
TECHNICAL SPECIFICATIONS

Q4SD Series

Single Packaged Heat Pump, Single Phase

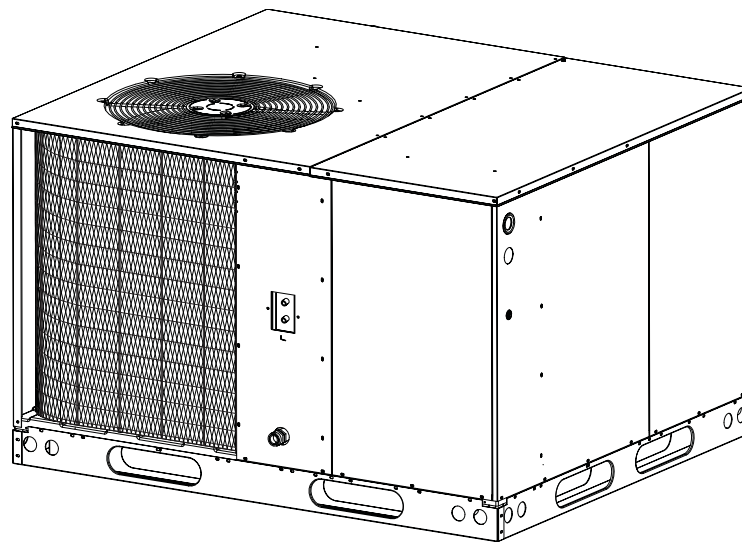
Q4SD-13 SEER

3 - 5 Ton Units

Cooling: 30,000 to 58,000 Btuh

Heating: 29,000 to 59,000 Btuh

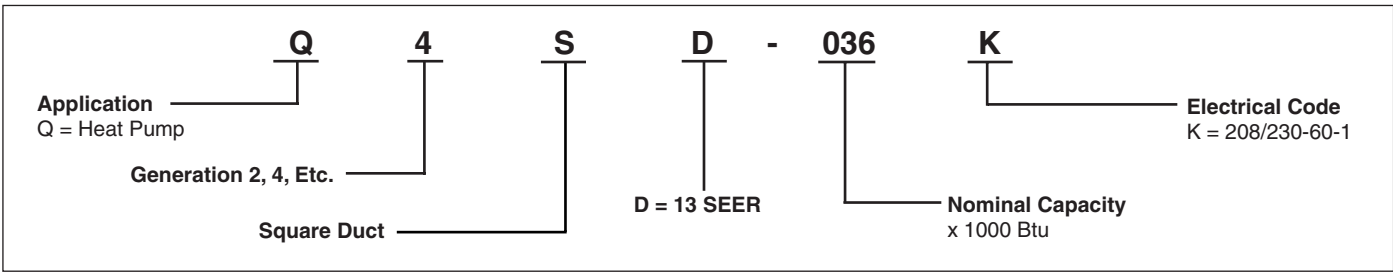
The Q4 Series single packaged heat pumps are high efficiency self contained cooling and heating units that can be installed on a roof or on a slab. The convertible unit design makes installations simple in all applications. Units are ETL and ETLc listed.



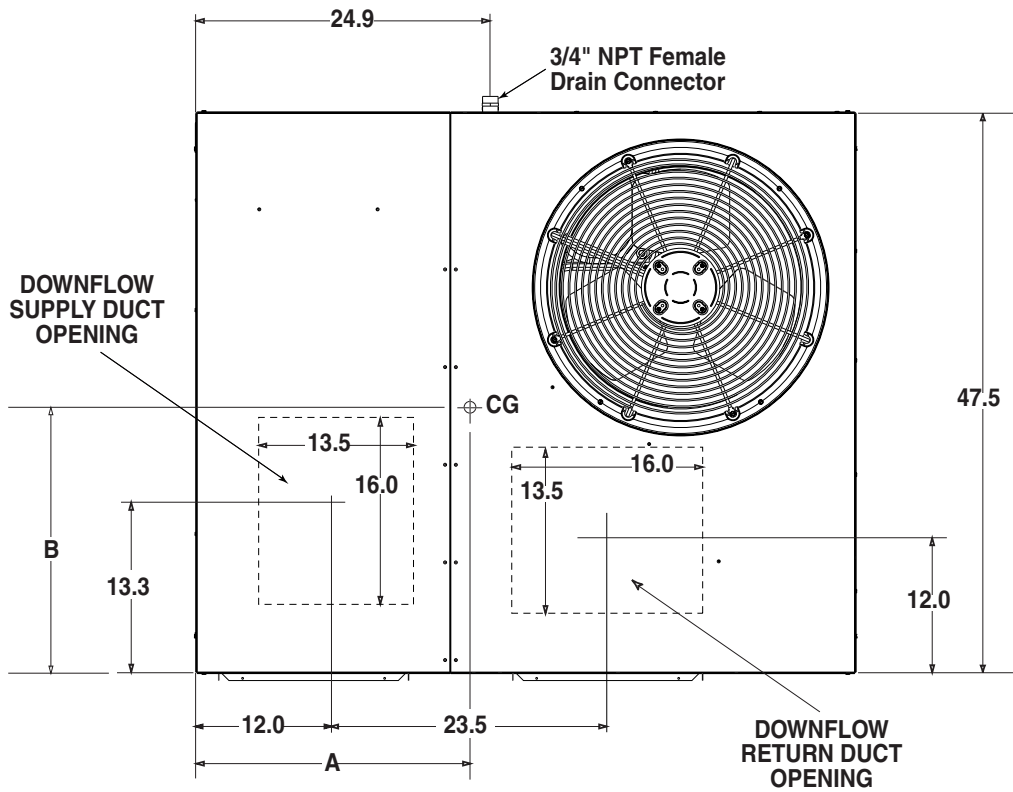
FEATURES AND BENEFITS

- **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 Cabinet**
with polyurethane finish provides 950 hour salt spray protection.
- **Plastic Coated Coil Guard and Mesh Hail Guard**
Will never rust and protect the coil from being damaged by balls, lawnmowers, hail etc.
- **Externally Accessible Service Ports**
Quick access to refrigerant system without disrupting operation.
- **Access to Controls and Major Components**
Easy in and out service.
- **Corrosion-Resistant Drain Pan**
Quickly drains away evaporator condensate.
- **Service Access Panels**
To all major components and the compressor. Designed to make servicing easier for the Contractor.
- **Easy to Install**
Electric heat strip provides up to 20 KW of heat output.
- **Proven, Industry Standard Components**
Easier service and availability.
- **Quiet Operation**
Low vibration.
20" fan blade combined with custom venturi condenser fan.
- **Accessories**
Roof curbs, economizers, fresh air dampers and more.
- **5 Year Limited Parts Warranty**

MODEL IDENTIFICATION CODE



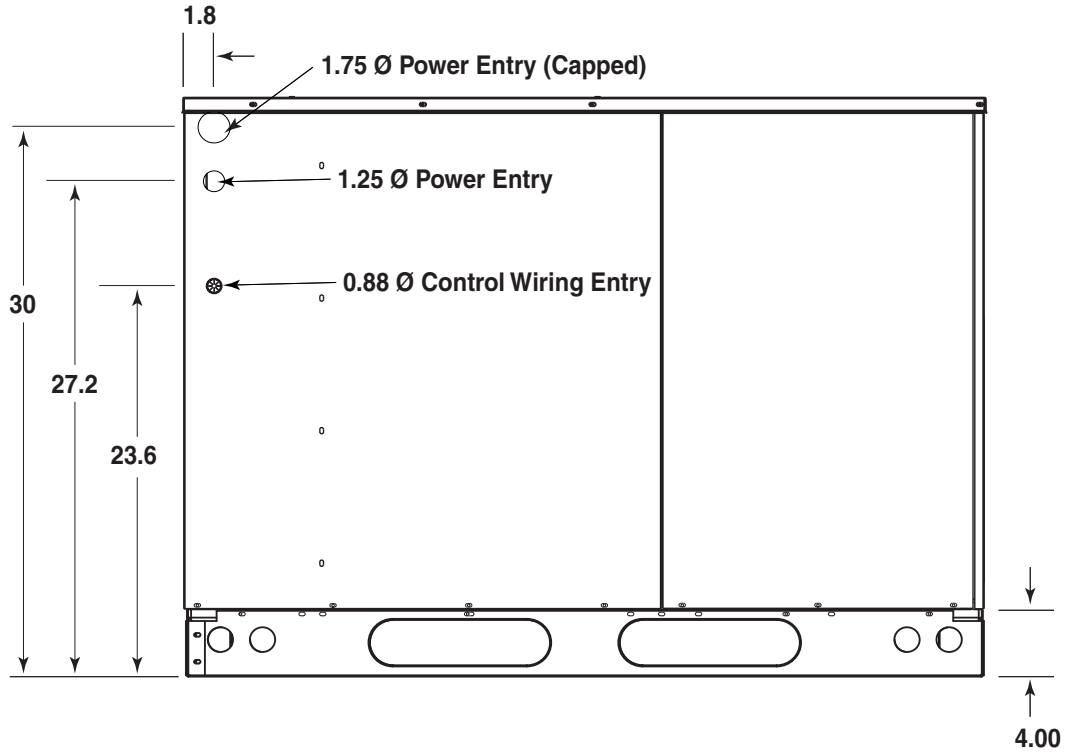
DIMENSIONS



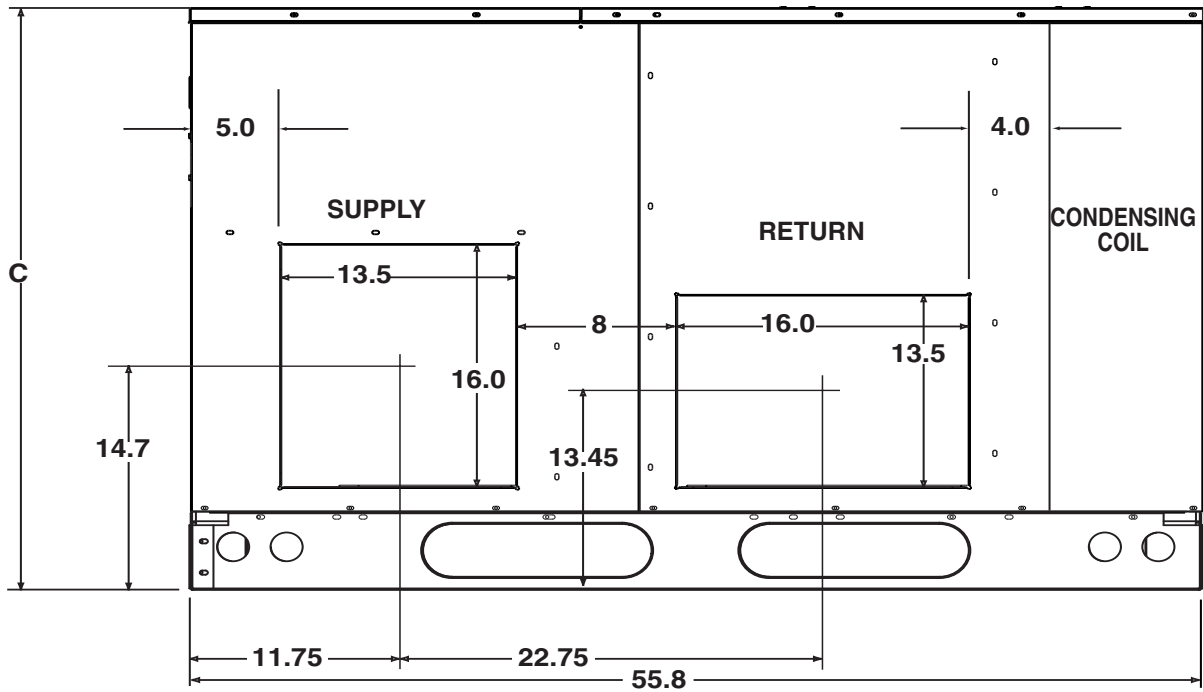
Top View

Model Number Q4SD	Unit Weight	Center of Gravity		Height (in inches)	
		A	B	C	
				with base rails	without base rails
036	460	28.0	25.5	35.0	35.3
048	570	29.5	26.0	43.0	39.3
060	580	29.5	26.0	43.0	39.3

DIMENSIONS Continued



Side View



Back (Duct) View

SPECIFICATIONS

Model Number	Q4SD		
	036	048	060
Performance			
Capacity - Heating BTUH	33,500	45,000	51,000
Efficiency - HSPF	7.7	7.7	7.7
Capacity - Cooling BTUH	34,800	46,000	55,500
Efficiency - SEER	13.00	13.00	13.00
EER (Btuh/watt)	11.0	11.0	11.0
Electric Rating - 60Hz (a)			
Phase	1	1	1
Operating Voltage Range	187-253	187-253	187-253
Min. Circuit Ampacity (a)	27.7	36.7	42.5
Field Wire Size - AWG (a)	10	8	6
Total Unit - Amps	23.2	30.8	35.5
Compressor Data			
Volts	208-230	208-230	208-230
Rated Load Amps	17.9	23.6	28.0
Lock Rotor Amps	88	137	169
Indoor Blower			
Type	Fixed Torque	Fixed Torque	Fixed Torque
Motor HP-RPM Range	1/2-1100	3/4-1400	3/4-1600
Motor - Amps	4.1	6.0	6.0
Outdoor Fan			
Motor - HP / RPM	1/4 - 1100	1/4 - 1100	1/3 - 1000
Motor - Amps	1.2	1.2	1.5
Fan Diameter / CFM	20 / 3800	20 / 3800	20 / 4000
Refrigerant Charge - Oz.	127	293	224
Net Weight lbs.	460	570	580
Shipping weight lbs.	470	580	590

ELECTRICAL DATA

Model Number	Heater Installed Norm. KW	Multiple Supply Circuit Option																					
		Single Supply Circuit Option						Circuit A (Compressor & Fan)			Circuit B (Blower & Heater)			Circuit C (Heater Only)									
		Minimum Circuit Amp.	Rec Wire Gauge (60° C Cu)	Rec Wire Gauge (75° C Cu)	Rec Wire Gauge (90° C Cu)	Maximum Over-current Rating*	Minimum Circuit Amp.	Rec Wire Gauge (60° C Cu)	Rec Wire Gauge (75° C Cu)	Rec Wire Gauge (90° C Cu)	Maximum Over-current Rating*	Minimum Circuit Amp.	Rec Wire Gauge (60° C Cu)	Rec Wire Gauge (75° C Cu)	Rec Wire Gauge (90° C Cu)	Maximum Over-current Rating*	Minimum Circuit Amp.	Rec Wire Gauge (60° C Cu)	Rec Wire Gauge (75° C Cu)	Rec Wire Gauge (90° C Cu)	Maximum Over-current Rating*		
		Circuit A (Compressor & Fan)			Circuit B (Blower & Heater)			Circuit C (Heater Only)															
Q45D-X36K		0	10	10	10	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		5	6	6	8	60	23.6	10	10	10	40	29.3	10	10	10	30	-	-	-	-	-	-	-
		8	4	4	6	70	23.6	10	10	10	40	43.7	6	8	8	45	-	-	-	-	-	-	-
		10	3	4	4	80	23.6	10	10	10	40	54.3	6	6	8	60	-	-	-	-	-	-	-
		15	1	2	3	110	23.6	10	10	10	40	54.3	6	6	8	60	25	10	10	10	10	10	30
		20	0	1	2	150	23.6	10	10	10	40	54.3	6	6	8	60	50	6	8	8	8	8	60
Q45D-X48K		0	8	8	8	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		5	4	6	6	80	30.7	8	8	8	50	31.2	8	8	8	35	-	-	-	-	-	-	-
		8	3	4	4	90	30.7	8	8	8	50	45.6	6	8	8	50	-	-	-	-	-	-	-
		10	2	3	4	100	30.7	8	8	8	50	56.8	4	6	6	60	-	-	-	-	-	-	-
		15	0	2	2	125	30.7	8	8	8	50	56.8	4	6	6	60	25	10	10	10	10	10	30
		20	0	0	1	150	30.7	8	8	8	50	56.8	4	6	6	60	50	6	8	8	8	8	60
Q45D-X60K		0	6	8	8	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5	4	4	6	90	36.5	8	8	8	60	31.8	8	8	8	35	-	-	-	-	-	-	-
		8	3	4	4	100	36.5	8	8	8	60	46.4	6	8	8	50	-	-	-	-	-	-	-
		10	2	3	4	110	36.5	8	8	8	60	56.8	4	6	8	60	-	-	-	-	-	-	-
		15	0	1	2	125	36.5	8	8	8	60	56.8	4	6	6	60	25	10	10	10	10	10	30
		20	0	0	1	150	36.5	8	8	8	60	56.8	4	6	6	60	50	6	8	8	8	8	60

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

BLOWER PERFORMANCE

Model Number Q4SD	Speed	External Static Pressure Drop-inches water column						
		0.1	0.2	0.3	0.4	0.5	0.6	
036	* *	Tap T1	1150	1050	1000	950	850	780
	*	Tap T2	1230	1190	1120	1080	1000	950
		Tap T3	1400	1350	1200	1150	1080	1030
		Tap T4	1600	1500	1400	1300	1200	1050
		Tap T5	1700	1650	1600	1565	1530	1480
048	*	Tap T1	1515	1450	1380	1350	1300	1250
	* *	Tap T2	1580	1520	1460	1400	1360	1300
		Tap T3	1740	1690	1650	1600	1540	1500
		Tap T4	1960	1910	1840	1820	1780	1740
		Tap T5	2090	2050	2010	1975	1940	1900
060	* *	Tap T1	1515	1450	1380	1350	1300	1250
		Tap T2	1580	1520	1460	1400	1360	1300
	*	Tap T3	1740	1690	1650	1600	1540	1500
		Tap T4	1960	1910	1840	1820	1780	1740
		Tap T5	2090	2050	2010	1975	1940	1900

* Denotes factory set cooling and heat pump speed

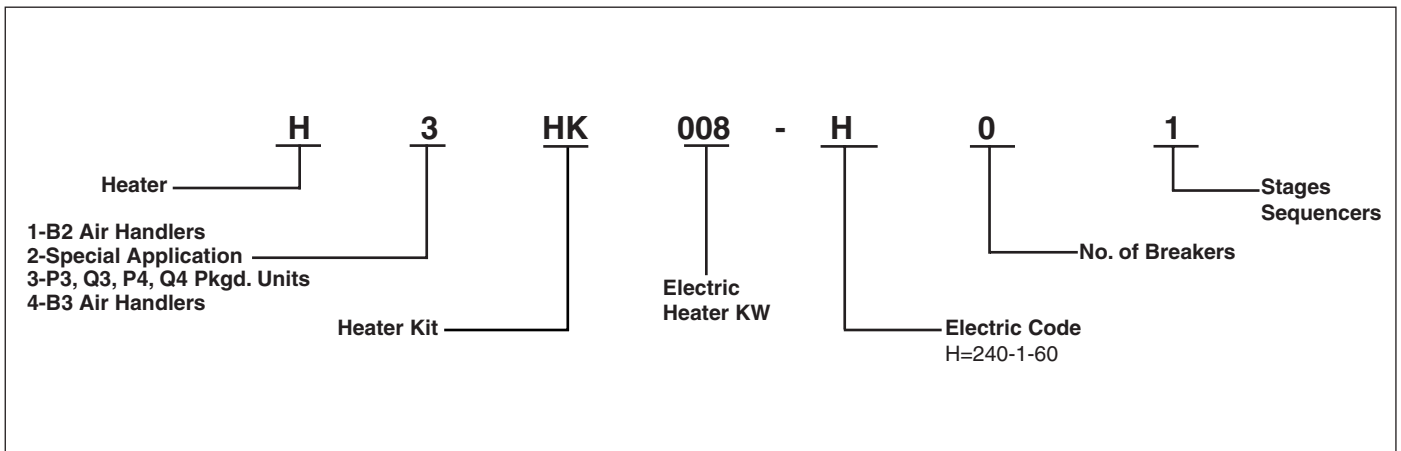
** Denotes factory set electric heating speed

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
	917166	917167	917168	917169	917170	917172	917173
Q4S(-)036K	X	X	X(2)	X(2)	NA	X	NA
Q4S(-)048K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)
Q4S(-)060K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)

NA = Not Applicable.
 () = Number of internal circuit breaker kits required.

MODEL IDENTIFICATION CODE



Q4SD ACCESSORIES

Description	Part Number
Roof Curb (8")	547830
Roof Curb (14")	547831
Roof Curb (18")	547850
Roof Curb (24")	547851
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
Circuit Breaker, disconnect 3 phase	913740
Manual Fresh Air Damper	547832
Motorized Fresh Air Damper	547840
Economizer, downflow w/filter (does not require filter kit) modulating	547833
Economizer, horizontal modulating	547841
Economizer, horizontal 3-position w/filter	547896
Economizer, downflow 3-position w/filter	547897
Power Exhaust for use with downflow economizer (special order)	547842
Power Exhaust for use with horizontal economizer (special order)	547843
HOOD TYPE HAIL GUARD 30" X 60" P4SA036, R4GA024, 030, 036, 042, R4GC024	547844
HOOD TYPE HAIL GUARD 30" X 76" P4SA048, P4SC036, Q4SA036	547845
HOOD TYPE HAIL GUARD 34" X 76" P4SA060, P4SC048, 060, Q4SA048, 060, Q4SC036, R4GA048, 060, R4GC030, 036, 042	547846
HOOD TYPE HAIL GUARD 38" X 76" Q4SC048, 060, R4GC048, 060	547847
CO2 sensors (special order)	547848
DUCT SMOKE DETECTOR PHOTO ELEC	547892
MULTI SIGNAL CONTROL	547893
SAMPLING TUBE ST3	547894
SAMPLING TUBE ST5	547895
Filter Rack, All Downflow Applications (not required with economizer)	547885
Filter Kit (not required with economizer) R4GA 024, R4GC 024, P4SA 036	547886
Filter Kit (not required with economizer) for Horizontal Applications P4SA 048, P4SC 036, Q4SA 036	547887
Filter Kit (not required with economizer) for Horizontal Applications R4GA 048 - 060, R4GC 030 - 042, P4SA 060, P4SC 048 - 060, Q4SA 048 - 060, Q4SC 036	547888
Filter Kit (not required with economizer) R4GC 048 - 060, Q4SC 048 - 060	547889
Universal Hard Start Kit	912933
Low Pressure Switch Kit	913551
High Pressure Switch Kit	913550
Low Ambient Kit	913549A
P-Trap Kit	913810
U.S. LP Gas Conversion Kit (0 ft to 10,000 ft above sea level)	904090A
Canadian LP Gas Conversion Kit (0 to 4,500 ft above sea level)	904091A
Outdoor Thermostat Kit	913852



CERTIFICATION APPLIES
ONLY WHEN THE
COMPLETE SYSTEM
IS LISTED WITH ARI

