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## TECHNICAL SPECIFICATIONS

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# Q3R(A,C) Series

## Single Packaged Heat Pump, Single Phase

### Q3RA-10 SEER

2 thru 5 Ton Units

Cooling: 24,000 to 58,000 Btuh

Heating: 23,200 to 58,000 Btuh

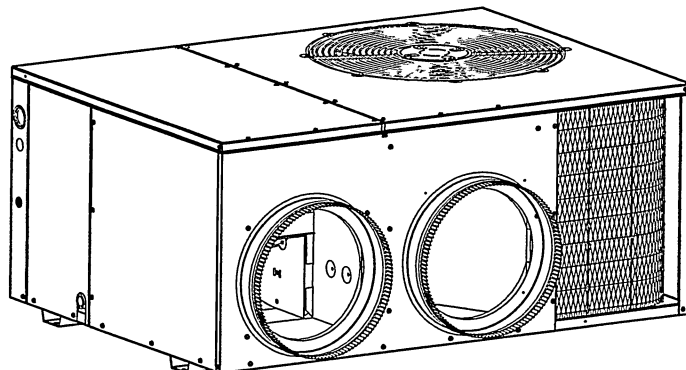
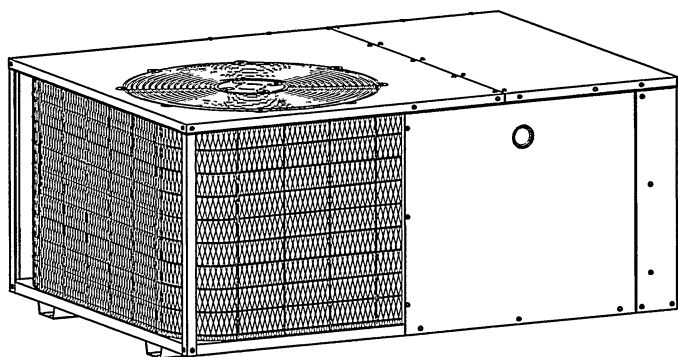
### Q3RC-12 SEER

2 Ton thru 4 Ton Units

Cooling: 23,800 to 47,000 Btuh

Heating: 23,400 to 47,000 Btuh

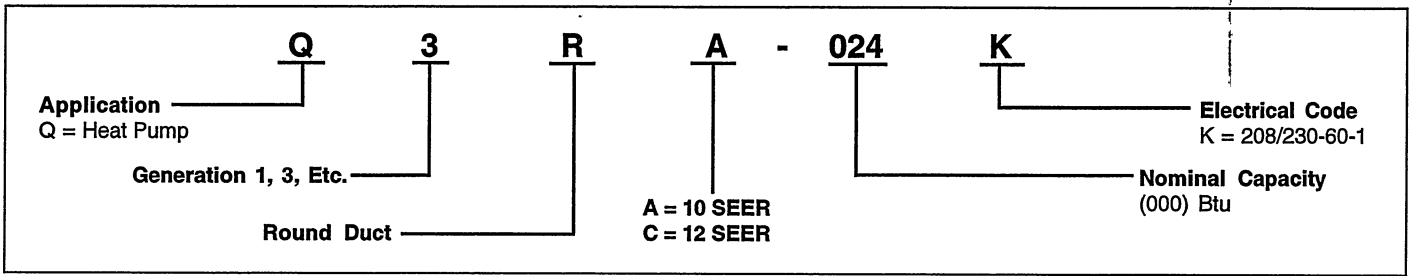
The Q3 Series single packaged heat pumps are high efficiency self contained cooling and heating units that can be installed on a slab. Units are ETL and ETLc listed. The unit is truly designed with the contractor and the consumer in mind.



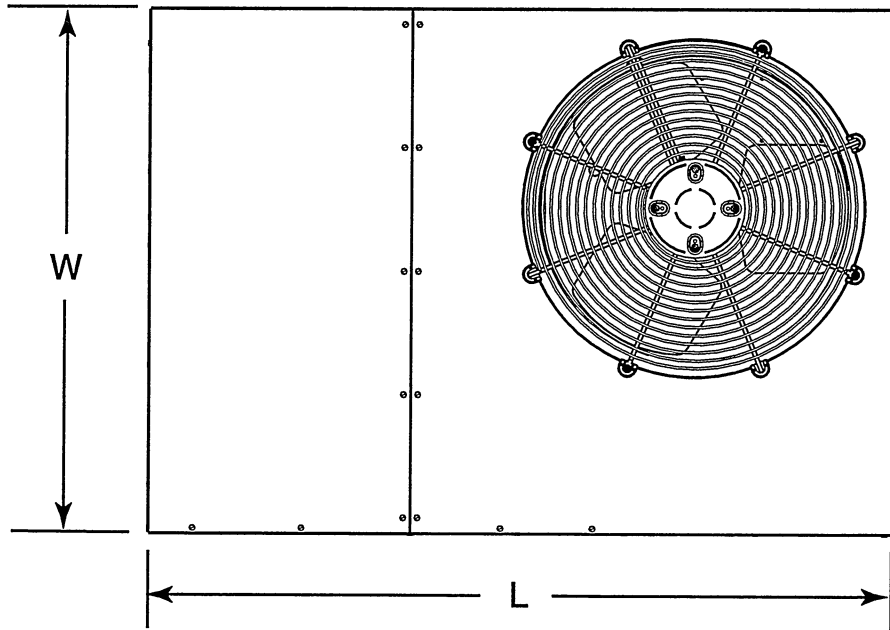
## FEATURES AND BENEFITS

- **State-of-the-art compressor** is standard equipment.
- **Designed using galvanized steel** with a polyester urethane coat finish. The 950 hour salt spray finish resists corrosion 50% better than comparable units.
- **Both indoor and outdoor coils** are designed to optimize heat transfer, minimize size and cost, and increase durability and reliability.
- **A heavy duty PSC motor** for long lasting reliability and operation. Requires no maintenance and is completely protected from rain and snow.
- **The service valves are easily accessible** and simplify servicing of the refrigeration system.
- **A wire coil guard and mesh hail guard that will never rust** protects the coil from being damaged by balls, lawnmowers, hail, etc.
- **Designed to make servicing easier** for the contractor, access panels are provided to all major components and the compressor.
- **1" clearance** to combustibles on duct side of the unit allows for installations in tight areas.
- **Easy access** to evaporator for cleaning and general maintenance.
- **Drain trap** design optimizes drainage capabilities.
- **Easy to install** electric heat strip provides up to 20 kw of heat output.
- **Compact footprint and profile** make the Q3 Series easy to install and transport.
- **Parts warranty** has proven to be a major benefit to the consumer.
- **Outdoor thermostat** is standard equipment on all heat pumps.

# MODEL IDENTIFICATION CODE



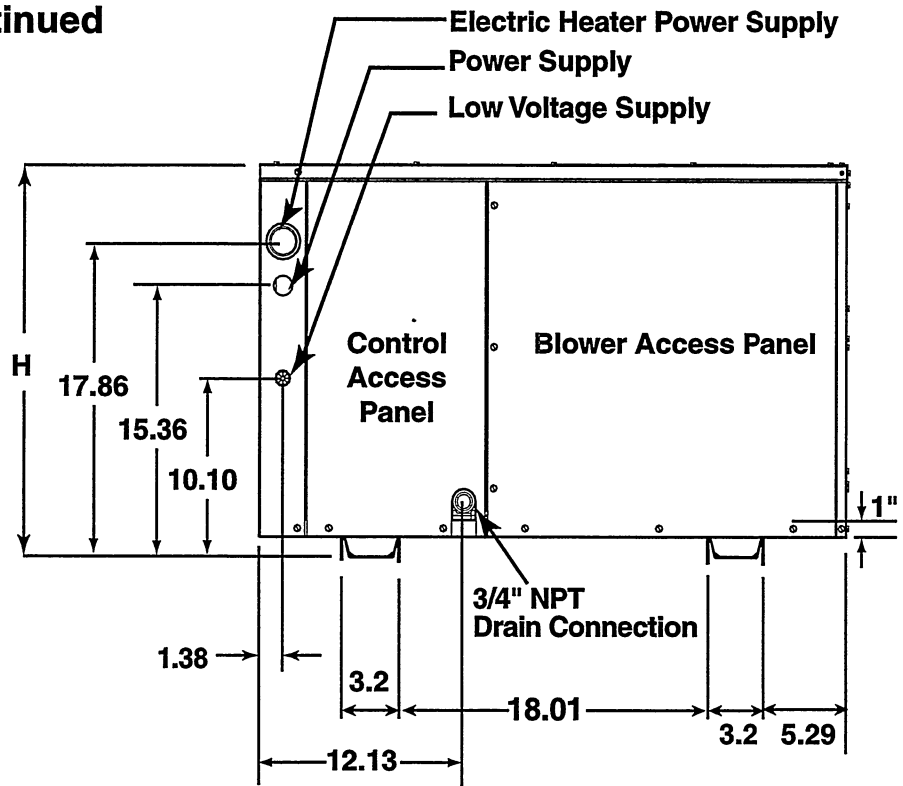
# DIMENSIONS



Top View

Model Number	(L) Length	(W) Width	(H) Height	A	B
<b>Q3RA-</b>					
024K	49	35	22.2	40.15	7.61
030K	49	35	22.2	35.02	2.48
036K	49	35	22.2	35.02	2.48
042K	49	35	30.2	35.02	2.48
048K	49	35	30.2	40.15	7.61
060K	49	35	30.2	35.02	2.48
<b>Q3RC-</b>					
024K	49	35	22.2	40.15	7.61
030K	49	35	22.2	40.15	7.61
036K	49	35	30.2	40.15	7.61
042K	49	35	30.2	40.15	7.61
048K	49	35	30.2	35.02	2.48

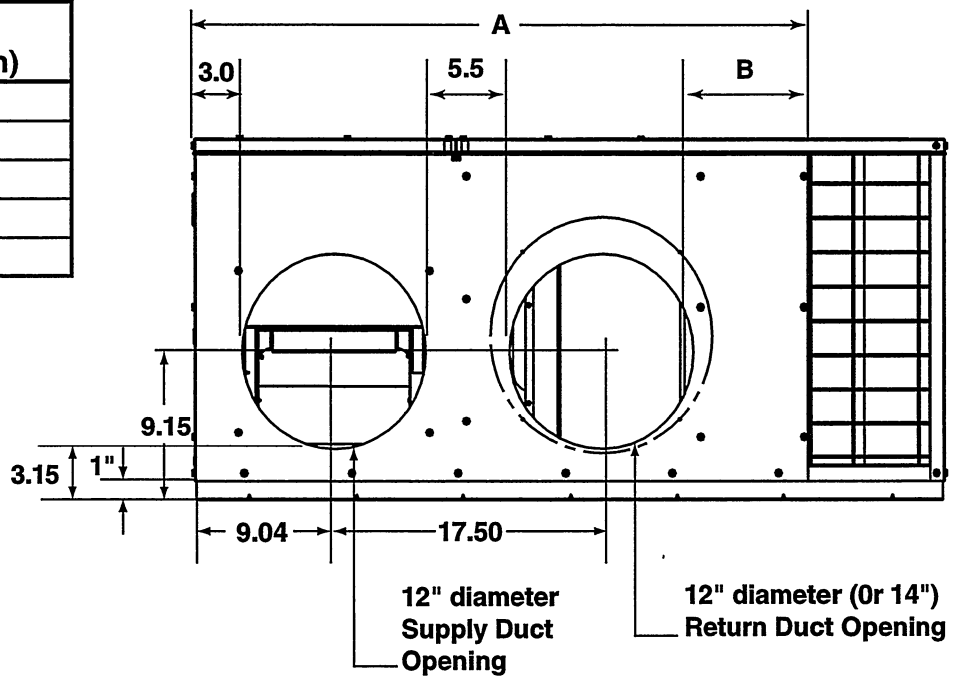
# DIMENSIONS Continued



Side View

Model Number	Return Diameter (in)
<b>Q3RA-</b>	
024K	12
030K	12
036K	12
042K	14
048K	14
060K	14

Model Number	Return Diameter (in)
<b>Q3RC-</b>	
024K	12
030K	12
036K	14
042K	14
048K	14



Back (Duct) View

# PHYSICAL SPECIFICATIONS

## Q3RA Models

Model No. Q3RA-	024K	030K	036K	042K	048K	060K
<b>Electric Rating — 60 Hz (a)</b>						
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Min. Circuit Ampacity (a)	14.8	20.4	21.9	24.9	31.5	38.6
Field Wire Size — AWG (a)	12	10	8	8	8	6
Delay Fuse — Max. (b)	20	30	35	40	50	60
Total Unit — AMPS	12.4	17.0	18.2	20.4	26.1	31.3
<b>Compressor</b>						
Volts	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230
Rated Load Amps	9.8	13.7	14.8	17.0	21.8	27.0
Lock Rotor Amps	56.0	75.0	96.0	105.0	131.0	175.0
<b>Fan Motor and Condenser</b>						
Fan Motor — HP - RPM	1/4 - 1100	1/4 - 1100	1/3 - 1100	1/3 - 1100	1/3 - 1100	1/3 - 1100
Fan Motor — Amps	1.2	1.2	1.3	1.3	1.3	1.3
Fan Dia. — CFM	20" - 2700	20 - 2700	20" - 2700	20" - 3000	20" - 3000	20" - 3000
<b>Motor and Evaporator</b>						
Blower Motor — HP - RPM	1/4 - 980	1/3 - 1080	1/3 - 900	1/3 - 900	1/2 - 1000	1/2 - 1000
Blower Motor — Amps	1.4	2.1	2.1	2.1	3	3
CFM @ E.S.P. — in. W.C.	1115 @ .30	1390 @ .30	1430 @ .30	1550 @ .30	1690 @ .30	1720 @ .30
<b>Refrigerant — Oz.</b>						
	60	80	80	100	102	132
<b>Shipping Weight — Lbs.</b>						
	280	295	300	340	355	390

## Q3RC Models

Model No. Q3RC-	024K	030K	036K	042K	048K
<b>Electric Rating — 60 Hz (a)</b>					
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Min. Circuit Ampacity (a)	15.4	20.1	21.8	26	33.9
Field Wire Size — AWG (a)	10	10	8	8	8
Delay Fuse — Max. (b)	25	30	35	40	50
Total Unit — AMPS	12.8	16.7	18.1	21.3	28.0
<b>Compressor</b>					
Volts	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230
Rated Load Amps	10.2	13.4	14.7	17.9	23.7
Lock Rotor Amps	56.0	72.5	83.0	104.0	129.0
<b>Fan Motor and Condenser</b>					
Fan Motor — HP - RPM	1/4 - 1125	1/4 - 1125	1/3 - 1100	1/3 - 1100	1/3 - 1100
Fan Motor — Amps	1.2	1.2	1.3	1.3	1.3
Fan Dia. — CFM	20" - 2700	20 - 2700	20" - 2700	20" - 3000	20" - 3000
<b>Motor and Evaporator</b>					
Blower Motor — HP - RPM	1/4 - 980	1/3 - 1080	1/3 - 900	1/3 - 900	1/2 - 1000
Blower Motor — Amps	1.4	2.1	2.1	2.1	3
CFM @ E.S.P. — in. W.C.	1115 @ .30	1390 @ .30	1430 @ .28	1500 @ .23	1730 @ .23
<b>Refrigerant — Oz.</b>					
	80	98	104	104	140
<b>Shipping Weight — Lbs.</b>					
	285	300	345	350	385

(a) Amperage and wire size based on refrigeration system only. 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.

# ELECTRICAL DATA - Q3RA Models

## 208/230 Volt Single Phase Models

Model Number Q3RA-	Heater Installed Nom. KW	Single Supply Circuit Option				2 Supply Circuit Option							
		Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating*	Circuit B (Heater & Blower)				Circuits A (Comp. & Fan) + C (Heater)			
						Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating	Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating
024K	0	14.8	12	12	20	-	-	-	-	14.8	12	12	20
	5	39.8	8	8	40	26.8	10	10	30	14.8	12	12	20
	8	52.3	4	6	60	39.3	8	8	40	14.8	12	12	20
	10	64.8	4	4	70	51.8	4	6	60	14.8	12	12	20
030K	0	20.4	10	10	30	-	-	-	-	20.4	10	10	30
	5	45.4	6	8	50	27.6	10	10	30	20.4	10	10	30
	8	57.9	4	6	60	40.1	8	8	40	20.4	10	10	30
	10	70.4	4	4	70	52.6	4	6	60	20.4	10	10	30
036K	0	21.9	8	8	35	-	-	-	-	21.9	8	8	35
	5	46.9	6	8	50	27.6	10	10	30	21.9	8	8	35
	8	59.4	4	6	60	40.1	8	8	40	21.9	8	8	35
	10	71.9	3	4	80	52.6	4	6	60	21.9	8	8	35
042K	0	24.9	8	8	40	-	-	-	-	24.9	8	8	40
	5	49.9	4	6	60	27.9	10	10	30	24.9	8	8	40
	8	62.4	4	4	70	40.4	8	8	40	24.9	8	8	40
	10	74.9	3	4	80	52.9	4	6	60	24.9	8	8	40
048K	0	31.5	6	8	50	-	-	-	-	31.5	6	8	50
	5	56.5	4	4	70	28.8	10	10	30	31.5	6	8	50
	8	69.0	3	4	80	41.3	6	8	45	31.5	6	8	50
	10	81.5	2	3	90	53.8	4	6	60	31.5	6	8	50
060K	0	38.6	4	6	60	-	-	-	-	38.6	4	6	60
	5	63.6	3	4	80	29.4	10	10	30	38.6	4	6	60
	8	76.1	2	3	90	41.9	6	8	45	38.6	4	6	60
	10	88.6	1	3	100	54.4	4	6	60	38.6	4	6	60
060K	15	113.6	0	1	125	54.4	4	6	60	63.6	4	4	70
	20	138.6	000	0	150	54.4	4	6	60	89.8	2	3	90

Model Number Q3RA-	Heater Installed Nom. KW	3 Supply Circuits Option											
		Circuit A (Comp. & Fan)				Circuit B (Heater & Blower)				Circuit C (Heater)			
		Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating	Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating	Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating
024K	0	14.8	12	12	20	-	-	-	-	-	-	-	-
	5	14.8	12	12	20	26.8	10	10	30	-	-	-	-
	8	14.8	12	12	20	39.3	8	8	40	-	-	-	-
	10	14.8	12	12	20	51.8	4	6	60	-	-	-	-
030K	0	20.4	10	10	30	-	-	-	-	-	-	-	-
	5	20.4	10	10	30	27.6	10	10	30	-	-	-	-
	8	20.4	10	10	30	40.1	8	8	40	-	-	-	-
	10	20.4	10	10	30	52.6	4	6	60	-	-	-	-
036K	0	21.9	8	8	35	-	-	-	-	-	-	-	-
	5	21.9	8	8	35	27.6	10	10	30	-	-	-	-
	8	21.9	8	8	35	40.1	8	8	40	-	-	-	-
	10	21.9	8	8	35	52.6	4	6	60	-	-	-	-
042K	0	24.9	8	8	40	-	-	-	-	-	-	-	-
	5	24.9	8	8	40	27.9	10	10	30	-	-	-	-
	8	24.9	8	8	40	40.4	8	8	40	-	-	-	-
	10	24.9	8	8	40	52.9	4	6	60	-	-	-	-
048K	0	31.5	6	8	50	-	-	-	-	-	-	-	-
	5	31.5	6	8	50	28.8	10	10	30	-	-	-	-
	8	31.5	6	8	50	41.3	6	8	45	-	-	-	-
	10	31.5	6	8	50	53.8	4	6	60	-	-	-	-
060K	0	38.6	4	6	60	-	-	-	-	-	-	-	-
	5	38.6	4	6	60	29.4	10	10	30	-	-	-	-
	8	38.6	4	6	60	41.9	6	8	45	-	-	-	-
	10	38.6	4	6	60	54.4	4	6	60	-	-	-	-
060K	15	38.6	4	6	60	54.4	4	6	60	25.0	10	10	25
	20	38.6	4	6	60	54.4	4	6	60	50.0	14	14	50

\*When overcurrent rating exceeds 60, internal circuit breakers must be installed in addition to branch circuit protection at distribution panel.

# ELECTRICAL DATA Continued

## Q3RC Models

### 208/230 Volt Single Phase Models

Model Number Q3RC-	Heater Installed Nom. KW	Single Supply Circuit Option				2 Supply Circuit Option							
		Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating*	Circuit B (Heater & Blower)				Circuits A (Comp. & Fan) + C (Heater)			
						Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating	Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating
024K	0	15.4	10	10	25	-	-	-	-	15.4	10	10	25
	5	40.4	6	8	45	26.8	10	10	30	15.4	10	10	25
	8	52.9	4	6	60	39.3	8	8	40	15.4	10	10	25
	10	65.4	4	4	70	51.8	4	6	60	15.4	10	10	25
030K	0	20.1	10	10	30	-	-	-	-	20.1	10	10	30
	5	45.1	6	8	50	27.6	10	10	30	20.1	10	10	30
	8	57.6	4	6	60	40.1	8	8	40	20.1	10	10	30
	10	70.1	4	4	70	52.6	4	6	60	20.1	10	10	30
036K	0	21.8	8	8	35	-	-	-	-	21.8	8	8	35
	5	46.8	6	8	50	27.6	10	10	30	21.8	8	8	35
	8	59.3	4	6	60	40.1	8	8	40	21.8	8	8	35
	10	71.8	3	4	80	52.6	4	6	60	21.8	8	8	35
042K	0	26.0	8	8	40	-	-	-	-	26.0	8	8	40
	5	51.0	4	6	60	27.9	10	10	30	26.0	8	8	40
	8	63.5	4	4	70	40.4	8	8	40	26.0	8	8	40
	10	76.0	3	4	80	52.9	4	6	60	26.0	8	8	40
048K	0	33.9	6	8	50	-	-	-	-	33.9	6	8	50
	5	58.9	4	4	70	28.8	10	10	30	33.9	6	8	50
	8	71.4	3	4	80	41.3	6	8	45	33.9	6	8	50
	10	83.9	2	3	90	53.8	4	6	60	33.9	6	8	50
048K	15	108.9	1	2	110	53.8	4	6	60	58.9	4	6	60
	20	133.9	000	0	150	53.8	4	6	60	85.0	2	3	90

Model Number Q3RC-	Heater Installed Nom. KW	3 Supply Circuit Option											
		Circuit A (Comp. & Fan)				Circuit B (Heater & Blower)				Circuit C (Heater)			
		Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating	Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating	Min. Circuit Amp.	Rec Wire Gauge (60°C Cu)	Rec Wire Gauge (75°C Cu)	Maximum Over-current Rating
024K	0	15.4	10	10	25	-	-	-	-	-	-	-	-
	5	15.4	10	10	25	26.8	10	10	30	-	-	-	-
	8	15.4	10	10	25	39.3	8	8	40	-	-	-	-
	10	15.4	10	10	25	51.8	4	6	60	-	-	-	-
030K	0	20.1	10	10	30	-	-	-	-	-	-	-	-
	5	20.1	10	10	30	27.6	10	10	30	-	-	-	-
	8	20.1	10	10	30	40.1	8	8	40	-	-	-	-
	10	20.1	10	10	30	52.6	4	6	60	-	-	-	-
036K	0	21.8	8	8	35	-	-	-	-	-	-	-	-
	5	21.8	8	8	35	27.6	10	10	30	-	-	-	-
	8	21.8	8	8	35	40.1	8	8	40	-	-	-	-
	10	21.8	8	8	35	52.6	4	6	60	-	-	-	-
042K	0	26.0	8	8	40	-	-	-	-	25.0	10	10	25
	5	26.0	8	8	40	27.9	10	10	30	-	-	-	-
	8	26.0	8	8	40	40.4	8	8	40	-	-	-	-
	10	26.0	8	8	40	52.9	4	6	60	-	-	-	-
048K	0	33.9	6	8	50	-	-	-	-	25.0	10	10	25
	5	33.9	6	8	50	28.8	10	10	30	-	-	-	-
	8	33.9	6	8	50	41.3	6	8	45	-	-	-	-
	10	33.9	6	8	50	53.8	4	6	60	-	-	-	-
048K	15	33.9	6	8	50	53.8	4	6	60	25.0	10	10	25
	20	33.9	6	8	50	53.8	4	6	60	50.0	6	8	50

\*When overcurrent rating exceeds 60, internal circuit breakers must be installed in addition to branch circuit protection at distribution panel.

## SYSTEM HEATING AND COOLING CAPACITIES

Model Number Q3RA-	Cooling Btuh	SEER	Heating Btuh @ 47	HSPF
024K	24,000	10	23,000	6.8
030K	30,000	10	28,400	6.8
036K	34,400	10	33,200	6.8
042K	40,500	10	40,500	6.8
048K	47,000	10	46,500	6.8
060K	58,000	10	58,000	6.8

Model Number Q3RC-	Cooling Btuh	SEER	Heating Btuh @ 47	HSPF
024K	23,800	12	23,400	7.0
030K	30,000	12	27,200	7.0
036K	35,000	12	34,000	7.0
042K	42,000	12	40,500	7.0
048K	47,000	12	47,500	7.0

## BLOWER PERFORMANCE

Model Number Q3RA-	External Static Pressure (in.w.c.)					
	0.1	0.2	0.3	0.4	0.5	0.6
024K	1163	1150	1115	1060	982	884
030K	1498	1455	1390	1303	1195	1064
036K	1550	1506	1430	1349	1237	1101
042K	1623	1592	1550	1503	1446	1379
048K	1766	1734	1690	1635	1569	1491
060K	1846	1786	1720	1651	1576	1497

Model Number Q3RC-	External Static Pressure (in.w.c.)					
	0.1	0.2	0.3	0.4	0.5	0.6
024K	1163	1150	1115	1060	982	884
030K	1498	1455	1390	1303	1195	1064
036K	1550	1506	1439	1349	1237	1101
042K	1528	1484	1418	1329	1219	1085
048K	1766	1734	1690	1635	1569	1491

# ACCESSORIES

## Heater Application Matrix

Model Number	H3HK-005H-01	H3HK-008H-01	H3HK-010H-01	H3HK-015H-01	H3HK-020H-01	H3HK-015H-21	H3HK-020H-21
<b>Q3RA-</b>	<b>917166</b>	<b>917167</b>	<b>917168</b>	<b>917169</b>	<b>917170</b>	<b>917172</b>	<b>917173</b>
024K	X(2)	X(2)	X(2)	NA	NA	NA	NA
030K	X(2)	X(2)	X(2)	X(3)	NA	X(1)	NA
036K	X(2)	X(2)	X(2)	X(3)	NA	X(1)	NA
042K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)
048K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)
060K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)

Model Number	H3HK-005H-01	H3HK-008H-01	H3HK-010H-01	H3HK-015H-01	H3HK-020H-01	H3HK-015H-21	H3HK-020H-21
<b>Q3RC-</b>	<b>917166</b>	<b>917167</b>	<b>917168</b>	<b>917169</b>	<b>917170</b>	<b>917172</b>	<b>917173</b>
024K	X(2)	X(2)	X(2)	NA	NA	NA	NA
030K	X(2)	X(2)	X(2)	X(3)	NA	X(1)	NA
036K	X(2)	X(2)	X(2)	X(3)	NA	X(1)	NA
042K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)
048K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)

NA = Not Approved

( ) = Number of internal circuit breaker kits required.

## Duct Kits

Description	Part Number
MHFK-12-SW (Single Wide Fitting Kit - 12")	911468A
MHFK-12-DW (Double Wide Fitting Kit - 12")	911469A
MHFK-14-SW (Single Wide Fitting Kit - 14")	914957
MHFK-14-DW (Double Wide Fitting Kit - 14")	914956
UFK-2RMI, 12"x12"x12" "Y" fitting with 2 clamps	911470
Clamps, 10-14" diameter	668659

## Heater Kit Accessories

Description	Part Number
4-Pole single circuit adaptor	913350
6-Pole single circuit adaptor	913556
Circuit Breaker Single Phase (2-pole)	913554



CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH AFI

454A-0600 (Replaces 454A-0999)

St. Louis, MO

**NORDYNE**

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. (06/00)