Supplemental Electric Heat Kits for DVM S Multi-position Air Handlers

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☐ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

Description

- Supplemental electric heat kit used with Samsung DVM S (AM0***NZDCH/AA) and CAC (AC0**KNZDCH/AA) multi-position air handlers to provide supplemental heat when the compressor cannot provide enough capacity due to low ambient conditions or for primary heat with cooling-only systems.
- Installs inside the air handling unit.
- The electric heat kit shall include breakers for overcurrent protection and to turn off the air handler.
- The electric heat kit control wiring shall plug directly into the electric heat kit control plug inside the air handling unit.
- The electric heat kit shall contain limit switches to prevent overheating.
- The supplemental electric heat kit shall include an external temperature sensor that must be connected to the suction pipe during installation. This sensor will not allow the heat kit to activate when the supplied refrigerant temperature is above 109°F to prevent unnecessary use.
- When installed in DVM S multi-position air handlers, the indoor unit can be programmed to activate the supplemental electric heat kits based on set temperature and room temperature difference along with a time delay of up to 20 minutes (see indoor unit installation manual for more details).
- The supplemental electric heat kit shall include all components necessary for heat kit installation.

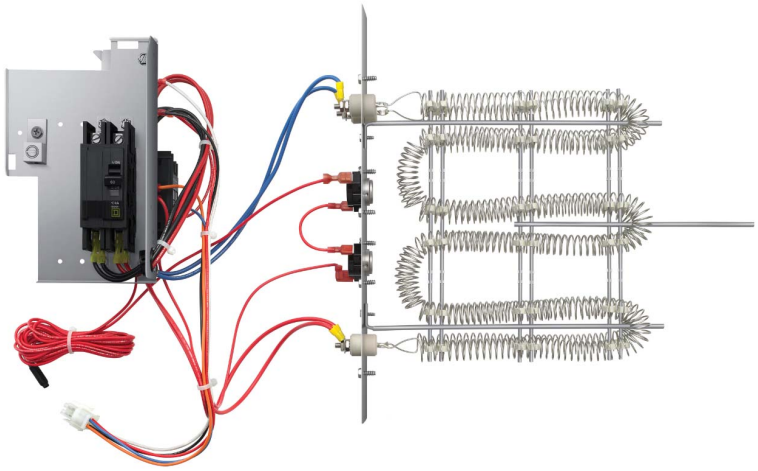
Compatibility

DVM S Multi-position AHU Models

AHU Model	Heat Kit Compatibility
AM012*NZDCH/AA	VHK-103A
AM018*NZDCH/AA	VHK-103A, VHK-105A
AM024*NZDCH/AA	VHK-103A, VHK-105A, VHK-110A
AM030*NZDCH/AA	VHK-205A, VHK-210A, VHK-215A
AM036*NZDCH/AA	VHK-205A, VHK-210A, VHK-215A
AM048*NZDCH/AA	VHK-305A, VHK-310A
AM054*NZDCH/AA	VHK-305A, VHK-310A, VHK-315A
AM060*NZDCH/AA	VHK-305A, VHK-310A, VHK-315A
AM072*NZDCH/AA	VHK-305A, VHK-310A, VHK-315A, VHK-320A

CAC Multi-position AHU Models (single zone)

AHU Model	Heat Kit Compatibility
AC018KNZDCH/AA	VHK-103A, VHK-105A
AC024KNZDCH/AA	VHK-103A, VHK-105A
AC030KNZDCH/AA	VHK-205A, VHK-210A
AC036KNZDCH/AA	VHK-205A, VHK-210A
AC042KNZDCH/AA	VHK-305A, VHK-310A
AC048KNZDCH/AA	VHK-305A, VHK-310A
AC054KNZDCH/AA	VHK-305A, VHK-310A, VHK-315A



(5 kW kit pictured, actual product appearance may vary)

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

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888-699-6067

Supplemental Electric Heat Kits for Samsung Multi-position Air Handlers

Electrical Data

DVM S Multi-position AHU Models

ELECTRICAL DATA																					
Indoor Unit Model	Electric Heater Data						Minimum Circuit Ampacity (MCA)				Maximum Overcurrent Protection (MOCP)				Minimum Wire Size (AWG)				Short-Circuit Current Rating	
	Circuit Qty.	Kw (2)	Amps 208V Circuit 1	Amps 208V Circuit 2	Amps 240V Circuit 1	Amps 240V Circuit 2	208V Circuit 1	208V Circuit 2	240V Circuit 1	240V Circuit 2	208V (3,4) Circuit 1	208V (3,4) Circuit 2	240V (3,4) Circuit 1	240V (3,4) Circuit 2	Circuit 1		Circuit 2		"SCCR"	
															75°C / 90°C	60°C	75°C / 90°C	60°C	kA rms symmetrical	V maximum
SMALL CABINET-NOMINAL1.0, 1.5 & 2.0 TONS (0 To 5 Kw)																				
AM012*NZDCH/AA	1	0	0	-	0	-	0.90	-	0.90	-	10.0	-	10.0	-	#14	#14	-	-	n/a	n/a
	1	3	10.90	-	12.50	-	13.63	-	15.63	-	15.0	-	20.0	-	#12	#12	-	-	n/a	n/a
AM018*NZDCH/AA AM024*NZDCH/AA	0	0	0	-	0	-	0.90	-	0.90	-	10.0	-	10.0	-	#14	#14	-	-	n/a	n/a
	1	3	10.90	-	12.50	-	13.63	-	15.63	-	15.0	-	20.0	-	#12	#12	-	-	n/a	n/a
	1	5	18.03	-	20.83	-	23.26	-	26.76	-	30.0	-	30.0	-	#10	#10	-	-	n/a	n/a
MEDIUM CABINET-NOMINAL 2.5, 3.0 TONS (0 To 10 Kw)																				
AM030*NZDCH/AA AM036*NZDCH/AA	1	0	-	-	-	-	2.08	-	2.08	-	10.0	-	10.0	-	#14	#14	-	-	n/a	n/a
	1	5	18.03	-	20.83	-	24.20	-	27.70	-	30.0	-	30.0	-	#10	#10	-	-	n/a	n/a
	1	10	36.06	-	41.67	-	46.73	-	53.74	-	50.0	-	60.0	-	#6	#4	-	-	n/a	n/a
LARGE CABINET-NOMINAL 4.0, 4.5, 5.0, 6.0 TONS (0 To 20 Kw)																				
AM048*NZDCH/AA	1	0	-	-	-	-	2	-	2.6	-	15.06	-	15.0	-	#14	#14	-	-	n/a	n/a
	1	5	18.0	-	20.8	-	24.6	-	26.0	-	30.0	-	30.0	-	#10	#10	-	-	n/a	n/a
	1	10	36.1	-	41.7	-	45.1	-	52.1	-	50.0	-	60.0	-	#6	#4	-	-	n/a	n/a
AM054*NZDCH/AA AM060*NZDCH/AA	1	0	-	-	-	-	2	-	2.6	-	15.06	-	15.0	-	#14	#14	-	-	n/a	n/a
	1	5	18.0	-	20.8	-	24.6	-	26.0	-	30.0	-	30.0	-	#10	#10	-	-	n/a	n/a
	1	10	36.1	-	41.7	-	45.1	-	52.1	-	50.0	-	60.0	-	#6	#4	-	-	n/a	n/a
	2	15	18.0	36.1	20.8	41.7	24.6	47.2	28.1	54.2	30.0	50.0	30.0	60.0	#6	#4	#10	#10	5	240
AM072*NZDCH/AA	1	0	-	-	-	-	7	-	7.2	-	15.02	-	15.0	-	#14	#14	-	-	n/a	n/a
	1	5	18.0	-	20.8	-	28.3	-	26.0	-	30.0	-	30.0	-	#10	#10	-	-	n/a	n/a
	1	10	36.1	-	41.7	-	45.1	-	52.1	-	50.0	-	60.0	-	#6	#4	-	-	n/a	n/a
	2	15	18.0	36.1	20.8	41.7	28.2	50.8	31.7	57.8	30.0	60.0	35.0	60.0	#6	#4	#10	#10	5	240
	2	20	36.1	36.1	41.7	41.7	50.8	50.8	57.8	57.8	60.0	60.0	60.0	60.0	#6	#4	#6	#4	5	240

1. Rated Motor Amps (at DOE External Static Rating Point)
2. Nominal Kw At 240V (Derate 25% For 208V)
3. Fuse or HACR Breaker
4. Maximum Overcurrent Device, Overcurrent Protection Installed On Breaker Models Are Sized Per MCA

• To prevent damage, carefully insert the electric heating assembly through the rectangular opening in the front of the discharge opening so the heat element support rod is seated into the hole on the back side of the discharge opening.

• After installing the electric heater, a one inch clearance must be maintained on all sides of the supply air duct and/or plenum for a minimum of thirty six inches from the air handler discharge opening.

CAC Multi-position AHU Models (single zone)

ELECTRICAL DATA																				
Indoor Unit Model	Electric Heater Data						Minimum Circuit Ampacity (MCA)				Maximum Overcurrent Protection (MOCP)				Minimum Wire Size (AWG)				Short-Circuit Current Rating	
	Circuit Qty.	Kw (2)	Amps 208V Circuit 1	Amps 208V Circuit 2	Amps 240V Circuit 1	Amps 240V Circuit 2	208V Circuit 1	208V Circuit 2	240V Circuit 1	240V Circuit 2	208V (3,4) Circuit 1	208V (3,4) Circuit 2	240V (3,4) Circuit 1	240V (3,4) Circuit 2	Circuit 1		Circuit 2		"SCCR"	
															75°C / 90°C	60°C	75°C / 90°C	60°C	kA rms symmetrical	V maximum
SMALL CABINET-NOMINAL1.0, 1.5 & 2.0 TONS (0 To 5 Kw)																				
AC018KNZDCH/AA AC024KNZDCH/AA	1	3	10.90	-	12.50	-	13.63	-	15.63	-	15.0	-	20.0	-	#12	#12	-	-	n/a	n/a
	1	5	18.03	-	20.83	-	23.26	-	26.76	-	30.0	-	30.0	-	#10	#10	-	-	n/a	n/a
MEDIUM CABINET-NOMINAL 2.5, 3.0 TONS (0 To 10 Kw)																				
AC030KNZDCH/AA AC036KNZDCH/AA	1	5	18.03	-	20.83	-	24.20	-	27.70	-	30.0	-	30.0	-	#10	#10	-	-	n/a	n/a
	1	10	36.06	-	41.67	-	46.73	-	53.74	-	50.0	-	60.0	-	#6	#4	-	-	n/a	n/a
LARGE CABINET-NOMINAL 4.0, 4.5, 5.0, 6.0 TONS (0 To 20 Kw)																				
AC042KNZDCH/AA AC048KNZDCH/AA	1	5	18.0	-	20.8	-	24.6	-	26.0	-	30.0	-	30.0	-	#10	#10	-	-	n/a	n/a
	1	10	36.1	-	41.7	-	45.1	-	52.1	-	50.0	-	60.0	-	#6	#4	-	-	n/a	n/a
AC054KNZDCH/AA	1	5	18.0	-	20.8	-	24.6	-	26.0	-	30.0	-	30.0	-	#10	#10	-	-	n/a	n/a
	1	10	36.1	-	41.7	-	45.1	-	52.1	-	50.0	-	60.0	-	#6	#4	-	-	n/a	n/a
	2	15	18.0	36.1	20.8	41.7	24.6	47.2	28.1	54.2	30.0	50.0	30.0	60.0	#6	#4	#10	#10	5	240

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