

# Chromalox®



FILE #E7061



CERTIFIED  
FILE LR40859



## SUBMITTAL SHEET HVH — HORIZONTAL & VERTICAL DISCHARGE UNIT HEATERS

### Capacities

2.6, 4, 5, 7.5, 10, 12.5, 15 kW  
208, 240, 480, 600 V  
1Ø and 3Ø

See Selection Guide on Last Page

JOB NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

SUBMITTED BY: \_\_\_\_\_

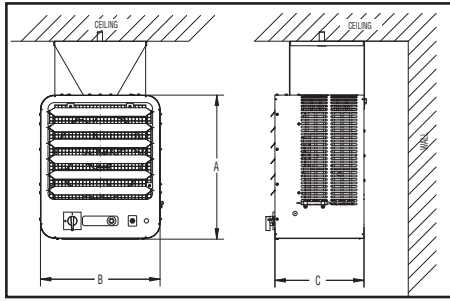
DATE: \_\_\_\_\_

QTY.	CATALOG NUMBER	TAG	HEATER			AMPS	MOTOR VOLTS	PHASE Ø	MOTOR RPM	AIR FLOW		NO. OF STAGES	BUILT-IN-CONTROLS
			KW	VOLTS	Ø					CFM	°F RISE		

ACCESSORIES  
AND  
CONTROLS

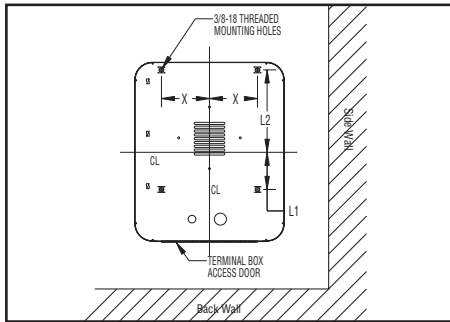
QTY.	CAT. NO.	TAG	DESCRIPTION

**Ceiling Mounted - Horizontal Discharge**



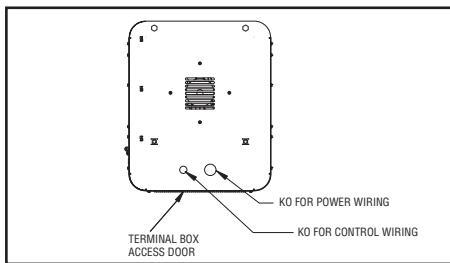
Heater	Dimensions (In.)		
	A	B	C
HVH-02 to 05	16-1/8	13	10
HVH-07 to 15	20-5/8	17-1/8	12-3/4

**Rod Thread Type and Spacing Dimensions for Horizontal Discharge**



Unit	Dimensions (In.)			
	Rod Thread Type	L1	L2	X
2.6-5 kW	3/8 - 16	2-7/8	7-1/8	3-3/4
7-1/2 - 15 kW	3/8 - 16	4-5/16	9-3/8	5-1/2

**Rod Thread Type and Spacing Dimensions for Horizontal Discharge**



Knockout Sizes	
HVH-02 - 05	1/2" 3/4" (1)
HVH-07 - 15	1/2" 1" (1)

**Thermostat Kits**

Model	Rating	PCN	Wt (Lbs.)
TK-5	SPST	219475	0.25
TK-6	DPST	219483	0.25

**Power Disconnect Kit (3 Pole 600V)**

Model	Rating	PCN	Wt (Lbs.)
HDS-1	50 Amps	219491	0.5

**Optional Fan Only Kits**

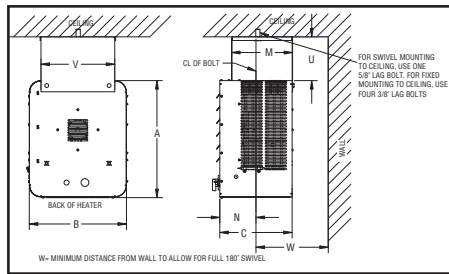
Description	Model	PCN	Wt. (Lbs.)
Fan Switch (no relay)	HVF-01	219504	0.25
Fan Switch (24V relay)	HVF-02	219512	0.5
Fan Switch (120V relay)	HVF-03	219520	0.5

**Specifications Information - Specify kW, volts, phase, catalog number**

Electrical (60 Hz)				Motor				Air Delivery				Ordering			
kW	Volts	Ckt & Phase	Amps <sup>1</sup>	Volts	Phase	HP	RPM	CFM	FPM	Temp. Rise (°F)	Horiz. Throw (Ft.)	Mtg. 5 Height (Ft.)	Model	PCN	Wt. (Lbs.)
2.6	208	1 - 1	13.1	208	1	1/40	1,650	410	880	21	12	8	HVH-02-81-00	219096	32
2/2.6	208/240	1 - 1	11.42	240	1	1/40	1,650	410	880	21	12	8	HVH-02-21-00	219109	32
2.6	277	1 - 1	9.6	277	1	1/30	1,550	360	770	24	12	8	HVH-02-71-00	219117	32
4	208	1 - 1	19.8	208	1	1/40	1,650	410	880	31	12	8	HVH-04-81-00	219125	32
4	208	1 - 33	11.7	208	1	1/40	1,650	410	880	31	12	8	HVH-04-83-34	219133	32
3/4	208/240	1 - 1	17.22	240	1	1/40	1,650	410	880	31	12	8	HVH-04-21-00	219141	32
3/4	208/240	1 - 33	10.22	240	1	1/40	1,650	410	880	31	12	8	HVH-04-23-34	219150	32
4	277	1 - 1	14.6	277	1	1/30	1,550	360	770	35	12	8	HVH-04-71-00	219168	32
4	480	1 - 3	5.1	480	1	1/35	1,550	380	815	33	12	8	HVH-04-43-30	219176	32
5	208	1 - 1	24.6	208	1	1/40	1,650	410	880	39	12	8	HVH-05-81-00	219184	32
5	208	1 - 33	14.5	208	1	1/40	1,650	410	880	39	12	8	HVH-05-83-34	219192	32
3.75/5	208/240	1 - 1	21.4	240	1	1/40	1,650	410	880	39	12	8	HVH-05-21-00	219205	32
3.75/5	208/240	1 - 33	12.6	240	1	1/40	1,650	410	880	39	12	8	HVH-05-23-34	219213	32
5	277	1 - 1	18.3	277	1	1/30	1,550	360	770	44	12	8	HVH-05-71-00	219221	32
5	480	1 - 3	6.3	480	1	1/35	1,550	380	815	42	12	8	HVH-05-43-30	219230	32
7.5	208	1 - 13	36.5	208	1	1/15	1,725	850	1040	28	27	8	HVH-07-81-34	219248	50
7.5	208	1 - 3	21.3	240	1	1/15	1,725	850	1040	28	27	8	HVH-07-83-34	219256	50
5.6/7.5	208/240	1 - 13	31.72	240	1	1/15	1,725	850	1040	28	27	8	HVH-07-21-34	219264	50
5.6/7.5	208/240	1 - 3	18.52	240	1	1/15	1,725	850	1040	28	27	8	HVH-07-23-34	219272	50
7.5	277	1 - 1	27.7	277	1	1/15	1,550	750	920	32	27	8	HVH-07-71-30	219280	50
7.5	480	1 - 3	9.9	480	3	1/15	1,725	850	1040	28	27	8	HVH-07-43-30	219299	50
7.5	600	1 - 3	7.6	575	3	1/3	1,725	850	1040	28	27	8	HVH-07-63-30	—	50
9.7	208	1 - 13	47.1	208	1	1/15	1,725	850	1040	37	27	9	HVH-10-81-34	219301	50
9.7	208	1 - 3	27.4	208	1	1/15	1,725	850	1040	37	27	9	HVH-10-83-34	219310	50
7.5/10	208/240	1 - 13	42.12	240	1	1/15	1,725	850	1040	37	27	9	HVH-10-21-34	219328	50
7.5/10	208/240	1 - 3	24.52	240	1	1/15	1,725	850	1040	37	27	9	HVH-10-23-34	219336	50
10	480	1 - 3	12.9	480	3	1/15	1,725	850	1040	37	27	9	HVH-10-43-30	219344	50
10	600	1 - 3	10.6	575	3	1/3	1,725	850	1040	37	27	9	HVH-10-63-30	—	50
12.5	208	1 - 3	35.2	208	1	1/15	1,725	850	1040	47	27	9	HVH-12-83-34	219352	50
9.3/12.5	208/240	1 - 3	30.6	240	1	1/15	1,725	850	1040	47	27	9	HVH-12-23-34	219360	50
12.5	480	1 - 3	15.9	480	3	1/15	1,725	850	1040	47	27	9	HVH-12-43-30	219379	50
12.5	600	1 - 3	12.6	575	3	1/3	1,725	850	1040	47	27	9	HVH-12-63-30	—	50
15	208	1 - 3	42.1	208	1	1/15	1,725	850	1040	56	27	10	HVH-15-83-34	219387	50
11.25/15	208/240	1 - 3	36.62	240	1	1/15	1,725	850	1040	56	27	10	HVH-15-23-34	219395	50
15	480	1 - 3	19.0	480	3	1/15	1,725	850	1040	56	27	10	HVH-15-43-30	219408	50
15	600	1 - 3	15.6	575	3	1/3	1,725	850	1040	56	27	10	HVH-15-63-30	—	50

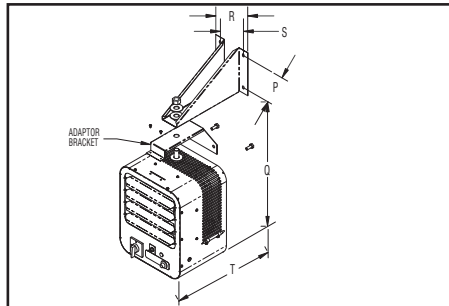
1. For motor data, see table.
2. 208V amperage is 86% of 240V value.
3. Models can be field wired for 1 or 3 phase.
4. Includes motor Amps.
5. Maximum mounting height for effective heat distribution. Minimum height is 7 feet.

**Optional Ceiling Swivel Mounting Bracket**



Bracket Model No.	PCN	Dimensions (In.)								Wt. (lbs.)	Use With
		A	B	C	M	N	U	V	W		
HVC-1	219432	16-1/8	13	10	8-3/8	5-3/4	7-3/4	9-3/4	12	4	HVH-02, 04, 05
HVC-2	219440	20-5/8	17-1/8	12-3/4	10-3/4	6-3/4	7-3/4	12	12	8	HVH-07, 10, 12, 15

**Optional Wall Swivel Mounting Bracket**



Bracket Model No.	PCN	Dimensions (In.)					Bracket Wt. (lbs.)	Use With
		P	Q	R	S	T		
HVV-1	219416	6-1/16	18-7/8	7	5	17-5/8	3-3/4	HVH-02, 04, 05
HVV-2	219424	6-1/16	23-1/4	7	5	18-5/8	6-1/2	HVH-07, 10, 15

**ARCHITECT'S & ENGINEER'S SPECIFICATIONS**

Furnish and install Chromalox type HVH unit heaters with heating and air delivery capabilities as shown on the heating schedule. Units must be approved for use in the horizontal or vertical air flow position. Mounting brackets designed for either ceiling or wall swivel mounting shall be furnished as shown on the heating schedule. The cabinet shall be 20 gauge die formed furniture grade steel with integral adjustable louvres to provide control of discharged air. All metal surfaces of the case shall be phosphate coated to resist corrosion, and finished in an attractive two-tone powder coated paint.

The electric heating bank shall be of Chromalox metal sheath *Fintube*® heating elements with furnace brazed fins for improved heat transfer. Automatic reset thermal overheat protection shall be wired for instantaneous de-energizing of built-in control of contactor holding coil in case of thermal overload. All units to include a heater contactor, except 2.6 through 5kW single phase models.

Motors shall be of the totally enclosed continuous fan-duty sleeve bearing type equipped with built-in thermal overload protection. Each unit shall be equipped with a combination motor support resiliently mounted at four points to absorb any motor vibration. Fans shall be aluminum, directly connected to fan motor, dynamically balanced and designed specifically for unit heater application.

Optional control transformers shall be available to internally develop safer low voltage for pilot-duty control circuits. Fan switching devices shall be available to independently operate the fan motor for summer circulation and winter heat recovery.

Individual optional built-in comfort control thermostat is integral or remote fan only switch and disconnect switch shall be available, for all models. All heaters shall be UL Listed, CSA Certified and meet requirements of the National Electrical Code.

**Recommended Control Options**

Heater		Heater Compatible, Field Installable, Accessory Options											Factory Installable Options	
Model No.	PCN	HVW-1 219416	HVW-2 219424	HVC-1 219432	HVC-2 219440	HVS-1 219459	HVS-2 219467	TK-5 219475	TK-6 219483	HDS-1 219491	HVF-01 219504	HVF-02 219512	HFD-1**	PL-1**
HVH-02-81-00	219096	X		X		X			X	X				X
HVH-02-21-00	219109	X		X		X			X	X				X
HVH-02-71-00	219117	X		X		X			X	X				
HVH-04-81-00	219125	X		X		X			X	X				X
HVH-04-83-34	219133	X		X		X		X		X	X			X
HVH-04-21-00	219141	X		X		X			X	X				X
HVH-04-23-34	219150	X		X		X		X		X	X			X
HVH-04-71-00	219168	X		X		X			X	X				
HVH-04-43-30	219176	X		X		X		X		X	X		X	X
HVH-05-81-00	219184	X		X		X			X	X				X
HVH-05-83-34	219192	X		X		X		X		X	X			X
HVH-05-21-00	219205	X		X		X			X	X				X
HVH-05-23-34	219213	X		X		X		X		X	X			X
HVH-05-71-00	219221	X		X		X			X	X				
HVH-05-43-30	219230	X		X		X		X		X	X		X	X
HVH-07-81-34	219248		X		X		X	X		X	X			X
HVH-07-83-34	219256		X		X		X	X		X	X			X
HVH-07-21-34	219264		X		X		X	X		X	X			X
HVH-07-23-34	219272		X		X		X	X		X	X			X
HVH-07-71-30	219280		X		X		X	X		X	X			
HVH-07-43-30	219299		X		X		X	X		X	X	X	X	X
HVH-10-81-34	219301		X		X		X	X		X	X			X
HVH-10-83-34	319310		X		X		X	X		X	X			X
HVH-10-21-34	219328		X		X		X	X		X	X			X
HVH-10-23-34	219336		X		X		X	X		X	X			X
HVH-10-43-30	219344		X		X		X	X		X	X	X	X	X
HVH-12-83-34	219352		X		X		X	X		X	X			X
HVH-12-23-34	219360		X		X		X	X		X	X			X
HVH-12-43-30	219379		X		X		X	X		X	X	X	X	X
HVH-15-83-34	219387		X		X		X	X		X	X			X
HVH-15-23-34	219395		X		X		X	X		X	X			X
HVH-15-43-30	219408		X		X		X	X		X	X	X	X	X

**Notes:**

- \* Includes all field installable options
- \*\* HFD-1 is a fan delay on / fan delay off
- \*\*\* PL-1 is a green pilot indicating power to heater

**HVH Horizontal or Vertical Discharge Fan Forced Unit Heater Ordering Information**

When ordering HVH heaters, specify the model number and corresponding PCN (Product Code Number). If controls (thermostat, fan switch, transformer, disconnect) or other options are required, designate these options in the model number when ordering, as shown below. always specify voltage, phase and kW by listing them on the purchase order specifications.

<b>HVH Horizontal or Vertical Discharge Blower Heater</b>											
<b>kW</b>											
<b>02</b>	2.6 kW										
<b>04</b>	4.0 kW										
<b>05</b>	5.0 kW										
<b>07</b>	7.5 kW										
<b>10</b>	10.0 kW										
<b>12</b>	12.5 kW										
<b>15</b>	15.0 kW										
<b>Volts</b>											
<b>2</b>	240V										
<b>4</b>	480V										
<b>6</b>	600V										
<b>7</b>	277V										
<b>8</b>	208V										
<b>A</b>	220V										
<b>B</b>	380V										
<b>C</b>	400V										
<b>D</b>	415V										
<b>Phase</b>											
<b>1</b>	1										
<b>3</b>	3										
<b>Control</b>											
<b>00</b>	No Contactor										
<b>30</b>	Contactor with 24V Transformer										
<b>31</b>	Contactor with 24V Externally Supplied										
<b>32</b>	Contactor with 120V Transformer										
<b>33</b>	Contactor with 120V Externally Supplied										
<b>34</b>	Contactor with 208/240V Internally Supplied										
<b>35</b>	Contactor with 277V Internally Supplied										
<b>Integral Thermostat</b>											
<b>0</b>	None										
<b>TL</b>	40-90°F Range										
<b>TH</b>	55-105°F Range										
<b>Disconnect Switch</b>											
<b>0</b>	None										
<b>D</b>	Yes										
<b>Fan Only Switch</b>											
<b>00</b>	None										
<b>FI</b>	Internal (In Heater)										
<b>FE</b>	External (On Wall)										
<b>Time Delay</b>											
<b>0</b>	None										
<b>R</b>	Yes										
<b>Pilot Light</b>											
<b>0</b>	None										
<b>P</b>	Yes										
<b>Outlet Screen</b>											
<b>0</b>	None										
<b>S</b>	Yes										
<b>HVH</b>	<b>05</b>	<b>2</b>	<b>1</b>	<b>34</b>	<b>TL</b>	<b>D</b>	<b>FI</b>	<b>-0</b>	<b>-0</b>	<b>-0</b>	<b>Typical Model Number</b>