



Thermostat Kits

SERVICE REFERENCE

DIVISION 4	SECTION KUH
SALES REFERENCE (Supersedes PF467-4)	PF467-5
161-057821-002	
DATE	JULY, 2002

INSTALLATION INSTRUCTIONS AND RENEWAL PARTS IDENTIFICATION

Type KUH-TK3 and KUH-TK4

For field installation only in KUH-02 through KUH-45 heaters

SPECIFICATIONS

1. Temperature Range: 40°F to 90°F.
2. Differential: 5°F.
3. Non-inductive Rating:
24V @ 25 Amperes
240V @ 25 Amperes
277V @ 22 Amperes



GENERAL

The following procedure contains instructions for installing thermostat kits KUH-TK3 and KUH-TK4 in KUH-02 through KUH-45 Heaters.

⚠ WARNING

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

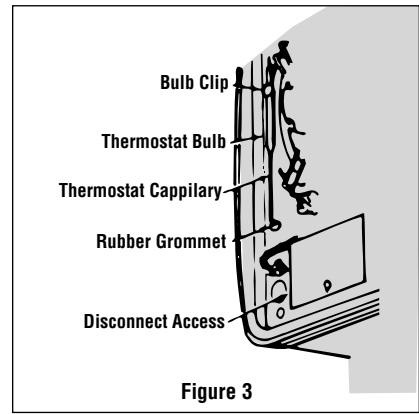
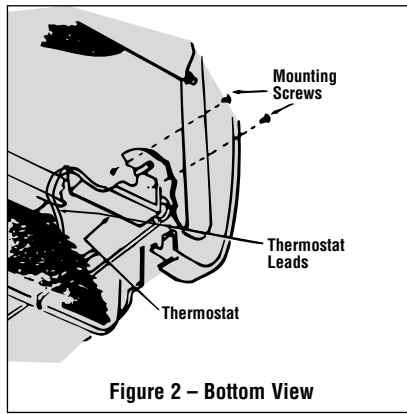
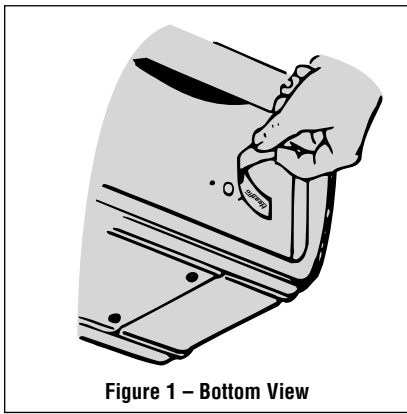
⚠ WARNING

This kit must be installed by a qualified electrician. Before performing any of the following operations, disconnect all power to the heater to prevent possible fatal injury.

INSTALLATION

1. Peel off "Heatflo" label located at the bottom right corner of the front of the heater. Removal of this label will reveal the thermostat shaft hole and two mounting holes which are factory drilled on all heaters. (See Figure 1).
2. Open hinged access door at bottom of heater and insert thermostat through the shaft hole in the front cover, assuring that thermostat leads are toward the inside of the case. (See Figure 2.) Align mounting holes and fasten with the mounting screws provided with the kit.
3. Refer to specific wiring diagram figure number (from Table 1, page 2) for electrical connections of the thermostat leads and follow directions under corresponding figure number. Complete all electrical connections indicated before proceeding to step 4.
4. Insert bulb clip in factory drilled hole located on heater back. (See Figure 3.)
5. Feed thermostat capillary (be careful not to kink or make any sharp bends) out through the factory drilled hole located on heater back directly beneath motor conduit. Snap the tip of the thermostat bulb into the bulb clip. (See Figure 3.)
6. Make a lengthwise cut with knife through the rubber grommet provided and insert the grommet over the capillary.
7. Install the grommet into factory drilled hole on back of heater. (See Figure 3.)
8. Install new label over the thermostat shaft. Install thermostat knob.

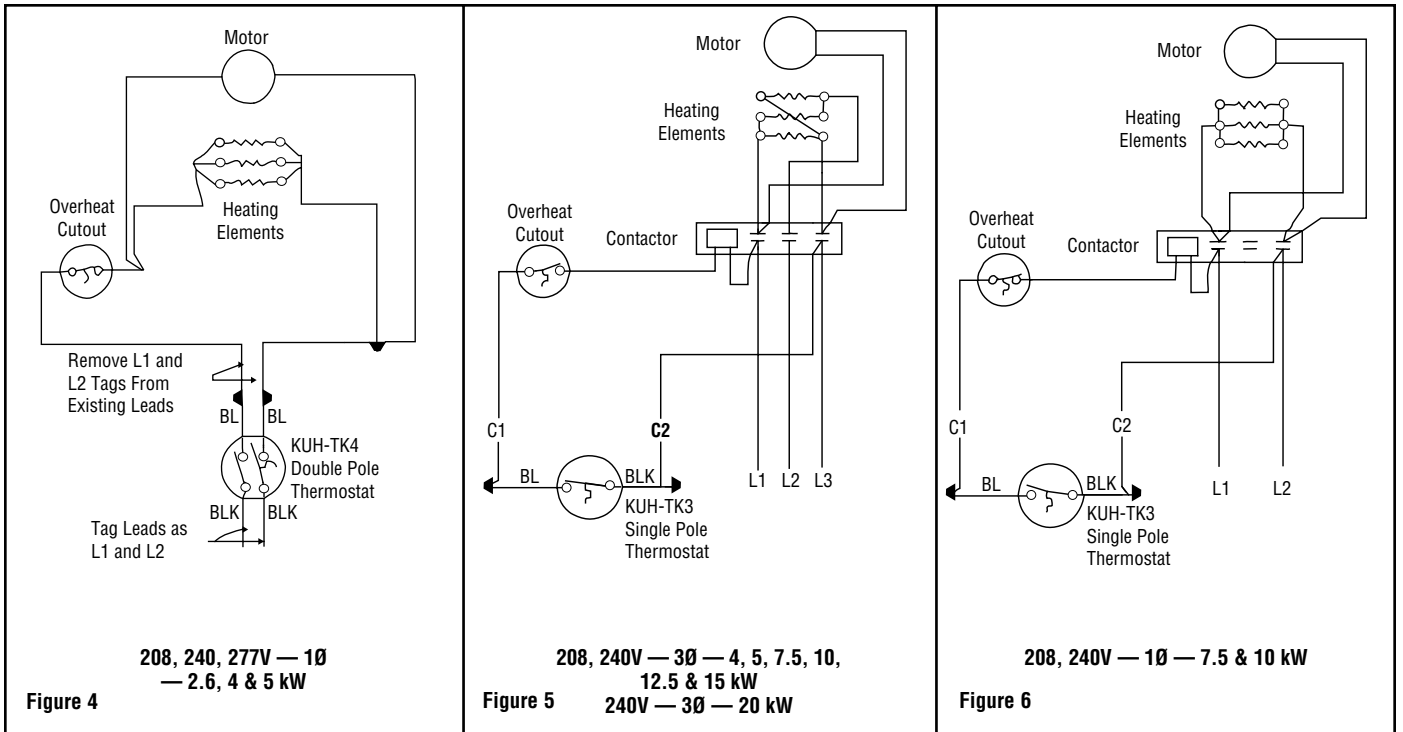
INSTALLATION



WIRING DIAGRAMS

Model	Volts	Phase	kW	Thermostat Kit No.	Wiring Diagram Figure No.	Built-In Contactor	Built-In Transformer
KUH-C-02-81	208	1	2.6	KUH-TK4	4	NO	NO
KUH-C-02-21	240	1	2.6		4	NO	NO
KUH-C-02-71	277	1	2.6		4	NO	NO
KUH-C-04-81	208	1	4	KUH-TK4	4	NO	NO
KUH-C-04-83	208	3	4	KUH-TK3	5	YES	NO
KUH-C-04-21	240	1	4	KUH-TK4	4	NO	NO
KUH-C-04-23	240	3	4	KUH-TK3	5	YES	NO
KUH-C-04-71	277	1	4	KUH-TK4	4	NO	NO
KUH-C-04-43	480	3	4	KUH-TK3	7	YES	YES
KUH-C-05-81	208	1	5	KUH-TK4	4	NO	NO
KUH-C-05-83	208	3	5	KUH-TK3	5	YES	NO
KUH-C-05-21	240	1	5	KUH-TK4	4	NO	NO
KUH-C-05-23	240	3	5	KUH-TK3	5	YES	NO
KUH-C-05-71	277	1	5	KUH-TK4	4	NO	NO
KUH-C-05-43	480	3	5	KUH-TK3	7	YES	YES
KUH-C-07-81	208	1	7.5	KUH-TK3	6	YES	NO
KUH-C-07-83	208	3	7.5		5	YES	NO
KUH-C-07-21	240	1	7.5		6	YES	NO
KUH-C-07-23	240	3	7.5		5	YES	NO
KUH-C-07-71	277	1	7.5		8	YES	YES
KUH-C-07-43	480	3	7.5		7	YES	YES
KUH-C-10-81	208	1	10	KUH-TK3	6	YES	NO
KUH-C-10-83	208	3	10		5	YES	NO
KUH-C-10-21	240	1	10		6	YES	NO
KUH-C-10-23	240	3	10		5	YES	NO
KUH-C-10-43	480	3	10		7	YES	YES
KUH-C-12-83	208	3	12.5	KUH-TK3	5	YES	NO
KUH-C-12-23	240	3	12.5		5	YES	NO
KUH-C-12-43	480	3	12.5		7	YES	YES
KUH-C-15-83	208	3	15	KUH-TK3	5	YES	NO
KUH-C-15-23	240	3	15		5	YES	NO
KUH-C-15-43	480	3	15		7	YES	YES
KUH-C-20-23	240	3	20	KUH-TK3	5	YES	NO
KUH-C-20-43	480	3	20		7	YES	YES
KUH-C-25-43 To KUH-C-45-43	480	3	25 - 45	KUH-TK3	7	YES	YES
Heaters without contactor	208/240/277	1	2.6, 4, 5	KUH-TK4	4	NO	NO

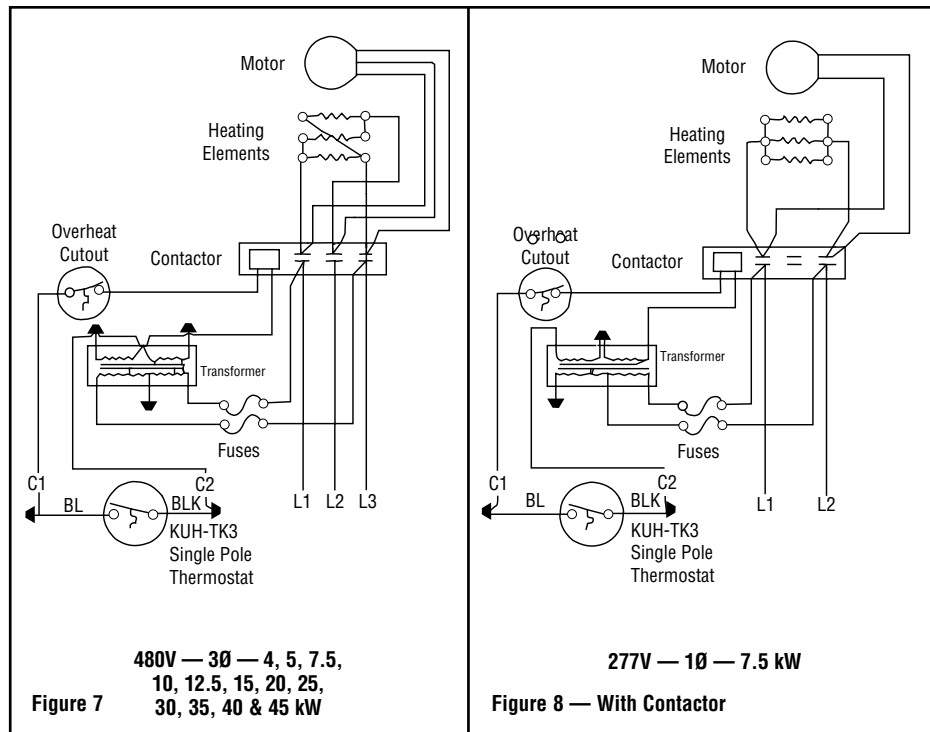
WIRING DIAGRAMS



Connect thermostat blue leads (BL) to L1 and L2 using wire nuts provided. Remove the L1 and L2 wire markers from the heater leads and attach L1 and L2 to thermostat black leads (BLK).

Connect single pole thermostat blue lead (BL) to heater lead C1 and black lead (BLK) to C2 using wire nut provided.

Connect single pole thermostat blue lead (BL) to heater lead C1 and black lead (BLK) to C2 using wire nuts provided.



Connect single pole thermostat blue lead (BL) to heater lead C1 and black lead (BLK) C2 using wire nuts provided.

Connect single pole thermostat blue lead (BL) to heater lead C1 and black lead (BLK) to C2 using wire nuts provided.

NOTE: One element is omitted on KUH-B-02

RENEWAL PARTS IDENTIFICATION

Components Kit	KUH-TK3 Part Number*	KUH-TK4 Part Number*
Thermostat	300-049197-003	300-049197-004
Screws	248-049282-021 (2)	248-049282-021 (2)
Rubber Grommet	135-075436-008	135-075436-008
Label Decal	170-049279-007	170-049279-007
Bulb Clip	059-304558-001	059-304558-001
Knob	169-049278-001	169-049278-001
Wire Nuts	070-075468-004 (2)	070-075468-004 (2)

*Number in Parentheses () indicates the quantity of that part required.

Limited Warranty:

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

Heatflo[®]

PRODUCT SERVICE

2150 N. RULON WHITE BLVD., OGDEN, UT 84404

Phone: 1-800-368-2493