	-	-	42.2	60	50	60	50	60

MODEL IDENTIFICATION CODE



Q7RE Heater Kit Application Matrix				
Tonnage	Nominal kW	Heater Kit Model	Heater Kit Part Number	Breakers
024K	5	H3HK005H-01B	917166B	None
	8	H3HK008H-01B	917167B	2
	10	H3HK010H-01B	917168B	2
030K	5	H3HK005H-01B	917166B	None
	8	H3HK008H-01B	917167B	2
	10	H3HK010H-01B	917168B	2
	15	H3HK015H-01B	917169B	2
	15	H3HK015H-21B	917172B	None
036K	5	H3HK005H-01B	917166B	None
	8	H3HK008H-01B	917167B	2
	10	H3HK010H-01B	917168B	2
	15	H3HK015H-01B	917169B	2
	15	H3HK015H-21B	917172B	None
042K	5	H3HK005H-01B	917166B	None
	8	H3HK008H-01B	917167B	2
	10	H3HK010H-01B	917168B	2
	15	H3HK015H-01B	917169B	2
	15	H3HK015H-21B	917172B	None
	20	H3HK020H-01B	917170B	3
	20	H3HK020H-21B	917173B	1
048K	5	H3HK005H-01B	917166B	2
	8	H3HK008H-01B	917167B	2
	10	H3HK010H-01B	917168B	2
	15	H3HK015H-01B	917169B	2
	15	H3HK015H-21B	917172B	None
	20	H3HK020H-01B	917170B	3
	20	H3HK020H-21B	917173B	1
060K	5	H3HK005H-01B	917166B	2
	8	H3HK008H-01B	917167B	2
	10	H3HK010H-01B	917168B	2
	15	H3HK015H-01B	917169B	2
	15	H3HK015H-21B	917172B	None
	20	H3HK020H-01B	917170B	3
	20	H3HK020H-21B	917173B	1

HEAT PUMP COOLING EXPANDED RATINGS (CONTINUED)

Q7RE-048K

O.D.T		65°F			75°F			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.
1400	80	62	49.1	42.2	2.69	47.7	40.8	3.09	46.2	39.4	3.48	44.8	37.9	3.88	43.4	36.5	4.27	41.9	35.0	4.67
	80	67	53.0	35.1	2.84	51.6	33.6	3.23	50.1	32.2	3.63	48.7	30.7	4.02	47.3	29.3	4.42	45.8	27.9	4.81
	80	72	57.4	28.4	2.76	56.0	26.9	3.16	54.5	25.5	3.55	53.1	24.1	3.95	51.6	22.6	4.34	50.2	21.2	4.74
	75	62	46.5	37.8	2.67	45.1	36.3	3.07	43.7	34.9	3.46	42.2	33.5	3.86	40.8	32.0	4.25	39.4	30.6	4.64
1500	80	62	48.8	43.4	2.75	47.4	41.9	3.15	46.0	40.5	3.54	44.5	39.0	3.94	43.1	37.6	4.33	41.7	36.2	4.73
	80	67	52.7	36.2	2.90	51.3	34.7	3.29	49.9	33.3	3.69	48.4	31.9	4.08	47.0	30.4	4.48	45.6	29.0	4.87
	80	72	57.1	29.5	2.82	55.7	28.1	3.22	54.3	26.6	3.61	52.8	25.2	4.01	51.4	23.8	4.40	49.9	22.3	4.80
	75	62	46.3	38.9	2.73	44.8	37.5	3.12	43.4	36.0	3.52	42.0	34.6	3.91	40.5	33.2	4.31	39.1	31.7	4.70
1600	80	62	49.1	45.0	2.82	47.7	43.6	3.21	46.2	42.1	3.61	44.8	40.7	4.00	43.3	39.3	4.40	41.9	37.8	4.79
	80	67	53.0	37.8	2.96	51.5	36.4	3.36	50.1	35.0	3.75	48.7	33.5	4.15	47.2	32.1	4.54	45.8	30.7	4.94
	80	72	57.4	31.2	2.89	55.9	29.7	3.28	54.5	28.3	3.68	53.1	26.8	4.07	51.6	25.4	4.47	50.2	24.0	4.86
	75	62	46.5	40.6	2.80	45.1	39.1	3.19	43.6	37.7	3.59	42.2	36.2	3.98	40.8	34.8	4.37	39.3	33.4	4.77

HEAT PUMP HEATING EXPANDED RATINGS (CONTINUED)

Q7RE-048K

CFM		Indoor T. Deg.F		OUTDOOR TEMPERATURE (Deg. F)																				
				10			17			30			40			47			60			70		
				MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
1400	60	24.5	2.71	2.65	29.5	3.01	2.87	38.8	3.48	3.27	46.1	3.77	3.58	51.2	3.96	3.79	60.8	4.25	4.19	68.2	4.44	4.50		
	70	21.9	2.14	3.00	26.9	2.45	3.22	36.3	2.94	3.62	43.5	3.24	3.93	48.6	3.44	4.14	58.2	3.76	4.54	65.7	3.97	4.85		
	80	19.3	1.68	3.36	24.3	1.99	3.57	33.7	2.49	3.97	40.9	2.80	4.28	46.1	3.01	4.49	55.6	3.33	4.89	63.1	3.56	5.20		
1500	60	24.8	2.72	2.67	29.8	3.02	2.89	39.1	3.49	3.28	46.4	3.79	3.59	51.5	3.96	3.81	61.1	4.25	4.21	68.5	4.45	4.51		
	70	22.2	2.15	3.02	27.2	2.46	3.24	36.6	2.95	3.64	43.8	3.26	3.94	49.0	3.45	4.16	58.5	3.76	4.56	66.0	3.97	4.87		
	80	19.6	1.70	3.37	24.6	2.01	3.59	34.0	2.50	3.99	41.3	2.81	4.30	46.4	3.02	4.51	56.0	3.34	4.91	63.4	3.56	5.22		
1600	60	25.1	2.73	2.69	30.1	3.04	2.90	39.5	3.51	3.30	46.7	3.79	3.61	51.9	3.98	3.82	61.4	4.26	4.22	68.9	4.46	4.53		
	70	22.5	2.17	3.04	27.5	2.48	3.25	36.9	2.96	3.65	44.2	3.27	3.96	49.3	3.46	4.18	58.9	3.77	4.58	66.3	3.98	4.88		
	80	19.9	1.72	3.39	24.9	2.02	3.61	34.3	2.51	4.00	41.6	2.83	4.31	46.7	3.02	4.53	56.3	3.35	4.93	63.7	3.57	5.23		

Q7RE-060K

CFM		Indoor T. Deg.F		OUTDOOR TEMPERATURE (Deg. F)																				
				10			17			30			40			47			60			70		
				MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
1530	60	26.3	2.67	3.03	32.1	2.89	3.26	43.0	3.30	3.69	51.4	3.62	4.01	57.3	3.85	4.24	68.2	4.32	4.67	76.6	4.58	5.00		
	70	24.1	2.18	3.43	30.0	2.40	3.66	40.9	2.82	4.09	49.3	3.13	4.41	55.1	3.36	4.64	66.0	3.77	5.07	74.4	4.09	5.91		
	80	21.9	1.69	3.83	27.8	1.91	4.06	38.7	2.33	4.48	47.1	2.64	4.81	53.0	2.87	5.04	63.9	3.28	5.46	72.3	3.60	5.79		
1650	60	26.6	2.76	3.00	32.5	2.99	3.23	43.4	3.40	3.65	51.8	3.72	3.98	57.7	3.94	4.21	68.6	4.36	4.63	77.0	4.68	4.96		
	70	24.5	2.27	3.40	30.3	2.50	3.63	41.2	2.91	4.05	49.6	3.23	4.38	55.5	3.45	4.61	66.4	3.87	5.03	74.8	4.19	5.36		
	80	22.3	1.78	3.80	28.2	2.01	4.03	39.1	2.42	4.45	47.5	2.74	4.78	53.3	2.96	5.01	64.2	3.38	5.43	72.6	3.70	5.76		
1770	60	27.0	2.86	2.97	32.9	3.08	3.20	43.8	3.50	3.62	52.2	3.82	3.95	58.1	4.04	4.18	69.0	4.46	4.60	77.4	4.78	4.93		
	70	24.8	2.37	3.36	30.7	2.59	3.59	41.6	3.01	4.02	50.0	3.33	4.35	55.9	3.55	4.57	66.8	3.97	5.00	75.2	4.29	5.33		
	80	22.7	1.88	3.76	28.5	2.10	3.99	39.4	2.52	4.42	47.8	2.84	4.74	53.7	3.06	4.97	64.6	3.48	5.40	73.0	3.80	5.72		



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 (01/2015)