

TECHNICAL SPECIFICATIONS

R8GE-ULN Series

Ultra-Low NOx Single Packaged Gas/Electric Units 14 SEER, 11.0 EER 81% AFUE 2 Ton thru 5 Ton Units FER Compliant

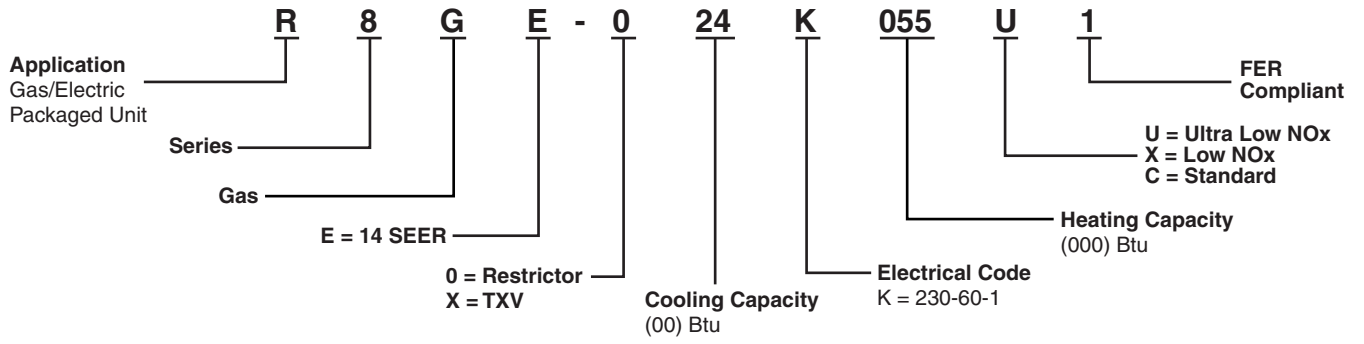
The R8GE-ULN Series Ultra-Low NOx single packaged gas/electric units are high efficiency self contained heating and cooling systems that can be installed on the roof or on a slab. The convertible unit design makes installations simple in all applications. Units are ETL and ETLc listed.



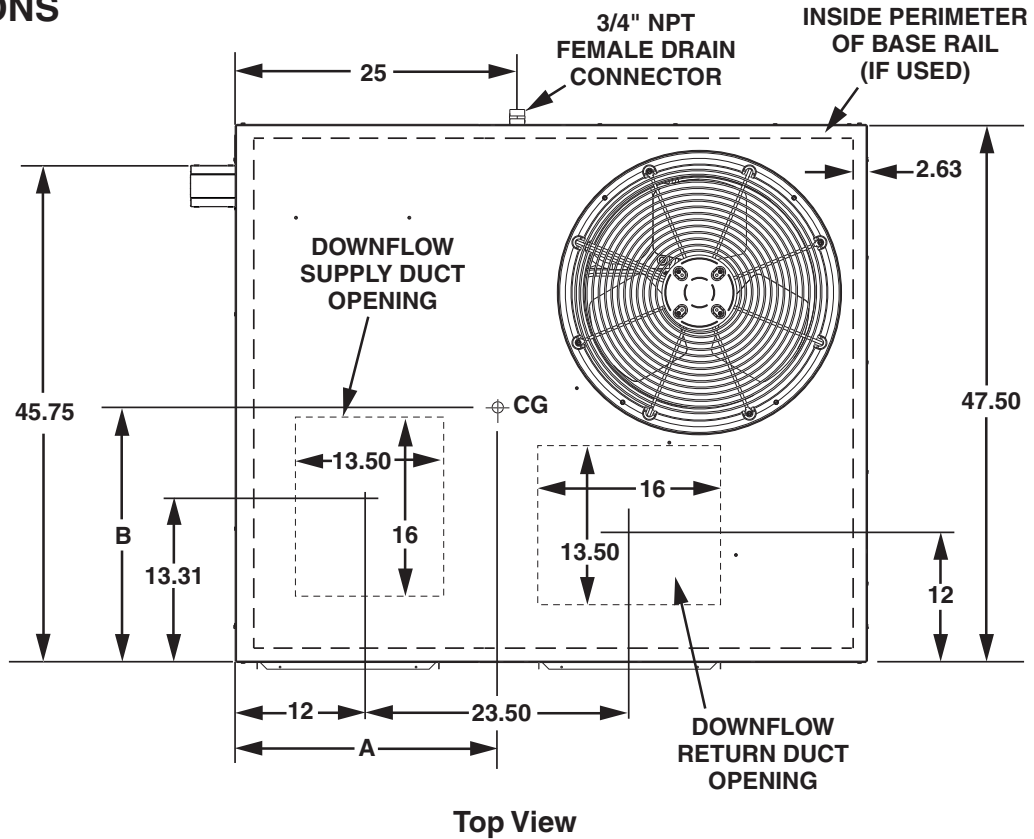
FEATURES and BENEFITS

- **Ultra-low emissions:** 65% less NOx than standard furnaces.
- **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.
- **Aluminum 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.
- **ECM Blower Motor:** Constant torque in all models.
- **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.
- **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



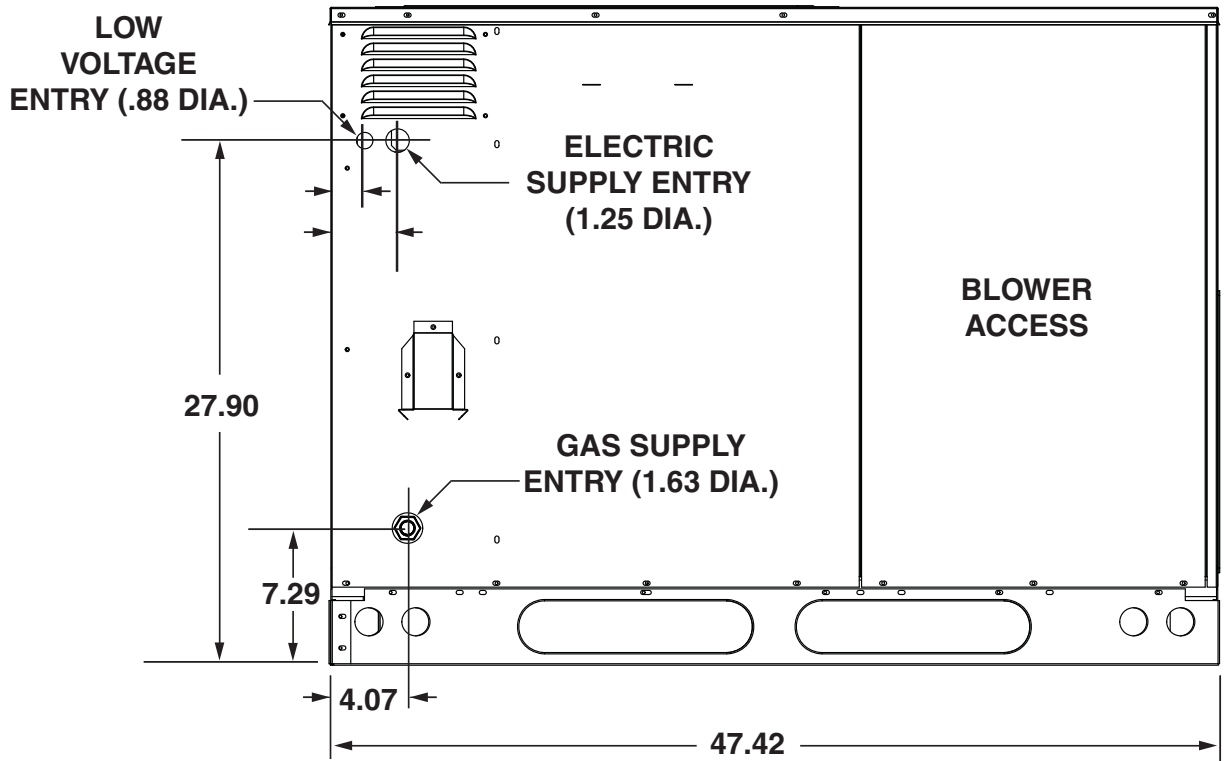
DIMENSIONS



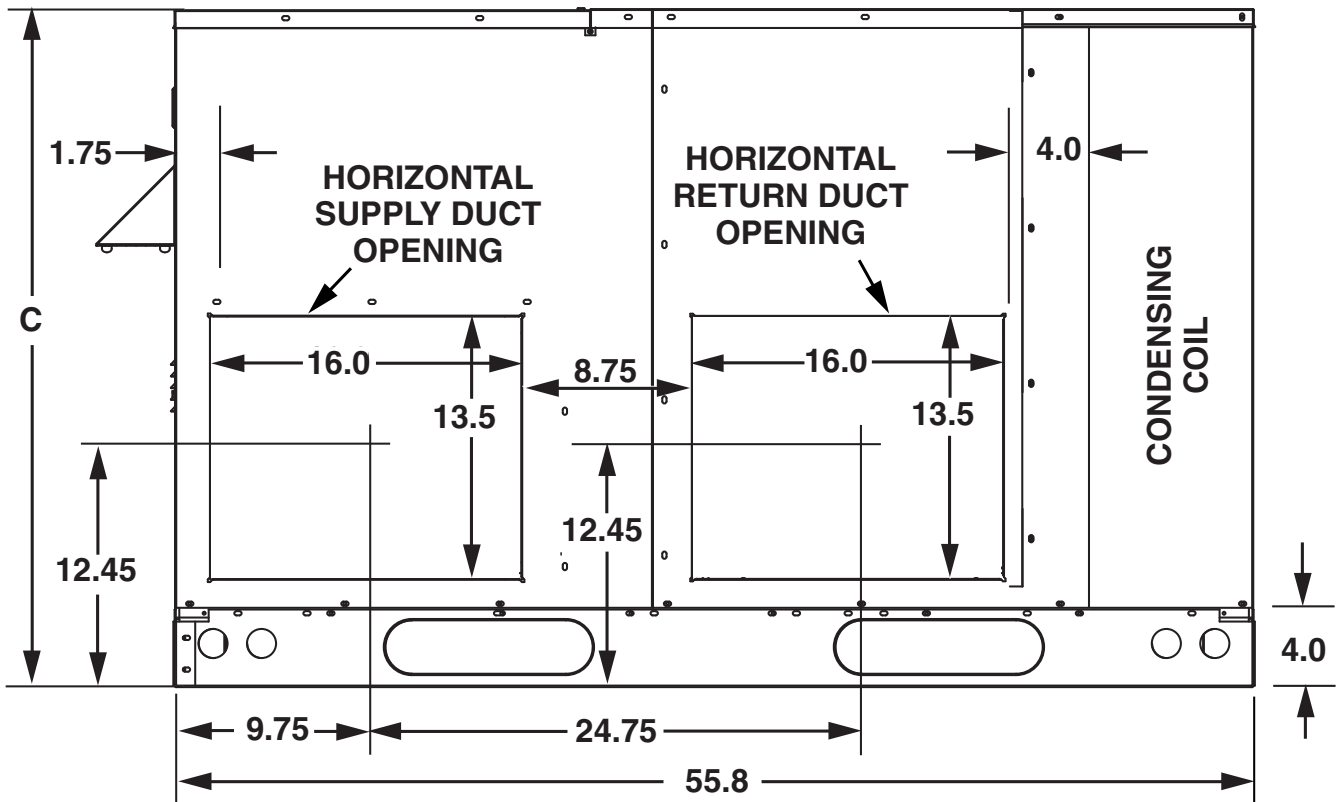
MODEL NUMBER	UNIT WEIGHT	SHIPPING WEIGHT	CENTER OF GRAVITY		HEIGHT IN INCHES (C)	
			A	B	WITH BASE RAILS	WITHOUT BASE RAILS
024K055U1	390	406	26.5	26.5	35.0	31.3
030K070U1	390	406	26.0	26.5	35.0	31.3
036K070U1	390	406	26.5	26.5	35.0	31.3
042K100U1	438	455	27	26.5	39.0	35.3
048K100U1	438	455	27	26.5	39.0	35.3
X60K100U1	490	507	27	27.5	47.0	43.3

† Denotes "C" or "X"

DIMENSIONS (Continued)



Side View



Back View

SPECIFICATIONS AND ELECTRICAL DATA

SINGLE PHASE

MODEL R8GE	024K	030K	036K	042K	048K	X60K
Capacity-Cooling Btuh	23,600	29,000	35,800	41,500	46,000	57,000
Electrical Rating - 60 Hz						
Phase	1	1	1	1	1	1
Operating Voltage Range	196 - 253	196 - 253	196 - 253	196 - 253	196 - 253	196 - 253
Minimum Circuit Ampacity	20.8	26.5	30.1	34.5	37.2	45.2
Max. Overcurrent Protection	30	40	45	50	60	70
Compressor Data						
Volts	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230
Rated Load Amps	12.8	15.7	18.6	22.1	24.3	29.3
Lock Rotor Amps	58.3	73	79	109	117	134
Indoor Blower						
Wheel Diameter	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10
Motor HP	1/2	3/4	3/4	3/4	3/4	1
Motor Amps	3.8	5.4	5.4	5.4	5.4	7.0
Outdoor Fan						
Motor HP	1/5	1/4	1/4	1/4	1/4	1/4
Motor Amps	1.0	1.46	1.46	1.46	1.46	1.46
Fan Diameter	20"	20"	20"	20"	20"	24"
Refrigerant Charge (oz)	60	61	60	69	69	85
Sound Rating	71	76	78	78	77	78

	Heating	Heating
R8GE	Input Btu/h	Output Btu/h
024K055U1	55,000	45,000
030K070U1	70,000	57,000
036K070U1	70,000	57,000
042K100U1	100,000	81,000
048K100U1	100,000	81,000
X60K100U1	100,000	81,000

SKU	Description
1036135	R8GE-024K055U1
1036136	R8GE-030K070U1
1036137	R8GE-036K070U1
1036138	R8GE-042K100U1
1036139	R8GE-048K100U1
1036140	R8GE-X60K100U1

AIRFLOW DATA

MODEL NUMBER	HEATING RISE RANGE (BTU/H)	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	
			(ACFM)	(°F) RISE	(ACFM)	(°F) RISE	(ACFM)	(°F) RISE	(ACFM)	(°F) RISE	(ACFM)	(°F) RISE	(ACFM)	(°F) RISE	(ACFM)	(°F) RISE	(ACFM)	(°F) RISE
024K055U1	35-65	Tap T1**	996	41	898	46	800	52	750	55	726	57	632	65	552	75	470	88
		Tap T2																
		Tap T3																
		Tap T4																
		Tap T5																
030K070U1	35-65	Tap T1	1243	42	1158	45	1076	49	984	53	906	58	845	62	704	75	686	77
		Tap T2	1319	40	1235	43	1166	45	1079	49	1003	52	934	56	782	67	718	73
		Tap T3**	1393	38	1310	40	1255	42	1172	45	1099	48	1021	51	955	55	809	65
		Tap T4																
		Tap T5																
036K070U1	35-65	Tap T1	1243	42	1158	45	1076	49	984	53	906	58	845	62	782	67	686	77
		Tap T2**	1393	38	1310	40	1255	42	1172	45	1099	48	1021	51	860	61	809	65
		Tap T3																
		Tap T4																
		Tap T5																
042K100U1	35-65	Tap T1	999	75	928	81	868	86	806	93	741	101	696	108	629	119	564	133
		Tap T2	1390	54	1337	56	1290	58	1235	61	1173	64	1131	66	1083	69	1030	73
		Tap T3**	1513	50	1461	51	1402	53	1355	55	1297	58	1243	60	1202	62	1147	65
		Tap T4																
		Tap T5																
048K100U1	35-65	Tap T1	999	75	928	81	868	86	806	93	741	101	696	108	629	119	564	133
		Tap T2	1390	54	1337	56	1299	58	1235	61	1173	64	1131	66	1083	69	1030	73
		Tap T3**	1513	50	1461	51	1402	53	1355	55	1297	58	1243	60	1120	67	1147	65
		Tap T4																
		Tap T5																
X60K100U1	35-65	Tap T1	1589	47	1498	50	1391	54	1271	59	1165	64	1063	71	995	75	899	83
		Tap T2**	1803	42	1710	44	1621	46	1513	50	1416	53	1320	57	1241	60	1146	65
		Tap T3																
		Tap T4																
		Tap T5																

** Denotes factory set heating speed
 Tap 1 is fan only
 (†) Part number may contain a C or X.
 Data is shown without a filter
 Heat rise: Btu/h (Input) = CFM * Δ T * 1.081
 Δ T = (Btu/h * 0.83) / (CFM * 1.081)

To comply with government mandated efficiency standards, two openings are required for airflows above 1,600 CFM.
 Temperature rises in the table are approximate. Actual temperature rises may vary.
 Individual cells shaded in gray indicate a temperature rise outside the recommended range.
 To comply with government mandated efficiency standards, speed settings which do not have data are not allowed in HEAT mode.
 Data is ACFM (Actual Cubic Feet per Minute)

AIRFLOW DATA

MODEL NUMBER	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
		SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM
R8GE-024K055U1	Tap T1	810	730	650	610	590	514	449	382
	Tap T2*	970	895	819	747	680	611	554	488
	Tap T3	1112	1050	987	903	837	776	707	641
	Tap T4	1239	1170	1110	1049	976	909	851	783
	Tap T5	1472	1411	1350	1295	1228	1164	1097	1051
R8GE-030K070U1	Tap T1	1036	965	897	820	755	704	652	635
	Tap T2*	1099	1029	972	899	836	778	724	665
	Tap T3	1161	1092	1046	977	916	851	796	749
	Tap T4	1555	1505	1448	1400	1351	1297	1238	1178
	Tap T5	1920	1872	1836	1785	1728	1699	1645	1592
R8GE-036K070U1	Tap T1	1036	965	897	820	755	704	652	635
	Tap T2	1161	1092	1046	977	916	851	796	749
	Tap T3*	1489	1431	1377	1323	1278	1228	1166	1100
	Tap T4	1555	1505	1448	1400	1351	1297	1238	1178
	Tap T5	1920	1872	1836	1785	1728	1699	1645	1592
R8GE-042K100U1	Tap T1	1098	1020	954	886	814	765	691	620
	Tap T2*	1527	1469	1418	1357	1289	1243	1190	1132
	Tap T3	1663	1605	1541	1489	1425	1366	1321	1260
	Tap T4	1950	1884	1842	1790	1743	1687	1637	1571
	Tap T5	2031	1992	1921	1871	1820	1770	1711	1650
R8GE-048K100U1	Tap T1	1098	1020	954	886	814	765	691	620
	Tap T2	1527	1469	1428	1357	1289	1243	1190	1132
	Tap T3	1663	1605	1541	1489	1425	1366	1231	1260
	Tap T4*	1903	1845	1798	1744	1696	1629	1582	1523
	Tap T5	2031	1992	1921	1871	1820	1770	1711	1650
R8GE-X60K100U1	Tap T1	1292	1218	1131	1033	947	864	809	731
	Tap T2	1466	1390	1318	1230	1151	1073	1009	932
	Tap T3	1774	1719	1661	1599	1529	1448	1384	1306
	Tap T4*	1835	1773	1715	1652	1595	1531	1453	1377
	Tap T5	2144	2087	2028	1962	1911	1849	1785	1718

* Denotes factory set cooling speed

Tap 1 is factory set fan speed.

Data is with a dry coil.

Data is SCFM (Standard Cubic Feet per Minute)

EXPANDED RATINGS Continued

R8GE-ULN-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
	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
1650	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
	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
1850	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-ULN-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.
1550	80	62	61.8	49.5	3.4	59.1	48.4	3.8	55.8	47.0	4.2	51.7	45.2	4.7	46.9	43.0	5.2	41.5	40.6	5.9
	80	67	67.2	42.0	3.5	64.6	40.9	3.8	61.4	39.5	4.2	57.4	37.7	4.7	52.8	35.5	5.3	47.4	33.1	5.9
	80	72	71.5	32.9	3.5	69.1	31.8	3.9	65.9	30.3	4.3	62.1	28.5	4.8	57.6	26.4	5.3	52.3	23.9	6.0
	75	62	62.2	39.8	3.4	59.6	38.7	3.8	56.2	37.2	4.2	52.2	35.4	4.7	47.4	33.3	5.2	41.9	30.8	5.9
1750	80	62	62.0	51.6	3.5	59.3	50.5	3.9	56.0	49.0	4.3	51.9	47.2	4.8	47.1	45.1	5.4	41.7	41.7	6.0
	80	67	67.4	44.1	3.6	64.8	43.0	3.9	61.6	41.5	4.4	57.0	39.3	4.8	53.0	37.6	5.4	47.6	35.1	6.0
	80	72	71.7	35.0	3.7	69.3	33.9	4.0	66.1	32.4	4.4	62.3	30.6	4.9	57.8	28.5	5.5	52.5	26.0	6.1
	75	62	62.4	41.9	3.6	59.8	40.7	3.9	56.4	39.3	4.3	52.4	37.5	4.8	47.6	35.3	5.4	42.1	32.9	6.0
1950	80	62	63.1	53.0	3.8	60.5	51.9	4.1	57.1	50.5	4.5	53.0	48.7	5.0	48.3	46.5	5.6	42.8	42.8	6.2
	80	67	68.5	45.6	3.8	65.9	44.4	4.1	62.7	43.0	4.6	58.7	41.2	5.1	54.1	39.0	5.6	48.7	36.6	6.2
	80	72	72.8	36.4	3.9	70.4	35.3	4.2	67.3	33.8	4.6	63.4	32.0	5.1	58.9	29.9	5.7	53.7	27.4	6.3
	75	62	63.6	43.3	3.8	60.9	42.2	4.1	57.5	40.7	4.5	53.5	38.9	5.0	48.7	36.8	5.6	43.2	34.3	6.2

R8GE ACCESSORIES

Description	Part Number
Manual Fresh Air Damper	547832
Motorized Fresh Air Damper	547840
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
CO ₂ Sensor Kit, Wall Mount	1011411
CO ₂ Sensor Kit, Duct Mount	1011410
Differential Enthalpy Kit	1011701
Duct Smoke Detector Photo Elec	558863
Low Ambient Kit	918837
Universal Hard Start Kit	912933
Skirt Trim Kit	919729



GENERAL TERMS OF LIMITED WARRANTY

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

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

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations. Printed in U.S.A (09/2021)