

VVCB

Multi-Position, Variable-Speed, ECM-Based Air Handler with Internal TXV ComfortBridge™ Compatible 2 to 5 Tons

N	EXG	EN
AIR CO	NDITIONING • HEATING	• PLUMBING

Air Handler Nomenclature2
Heater Kit Nomenclature2
Product Specifications 3
Dimensions
Airflow Data
Heat Kit Data7
Wiring Diagram16
Accessories 18

Standard Features

- High-efficiency two-stage scroll compressor
- High-density foam compressor sound blanket
- Integrated communicating ComfortBridge™ Technology
- Commissioning and diagnostics via indoor board Bluetooth with the CoolCloud™ phone and tablet application
- Expanded ComfortAlert™ diagnostics built in
- Simple low-voltage wiring to outdoor unit in communicating mode
- Diagnostic indicator lights and storage of six fault codes
- Color-coded terminal strip for non-communicating set-up
- SmartShift® technology with short-cycle protection to ensure quiet, reliable defrost
- Factory-installed bi-flow liquid-line filter drier
- Factory-installed transformer
- Factory-installed suction-line accumulator
- Factory-installed compressor crankcase heater
- Factory-installed high-capacity muffler
- Factory-installed coil and ambient temperature sensors
- Fully charged for 15' of tubing length
- Quiet ECM condenser fan motor
- AHRI Certified; ETL Listed

-PROTECT

* Complete warranty details available on www.nexgenairandheat.com. To receive the Lifetime Unit Replacement Warranty (good for as long as you own your home) and 10-Year Parts Lifetime Warranty, in order to qualify for lifetime replacement warranty you need to be part of the X Protection Family. Membership must be current and up-to-date.

Cabinet Features

- Heavy-gauge galvanized steel enclosure with sound-control top
- Baked-on powder-paint finish
- Wire fan discharge grille
- Steel louver coil guard
- Rust-resistant coated screws
- Compact footprint
- Top and side maintenance access
- Single panel access to controls with space provided for fieldinstalled accessories
- Sweat connection service valves with easy access to gauge ports
- When properly anchored, meets the 2010 Florida Building Code unit integrity requirements for hurricane-type winds

(Anchor bracket kits available.)



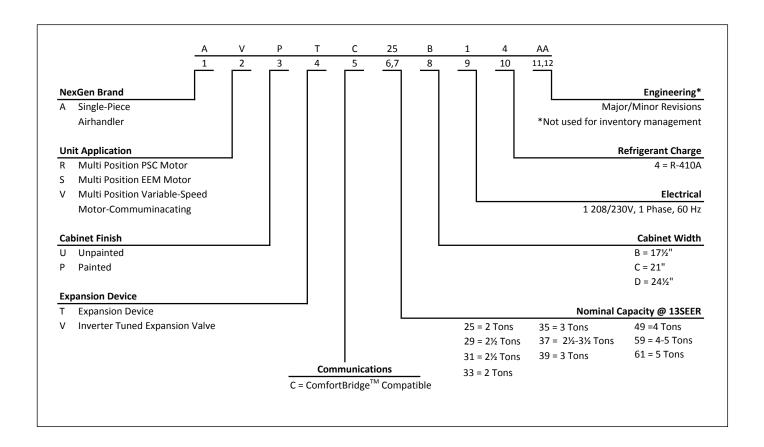


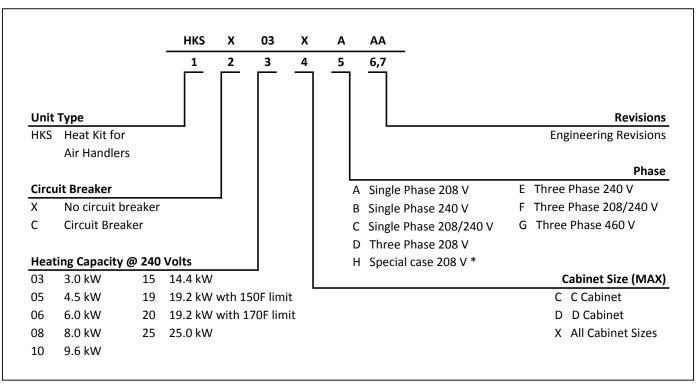












*Refer S&R Plate

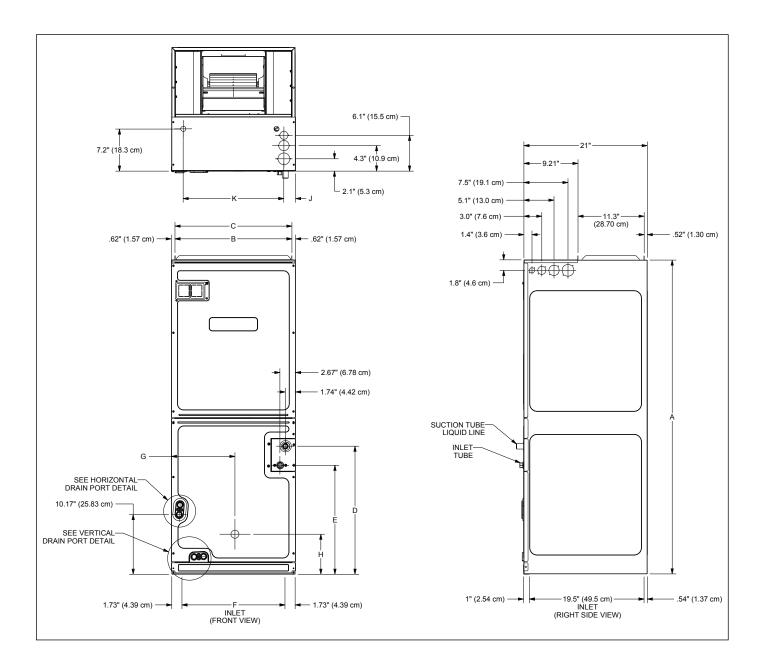
	VVCB 25B14B*	VVCB 29B14B*	VVCB 31C14B*	VVCB 33C14B*	VVCB 35B14B*	VVCB 37B14B*	VVCB 37C14B*	VVCB 37D14B*
Nominal Ratings								
Cooling (BTU/h)	24,000	30,000	30,000	24,000	28,000	36,000	36,000	36,000
CFM (High range)	1085/650	1085/610	1315/870	1090/685	1020/685	1085/610	1315/870	1375/865
BLOWER								
Diameter	9½"	9½"	10%"	10%"	9½"	9½"	10%"	10%"
Width	6"	6"	8"	8"	6"	6"	8"	10%"
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
SERVICE VALVE								
Liquid	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction	3/4"	7 ₈ "	7 ₈ "	7 ₈ "	3/4"	7 ₈ "	7 ₈ "	7 ₈ "
ELECTRICAL DATA								
Voltage	208/240	208/240	208/240	208/240	208/240	208/240	208/240	208/240
Min Circuit Ampacity	4.9/4.9	6.5/6.5	6.5/6.5	4.9/4.9	4.9/4.9	6.5/6.5	6.5/6.5	6.5/6.5
Max. Overcurrent Device (amps)	15/15	15/15	15/15	15/15	15/15	15/15	15/15	15/15
Minimum VAC	197	197	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253	253	253
BLOWER MOTOR								
FLA	3.9	5.2	5.2	3.9	3.9	5.2	5.2	5.2
HP	1/2	3/4	3/4	1/2	1/2	3/4	3/4	3/4
SHIP WEIGHT (LBS)	116	129	144	118	116	129	144	155

Note: Minimum Circuit Ampacity (MCA) and Maximum Overcurrent Protection (MOP) for blower without supplemental heat installed. Refer to unit nameplate and/or Heat Kit Data for specification with approved accessory heaters installed

	VVCB 39C14B*	VVCB 49C14B*	VVCB 49D14B*	VVCB 59C14B*	VVCB 59D14B*	VVCB 61D14B*
Nominal Ratings						
Cooling (BTU/h)	36,000	48,000	42,000	48,000	48,000	60,000
CFM (High range)	1315/965	1420/1040	1530/1195	1595/875	1990/1445	2025/1630
BLOWER						
Diameter	10%"	10%"	10%"	10%"	1115/16"	11 ¹⁵ / ₁₆ "
Width	8"	8"	10%"	8"	10%"	10%"
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
SERVICE VALVE						
Liquid	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction	7∕8"	7/8"	7 ₈ "	7∕8"	7 ₈ "	7⁄8"
ELECTRICAL DATA						
Voltage	208/240	208/240	208/240	208/240	208/240	208/240
Min Circuit Ampacity	6.5/6.5	6.5/6.5	6.5/6.5	8.6/8.6	8.6/8.6	8.6/8.6
Max. Overcurrent Device (amps)	15/15	15/15	15/15	15/15	15/15	15/15
Minimum VAC	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253
BLOWER MOTOR	·					
FLA	5.2	5.2	5.2	6.9	6.9	6.9
НР	3/4	3/4	3/4	1	1	1
SHIP WEIGHT (LBS)	118	125	167	144	155	167

Note: Minimum Circuit Ampacity (MCA) and Maximum Overcurrent Protection (MOP) for blower without supplemental heat installed.

Refer to unit nameplate and/or Heat Kit Data for specification with approved accessory heaters installed



Model	Α	В	С	D	E	F	G	Н
VVCB25B14*	45	16%	17½	15¼	12	14%	9%	12%
VVCB29B14*	537/16	16¾	17½	2311/16	20½	14%	9%	7%
VVCB31C14*	53½	19%	21	2113/16	185%	1711/16	1013/16	6 ¹³ / ₁₆
VVCB33C14*	49	19%	21	179/16	14¾	1711/16	109/16	12½
VVCB35B14*	45	16¾	17½	15¼	12	14%	91/8	125/8
VVCB37B14*	537/16	16¾	17½	2311/16	20½	141/6	91/8	75/8
VVCB37C14*	53½	19%	21	2113/16	18%	1711/16	1013/16	6 ¹³ / ₁₆
VVCB37D14*	537/16	235/16	24½	21½	185/16	21¾ ₁₆	125/8	6%
VVCB39C14*	49	19%	21	179/16	14¾	1711/16	109/16	12½
VVCB49C14*	49	19%	21	179/16	14¾	1711/16	109/16	12½
VVCB49D14*	58	235/16	24½	26%	22%	213/16	125/8	25%
VVCB59C14*	537/16	19%	21	2113/16	18%	1711/16	1013/16	6 ¹³ / ₁₆
VVCB59D14*	537/16	235/16	24½	21½	185/16	213/16	125/8	6%
VVCB61D14*	58	235/16	24½	26%	22%	21¾ ₁₆	125/8	25%

4

MODEL	Spee	D TAP	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
	А	Low	460	445	445	425	410	400	400	400	395
	В	Low	620	610	600	605	600	590	585	575	565
<u> </u>	C	Low	700	695	690	690	690	690	675	665	660
14B*	D	Low	750	750	745	745	740	730	720	710	700
VVCB25B14B*	A	High	670	660	650	650	655	645	640	635	625
VCB	В	High	870	865	855	850	840	840	840	830	835
>	С	High	1000	990	980	975	965	965	955	955	945
	D	High	1105	1095	1085	1075	1065	1055	1050	1040	1030
	A	Low	390	385	375	360	350	335	325	315	305
	В	Low	545	540	545	540	540	540	535	530	525
	С	Low	610	620	630	635	630	625	620	625	625
14B*	D	Low	720	735	740	740	735	730	725	715	705
VVCB29B14B* VVCB37B14B*	A	High	615	620	610	605	610	615	615	620	625
VCB	В	High	790	795	795	795	795	790	800	795	785
>>	С	High	925	930	930	925	925	920	915	910	905
	D	High	1085	1085	1085	1080	1080	1075	1070	1065	1060
		Low	610	600	590	590	600	605	610	610	610
	A B	Low	710	710	705	705	695	690	685	675	665
	С	Low	845	845	845	825	815	810	800	805	795
VVCB31C14B* VVCB37C14B*	D	Low	915	910	910	900	850	840	830	820	795 825
31C	A	High	885	880	880	860	850	840	830	820	830
VCB	В	High	1055	1055	1055	1040	1030	1015	1005	995	985
>>	С	High	1275	1270	1265	1260	1250	1240	1230	1215	1205
	D	High	1365	1360	1360	1330	1300	1240	1230	1213	1255
	A	Low	500	480	460	445	430	415	400	380	365
	В	Low	580	565	545	535	525	515	505	495	485
*_	C	Low	710	700	685	675	670	665	655	645	640
-4AB	D	Low	725	750	755	760	755	745	735	725	715
WCB33C14AB*	A	High	710	700	685	685	685	680	670	660	645
VCB	В	High	765	780	785	785	785	775	770	760	745
>	С	High	950	960	970	970	970	960	955	945	935
	D	High	1090	1090	1090	1095	1090	1085	1080	1075	1065
	A	Low	395	390	395	390	385	380	380	380	380
	В	Low	580	580	590	580	575	580	575	575	575
*	C	Low	670	670	680	690	680	670	660	660	665
VVCB35B14B*	D	Low	715	705	710	720	715	705	690	685	680
335B	A	High	645	630	645	645	635	630	630	635	635
NCE	В	High	900	875	870	870	870	870	865	855	845
	С	High	1030	1015	1005	995	990	985	990	990	980
	D	High	1075	1060	1045	1035	1030	1025	1020	1020	1015
	A	Low	605	605	605	575	560	545	525	510	500
	В	Low	730	725	725	700	700	695	680	660	645
*	С	Low	820	820	820	800	760	750	740	720	700
14A	D	Low	870	885	940	885	875	865	850	835	835
VVCB37D14AB*	A	High	910	905	900	870	870	860	855	845	845
VCB	В	High	1085	1080	1080	1060	1060	1055	1045	1035	1020
>	C	High	1230	1225	1225	1205	1205	1200	1190	1185	1180
	D	High	1405	1405	1405	1370	1365	1355	1345	1335	1330
		1			55						

Note: When applying a humidistat (normally closed), refer to the installation and operating instructions. The humidistat can adjust the cooling airflow to 85%.

MODEL	SPEE	р Тар	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
	А	Low	715	695	680	685	685	680	675	665	650
	В	Low	755	770	780	780	780	780	770	765	755
*	С	Low	780	790	795	805	800	800	795	805	795
)C14	D	Low	875	885	890	890	890	890	885	880	875
VVCBC39C14B*	А	High	960	960	965	970	965	965	960	955	950
MC WC	В	High	1120	1115	1115	1115	1120	1115	1115	1110	1105
	С	High	1180	1180	1175	1175	1175	1175	1170	1165	1160
	D	High	1325	1320	1315	1315	1310	1310	1310	1305	1300
	А	Low	705	710	725	735	740	740	740	735	730
	В	Low	730	745	760	770	775	775	775	770	765
* *	С	Low	850	865	870	875	880	880	875	870	865
VVCB49C14B*	D	Low	950	955	960	965	965	965	965	960	955
.B49	А	High	1030	1040	1040	1045	1045	1045	1045	1040	1035
X	В	High	1090	1095	1095	1095	1095	1095	1095	1090	1085
	С	High	1290	1290	1280	1285	1280	1280	1275	1275	1270
	D	High	1425	1425	1420	1420	1415	1410	1410	1405	1400
	А	Low	795	815	820	820	810	800	785	785	770
	В	Low	870	890	895	895	890	875	865	850	850
*	С	Low	985	990	995	995	990	980	970	955	940
VVCB49D14B*	D	Low	1040	1055	1055	1055	1045	1035	1025	1020	1005
B49	А	High	1195	1195	1195	1200	1195	1185	1175	1165	1155
ĕ	В	High	1325	1320	1320	1315	1315	1305	1295	1285	1275
	С	High	1460	1460	1455	1455	1455	1450	1440	1430	1420
	D	High	1520	1530	1530	1530	1530	1525	1515	1510	1495
	А	Low	635	620	610	600	600	600	600	600	600
	В	Low	790	805	810	810	805	805	795	810	800
* •	С	Low	930	940	940	935	930	925	920	915	905
VVCB59C14B*	D	Low	1065	1065	1070	1065	1060	1050	1045	1035	1030
CB59	А	High	870	880	875	875	870	865	860	860	845
>	В	High	1230	1230	1225	1220	1210	1205	1200	1190	1180
	С	High	1420	1410	1410	1405	1395	1385	1380	1380	1370
	D	High	1615	1600	1595	1595	1585	1580	1570	1565	1555
	А	Low	1030	1035	1040	1040	1030	1025	1015	995	970
	В	Low	1260	1260	1260	1260	1260	1250	1245	1235	1225
14B*	С	Low	1330	1335	1330	1330	1325	1320	1315	1305	1295
29D.	D	Low	1395	1395	1395	1390	1390	1385	1375	1365	1355
AVPTC59D14B*	A	High	1450	1445	1445	1435	1430	1425	1420	1410	1395
₹	В	High	1795	1790	1790	1785	1775	1765	1760	1750	1745
	C	High	1890	1890	1890	1880	1870	1865	1855	1850	1840
	D	High	1995	1995	1990	1985	1985	1975	1965	1955	1945
	A	Low	1080	1085	1080	1085	1080	1075	1070	1065	1055
*	В	Low	1200	1200	1210	1210	1210	1210	1205	1205	1200
14B	С	Low	1290	1290	1280	1275	1280	1280	1270	1265	1265
AVPTC61D14B*	D	Low	1360	1355	1350	1355	1350	1345	1340	1340	1330
/PTC	Α _	High	1630	1630	1630	1625	1620	1615	1610	1600	1590
€	В	High	1820	1820	1820	1815	1805	1795	1785	1780	1770
	С	High	1935	1930	1925	1920	1905	1900	1890	1875	1865
	D	High	2035	2030	2025	2020	2005	1995	1985	1960	1955

Note: When applying a humidistat (normally closed), refer to the installation and operating instructions. The humidistat can adjust the cooling airflow to 85%.

HTR KW	9	10	11	VVCB 25B14	VVCB 29B14	VVCB 31C14	VVCB 33C14	VVCB 35B14	VVCB 37B14	VVCB 37C14	VVCB 37D14	VVCB 39C14
3	ON	ON	ON	550	550	600	600	550	550			
5	ON	ON	OFF	650	650	850	700	660	650	850	1240	850
6	ON	OFF	ON	700	700	900	750	700	700	900	1240	900
8	ON	OFF	OFF	800	800	1000	875	800	800	1000	1240	1000
10	OFF	ON	ON	850	875	1170	950	875	875	1170	1240	1170
15	OFF	ON	OFF	875	875	1345	950	875	1050	1345	1520	1345
19*	OFF	OFF	ON			1345				1345		1345
20											1520	
21 or 25*	OFF	OFF	OFF									

Note: Airflow data shown applies to the electric heat only in either legacy mode or communicating mode operation

- --- indicates Not Rated
- * Within thermostat user menu, CTKO* communicating thermostat will display 20kW for OFF- OFF- ON dipswitch selection, 21kW for OFF-OFF dipswitch selection.
- † For match up with a 2 ton outdoor unit: Heater kit application shall not exceed 10 kW. Airflow for 5 kW up to 10 kW heater kits shall be set to 850 cfm speed tap of ON-ON-ON.
- †† For match up with a 3 ton outdoor unit: Heater kit application shall not exceed 15 kW.

 Airflow for 5 kW up to 15 kW heater kits shall be set to 1300 cfm speed tap of ON-OFF-ON.
- ††† For match up with a 3.5 ton outdoor unit: Heater kit application shall not exceed 20 kW. Airflow for 5 kW up to 20 kW heater kits shall be set to 1500 cfm speed tap of ON-OFF-OFF
- ** 3 kW heater kit is not applicable for this indoor application.

HTR KW	9	10	11	VVCB 49C14	VVCB 49D14††	VVCB 59C14	VVCB C59D14	VVCB 61D14 †††
3	ON	ON	ON					
5	ON	ON	OFF	1170	1250	1170	1240	1250
6	ON	OFF	ON	1170	1300	1170	1240	1300
8	ON	OFF	OFF	1170	1500	1170	1240	1500
10	OFF	ON	ON	1170	1550	1170	1240	1550
15	OFF	ON	OFF	1345	1720	1345	1520	1780
19*	OFF	OFF	ON	1345		1345		
20							1520	1850
21 or 25*	OFF	OFF	OFF					1850

Note: Airflow data shown applies to the electric heat only in either legacy mode or communicating mode operation

- --- indicates Not Rated
- * Within thermostat user menu, CTKO* communicating thermostat will display 20kW for OFF- OFF- ON dipswitch selection, 21kW for OFF-OFF dipswitch selection.
- † For match up with a 2 ton outdoor unit: Heater kit application shall not exceed 10 kW. Airflow for 5 kW up to 10 kW heater kits shall be set to 850 cfm speed tap of ON-ON-ON.
- †† For match up with a 3 ton outdoor unit: Heater kit application shall not exceed 15 kW.

 Airflow for 5 kW up to 15 kW heater kits shall be set to 1300 cfm speed tap of ON-OFF-ON.
- +++ For match up with a 3.5 ton outdoor unit: Heater kit application shall not exceed 20 kW. Airflow for 5 kW up to 20 kW heater kits shall be set to 1500 cfm speed tap of ON-OFF-OFF
- ** 3 kW heater kit is not applicable for this indoor application.

			CIRCUIT 1			CIRCUIT 2		SINGLE-POINT KIT		
HEATER KIT MODEL		HEATER	MCA ¹	MOP ²	HEATER AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²	
VVCB25B14B*		AMPS 0/0	4.9/4.9	15/15						
HKSX03XC- 208 V		10.8	18.4	20						
HKSX05XC- 208 V		17.3	27	30						
HKSX06XC- 208 V	No Breaker	21.7	32	35						
HKSX08XC- 208 V		28.9	41	45						
HKSX10XC- 208 V		34.7	48	50						
HKSC05XC- 208 V		17.3	27	30						
HKSC08XC- 208 V	Duralian	28.9	41	45						
HKSC10XC- 208 V	Breaker	34.7	48	50						
HKSC15XA- 208 V		34.7	48	50	17.3	21.7	25	69.9	70	
HKSX03XC- 240 V		12.5	21	25						
HKSX05XC- 240 V		20	29.9	30						
HKSX06XC- 240 V	No Breaker	25	36.1	40						
HKSX08XC- 240 V		33.3	46.5	50						
HKSX10XC- 240 V		40	54.9	60						
HKSC05XC- 240 V		20	29.9	30						
HKSC08XC- 240 V	Breaker	33.3	46.5	50						
HKSC10XC- 240 V		40	54.9	60						
HKSC15XB- 240 V		40	54.9	60	20	25	25	79.9	80	
VVCB29B14B*		0/0	6.5/6.5	15/15						
HKSX03XC- 208 V		10.8	20	20						
HKSX05XC- 208 V		17.3	28.2	30						
HKSX06XC- 208 V	No Breaker	21.7	33.6	35						
HKSX08XC- 208 V		28.9	42.6	45						
HKSX10XC- 208 V		34.7	49.8	50						
HKSC05XC- 208 V		17.3	28.2	30						
HKSC08XC- 208 V	Breaker	28.9	42.6	45						
HKSC10XC- 208 V		34.7	49.8	50	17.2	21.7	25	71 5		
HKSC15XA- 208 V		34.7	49.8	50	17.3	21.7	25	71.5	80	
HKSX03XC- 240 V HKSX05XC- 240 V		12.5 20	22.1 32	25 35						
HKSX06XC- 240 V	No Breaker	25	38	40						
HKSX08XC- 240 V	NO BICARCI	33.3	48	50						
HKSX10XC- 240 V		40	57	60						
HKSC05XC- 240 V		20	32	35						
HKSC08XC- 240 V		33.3	48	50						
HKSC10XC- 240 V	Breaker	40	57	60						
HKSC15XB- 240 V		40	57	60	20	25	25	81.5	90	
VVCB31C14B*		0/0	6.5/6.5	15/15						
HKSX03XC- 208 V		10.8	20	20						
HKSX05XC- 208 V		17.3	28.2	30						
HKSX06XC- 208 V	No Breaker	21.7	33.6	35						
HKSX08XC- 208 V		28.9	42.6	45						
HKSX10XC- 208 V		34.7	49.8	50						

			CIRCUIT 1			CIRCUIT 2		Single-F	OINT KIT
HEATER KIT MODEL		HEATER AMPS	MCA ¹	MOP ²	HEATER AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
HKSC05XC- 208 V		17.3	28.2	30					
HKSC08XC- 208 V		28.9	42.6	45					
HKSC10XC- 208 V		34.7	49.8	50					
HKSC15XA- 208 V	Breaker	34.7	49.8	50	17.3	21.7	25	71.5	80
HKSC19CA- 208 V		34.7	49.8	50	34.7	43.3	45	93.2	100
HKSC15XF- 208 V ^		0	6.5	15	30	37.5	40		
HKSX03XC- 240 V		12.5	22.1	25					
HKSX05XC- 240 V		20	32	35					
HKSX06XC- 240 V	No Breaker	25	38	40					
HKSX08XC- 240 V		33.3	48	50					
HKSX10XC- 240 V		40	57	60					
HKSC05XC- 240 V		20	32	35					
HKSC08XC- 240 V		33.3	48	50					
HKSC10XC- 240 V		40	57	60					
HKSC15XB- 240 V	Breaker	40	56.5	60	20	25	25	81.5	90
HKSC19CB- 240 V		40	56.5	60	40	50	50	107	110
HKSC15XF- 240 V ^		0	6.5	15	34.6	43	45		
VVCB33C14B*		0.0/0.0	4.9/4.9	15/15					
HKSX03XC- 208 V		10.8	18.4	20					
HKSX05XC- 208 V		17.3	27	30					
HKSX06XC- 208 V	No Breaker	21.7	32	35					
HKSX08XC- 208 V		28.9	41	45					
HKSX10XC- 208 V		34.7	48	50					
HKSC05XC- 208 V		17.3	27	30					
HKSC08XC- 208 V		21.7	32	35					
HKSC10XC- 208 V	Breaker	28.9	41	45					
HKSC15XA- 208 V		34.7	48	50	17.3	21.7	25	69.9	70
HKSX03XC- 240 V		12.5	21	25					
HKSX05XC- 240 V		20	29.9	30					
HKSX06XC- 240 V	No Breaker	25	36.1	40					
HKSX08XC- 240 V		33.3	46.5	50					
HKSX10XC- 240 V		40	54.9	60					
HKSC05XC- 240 V		20	29.9	30					
HKSC08XC- 240 V		33.3	46.5	50					
HKSC10XC- 240 V	Breaker	40	54.9	60					
HKSC15XB- 240 V		40	54.9	60	20	25	25	79.9	80
VVCB35C14B*		0/0	4.9/4.9	15/15					
HKSX03XC- 208 V		10.8	18.4	20					
HKSX05XC- 208 V		17.3	27	30					
HKSX06XC- 208 V	No Breaker	21.7	32	35					
HKSX08XC- 208 V		28.9	41	45					
HKSX10XC- 208 V		34.7	48	50					

			CIRCUIT 1			CIRCUIT 2		SINGLE-POINT KIT		
HEATER KIT MODEL		HEATER	MCA ¹	MOP ²	HEATER AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²	
		AMPS								
HKSC05XC- 208 V		17.3	27	30						
HKSC08XC- 208 V	Breaker	28.9	41	45						
HKSC10XC- 208 V		34.7	48	50	17.2	21.7	25		70	
HKSC15XA- 208 V		34.7	48	50	17.3	21.7	25	69.9	70	
HKSX03XC- 240 V		12.5	21	25						
HKSX05XC- 240 V	No Drooken	20	29.9	30						
HKSX06XC- 240 V	No Breaker	25	36.1	40						
HKSX08XC- 240 V		33.3	46.5	50						
HKSX10XC- 240 V		40	54.9	60						
HKSC05XC- 240 V		20	29.9	30						
HKSC08XC- 240 V	Breaker	33.3	46.5	50						
HKSC10XC- 240 V		40	54.9	60		25	25	70.0		
HKSC15XB- 240 V	-	40	54.9	60	20	25	25	79.9	80	
VVCB37B14B*		0/0	6.5/6.5	15/15						
HKSX03XC- 208 V		10.8	20	20						
HKSX05XC- 208 V	N. D	17.3	28.2	30						
HKSX06XC- 208 V	No Breaker	21.7	33.6	35						
HKSX08XC- 208 V		28.9	42.6	45						
HKSX10XC- 208 V		34.7	49.8	50						
HKSC05XC- 208 V		17.3	28.2	30						
HKSC08XC- 208 V	Breaker	28.9	42.6	45						
HKSC10XC- 208 V		34.7	49.8	50						
HKSC15XA- 208 V		34.7	49.8	50	17.3	21.7	25	71.5	80	
HKSX03XC- 240 V		12.5	22.1	25						
HKSX05XC- 240 V		20	32	35						
HKSX06XC- 240 V	No Breaker	25	38	40						
HKSX08XC- 240 V		33.3	48	50						
HKSX10XC- 240 V		40	57	60						
HKSC05XC- 240 V		20	32	35						
HKSC08XC- 240 V	Breaker	33.3	48	50						
HKSC10XC- 240 V		40	57	60						
HKSC15XB- 240 V	<u> </u>	40	57	60	20	25	25	81.5	90	
VVCB37C14B*		0/0	6.5/6.5	15/15						
HKSX03XC- 208 V		47.0								
HKSX05XC- 208 V		17.3	28.2	30						
HKSX06XC- 208 V	No Breaker	21.7	33.6	35						
HKSX08XC- 208 V		28.9	42.6	45						
HKSX10XC- 208 V		34.7	49.8	50						
HKSC05XC- 208 V		17.3	28.2	30						
HKSC08XC- 208 V		28.9	42.6	45						
HKSC10XC- 208 V	Breaker	34.7	49.8	50						
HKSC15XA- 208 V		34.7	49.8	50	17.3	21.7	25	71.5	80	
HKSC19CA- 208 V		34.7	49.8	50	34.7	43.3	45	93.2	100	
HKSC15XF- 208 V ^		0	6.5	15	30	37.5	40			

		CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
HEATER KIT MODEL		HEATER AMPS	MCA ¹	MOP ²	HEATER AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
HKSX03XC- 240 V									
HKSX05XC- 240 V		20	32	35					
HKSX06XC- 240 V	No Breaker	25	38	40					
HKSX08XC- 240 V		33.3	48	50					
HKSX10XC- 240 V		40	57	60					
HKSC05XC- 240 V		20	32	35					
HKSC08XC- 240 V		33.3	48	50					
HKSC10XC- 240 V		40	57	60					
HKSC15XB- 240 V	Breaker	40	57	60	20	25	25	81.5	90
HKSC19CB- 240 V		40	57	60	40	50	50	106.5	110
HKSC15XF- 240 V ^		0	6.5	15	34.6	43	45		
VVCB37D14B*	i	0/0	6.5/6.5	15/15					
HKSX03XC- 208 V									
HKSX05XC- 208 V		17.3	28.2	30					
HKSX06XC- 208 V	No Breaker	21.7	33.6	35					
HKSX08XC- 208 V		28.9	42.6	45					
HKSX10XC- 208 V		34.7	49.8	50					
HKSC05XC- 208 V		17.3	28.2	30					
HKSC08XC- 208 V		28.9	42.6	45					
HKSC10XC- 208 V		34.7	49.8	50					
HKSC15XA- 208 V	Breaker	34.7	49.8	50	17.3	21.7	25	71.5	80
HKSC20DA- 208 V		34.7	49.8	50	34.7	43.3	45	93.2	100
HKSC15XF- 208 V ^		0	6.5	15	30	37.5	40		
HKSC20XF- 208 V ^		0	6.5	15	37.5	47	50		
HKSX03XC- 240 V									
HKSX05XC- 240 V		20	32	35					
HKSX06XC- 240 V	No Breaker	25	38	40					
HKSX08XC- 240 V		33.3	48	50					
HKSX10XC- 240 V		40	57	60					
HKSC05XC- 240 V		20	32	35					
HKSC08XC- 240 V		33.3	48	50					
HKSC10XC- 240 V		40	57	60					
HKSC15XB- 240 V	Breaker	40	57	60	20	25	25	81.5	90
HKSC20DB- 240 V		40	57	60	40	50	50	106.5	110
HKSC15XF- 240 V ^		0	6.5	15	34.6	43	45		
HKSC20XF- 240 V ^		0	6.5	15	43	54	60		
VVCB39C14B*		0.0/0.0	6.5/6.5	15/15					
HKSX03XC- 208 V									
HKSX05XC- 208 V		17.3	28.2	30					
HKSX06XC- 208 V	No Breaker	21.7	33.6	35					
HKSX08XC- 208 V		28.9	42.6	45					
HKSX10XC- 208 V		34.7	49.8	50					

		CIRCUIT 1		CIRCUIT 2			SINGLE-POINT KIT		
HEATER KIT MODEL		HEATER AMPS	MCA ¹	MOP ²	HEATER AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
HKSC05XC- 208 V		17.3	28.2	30					
HKSC08XC- 208 V		28.9	42.6	45					
HKSC10XC- 208 V		34.7	49.8	50					
HKSC15XA- 208 V	Breaker	34.7	49.8	50	17.3	21.7	25	71.5	80
HKSC19CA- 208 V		34.7	49.8	50	34.7	43.3	45	93.2	100
HKSC15XF- 208 V ^		0	6.5	15	30	37.5	40		
HKSX03XC- 240 V									
HKSX05XC- 240 V		20	32	35					
HKSX06XC- 240 V	No Breaker	25	38	40					
HKSX08XC- 240 V		33.3	48	50					
HKSX10XC- 240 V		40	57	60					
HKSC05XC- 240 V		20	32	35					
HKSC08XC- 240 V		33.3	48	50					
HKSC10XC- 240 V		40	57	60					
HKSC15XB- 240 V	Breaker	40	57	60	20	25	25	81.5	90
HKSC19CB- 240 V		40	57	60	40	50	50	106.5	110
HKSC15XF- 240 V ^		0	6.5	15	34.6	43	45		
VVCB49C14B*	ĺ	0.0/0.0	6.5/6.5	15/15					
HKSX03XC- 208 V									
HKSX05XC- 208 V		17.3	28.2	30					
HKSX06XC- 208 V	No Breaker	21.7	33.6	35					
HKSX08XC- 208 V		28.9	42.6	45					
HKSX10XC- 208 V		34.7	49.8	50					
HKSC05XC- 208 V		17.3	28.2	30					
HKSC08XC- 208 V		28.9	42.6	45					
HKSC10XC- 208 V		34.7	49.8	50					
HKSC15XA- 208 V	Breaker	34.7	49.8	50	17.3	21.7	25	71.5	80
HKSC19CA- 208 V		34.7	49.8	50	34.7	43.3	45	93.2	100
HKSC15XF- 208 V ^		0	6.5	15	30	37.5	40		
HKSX03XC- 240 V									
HKSX05XC- 240 V		20	32	35					
HKSX06XC- 240 V	No Breaker	25	38	40					
HKSX08XC- 240 V		33.3	48	50					
HKSX10XC- 240 V		40	57	60					
HKSC05XC- 240 V		20	32	35					
HKSC08XC- 240 V		33.3	48	50					
HKSC10XC- 240 V		40	57	60					
HKSC15XB- 240 V	Breaker	40	57	60	20	25	25	81.5	90
HKSC19CB- 240 V		40	57	60	40	50	50	106.5	110
HKSC15XF- 240 V ^		0	6.5	15	34.6	43	45		

			CIRCUIT 1		CIRCUIT 2			SINGLE-POINT KIT	
HEATER KIT MODEL		HEATER AMPS	MCA ¹	MOP ²	HEATER AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
VVCB49D14B*		0/0	6.5/6.5	15/15					
HKSX03XC- 208 V									
HKSX05XC- 208 V		17.3	28.2	30					
HKSX06XC- 208 V	No Breaker	21.7	33.6	35					
HKSX08XC- 208 V		28.9	42.6	45					
HKSX10XC- 208 V		34.7	49.8	50					
HKSC05XC- 208 V		17.3	28.2	30					
HKSC08XC- 208 V		28.9	42.6	45					
HKSC10XC- 208 V		34.7	49.8	50					
HKSC15XA- 208 V		34.7	49.8	50	17.3	21.7	25	71.5	80
HKSC20DA- 208 V	Breaker								
HKSC15XF- 208 V ^									
HKSC20XF- 208 V ^									
HKSC25DA- 208 V									
HKSX03XC- 240 V									
HKSX05XC- 240 V		20	32	35					
HKSX06XC- 240 V	No Breaker	25	38	40					
HKSX08XC- 240 V		33.3	48	50					
HKSX10XC- 240 V		40	57	60					
HKSC05XC- 240 V		20	32	35					
HKSC08XC- 240 V		33.3	48	50					
HKSC10XC- 240 V		40	57	60					
HKSC15XB- 240 V		40	57	60	20	25	25	81.5	90
HKSC20DB- 240 V	Breaker								
HKSC15XF- 240 V ^									
HKSC20XF- 240 V ^									
HKSC25DB- 240 V									
VVCB59C14B*		0/0	8.6/8.6	15/15					
HKSX03XC- 208 V									
HKSX05XC- 208 V		17.3	30.3	35					
HKSX06XC- 208 V	No Breaker	21.7	36	40					
HKSX08XC- 208 V		28.9	45	45					
HKSX10XC- 208 V		34.7	52	60					
HKSC05XC- 208 V		17.3	30.3	35					
HKSC08XC- 208 V		28.9	45	45					
HKSC10XC- 208 V		34.7	52	60					
HKSC15XB 3- 208 V	Breaker	34.7	52	60	17.3	21.7	25	73.6	80
HKSC19CH- 208 V		34.7	52	60	34.7	43.3	45	95.3	100
HKSC15XF- 208 V ^		0	8.6	15	30	37.5	40		
HKSC20XF- 208 V ^									

		CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
HEATER KIT MODEL		HEATER AMPS	MCA ¹	MOP ²	HEATER AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
HKSX03XC- 240 V									
HKSX05XC- 240 V		20	34	35					
HKSX06XC- 240 V	No Breaker	25	39.9	40					
HKSX08XC- 240 V		33.3	50.3	60					
HKSX10XC- 240 V		40	58.6	60					
HKSC05XC- 240 V		20	34	35					
HKSC08XC- 240 V		33.3	50.3	60					
HKSC10XC- 240 V		40	58.6	60					
HKSC15XB- 240 V	Breaker	40	58.6	60	20	25	25	83.6	90
HKSC19CB- 240 V		40	58.6	60	40	50	50	108.6	110
HKSC15XF- 240 V ^		0	8.6	15	34.6	43	45		
HKSC20XF- 240 V ^									
VVCB59D14B*		0/0	8.6/8.6	15/15					
HKSX03XC- 208 V									
HKSX06XC- 208 V		21.7	36	40					
HKSX08XC- 208 V	No Breaker	28.9	45	45					
HKSX10XC- 208 V		34.7	52	60					
HKSC05XC- 208 V		17.3	30.3	35					
HKSC08XC- 208 V		28.9	45	45					
HKSC10XC- 208 V		34.7	52	60					
HKSC15XB 3- 208 V	Breaker	34.7	52	60	17.3	21.7	25	73.6	80
HKSC20DH- 208 V		34.7	52	60	34.7	43.3	45	95.3	100
HKSC15XF- 208 V ^		0	8.6	15	30	37.5	40		
HKSC20XF- 208 V ^		0	8.6	15	37.5	47	50		
HKSX03XC- 240 V									
HKSX05XC- 240 V		20	34	35					
HKSX06XC- 240 V	No Breaker	25	39.9	40					
HKSX08XC- 240 V		33.3	50.3	60					
HKSX10XC- 240 V		40	58.6	60					
HKSC05XC- 240 V		20	34	35					
HKSC08XC- 240 V		33.3	50.3	60					
HKSC10XC- 240 V		40	58.6	60					
HKSC15XB- 240 V	Breaker	40	58.6	60	20	25	25	83.6	90
HKSC20DB- 240 V		40	58.6	60	40	50	50	108.6	110
HKSC15XF- 240 V ^		0	8.6	15	34.6	43	45		
HKSC20XF- 240 V ^		0	8.6	15	43	54	60		
VVCB61D14B*		0/0	8.6/8.6	15/15					
HKSX03XC- 208 V									
HKSX05XC- 208 V		17.3	30.3	35					
HKSX06XC- 208 V	No Breaker	21.7	36	40					
HKSX08XC- 208 V		28.9	45	45					
HKSX10XC- 208 V		34.7	52	60					

		CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
HEATER KIT MODEL		HEATER AMPS	MCA ¹	MOP ²	HEATER AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
HKSC05XC- 208 V		17.3	30.3	35					
HKSC08XC- 208 V		28.9	45	45					
HKSC10XC- 208 V		34.7	52	60					
HKSC15XB ³ - 208 V	Breaker	34.7	52	60	17.3	21.7	25	73.6	80
HKSC20DH- 208 V	Бгеакег	34.7	52	60	34.7	43.3	45	95.3	100
HKSC15XF- 208 V ^		0	8.6	15	30	37.5	40		
HKSC20XF- 208 V ^		0	8.6	15	37.5	47	50		
HKSC25DA- 208 V		52	73.6	80	34.7	43.3	45	117	125
HKSX03XC- 240 V									
HKSX05XC- 240 V		20	34	35					
HKSX06XC- 240 V	No Breaker	25	39.9	40					
HKSX08XC- 240 V		33.3	50.3	60					
HKSX10XC- 240 V		40	58.6	60					
HKSC05XC- 240 V		20	34	35					
HKSC08XC- 240 V		33.3	50.3	60					
HKSC10XC- 240 V		40	58.6	60					
HKSC15XB- 240 V	Drooker	40	58.6	60	20	25	25	83.6	90
HKSC20DB- 240 V	Breaker	40	58.6	60	40	50	50	108.6	110
HKSC15XF- 240 V ^		0	8.6	15	34.6	43	45		
HKSC20XF- 240 V ^		0	8.6	15	43	54	60		
HKSC25DB- 240 V		60	84	90	40	50	50	133.6	150

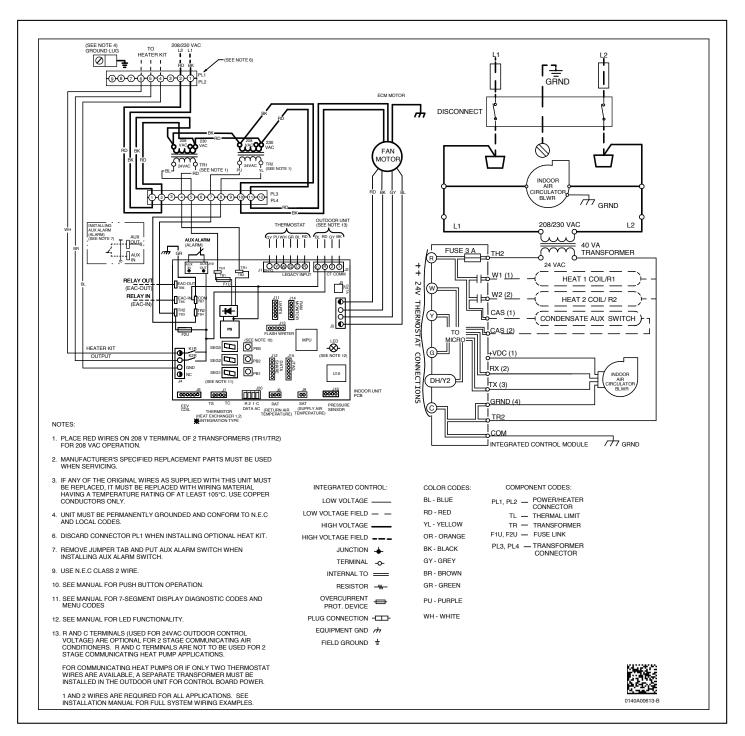
 $^{^{\}rm 1}$ Minimum Circuit Ampacity (Heater Amps + Motor Amps) X 1.25

Note: The 208 or 240 in the heat kit part number field is for clarification of the nominal voltage for this model.

² Maximum Overcurrent Protection = 2.25 X Motor Amps + Heater Amps

[^] Circuit 1: Single-phase for Air Handlers Circuit 2: Three-phase for HKR3 Heater Kits

³Notation is correct as XB because technically the 240V heater kit application can be used here without any issues.

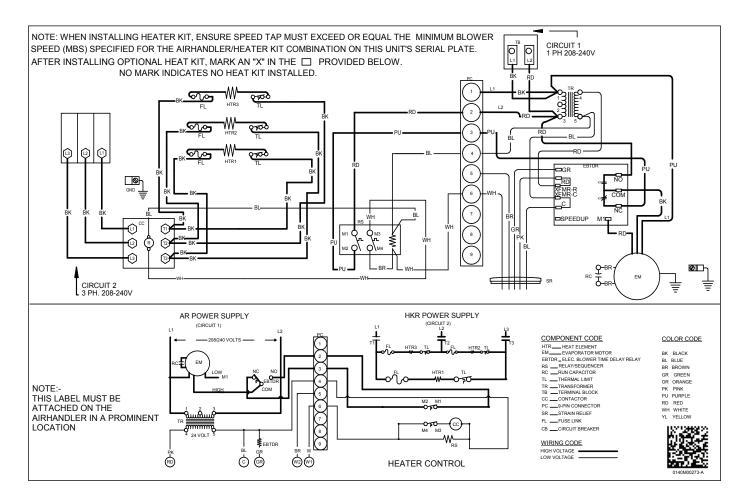


Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.



High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.





Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.



High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

4

DOWNFLOW KITS

DFK-B	DFK-C	DFK-D
AVPTC25B14**	AVPTC31C14**	AVPTC37D14**
AVPTC29B14**	AVPTC33C14**	AVPTC59D14**
AVPTC35B14**	AVPTC37C14**	AVPTC49D14**
AVPTC37B14**	AVPTC39C14**	AVPTC61D14**
	AVPTC49C14**	
	AVPTC59C14**	

FILTERS

CHASSIS	PART #	Size
В	ALFH16201E	16.0" x 20.0"
С	ALFH1912201E	19.5" x 20.0"
D	ALFH20231E	23.0" x 20.0"

SINGLE POINT KIT **

MODEL	HKR-15C	HKR-20C	HKR-21C
SPW-01	X	X	Х

^{**} Must be installed along with any of the above compatible heat kits. This kit will fit any AVPTC air handler as long as a compatible heat kit is installed in the unit.