

# Chromalox®

## Installation, Operation and RENEWAL PARTS IDENTIFICATION

### SERVICE REFERENCE

DIVISION 4	SECTION
SALES REFERENCE	PF207
161-305681-001	
DATE	SEPTEMBER, 2005

## HDS-1 Power Disconnect Switch Kit for Field Installation in an HVH Series Air Heater

Specifications — Table A



Model	Electrical Data (60 Hz)				Standard Contactor Rating (Qty.)
	Volts	Watts	Phase	Amps	
HVH-02-81	208	2,667	1	12.8	—
HVH-02-21	208/240	2000/2,667	1	11.1*	—
HVH-02-71	277	2,667	1	9.6	—
HVH-04-81†	208	4,000	1	19.2	—
HVH-04-83†	208	4,000	3	11.2	30A (1)
HVH-04-21†	208/240	3,000/4,000	1	16.7*	—
HVH-04-23†	208/240	3,000/4,000	3	9.6*	30A (1)
HVH-04-71	277	4,000	1	14.5	—
HVH-04-43	480	4,000	3	4.8	30A (1)
HVH-05-81†	208	5,000	1	24.0	—
HVH-05-83†	208	5,000	3	13.8	30A (1)
HVH-05-21†	208/240	3,750/5,000	1	20.8*	—
HVH-05-23†	208/240	3,750/5,000	3	12.1*	30A (1)
HVH-05-71	277	5,000	1	18.2	—
HVH-05-43	480	5,000	3	6.0	30A (1)
HVH-07-81†	208	7,500	1	36.1	50A (1)
HVH-07-83	208	7,500	3	20.9	30A (1)
HVH-07-21†	208/240	5,625/7,500	1	31.1*	30A (1)
HVH-07-23	208/240	5,625/7,500	3	18.1*	30A (1)
HVH-07-71	277	7,500	1	27.2	30A (1)
HVH-07-43	480	7,500	3	9.0	30A (1)
HVH-10-81†	208	10,000	1	48.0	50A (1)
HVH-10-83	208	10,000	3	27.8	30A (1)
HVH-10-21†	208/240	7,500/10,000	1	41.7*	30A (1)
HVH-10-23	208/240	7,500/10,000	3	24.0*	30A (1)
HVH-10-43	480	10,000	3	12.0	30A (1)
HVH-12-83	208	12,500	3	34.8	50A (1)
HVH-12-23	208/240	9,375/12,500	3	30.1*	50A (1)
HVH-12-43	480	12,500	3	15.1	30A (1)
HVH-15-83	208	15,000	3	41.8	50A (1)
HVH-15-23	208/240	11,250/13,000	3	36.2*	50A (1)
HVH-15-43	480	15,000	3	18.1	30A (1)

\* Note: 208V amperage is 86% of 240V value.

† These models can be field changed from single phase to three phase or three phase to single phase.

### GENERAL

This instruction sheet provides information for field installing an HDS-1 Power Disconnect Switch in an HVH Series air heater.

### WARNING

**ELECTRIC SHOCK HAZARD. Disconnect all power before installing or servicing heater. Failure to do so could result in personal injury or property damage. Power Disconnect Switch must be installed by a qualified person in accordance with the National Electrical Code, NFPA 70.**

## INSTALLATION

1. The amperage rating of the disconnect must be equal to or greater than the amperage rating on Table A and as marked on the nameplate located on the bottom access door (Figure 1).
  - A. The HDS-1 is rated 50 Amps at 480V or less and 40 Amps at 500-600V. Verify that the volts and amps of the heater (see heater nameplate) do not exceed the rating of the HDS-1.
  - B. The power disconnect switch kit is to be installed in the five (5) hole K.O. cluster located in the bottom left front corner of the heater. The K.O.'s can be removed using a chisel or similar tool, if the 7/32 Ø K.O.'s are stubborn, it may be necessary to drill out using a 7/32 drill bit (See Figure 1).

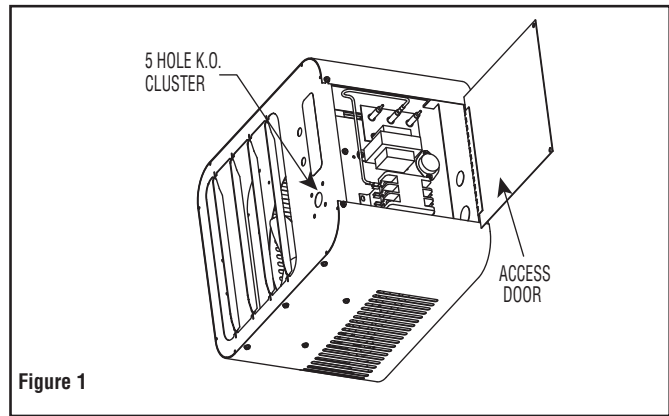


Figure 1

## INSTALLATION

### ⚠ WARNING

**Any installation involving electric heaters must be performed by a qualified person and must be effectively grounded in accordance with the National Electrical Code to eliminate shock hazard.**

1. For easier wiring, it is recommended that the pigtail leads from the disconnect switch be wired to the matching terminals of the contactor or terminal block. It is also suggested that the service entrance wiring be done at this time, terminal 1 and 3 for 1Ø and terminals 1, 3 and 5 for 3Ø (see Figure 3).
2. Insert switch through front of heater and secure in place with the No. 8 screws.
3. Attach faceplate using the No. 6 screws. The "1" on the face plate to face towards the louvers.
4. Slide handle on shaft of switch and fasten in place by tightening the pre-attached set screw.
5. Close cover and reattach screws.

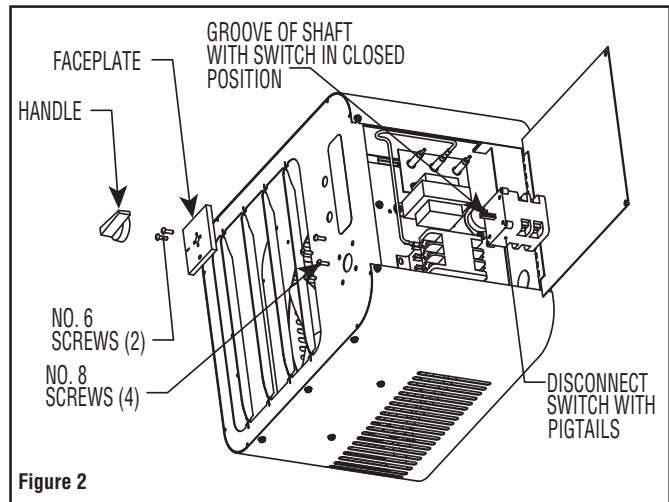


Figure 2

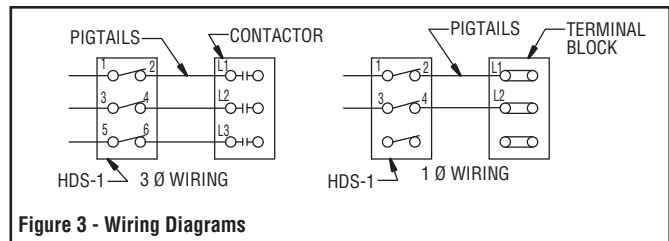


Figure 3 - Wiring Diagrams

### Limited Warranty:

Please refer to the Chromalox limited warranty applicable to this product at <http://www.chromalox.com/customer-service/policies/termsforsale.aspx>.

# Chromalox®

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