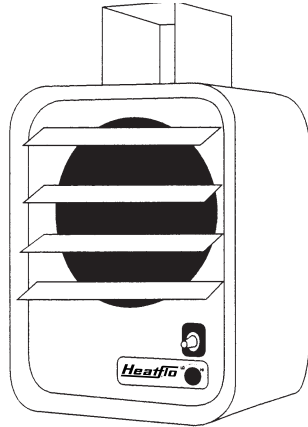




FILE #E7061



CERTIFIED
FILE LR40859



SUBMITTAL SHEET KUH — HORIZONTAL UNIT HEATERS

Capacities

2.6, 4, 5, 7.5, 10 kW

208, 240, 480, 600V

1Ø and 3Ø

12.5, 15, 20, 25, 35, 40, 45 kW

208, 240, 480, 600V 3Ø only

**See Selection Chart
Back Page**

JOB NAME: _____

LOCATION: _____

ARCHITECT: _____

ENGINEER: _____

CONTRACTOR: _____

SUBMITTED BY: _____

QUANTITY: _____

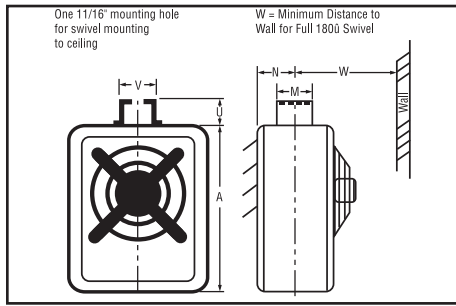
DATE: _____

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

ACCESSORIES
AND
CONTROLS

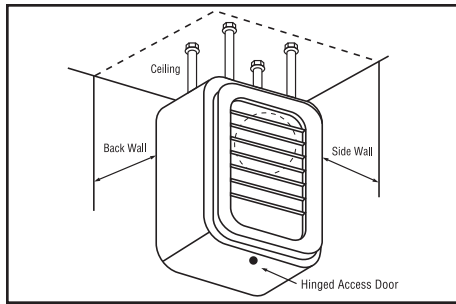
QTY.	CAT. NO.	TAG	DESCRIPTION

Ceiling Mounted



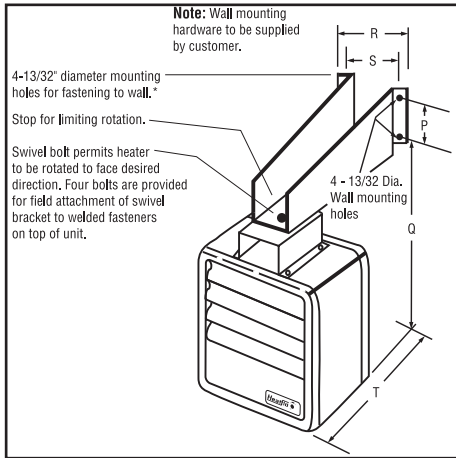
Bracket Catalog No.	Dimensions - inches						Wt. lbs.	Bracket Use With Heater
	A	M	N	U	V	W		
BUH-04A	16	6	4-7/16	4	4-3/4	10-1/2	1-3/4	KUH-02, 04, 05
BUH-05A	20-1/2	8	4-3/4	6	7-1/4	16	5	KUH-07, 10, 12, 15
BUH-05A	24	8	6-1/4	6	7-1/4	16	5	KUH-20, 25
BUH-06A	24	13-3/4	9-5/16	6	7-1/4	21	11	KUH-30, 35, 40, 45

Ceiling Mounted



Basic Catalog No.	Mounting Limitations		
	Back to Wall	Side to Wall	Top to Ceiling
KUH-02 Thru KUH-05	6"	6"	4"
KUH-07 Thru KUH-15	6"	6"	6"
KUH-20 and KUH-25	6"	6"	6"
KUH-30 Thru KUH-45	6"	6"	4"

Wall Mounted Universal Bracket



Heater	Dimensions - inches					Wall Bracket	PCN	Stock	Wt. (lbs.)
	P	Q	R	S	T				
KUH-02 to -05	1-3/4	21-1/2	6-3/4	5-1/2	14-15/16	BUH-01A	304493	S	3
KUH-07, 10, 12, 15	2	28-7/16	9-1/2	8-3/8	22-1/4	BUH-02A	304506	S	5
KUH-20, 25	2	32	9-1/2	8-3/8	22-1/4	BUH-02A	304506	S	7
KUH-30, 35, 40, 45	5-1/2	28-11/16	5	3-1/2	33-1/4	BUH-03A	304514	S	10

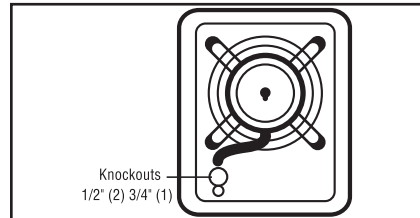
Specifications Information

Specify kW, volts, phase, catalog number

Catalog Number	Electrical Data (60Hz)					Fan Motor				Air Fan Dia. (in.)	Temp. Veloc. CFM	Rise °F	Mounting Data		
	kW	Volts	Phase	Amps	BTU	Volts	Phase	RPM	HP				Max. Height	Hor. Throw	Wt. Lbs.
KUH-C-02-81-00	2.6	208	1	12.8	8,850	208	1	1650	1/40	9	410	21	8'	12'	35
KUH-C-02-21-00	2/2.6	208/240	1	11.1***	8,850	240	1	1650	1/40	9	410	21	8'	12'	35
KUH-C-02-71-00	2.6	277	1	9.6	8,850	277	1	1550	1/30	9	360	24	8'	12'	35
KUH-C-04-81-00	4	208	1	19.2	13,661	208	1	1650	1/40	9	410	31	8'	12'	35
KUH-C-04-83-34	4	208	3	11.2	13,661	208	1	1650	1/40	9	410	31	8'	12'	35
KUH-C-04-21-00	3/4	208/240	1	16.7***	13,661	240	1	1650	1/40	9	410	31	8'	12'	35
KUH-C-04-23-34	3/4	208/240	3	9.6***	13,661	240	1	1650	1/40	9	410	31	8'	12'	35
KUH-C-04-71-00	4	277	1	14.5	13,661	277	1	1550	1/30	9	360	35	8'	12'	35
KUH-C-04-43-00	4	480	3	4.8	13,661	480	1	1550	1/35	9	380	33	8'	12'	35
KUH-C-05-81-00	5	208	1	24.0	17,076	208	1	1650	1/40	9	410	39	8'	12'	35
KUH-C-05-83-34	5	208	3	13.8	17,076	208	1	1650	1/40	9	410	39	8'	12'	35
KUH-C-05-21-00	3.75/5	208/240	1	20.8***	17,076	240	1	1650	1/40	9	410	39	8'	12'	35
KUH-C-05-23-34	3.75/5	208/240	3	12.1***	17,076	240	1	1650	1/40	9	410	39	8'	12'	35
KUH-C-05-71-00	5	277	1	18.2	17,076	277	1	1550	1/30	9	360	44	8'	12'	35
KUH-C-05-43-00	5	480	3	6.0	17,076	480	1	1550	1/35	9	380	42	8'	12'	35
KUH-C-07-81-34	7.5	208	1	36.1	25,598	208	1	1725	1/15	12	850	28	8'	27'	55
KUH-C-07-83-34	7.5	208	3	20.9	25,598	208	1	1725	1/15	12	850	28	8'	27'	55
KUH-C-07-21-34	5.6/7.5	208/240	1	31.1***	25,598	240	1	1725	1/15	12	850	28	8'	27'	55
KUH-C-07-23-34	5.6/7.5	208/240	3	18.1***	25,598	240	1	1725	1/15	12	850	28	8'	27'	55
KUH-C-07-71-30	7.5	277	1	27.2	25,598	277	1	1550	1/15	12	750	32	8'	27'	55
KUH-C-07-43-30	7.5	480	3	9.0	25,598	480	3	1725	1/15	12	850	28	8'	27'	55
KUH-C-07-63-32	7.5	600	3	7.0	25,598	575	3	1725	1/3	12	850	28	8'	27'	55
KUH-C-10-81-34	9.7	208	1	48.0	34,130	208	1	1725	1/15	12	850	37	9'	27'	55
KUH-C-10-83-34	9.7	208	3	27.8	34,130	208	1	1725	1/15	12	850	37	9'	27'	55
KUH-C-10-21-34	7.5/10	208/240	1	41.7***	34,130	240	1	1725	1/15	12	850	37	9'	27'	55
KUH-C-10-23-34	7.5/10	208/240	3	24.0***	34,130	240	1	1725	1/15	12	850	37	9'	27'	55
KUH-C-10-43-30	10	480	3	12.0	34,130	480	3	1725	1/15	12	850	37	9'	27'	55
KUH-C-10-63-32	10	600	3	10.0	34,130	575	3	1725	1/3	12	850	37	9'	27'	55
KUH-C-12-83-34	12.5	208	3	34.8	42,663	208	1	1725	1/15	12	850	47	9'	27'	55
KUH-C-12-23-34	9.4/12.5	208/240	3	30.1***	42,663	240	1	1725	1/15	12	850	47	9'	27'	55
KUH-C-12-43-30	12.5	480	3	15.1	42,663	480	3	1725	1/15	12	850	47	9'	27'	55
KUH-C-12-63-32	12.5	600	3	12.0	42,663	575	3	1725	1/3	12	850	47	9'	27'	55
KUH-C-15-83-34	15	208	3	41.8	51,195	208	1	1725	1/15	12	850	56	10'	27'	55
KUH-C-15-23-34	11.2/15	208/240	3	36.2***	51,195	240	1	1725	1/15	12	850	56	10'	27'	55
KUH-C-15-43-30	15	480	3	18.1	51,195	480	3	1725	1/15	12	850	56	10'	27'	55
KUH-C-15-63-32	15	600	3	15.0	51,195	575	3	1725	1/3	12	850	56	10'	27'	55
KUH-C-20-23-34	15/20	208/240	3	48.0***	68,460	208	3	1725	1/3	14	1240	53	11'	31'	75
KUH-C-20-43-30	20	480	3	24.0	68,460	480	3	1725	1/3	14	1240	53	11'	31'	75
KUH-C-20-63-32	20	600	3	19.0	68,460	575	3	1725	1/3	14	1240	53	11'	31'	75
KUH-C-25-43-30	25	480	3	30.0	85,525	480	3	1725	1/3	14	1350	60	12'	31'	75
KUH-C-25-63-32	25	600	3	24.0	85,525	575	3	1725	1/3	14	1350	60	12'	31'	75
KUH-C-30-83-34	30	208	3	83.4	102,390	240	3	1725	1/3	14	1555	64	13'	46'	110
KUH-C-30-23-34	22.5/30	208/240	3	72.2***	102,390	240	3	1725	1/3	14	1555	64	13'	46'	110
KUH-C-30-43-30	30	480	3	36.1	102,390	480	3	1725	1/3	14	1555	64	13'	46'	110
KUH-C-30-63-32	30	600	3	29.0	102,390	575	3	1725	1/3	14	1555	64	13'	46'	110
KUH-C-35-23-34	26.2/35	208/240	3	84.3***	119,455	240	3	1725	1/3	14	1555	71	14'	45'	110
KUH-C-35-43-30	35	480	3	42.1	119,455	480	3	1725	1/3	14	1555	71	14'	45'	110
KUH-C-35-63-32	35	600	3	34.0	119,455	575	3	1725	1/3	14	1555	71	14'	45'	110
KUH-C-40-23-34	30/40	208/240	3	96.0***	136,520	240	3	1725	1/3	14	1555	84	15'	44'	110
KUH-C-40-43-30	40	480	3	48.0	136,520	480	3	1725	1/3	14	1555	84	15'	44'	110
KUH-C-40-63-32	40	600	3	49.0	136,520	575	3	1725	1/3	14	1555	84	15'	44'	110
KUH-C-45-43-30	45	480	3	54.1	153,585	480	3	1725	1/3	14	1555	94	17'	42'	110
KUH-C-45-63-32	45	600	3	43.0	153,585	575	3	1725	1/3	14	1555	94	17'	42'	110

** Check factory for motor data

***208V amperage is 86% of 240V value



Knockout Sizes		
KUH-02 - 05	1/2" (2)	3/4" (1)
KUH-07 - 15	1/2" (2)	3/4" (1)
KUH-20 - 25	1/2" (2)	3/4" (1)
KUH-30 - 45	1/2" (2)	3/4", 1", 1-1/2" (1)

ARCHITECT'S & ENGINEER'S SPECIFICATIONS

Furnish and install Chromalox type KUH Horizontal Unit Heaters with heating and air delivery capabilities as shown on the heating schedule. Mounting brackets designed for either ceiling or wall swivel mounting shall be furnished as shown on the heating schedule. The cabinet shall be 18 gauge die formed furniture grade steel. Individual adjustable louvers shall be furnished to provide desired control of discharge air. All metal surfaces of the casing shall be phosphate coated to resist corrosion, and finished in gray 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 the heating element in case of thermal overload.

All heaters drawing more than 48 amperes shall have built-in branch circuit fusing for protection.

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 fan guard/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

PCN	Description	Kits			
		Thermo-stat	Fan Only	Remote Fan	Dis-connect
304004	KUH-C-02-81-00 208V 1P 2.6kW	KUH-TK4	ISFS-02	ESFS-42	KDS-1
304012	KUH-C-02-21-00 240V 1P 2.6kW	KUH-TK4	ISFS-02	ESFS-42	KDS-1
304020	KUH-C-02-71-00 277V 1P 2.6kW	KUH-TK4	ISFS-02	ESFS-47	KDS-1
304039	KUH-C-04-81-00 208V 1P 4kW	KUH-TK4	ISFS-02	ESFS-42	KDS-1
304047	KUH-C-04-83-34 208V 3P 4kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304055	KUH-C-04-21-00 240V 1P 4kW	KUH-TK4	ISFS-02	ESFS-42	KDS-1
304063	KUH-C-04-23-34 240V 3P 4kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304071	KUH-C-04-71-00 277V 1P 4kW	KUH-TK4	ISFS-02	ESFS-47	KDS-1
304080	KUH-C-04-43-30 480V 3P 4kW	KUH-TK3	ESFS-40	ESFS-40	KDS-1
304098	KUH-C-05-81-00 208V 1P 5kW	KUH-TK4	ISFS-02	ESFS-42	KDS-1
304100	KUH-C-05-83-34 208V 3P 5kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304119	KUH-C-05-21-00 240V 1P 5kW	KUH-TK4	ISFS-02	ESFS-42	KDS-1
304127	KUH-C-05-23-34 240V 3P 5kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304135	KUH-C-05-71-00 277V 1P 5kW	KUH-TK4	ISFS-02	ESFS-47	KDS-1
304143	KUH-C-05-43-30 480V 3P 5kW	KUH-TK3	ESFS-40	ESFS-40	KDS-1
304151	KUH-C-07-81-34 208V 1P 7.5kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304160	KUH-C-07-83-34 208V 3P 7.5kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304178	KUH-C-07-21-34 240V 1P 7.5kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304186	KUH-C-07-23-34 240V 3P 7.5kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304194	KUH-C-07-71-30 277V 1P 7.5kW	KUH-TK3	ISFS-02	ESFS-47	KDS-1
304207	KUH-C-07-43-30 480V 3P 7.5kW	KUH-TK3	ESFS-40	ESFS-40	KDS-1
304215	KUH-C-10-81-34 208V 1P 10kW	KUH-TK3	ISFS-02	ESFS-42	KDS-2

PCN	Description	Kits			
		Thermo-stat	Fan Only	Remote Fan	Dis-connect
304223	KUH-C-10-83-34 208V 3P 10kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304231	KUH-C-10-21-34 240V 1P 10kW	KUH-TK3	ISFS-02	ESFS-42	KDS-2
304240	KUH-C-10-23-34 240V 3P 10kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304258	KUH-C-10-43-30 480V 3P 10kW	KUH-TK3	ESFS-40	ESFS-40	KDS-1
304266	KUH-C-12-83-34 208V 3P 12.5kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304274	KUH-C-12-23-34 240V 3P 12.5kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304282	KUH-C-12-43-30 480V 3P 12.5kW	KUH-TK3	ESFS-40	ESFS-40	KDS-1
304290	KUH-C-15-83-34 208V 3P 15kW	KUH-TK3	ISFS-02	ESFS-42	KDS-2
304303	KUH-C-15-23-34 240V 3P 15kW	KUH-TK3	ISFS-02	ESFS-42	KDS-1
304311	KUH-C-15-43-30 480V 3P 15kW	KUH-TK3	ESFS-40	ESFS-40	KDS-1
304320	KUH-C-20-23-34 240V 3P 20kW	KUH-TK3	ISFS-02	ESFS-42A	KDS-2
304338	KUH-C-20-43-30 480V 3P 20kW	KUH-TK3	ESFS-40A	ESFS-40A	KDS-1
304346	KUH-C-25-43-30 480V 3P 25kW	KUH-TK3	ESFS-40A	ESFS-40A	KDS-1
304354	KUH-C-30-83-34 208V 3P 30kW	KUH-TK3	ISFS-02	ESFS-42A	KDS-3
304362	KUH-C-30-23-34 240V 3P 30kW	KUH-TK3	ISFS-02	ESFS-42A	KDS-2
304370	KUH-C-30-43-30 480V 3P 30kW	KUH-TK3	ESFS-40A	ESFS-40A	KDS-1
304389	KUH-C-35-23-34 240V 3P 35kW	KUH-TK3	ISFS-02	ESFS-42A	KDS-3
304397	KUH-C-35-43-30 480V 3P 35kW	KUH-TK3	ESFS-40A	ESFS-40A	KDS-2
304400	KUH-C-40-23-34 240V 3P 40kW	KUH-TK3	ISFS-02	ESFS-42A	KDS-3
304418	KUH-C-40-43-30 480V 3P 40kW	KUH-TK3	ESFS-40A	ESFS-40A	KDS-2
304426	KUH-C-45-43-30 480V 3P 45kW	KUH-TK3	ESFS-40A	ESFS-40A	KDS-2

Model Numbers

When ordering KUH heaters, specify the model number and corresponding PCN (Product Code Number). If controls or thermostat/fan options are required, designate these options in the model number

when orderin, as shown below. Always specify voltage, phase and kW by listing them on the purchase order product specifications.

KUH	05	21	34	41	1
					Disconnect Switch
					1 40 Amp
					2 80 Amp
					3 100 Amp
				Control	
				0 0	No Thermostat, No Summer Fan Switch
				4 0	Internal Thermostat Only
				4 1	Internal Therm. and Internal Sum. Fan Sw.
				4 2	External Sum. Fan Sw. Only (Not 480V)
				4 3	External Sum. Fan Sw. and Fan Relay (All Volts)
				4 4	Rem. Fan Sw. and Internal Therm. (Not 480V)
				4 5	Rem. Fan. Sw., Fan Relay and Int. Therm. (All Volts)
				Control	
				0 0	No Contactor(s)
				3 0	24V Control Internal Transformer
				3 1	24V Control Externally Supplied
				3 2	120V Control Internal Transformer
				3 3	120V Control Externally Supplied
				3 4	208/240V Control Internally Supplied, No Transformer
				3 5	277V Control Internally Supplied
					Heater Voltage and Phase
					81 = 208V, 1 Phase
					83 = 208V, 3 Phase
					21 = 240V, 1 Phase
					23 = 240V, 3 Phase
					71 = 277V, 1 Phase
					43 = 480V, 3 Phase
					63 = 600V, 3 Phase
					Heating Elements
					02 = 2.6 kW
					04 = 4.0 kW
					05 = 5.0 kW
					07 = 7.5 kW
					10 = 10.0 kW
					12 = 12.5 kW
					15 = 15.0 kW
					20 = 20.0 kW
					25 = 25.0 kW
					30 = 30.0 kW
					35 = 35.0 kW
					40 = 40.0 kW
					45 = 45.0 kW

Chromalox Horizontal Unit Heater