

R6GD Series

13 SEER, Three Phase, Packaged Gas/Electric Units 3 - 5 Ton Units

The R6GD Series packaged gas/electrics are high efficiency self contained heating and cooling units 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. The unit is truly designed with the contractor and the end user in mind.



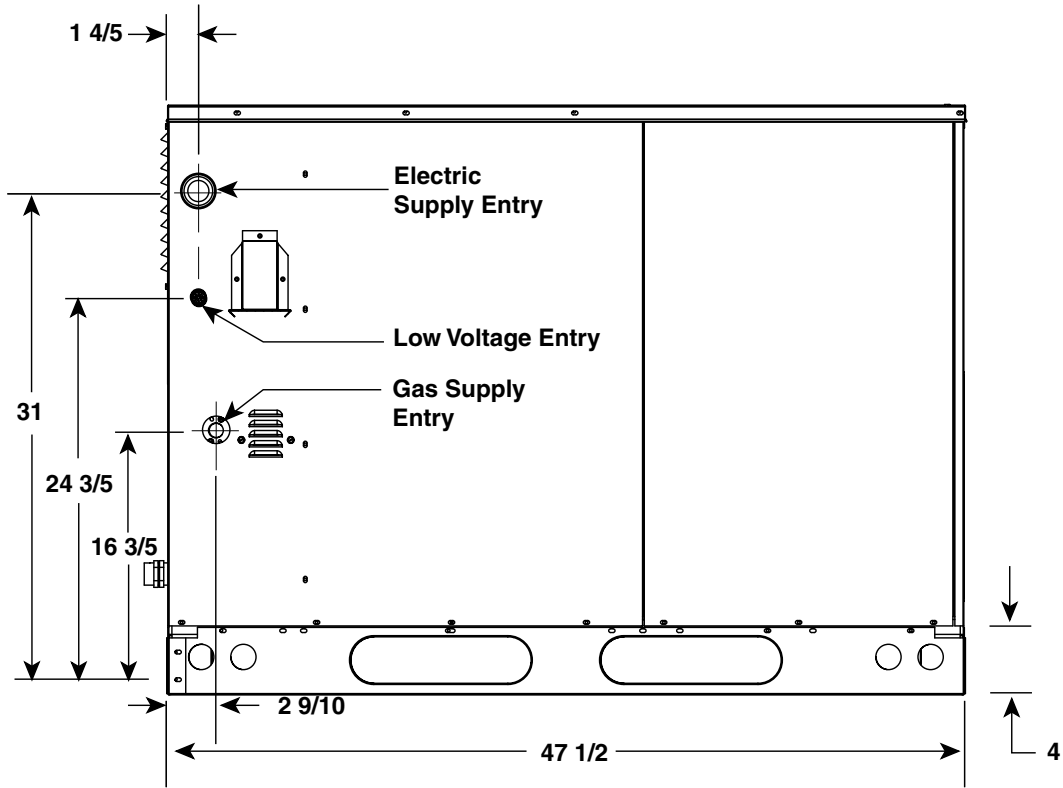
WARRANTY

- One Year Commercial Parts Warranty
- 5 Year Limited Compressor Warranty
- 10 Year Limited Heat Exchanger Warranty

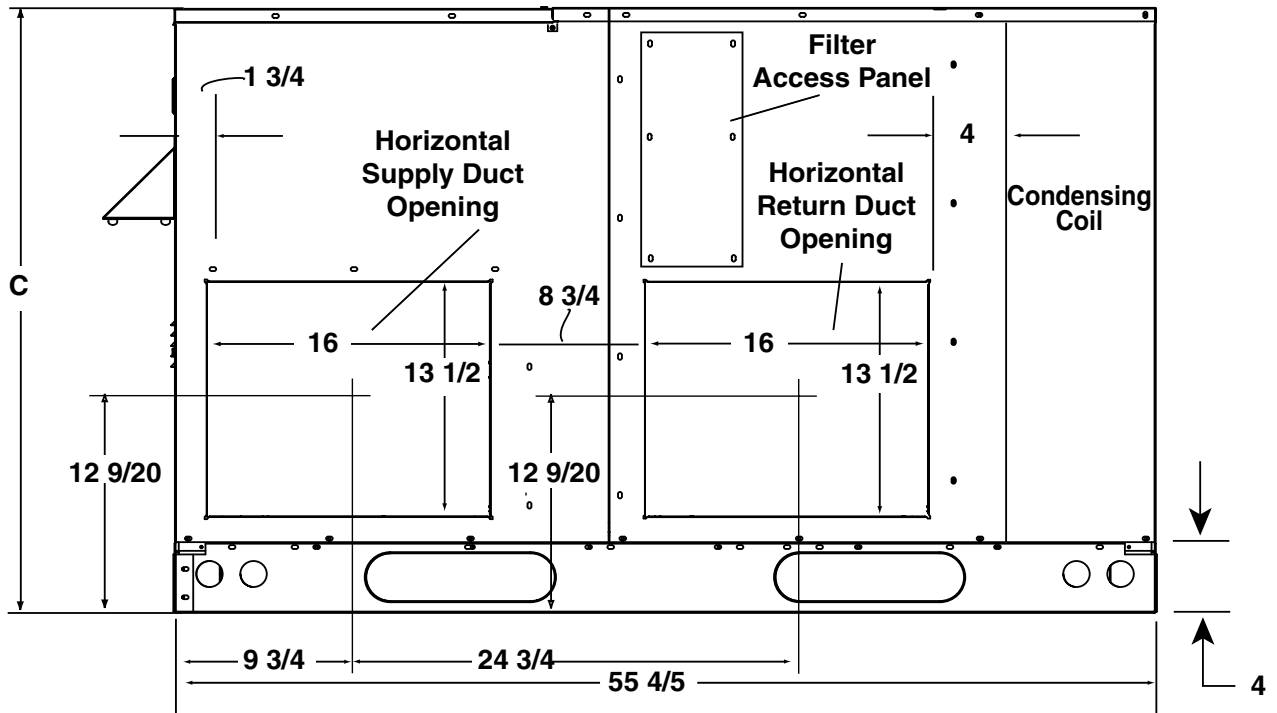
FEATURES and BENEFITS

- **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 with Polyurethane Finish:** Provides a minimum of 950 hour salt spray protection to resist corrosion.
- **Wire Guard Coated with Earth Friendly Epoxy and Plastic Mesh Hail Guard:** Will never rust and protects the coil from being damaged by balls, lawnmowers, hail etc.
- **Liquid Line Filter/Drier:** Insures clean refrigeration system.
- **Externally Accessible Service Ports:** Quick access to refrigerant system without disrupting operation.
- **Access to Controls and Major Components:** Easy in and out service.
- **Smaller Panels, 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.
- **Factory Installed Filter Rack:** 1" or 2" Capable.
- **TXV:** Externally equalized. Provides precise refrigerant control under varying load conditions.
- **High Pressure Switch:** Protects against abnormally High system Pressures.
- **Corrosion-Resistant Drain Pan:** Quickly drains away evaporator condensate.
- **Proven, Industry Standard Components:** Easier service and availability.
- **Accessories:** Roof curbs, economizers, fresh air dampers and more.
- **Quiet Operation:** Low vibration. 20" fan blade combined with custom condenser fan orifice.

DIMENSIONS Continued



Side View



Back View

SPECIFICATIONS AND ELECTRICAL DATA

THREE PHASE - 208/230V

Model R6GD-	X36C072C	X36C096C	X48C096C	X48C120C	X60C096C	X60C120C
Performance						
Heating Input BTUH	72,000	96,000	96,000	120,000	96,000	120,000
Heating Output BTUH	56,000	75,000	75,000	94,000	75,000	94,000
Capacity-Cooling BTUH	36,000	36,000	47,800	47,800	56,500	56,500
AFUE	78	78	78	78	78	78
Efficiency - SEER	13.50	13.50	13.00	13.00	13.00	13.00
Efficiency - EER	11.80	11.80	11.00	11.00	11.00	11.00
Electrical Rating - 60 Hz						
Phase	3	3	3	3	3	3
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Minimum Circuit Ampacity	21.2	21.2	27.7	27.7	31.9	31.9
Max. Over-current Protection	30	30	40	40	45	45
Compressor Data						
Volts	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230
Rated Load Amps	11.6	11.6	15.3	15.3	17.4	17.4
Lock Rotor Amps	73	73	83	83	110	110
Indoor Blower						
Wheel Blower	10x10		10x10		11x10	
Type	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque
Motor - HP	1/2	1/2	3/4	3/4	1	1
Motor - Amps	4.1	4.1	6.0	6.0	7.6	7.6
Outdoor Fan						
Motor - HP / RPM	1/4 - 1100	1/4 - 1100	1/4 - 1100	1/4 - 1100	1/4 - 1100	1/4 - 1100
Motor - Amps	1.2	1.2	1.2	1.2	1.2	1.2
Fan Diameter / CFM	20 / 3800	20 / 3800	20 / 3800	20 / 3800	20 / 3800	20 / 3800
Refrigerant Charge - oz. R-410A	112	112	224	224	184	184
Filters (Field Installed)						
Style	Disposable		Disposable			
Size (Qty)	16 x 25 x 1 (2)		18 x 25 x 1 (2)			
Field convertible to two inches						

SPECIFICATIONS AND ELECTRICAL DATA

THREE PHASE - 460V

Model R6GD-	X36D072C	X36D096C	X48D096C	X48D120C	X60D096C	X60D120C
Performance						
Heating Input BTUH	72,000	96,000	96,000	120,000	96,000	120,000
Heating Output BTUH	56,000	75,000	75,000	94,000	75,000	94,000
Capacity-Cooling BTUH	36,000	36,000	47,800	47,800	56,500	56,500
AFUE	78	78	78	78	78	78
Efficiency - SEER	13.50	13.50	13.00	13.00	13.00	13.00
Efficiency - EER	11.80	11.80	11.00	11.00	11.00	11.00
Electrical Rating - 60 Hz						
Phase	3	3	3	3	3	3
Operating Voltage Range	414 - 506	414 - 506	414 - 506	414 - 506	414 - 506	414 - 506
Minimum Circuit Ampacity	12.1	12.1	13.8	13.8	16.7	16.7
Max. Over-current Protection	15	15	20	20	25	25
Compressor Data						
Volts	460	460	460	460	460	460
Rated Load Amps	6.4	6.4	6.9	6.9	8.6	8.6
Lock Rotor Amps	38	38	41	41	52	52
Indoor Blower						
Wheel Blower	10x10		10x10		11x10	
Type	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque	Fixed Torque
Motor - HP	1/2	1/2	3/4	3/4	1	1
Motor - Amps	2.1	2.1	3.2	3.2	4.0	4.0
Outdoor Fan						
Motor - HP / RPM	1/4 - 1100	1/4 - 1100	1/4 - 1100	1/4 - 1100	1/4 - 1100	1/4 - 1100
Motor - Amps	0.6	0.6	0.6	0.6	0.6	0.6
Fan Diameter / CFM	20 / 3800	20 / 3800	20 / 3800	20 / 3800	20 / 3800	20 / 3800
Refrigerant Charge - oz. R-410A	112	112	224	224	184	184
Filters (Field Installed)						
Style	Disposable		Disposable			
Size (Qty)	16 x 25 x 1 (2)		18 x 25 x 1 (2)			
	Field convertible to two inches					

AIRFLOW DATA

Model Number R6GD-	Heating Input (Btu/h)	Heating Output (Btu/h)	Heating Rise Range (F)	Cooling Output (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)
X36*072(X)	72,000	56,000	40-70	36,800	10 X 10	1/2		T1	950	55	880	59	810	64	755	69	705	--	655	--	600	--	570	--
								**T2	1110	47	1065	49	1020	51	965	54	910	57	865	60	825	63	790	66
								T3	1220	43	1180	44	1135	46	1085	48	1030	50	990	53	945	55	915	57
								*T4	1260	41	1215	43	1387	37	1125	46	1075	48	1030	50	990	53	960	54
								T5	1345	--	1300	40	1250	42	1210	43	1170	44	1120	46	1070	49	1030	50
X36*096(X)	96,000	75,000	40-70	36,800	10 X 10	1/2		T1	950	--	880	--	810	--	755	--	705	--	655	--	600	--	570	--
								**T2	1110	62	1065	65	1020	68	965	--	910	--	865	--	825	--	790	--
								T3	1220	57	1180	59	1135	61	1085	64	1030	67	990	70	945	--	915	--
								*T4	1260	55	1215	57	1175	59	1125	62	1075	64	1030	67	990	70	960	--
								T5	1345	52	1300	53	1250	55	1210	57	1170	59	1120	62	1070	65	1030	67
X48*096(X)	96,000	75,000	45-75	47,800	10 X 10	3/4		T1	1185	59	1110	62	1035	67	980	71	925	75	875	--	820	--	785	--
								T2	1410	49	1330	52	1250	55	1195	58	1140	61	1085	64	1030	67	975	71
								**T3	1525	45	1450	48	1370	51	1320	53	1270	55	1210	57	1150	60	1100	63
								T4	1650	--	1585	--	1520	46	1465	47	1405	49	1340	52	1280	54	1235	56
								*T5	1775	--	1715	--	1650	--	1600	--	1540	45	1460	47	1375	50	1330	52
X48*120(X)	120,000	94,000	45-75	47,800	10 X 10	3/4		T1	1185	73	1110	--	1035	--	980	--	925	--	875	--	820	--	785	--
								T2	1410	61	1330	65	1250	69	1195	73	1140	--	1085	--	1030	--	975	--
								**T3	1525	57	1450	60	1370	63	1320	66	1270	68	1210	72	1150	75	1100	--
								T4	1650	53	1585	55	1520	57	1465	59	1405	62	1340	65	1280	68	1235	70
								*T5	1775	49	1715	51	1650	53	1600	54	1540	56	1460	59	1375	63	1330	65
X60*096(X)	96,000	75,000	45-75	58,000	11 X 10	1		T1	1199	58	1101	63	1027	68	940	74	867	--	809	--	760	--	701	--
								**T2	1488	47	1433	48	1363	51	1310	53	1257	55	1184	59	1108	63	1050	66
								*T3	1596	--	1540	45	1497	46	1455	48	1413	49	1379	50	1348	51		
								T4	1787	--	1722	--	1687	--	1647	--	1611	--	1573	--	1533	45	1499	46
								T5	1993	--	1953	--	1891	--	1825	--	1763	--	1714	--	1664	--	1601	--
X60*120(X)	120,000	94,000	45-75	58,000	11 X 10	1		T1	1199	72	1101	--	1027	--	940	--	867	--	809	--	760	--	701	--
								**T2	1488	58	1433	60	1363	64	1310	66	1257	69	1184	73	1108	--	1050	--
								*T3	1596	54	1540	56	1497	58	1455	60	1413	61	1379	63	1348	61	1348	64
								T4	1787	48	1722	50	1687	51	1647	53	1611	54	1573	55	1533	57	1499	58
								T5	1993	--	1953	--	1891	46	1825	47	1763	49	1714	51	1664	52	1601	54

* Denotes factory set cooling speed
 ** Denotes factory set heating speed
 X - Can be C or X

R6GD ACCESSORIES

Description	Part Number
Roof Curb (8")	547830
Roof Curb (14")	547831
Roof Curb (18")	547850
Roof Curb (24")	547851
Duct Adapter, 14" Round (2 each)	913812A
Concentric diffuser, flush, 16"	547836
Concentric diffuser, flush, 18"	547837
Supply/return transition, 16"	547834
Supply/return transition, 18"	547835
Concentric diffuser, step down 16"	547838
Concentric diffuser, step down 18"	547839
Differential enthalpy sensor kit	920233
Control, CO2 sensor, wall mount	547848
Economizer, downflow w/filter modulating, enthalpy controlled	558870
Economizer, horizontal modulating, enthalpy controlled	547841
Power Exhaust for use with downflow economizer (208/230 3 Phase)*	555578
Power Exhaust, for use with horizontal economizer (208/230 3 Phase)*	555580
Power Exhaust for use with downflow economizer (460V 3 Phase)*	555579
Power Exhaust, for use with horizontal economizer (460V 3 Phase)*	555581
Manual Fresh Air Damper	547832
Motorized Fresh Air Damper	547840
Hood Type Hail Guard, Coil Dim. 34" X 76" (3 ton)	547846
Hood Type Hail Guard, Coil Dim. 38" X 76" (4 & 5 ton)	547847
Low Ambient Kit	918837
Low Pressure Switch Kit	913551
Freezestat	917108
LP Gas Conversion Kit, Canadian (0 to 4,500 ft above sea level)	904405A
LP Gas Conversion Kit, U.S. (0 ft to 10,000 ft above sea level)	904404A
Smoke Detector, Duct Mount, Photo Electric Type	558863
Smoke Detector, Multi Signal Control	558866
Smoke Detector, Sampling Tube 2-4 ft	558864
Smoke Detector, Sampling Tube 4-8 ft	558865
Skirt Trim Kit	919729

* Special Order

R6GD EXPANDED RATINGS

R6GD-X36

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.
1300	80	62	39.3	34.9	2.25	37.8	34.4	2.46	36.4	34.0	2.69	34.9	32.7	2.95	33.3	32.7	3.25	31.5	31.0	3.58
	80	67	42.1	28.1	2.27	40.3	27.9	2.49	38.5	28.2	2.71	36.6	27.8	2.97	34.6	27.4	3.26	32.5	27.0	3.59
	80	72	45.7	20.8	2.31	43.7	20.7	2.52	41.8	21.1	2.76	39.7	20.8	3.01	37.5	20.5	3.30	35.2	21.0	3.63
	75	63	39.3	27.2	2.25	37.6	26.9	2.46	35.9	27.1	2.68	34.1	26.7	2.94	32.2	24.7	3.23	30.2	26.5	3.57
1400	80	62	40.0	36.0	2.28	38.6	36.0	2.50	37.1	34.6	2.72	35.5	33.6	2.99	33.9	32.7	3.28	32.1	31.8	3.62
	80	67	42.5	29.3	2.30	40.7	30.1	2.52	38.9	29.4	2.74	36.9	29.2	3.00	34.9	29.2	3.29	32.8	29.3	3.63
	80	72	46.0	21.6	2.34	44.1	22.5	2.55	42.0	21.9	2.79	39.9	21.8	3.04	37.7	21.9	3.33	35.4	22.2	3.66
	75	63	39.6	28.3	2.28	38.0	28.9	2.49	36.2	28.3	2.71	34.4	28.0	2.98	32.5	27.9	3.26	30.5	27.9	3.60
1500	80	62	40.8	37.1	2.31	39.3	36.6	2.53	37.8	35.2	2.76	36.1	34.3	3.02	34.4	33.2	3.31	32.6	32.4	3.65
	80	67	42.8	31.0	2.33	41.0	31.3	2.55	39.2	30.6	2.77	37.2	30.6	3.04	35.1	30.4	3.32	33.0	30.6	3.66
	80	72	46.3	22.8	2.37	44.3	23.2	2.58	42.3	22.6	2.82	40.1	22.7	3.07	37.9	22.8	3.37	35.6	23.1	3.69
	75	63	40.0	29.8	2.30	38.3	30.0	2.52	36.5	29.4	2.75	34.7	29.3	3.01	32.7	29.0	3.29	30.7	29.1	3.63

R6GD EXPANDED RATINGS (Continued)

R6GD-X48

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.
1650	80	62	51.3	43.9	3.13	49.1	43.5	3.51	47.0	43.5	3.88	45.0	42.2	4.29	43.0	42.2	4.73	40.9	40.2	5.21
	80	67	55.3	35.6	3.13	52.6	35.2	3.53	50.1	35.5	3.91	47.7	34.9	4.32	45.1	34.4	4.76	42.6	33.5	5.25
	80	72	60.1	26.7	3.12	57.1	26.4	3.54	54.3	26.9	3.95	51.6	26.4	4.36	48.8	26.0	4.81	46.0	26.7	5.30
	75	63	51.4	34.4	3.13	49.0	34.0	3.51	46.7	34.2	3.88	44.4	33.5	4.28	42.1	31.1	4.72	39.6	33.3	5.19
1800	80	62	52.2	46.1	3.19	50.0	46.4	3.57	48.0	44.7	3.95	45.9	43.4	4.36	43.8	42.3	4.80	41.6	41.3	5.29
	80	67	55.8	37.2	3.19	53.2	38.1	3.58	50.6	37.1	3.98	48.1	36.8	4.39	45.5	36.8	4.83	42.9	36.8	5.32
	80	72	60.5	27.7	3.18	57.6	28.8	3.60	54.8	27.9	4.01	52.0	27.6	4.43	49.2	27.8	4.88	46.3	28.0	5.37
	75	63	52.0	35.9	3.19	49.6	36.6	3.57	47.2	35.7	3.95	44.8	35.3	4.35	42.4	35.2	4.78	40.0	35.1	5.26
1950	80	62	53.1	48.2	3.25	51.0	47.5	3.64	48.9	45.6	4.02	46.7	44.4	4.43	44.7	43.1	4.88	42.4	42.2	5.37
	80	67	56.3	39.4	3.25	53.6	39.7	3.64	51.0	38.7	4.04	48.5	38.6	4.45	45.9	38.4	4.89	43.2	38.6	5.38
	80	72	61.0	29.3	3.24	58.0	29.8	3.66	55.2	28.9	4.08	52.3	28.9	4.50	49.5	28.8	4.94	46.5	29.2	5.44
	75	63	52.5	37.9	3.25	50.0	38.1	3.63	47.6	37.2	4.01	45.2	37.0	4.41	42.7	36.6	4.85	40.3	36.7	5.33

R6GD-X60

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.
1500	80	62	58.9	45.0	3.83	56.7	44.6	4.20	54.4	44.9	4.61	52.0	44.1	5.09	49.6	46.3	5.61	47.0	43.9	6.20
	80	67	63.7	36.8	3.91	61.2	36.6	4.28	58.6	37.0	4.70	56.1	36.4	5.17	53.3	35.9	5.69	50.5	33.9	6.28
	80	72	69.9	28.6	4.02	67.2	28.5	4.39	64.4	29.1	4.82	61.6	28.5	5.29	58.5	28.2	5.82	55.4	29.0	6.39
	75	63	59.3	35.9	3.84	57.0	35.6	4.21	54.7	35.9	4.62	52.3	35.2	5.09	49.7	32.8	5.61	47.0	35.1	6.20
1650	80	62	60.2	47.5	3.85	57.9	48.5	4.22	55.6	47.4	4.64	53.1	46.9	5.11	50.6	46.9	5.63	48.0	46.7	6.22
	80	67	64.8	38.7	3.93	62.3	39.8	4.30	59.8	38.8	4.72	57.1	38.5	5.19	54.3	38.6	5.71	51.4	39.0	6.30
	80	72	71.1	29.7	4.04	68.4	31.2	4.42	65.5	30.3	4.84	62.5	30.1	5.31	59.4	30.4	5.84	56.1	30.7	6.41
	75	63	60.5	37.6	3.86	58.2	38.6	4.23	55.8	37.6	4.64	53.3	37.2	5.11	50.7	37.2	5.63	47.9	37.4	6.22
1800	80	62	61.3	50.6	3.87	59.0	50.9	4.24	56.6	49.8	4.66	54.1	49.6	5.13	51.6	49.2	5.65	49.2	48.9	6.25
	80	67	65.9	41.1	3.95	63.4	41.6	4.32	60.7	40.6	4.74	58.0	40.9	5.21	55.1	40.7	5.73	52.1	41.0	6.31
	80	72	72.2	31.6	4.08	69.3	32.4	4.44	66.3	31.4	4.86	63.2	31.6	5.32	60.0	31.6	5.85	56.5	32.1	6.42
	75	63	61.6	39.9	3.88	59.2	40.3	4.24	56.7	39.3	4.66	54.2	39.4	5.13	51.5	39.1	5.65	48.6	39.3	6.23



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)