

R8GE Series

Single Packaged Gas/Electric Units 14 SEER, 81% AFUE 2 Ton thru 5 Ton Units

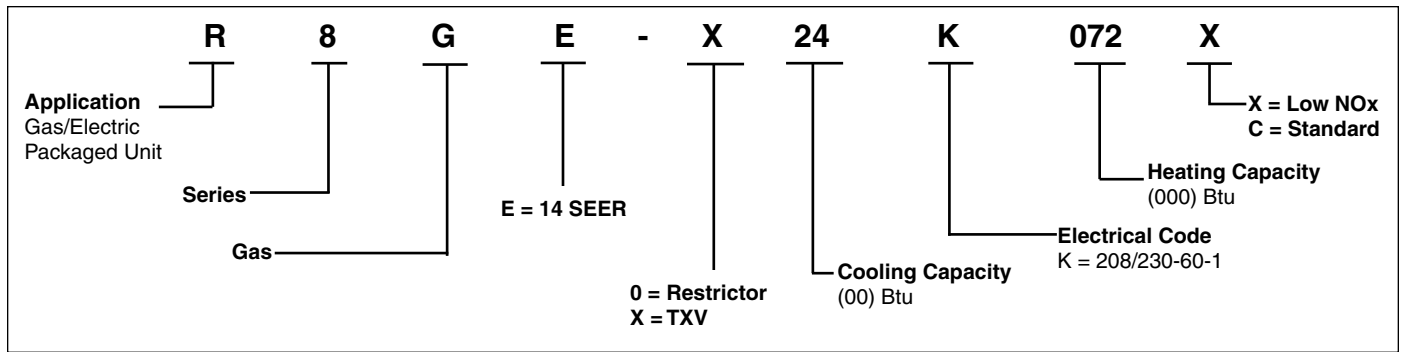
The R8GE Series single packaged gas/electric units are high efficiency self contained heating and cooling systems that can be installed on the roof or on a slab. The convertible unit design makes installations simple in all applications. Units are ETL and ETLc listed.



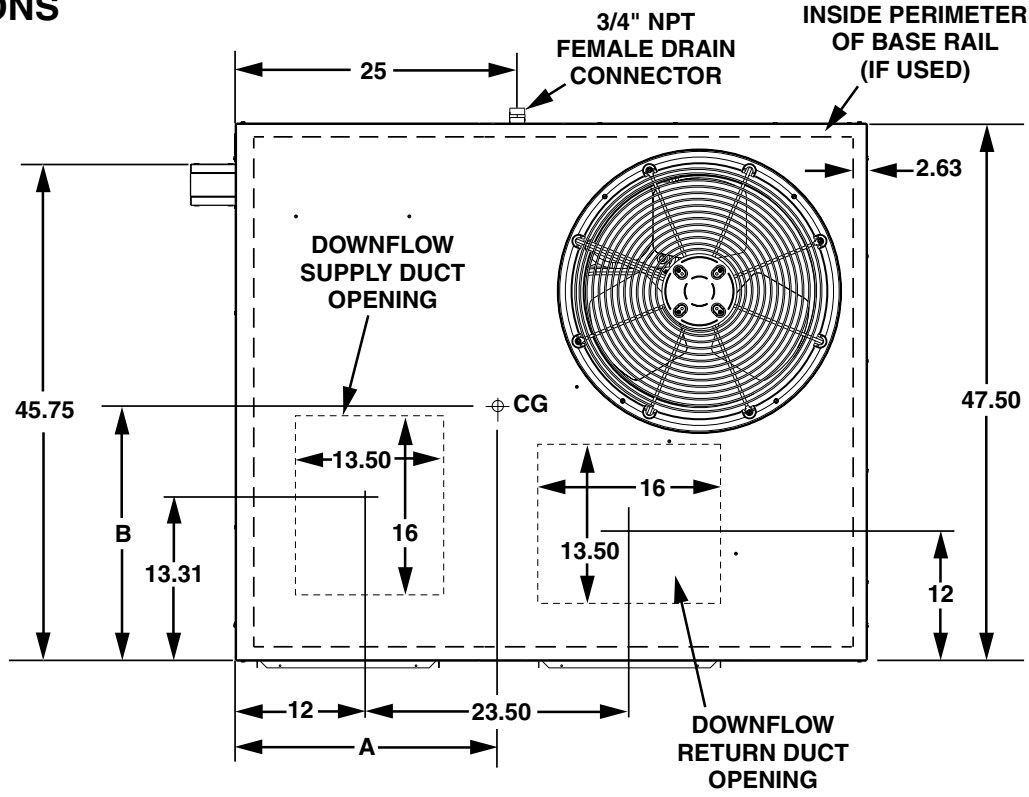
FEATURES and BENEFITS

- **Quality Compressor:** State of the art Copeland Scroll compressor is standard equipment.
- **Proven, Industry Standard Components:** Easier service and availability.
- **High and Low Pressure Switch:** Added compressor protection.
- **Micro-Channel Coils:** Both indoor and outdoor all aluminum coils are designed to optimize heat transfer, minimize size and cost, and increase durability and reliability.
- **Liquid Line Filter Drier:** Factory installed at a convenient location for service.
- **Externally Accessible Service Ports:** Quick access to refrigerant system without disrupting operation.
- **Compact Footprint/Low Profile:** Easy to handle and transport.
- **Heavy-Gauge Full Perimeter Base Rails:** Facilitates forklift handling and curb mounting.
- **Convertible Air Delivery:** Horizontal or downflow to accommodate rooftop or horizontal application.
- **Galvanized Steel Cabinet:** Polyurethane finish provides 950 hour salt spray protection to resist corrosion.
- **Wire Guard Coated with Earth Friendly Epoxy and Mesh Hail Guard:** Will never rust and protect the coil from being damaged by balls, lawnmowers, hail etc.
- **Access to Controls and Major Components:** Easy in and out service.
- **Low Voltage Transformer:** Includes 3 Amp fuse to protect low voltage circuit.
- **Corrosion-Resistant Drain Pan:** Quickly drains away evaporator condensate.
- **One Piece Top for Great Fit and Finish, Total Seal:** Well designed, quality construction. Drip edge on top panels whisks away rainwater. Embossed bottom pan keeps blower component compartment dry.
- **Quiet Operation:** Low vibration fan blade combined with custom venturi condenser fan.
- **SmartLite® Control Board:** Provides extended life to igniters using hot surface ignition technology. Programmed to learn the heat-up characteristics of the igniter, then adapt the ignition time to the characteristics of the furnace so the igniter is energized appropriately.
- **Hot Surface igniter:** Innovative application of an appliance type igniter with a 20 year history of reliability.
- **Accessories:** Roof curbs and more.

MODEL IDENTIFICATION CODE



DIMENSIONS

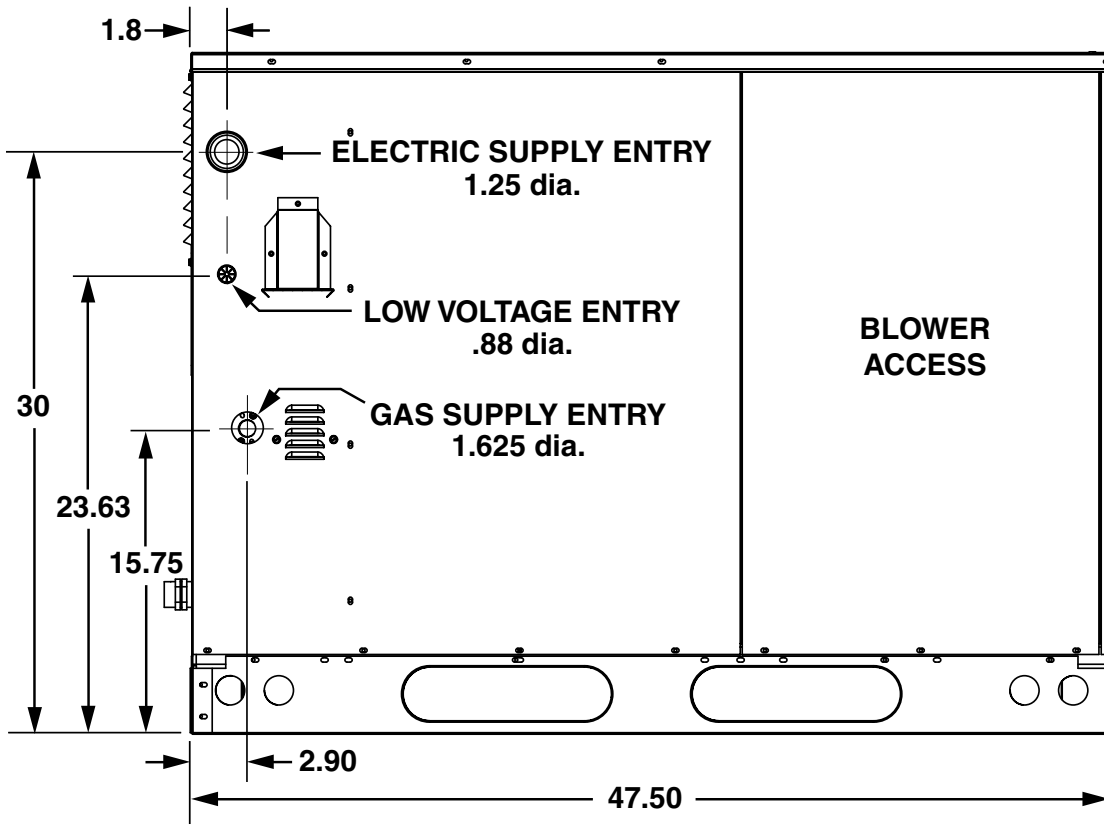


Top View

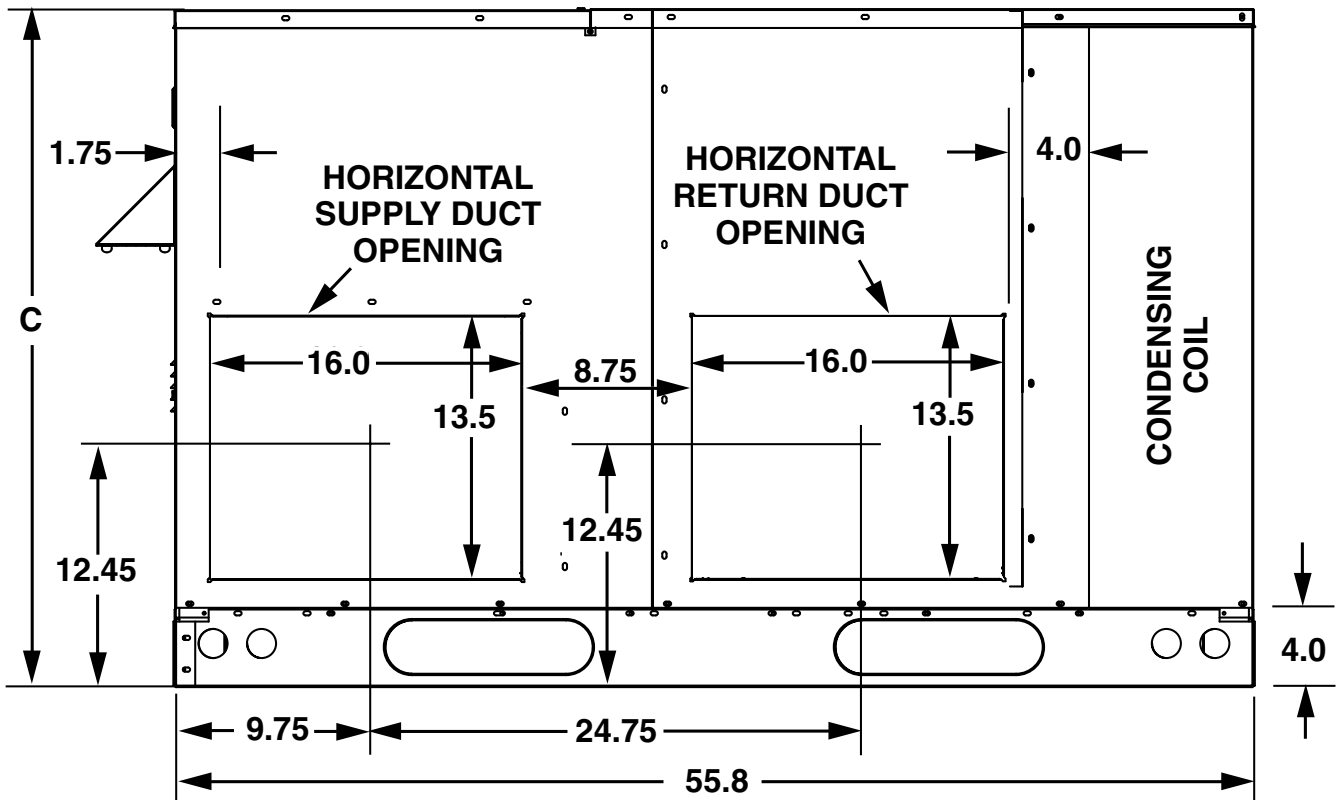
Model Number R8GE	Unit Weight	Shipping Weight	Center of Gravity		Height in inches (C)	
			A	B	with base rails	without base rails
024K045†	397	413	26.5	26.5	35.0	31.3
024K072†	405	421	26.0	26.5	35.0	31.3
030K045†	398	414	26.5	26.5	35.0	31.3
030K072†	406	422	26.0	26.5	35.0	31.3
036K072†	403	419	26.5	26.5	35.0	31.3
036K096†	411	427	26.5	26.5	35.0	31.3
042K072†	435	453	27.0	26.5	39.0	35.3
042K096†	443	461	27.0	26.5	39.0	35.3
048K096†	453	470	27.5	26.5	39.0	35.3
048K120†	461	478	27.5	26.5	39.0	35.3
X60K096†	472	489	27.5	26.5	43.0	39.3
X60K120†	480	497	27.5	26.5	43.0	39.3

† Denotes "C" or "X"

DIMENSIONS (Continued)



Side View



Back View

SPECIFICATIONS AND ELECTRICAL DATA

SINGLE PHASE

MODEL R8GE	-024K045(*)	-024K072(*)	-030K045(*)	-030K072(*)	-036K072(*)	-036K096(*)	-042K072(*)	-042K096(*)	-048K096(*)	-048K120(*)	-X60K096(*)	-X60K120(*)
Performance												
Heating Input Btuh	45,000	72,000	45,000	72,000	72,000	96,000	72,000	96,000	96,000	120,000	96,000	120,000
Heating Output Btuh	36,450	58,320	36,450	58,320	58,320	77,760	58,320	77,760	77,760	97,200	77,760	97,200
Capacity-Cooling Btuh	23,600	23,600	29,000	29,000	35,800	35,800	41,500	41,500	46,000	46,000	57,000	57,000
AFUE	81	81	81	81	81	81	81	81	81	81	81	81
Efficiency -- SEER	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Efficiency -- EER	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Electrical Rating - 60 Hz												
Phase	1	1	1	1	1	1	1	1	1	1	1	1
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Minimum Circuit Ampacity	20.6	20.6	24.7	24.7	28.3	28.3	34.1	34.1	36.8	36.8	44.6	44.6
Max. Overcurrent Protection	30	30	40	40	45	45	50	50	60	60	70	70
Compressor Data												
Volts	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230
Rated Load Amps	12.8	12.8	15.7	15.7	18.6	18.6	22.1	22.1	24.3	24.3	29.3	29.3
Lock Rotor Amps	58.3	58.3	73	73	79	79	109	109	117	117	134	134
Indoor Blower												
Wheel Diameter	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10
Motor Type	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque
Motor HP	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4	3/4	1	1
Motor Amps	3.6	3.6	3.6	3.6	3.6	3.6	5.0	5.0	5.0	5.0	6.5	6.5
Outdoor Fan												
Motor HP	1/5	1/5	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Motor Amps	1.0	1.0	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
Fan Diameter/CFM	20" / 3800	20" / 3800	20" / 3800	20" / 3800	20" / 3800	20" / 3800	20" / 3800	20" / 3800	20" / 3800	20" / 3800	24" / 3800	24" / 3800
Refrigerant Charge (oz)	60	60	61	61	60	60	69	69	69	69	72	72
Sound Rating	71	71	76	76	78	78	78	78	77	77	78	78

AIRFLOW DATA

Model Number R8GE		Heating Input (Btu/h)	Heating Output (Btu/h)	Heating Rise Range (Btu/h)	Blower Size	Motor HP	Motor Tap	External Static Pressure Drop - inches water column															
								0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
								(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise
024K045(†)	Tap T1	949	36	895	39	839	41	865	40	708	49	658	53	602	57	546	63						
	Tap T2*	949	36	895	39	839	41	865	40	708	49	658	53	602	57	546	63						
	Tap T3**	1084	32	1026	34	974	36	925	37	850	41	790	44	742	47	694	50						
	Tap T4	1226	28	1155	30	1101	31	1034	33	963	36	897	39	827	42	762	45						
	Tap T5	1525	23	1478	23	1432	24	1384	25	1336	26	1293	27	1244	28	1187	29						
024K072(†)	Tap T1	949	58	895	62	839	66	865	64	708	78	658	84	602	92	546	101						
	Tap T2*	949	58	895	62	839	66	865	64	708	78	658	84	602	92	546	101						
	Tap T3	1084	51	1026	54	974	57	925	60	850	65	790	70	742	75	694	80						
	Tap T4**	1226	45	1155	48	1101	50	1034	54	963	57	897	62	827	67	762	73						
	Tap T5	1525	36	1478	37	1432	39	1384	40	1336	41	1293	43	1244	44	1187	47						
030K045(†)	Tap T1	949	36	895	39	839	41	865	40	708	49	658	53	602	57	546	63						
	Tap T2**	949	36	895	39	839	41	865	40	708	49	658	53	602	57	546	63						
	Tap T3*	1084	32	1026	34	974	36	925	37	850	41	790	44	742	47	694	50						
	Tap T4	1226	28	1155	30	1101	31	1034	33	963	36	897	39	827	42	762	45						
	Tap T5	1525	23	1478	23	1432	24	1384	25	1336	26	1293	27	1244	28	1187	29						
030K072(†)	Tap T1	949	58	895	62	839	66	865	64	708	78	658	84	602	92	546	101						
	Tap T2	949	58	895	62	839	66	865	64	708	78	658	84	602	92	546	101						
	Tap T3*	1084	51	1026	54	974	57	925	60	850	65	790	70	742	75	694	80						
	Tap T4**	1226	45	1155	48	1101	50	1034	54	963	57	897	62	827	67	762	73						
	Tap T5	1525	36	1478	37	1432	39	1384	40	1336	41	1293	43	1244	44	1187	47						
036K072(†)	Tap T1	1085	51	1025	54	975	57	925	60	850	65	790	70	745	74	695	80						
	Tap T2**	1249	44	1185	47	1123	49	1065	52	979	57	908	61	858	64	800	69						
	Tap T3*	1390	40	1310	42	1250	44	1185	47	1090	51	1010	55	955	58	890	62						
	Tap T4	1495	37	1445	38	1400	40	1355	41	1305	42	1260	44	1210	46	1155	48						
	Tap T5	1560	35	1515	37	1470	38	1420	39	1370	40	1325	42	1280	43	1225	45						
036K096(†)	Tap T1	1085	68	1025	72	975	76	925	80	850	87	790	93	745	99	695	106						
	Tap T2*	1249	59	1185	62	1123	66	1065	69	979	75	908	81	858	86	800	92						
	Tap T3**	1390	53	1310	56	1250	59	1185	62	1090	68	1010	73	955	77	890	83						
	Tap T4	1495	49	1445	51	1400	53	1355	54	1305	57	1260	59	1210	61	1155	64						
	Tap T5	1560	47	1515	49	1470	50	1420	52	1370	54	1325	56	1280	58	1225	60						

Shaded boxes represent airflows and temperatures that exceed recommendations.

* Denotes factory set cooling speed

** Denotes factory set heating speed

*** Denotes factory set cooling and heating speed

(†) Part number may contain a C or X.

$$\Delta T = (\text{Btu/h} \times 0.83) / (\text{CFM} \times 1.08)$$

$$\text{Heat rise: Btu/h (Input)} = \text{CFM} \times \Delta T \times 1.08$$

AIRFLOW DATA CONTINUED

Model Number R8GE		Heating Input (Btu/h)	Heating Output (Btu/h)	Heating Rise Range (Btu/h)	Blower Size	Motor HP	Motor Tap	External Static Pressure Drop - inches water column																	
								0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8			
								(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise	(cfm)	(°F) Rise
042K072(†)	72,000	57,600	35-65	11 x 10	3/4		Tap T1	1218	45	1031	54	944	59	868	64	782	71	710	78	643	86	583	95		
							Tap T2**	1268	44	1207	46	1138	49	1048	53	982	56	918	60	832	67	771	72		
							Tap T3*	1489	37	1439	38	1381	40	1319	42	1253	44	1172	47	1090	51	1019	54	919	54
							Tap T4	1788	31	1740	32	1692	33	1511	37	1574	35	1511	37	1449	38	1389	40	1277	35
							Tap T5	1963	28	1912	29	1862	30	1698	33	1758	31	1698	33	1638	34	1577	35	1511	35
042K096(†)	96,000	76,800	35-65	11 x 10	3/4		Tap T1	1218	61	1031	72	944	78	868	85	782	94	710	104	643	115	583	127		
							Tap T2	1268	58	1207	61	1138	65	1048	70	982	75	918	80	832	89	771	96		
							Tap T3*	1489	50	1439	51	1381	53	1319	56	1253	59	1172	63	1090	68	1019	72		
							Tap T4**	1788	41	1740	42	1692	44	1633	45	1574	47	1511	49	1449	51	1389	53		
							Tap T5	1963	38	1912	39	1862	40	1810	41	1758	42	1698	43	1638	45	1577	47		
048K096(†)	96,000	76,800	35-65	11 x 10	3/4		Tap T1	1489	50	1439	51	1381	53	1319	56	1253	59	1172	63	1090	68	1019	72		
							Tap T2	1553	48	1495	49	1417	52	1386	53	1322	56	1265	58	1196	62	1113	66		
							Tap T3**	1788	41	1740	42	1692	44	1633	45	1574	47	1511	49	1449	51	1389	53		
							Tap T4*	1788	41	1740	42	1692	44	1633	45	1574	47	1511	49	1449	51	1389	53		
							Tap T5	2015	37	1970	37	1915	39	1870	39	1805	41	1740	42	1680	44	1630	45		
048K120(†)	120,000	96,000	45-75	11 x 10	3/4		Tap T1	1489	62	1439	64	1381	67	1319	70	1253	74	1172	79	1090	85	1019	91		
							Tap T2**	1553	59	1495	62	1417	65	1386	67	1322	70	1265	73	1196	77	1113	83		
							Tap T3	1788	52	1740	53	1692	55	1633	56	1574	59	1511	61	1449	64	1389	66		
							Tap T4*	1788	52	1740	53	1692	55	1633	56	1574	59	1511	61	1449	64	1389	66		
							Tap T5	2015	46	1970	47	1915	48	1870	49	1805	51	1740	53	1680	55	1630	57		
060K096(†)	96,000	76,800	35-65	11 x 10	1		Tap T1	1448	51	1383	53	1320	56	1244	59	1180	63	1094	67	1027	72	958	77		
							Tap T2**	1635	45	1595	46	1510	49	1485	50	1425	52	1365	54	1305	57	1245	59		
							Tap T3	1839	40	1791	41	1699	43	1670	44	1600	46	1536	48	1469	50	1402	53		
							Tap T4*	1900	39	1855	40	1795	41	1750	42	1700	43	1650	45	1595	46	1535	48		
							Tap T5	2202	34	2161	34	2104	35	2036	36	1974	37	1928	38	1872	39	1823	40		
060K120(†)	120,000	96,000	45-75	11 x 10	1		Tap T1	1448	64	1383	67	1320	70	1244	74	1180	78	1094	84	1027	90	958	96		
							Tap T2	1635	56	1595	58	1510	61	1485	62	1425	65	1365	68	1305	71	1245	74		
							Tap T3**	1839	50	1791	51	1699	54	1670	55	1600	58	1536	60	1469	63	1402	66		
							Tap T4*	1900	49	1855	50	1795	51	1750	53	1700	54	1650	56	1595	58	1535	60		
							Tap T5	2202	42	2161	43	2104	44	2036	45	1974	47	1928	48	1872	49	1823	51		

Shaded boxes represent airflows and temperatures that exceed recommendations.

Heat rise: Btu/h (Input) = CFM x Δ T x 1.08

Δ T = (Btu/h x 0.83) / (CFM x 1.08)

* Denotes factory set cooling speed
 ** Denotes factory set heating speed
 *** Denotes factory set cooling and heating speed
 (†) Part number may contain a C or X.

EXPANDED RATINGS Continued

R8GE-048K

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.
1450	80	62	51.3	38.4	2.74	48.8	41.5	3.01	45.9	43	3.35	42.6	42.6	3.75	38.8	38.8	4.22	34.6	34.6	4.75
	80	67	55.1	27.3	2.79	52.7	29.0	3.06	49.9	29.1	3.39	46.6	27.6	3.79	42.9	24.5	4.26	38.7	19.8	4.79
	80	72	59.3	21.7	2.86	57.0	22.0	3.13	54.2	20.7	3.46	51.0	17.8	3.86	47.4	13.3	4.33	43.3	7.28	4.85
1650	75	62	50.8	30.5	2.74	48.2	32.1	3.02	45.1	32.2	3.36	41.6	30.7	3.77	37.7	27.6	4.25	33.3	22.9	4.79
	80	62	51.9	45.4	2.93	49.4	48.5	3.2	46.6	46.6	3.53	43.2	43.2	3.94	39.4	39.4	4.4	35.2	35.2	4.93
	80	67	55.7	34.3	2.97	53.3	36.0	3.24	50.5	36.1	3.58	46.0	34.6	3.98	43.5	31.5	4.44	39.4	26.8	4.97
	80	72	59.9	28.7	3.05	57.6	29.0	3.32	54.8	27.7	3.65	51.6	24.8	4.05	48.0	20.3	4.51	43.9	14.3	5.04
1850	75	62	51.4	37.5	2.92	48.8	39.1	3.2	45.8	39.2	3.55	42.3	37.7	3.96	38.3	34.6	4.43	33.9	29.9	4.97
	80	62	50.7	50.7	3.23	48.3	48.3	3.51	45.4	45.4	3.84	42.1	42.1	4.24	38.3	38.3	4.71	34.1	34.1	5.24
	80	67	54.6	41.3	3.28	52.2	43.0	3.55	49.4	43.1	3.89	46.1	41.6	4.29	42.4	38.5	4.75	38.2	33.8	5.28
	80	72	58.8	35.7	3.35	56.4	36.0	3.62	53.7	34.7	3.96	50.5	31.8	4.36	46.8	27.3	4.82	42.8	21.3	5.35
	75	62	50.3	44.5	3.23	47.7	46.1	3.51	44.6	44.6	3.86	41.1	41.1	4.27	37.2	37.2	4.74	32.8	32.8	5.28

R8GE-060K

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.
1500	80	62	60.7	49.0	3.44	58.4	47.3	3.8	55.5	45.5	4.24	52.1	43.6	4.77	48.1	41.5	5.38	43.4	39.4	6.08
	80	67	67.7	44.1	3.55	64.9	42.5	3.91	61.6	40.7	4.36	57.7	38.9	4.89	53.2	36.9	5.51	48.2	34.7	6.21
	80	72	73.0	34.9	3.54	69.8	33.3	3.91	66.0	31.6	4.36	61.6	29.8	4.89	56.7	27.8	5.51	51.2	25.7	6.21
	75	62	60.4	37.8	3.15	57.8	37.0	3.57	54.7	36.0	4.08	51.0	34.9	4.67	46.7	33.7	5.34	41.9	32.3	6.09
1700	80	62	60.7	49.3	3.52	58.4	47.7	3.89	55.5	45.9	4.33	52.0	43.9	4.86	48.0	41.9	5.47	43.4	39.7	6.17
	80	67	67.6	44.4	3.64	64.9	42.8	4.0	61.6	41.1	4.45	57.0	39.2	4.98	53.2	37.2	5.6	48.1	35.0	6.3
	80	72	72.9	35.2	3.63	69.7	33.6	4.0	65.9	31.9	4.45	61.6	30.1	4.98	56.6	28.2	5.6	51.1	26.1	6.3
	75	62	60.4	38.2	3.24	57.8	37.3	3.66	54.7	36.4	4.17	51.0	35.2	4.75	46.7	34.0	5.43	41.8	32.7	6.18
1900	80	62	63.4	51.1	3.68	61.0	49.4	4.04	58.2	47.6	4.48	54.7	45.7	5.01	50.7	43.6	5.62	46.1	41.4	6.32
	80	67	70.3	46.2	3.79	67.6	44.5	4.15	64.2	42.8	4.6	60.3	40.9	5.13	55.8	38.9	5.75	50.8	36.8	6.45
	80	72	75.6	36.9	3.78	72.4	35.4	4.15	68.6	33.7	4.6	64.2	31.8	5.13	59.3	29.9	5.75	53.8	27.8	6.45
	75	62	63	39.9	3.39	60.5	39.1	3.81	57.3	38.1	4.32	53.6	37.0	4.9	49.3	35.8	5.58	44.5	34.4	6.33

R8GE ACCESSORIES

Description	Part Number
Roof Curb (8")	547830
Roof Curb (14")	547831
Roof Curb (18")	547850
Roof Curb (24")	547851
Cap, Duct Adapter, 12" Round	913811A
Cap, Duct Adapter, 14" Round	913812A
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, Modulating w/filter (does not require filter kit) 2 - 3 Ton	547833
Economizer, Downflow, Modulating w/filter (does not require filter kit) 3.5 - 5 Ton	558870
Economizer, Horizontal, Modulating 2 - 5 Ton	547841
Economizer, Downflow, Modulating w/filter (does not require filter kit) CA, title 24, 2 - 3 Ton	562533
Economizer, Downflow, Modulating w/filter (does not require filter kit) CA, title 24, 3.5 - 5 Ton	563209
Economizer, Horizontal, Modulating, CA, title 24, 2 - 5 Ton	562534
Power Exhaust, Downflow (application requires downflow economizer) (Special Order)	547842
Power Exhaust, Horizontal (application requires horizontal economizer) (Special Order)	547843
Filter Rack Kit (not required with downflow economizer) 2 - 3 Ton	10079911R
Filter Rack Kit (not required with downflow economizer) 3.5 - 4 Ton	10079912R
Filter Rack Kit (not required with downflow economizer) 5 Ton	10079915R
Hood Type Hail Guard, Coil Dim. 30" X 76" 2, 2.5, 3 Ton	547845
Hood Type Hail Guard, Coil Dim. 34" X 76" 3.5 - 4 Ton	547846
Hood Type Hail Guard, Coil Dim. 38" X 76" 5 Ton	547847
Duct Smoke Detector Photo Elec	558863
Multi Signal Control	558866
Sampling Tube DST3, 2-4ft	558864
Sampling Tube DST5, 4-8ft	558865
Low Ambient Kit	918837
U.S. - LP Gas/High Elevation Conversion Kit, 1 & 2 Stage models (0 - 10,000 ft. above sea level)	904404A
Canada - LP Gas/High Elevation Conversion Kit, 1 & 2 Stage models (0 - 4,500 ft. above sea level)	904405A
Universal Hard Start Kit	912933
Skirt Trim Kit	919729
CO2 Sensor Kit, Wall Mount	920317
CO2 Sensor Kit, Duct Mount	920318
Differential Enthalpy Kit	922431



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 (10/2015)