

Electric Heat Accessory

AAH10FBHAA, AAH15FBHAA, AAH20FBHAA
AAH10FBLAA, AAH15FBLAA, AAH20FBLAA
AAH10FBSAA, AAH15FBSAA, AAH20FBSAA

For Use With PAF/PHF & APFM/HPFM Three Phase Package Units

WARNING

Electrical shock hazard.

Installation or repairs made by unqualified persons can result in hazards to you and others. Installation must conform with local building codes or, in the absence of local codes, with National Electrical Code ANSI/NFPA 70-1996 or current edition.

The information contained in this manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments.

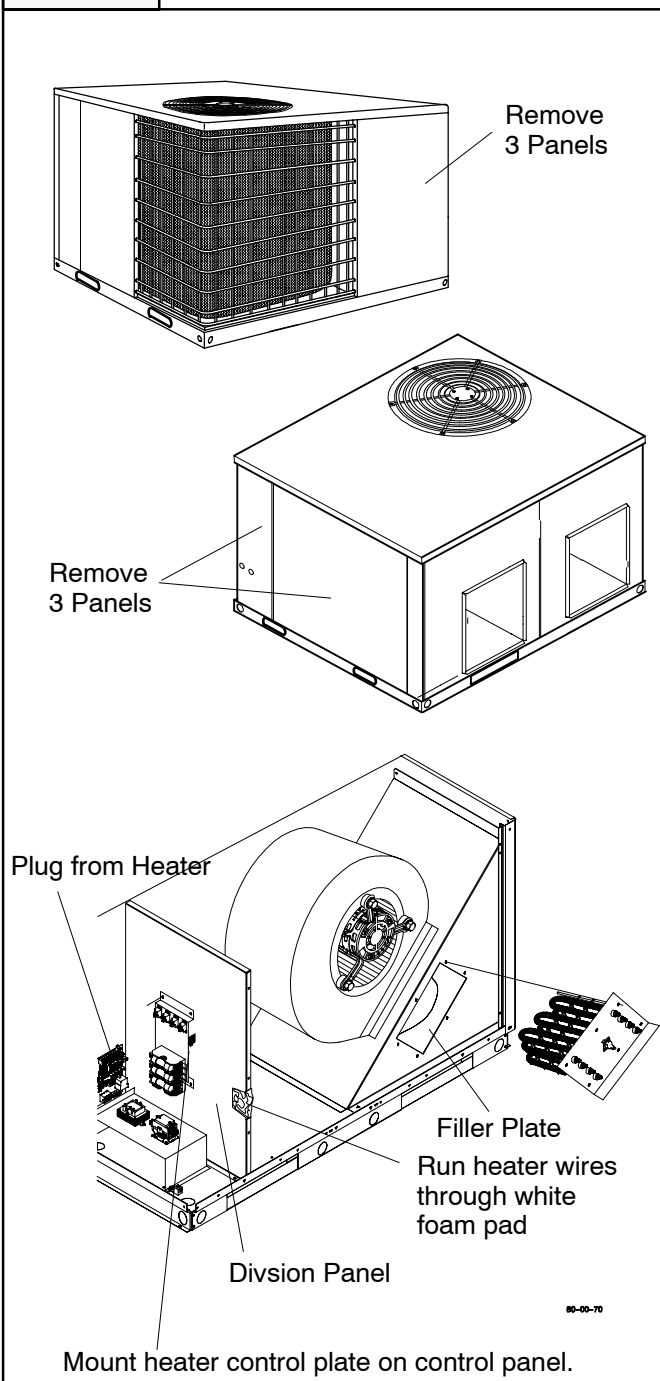
Shut OFF electric power at unit disconnect and/or service panel before beginning the following procedures.

Failure to carefully read and follow all instructions in this manual can result in malfunction, property damage, personal injury, and/or death.

NOTE: Supply voltage, amperage, fuse and disconnect switch sizes **MUST** conform with all technical specifications in this manual and on the unit rating plate.

1. Shut **OFF** electric power at unit disconnect switch or service panel.
2. Remove the three access panels as shown in **Figure 1**.
3. Remove the filler plate from the blower box, **Figure 1**.
4. Insert the heater into the cabinet opening as shown in **Figure 1**, **Exercise caution to prevent tearing of insulation or damage to heater element.**
5. Secure the electric heat accessory with screws removed from filler plate.
6. Route wires through the white foam pad in the division panel to the control side. Mount the heater circuit breaker/relay plate on the control side of the division panel using the four holes and screws provided, **Figure 1**.
7. Connect the plug on the heater wiring into the receptacle on the control board on the side of the cabinet, **Figure 1**.
8. Connect wiring for low voltage and line voltage as shown in **Figure 2** and heater wiring diagram.
9. Reinstall all panels.
10. Mark an "X" in the appropriate box for the heater on the unit rating plate.

Figure 1 Installing The Electric Heat Accessory



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Wiring

All line voltage connections and ground connections **MUST** be made with copper wire.

The power supply wiring **MUST** have overcurrent protection. This can be either fuses or circuit breakers. The maximum size for the overcurrent protection is shown in the column labeled “Max. Fuse or NEC HACR Breaker (Amps)” in the Electrical Data Table or on the unit rating plate.

Connect supply voltage wires to the Circuit Breakers on the heater or to the pigtails on the heater. Power for the blower motor is supplied through the connector from the heater to the control board.

Grounding

Permanently ground the electric heat accessory in accordance with local codes and ordinances and in the United States with National Electrical Code ANSI/NFPA70-1996 or current edition. Use a copper conductor of the appropriate size from the electric heat accessory ground lug, to a grounding lug on the circuit breaker panel. On models with more than one circuit, a separate copper ground wire **MUST** be connected for *each* circuit.

Adjusting Thermostat Anticipator

Set the heat anticipator of the thermostat to the proper value. See instructions provided with the thermostat before making this adjustment.

Heater Model	Anticipator Setting
05	.24
07, 10	.32
14, 15	.40
20	.46

Staging

Staging is not available on these units.

Temperature Rise Check

Temperature rise is the difference between the supply and return air temperatures.

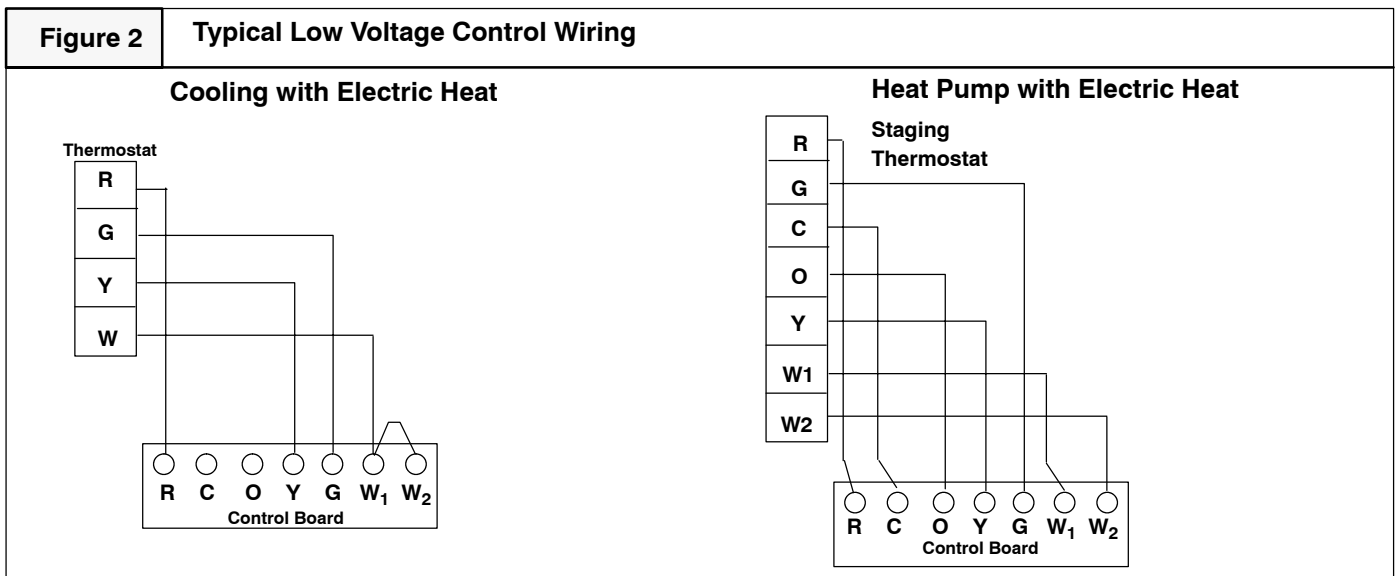
NOTE: The temperature rise can be adjusted by changing the heating speed tap at the unit’s blower terminal block. Refer to the unit’s *Installation Instructions* for airflow information.

A temperature rise greater than 60°F (33.3°C) is not recommended.

1. To check the temperature rise through the unit, place thermometers in the supply and return air ducts as close to the unit as possible.
2. Open **ALL** registers and duct dampers.
3. Set thermostat Heat-Cool selector to **HEAT**.
4. Set the thermostat temperature setting as high as it will go.
5. Turn electric power **ON**.
6. Operate unit **AT LEAST** 5 minutes, then check temperature rise.

NOTE: The maximum outlet air temperature for all models is 200°F (93.3°C).

7. Set thermostat to normal temperature setting.
8. Turn electric power **OFF**.
9. Be sure to seal all holes in ducts if any were created during this process.



Technical Data

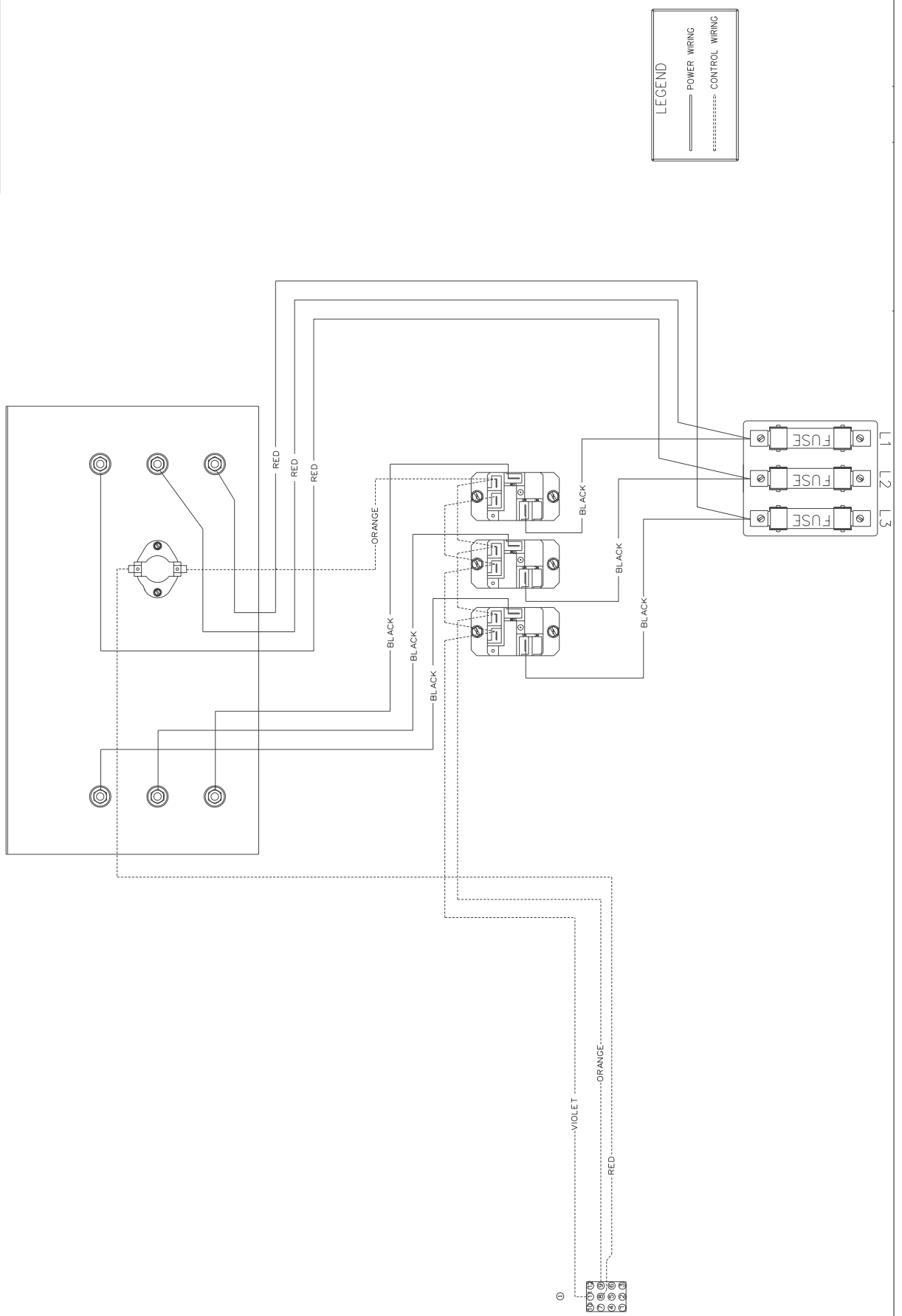
HEATER MODEL	Used With	Supply Voltage	Nominal Heating BTUH	Supply Circuit No.	Heater Amps	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device (Amps)	
AAH10FBHAA	3 - 5 Ton	208-3-60	24,574	L4-L5-L6	20.0	25.0	30	
		240-3-60	32,765	L4-L5-L6	23.1	28.9	30	
AAH10FBLAA		480-3-60	32,765	L4-L5-L6	11.5	14.4	15	
AAH10FBSAA		575-3-60	32,765	L4-L5-L6	9.6	12.0	15	
AAH15FBHAA		3 - 5 Ton	208-3-60	36,860	L4-L5-L6	30.0	37.5	40
			240-3-60	49,147	L4-L5-L6	34.6	43.3	45
AAH15FBLAA	480-3-60		49,147	L4-L5-L6	17.3	21.7	25	
AAH15FBSAA	575-3-60		49,147	L4-L5-L6	14.5	18.1	20	
AAH20FBHAA	3 - 5 Ton		208-3-60	49,147	L4-L5-L6	40.0	50.0	60
			240-3-60	65,530	L4-L5-L6	46.2	57.8	60
AAH20FBLAA		480-3-60	65,530	L4-L5-L6	23.1	28.9	30	
AAH20FBSAA		575-3-60	65,530	L4-L5-L6	19.3	24.1	25	

Heater Model	Voltage/Ph/Hz	*Temperature Rise °F @ CFM								
		600	800	1000	1200	1400	1600	1800	2000	2200
AAH10	240-480-575/3/60	50.6	37.9	30.3	25.3	21.7	19.0	16.9	15.2	13.8
	208/3/60	37.9	28.4	22.8	19.0	16.3	14.2	12.6	11.4	10.3
AAH15	240-480-575/3/60	---	56.9	45.5	37.9	32.5	28.4	25.3	22.8	20.7
	208/3/60	56.9	42.7	34.1	28.4	24.4	21.3	19.0	17.1	15.5
AAH20	240-480-575/3/60	---	---	---	50.6	43.3	37.9	33.7	30.3	27.6
	208/3/60	---	56.9	45.5	37.9	32.5	28.4	25.3	22.8	20.7

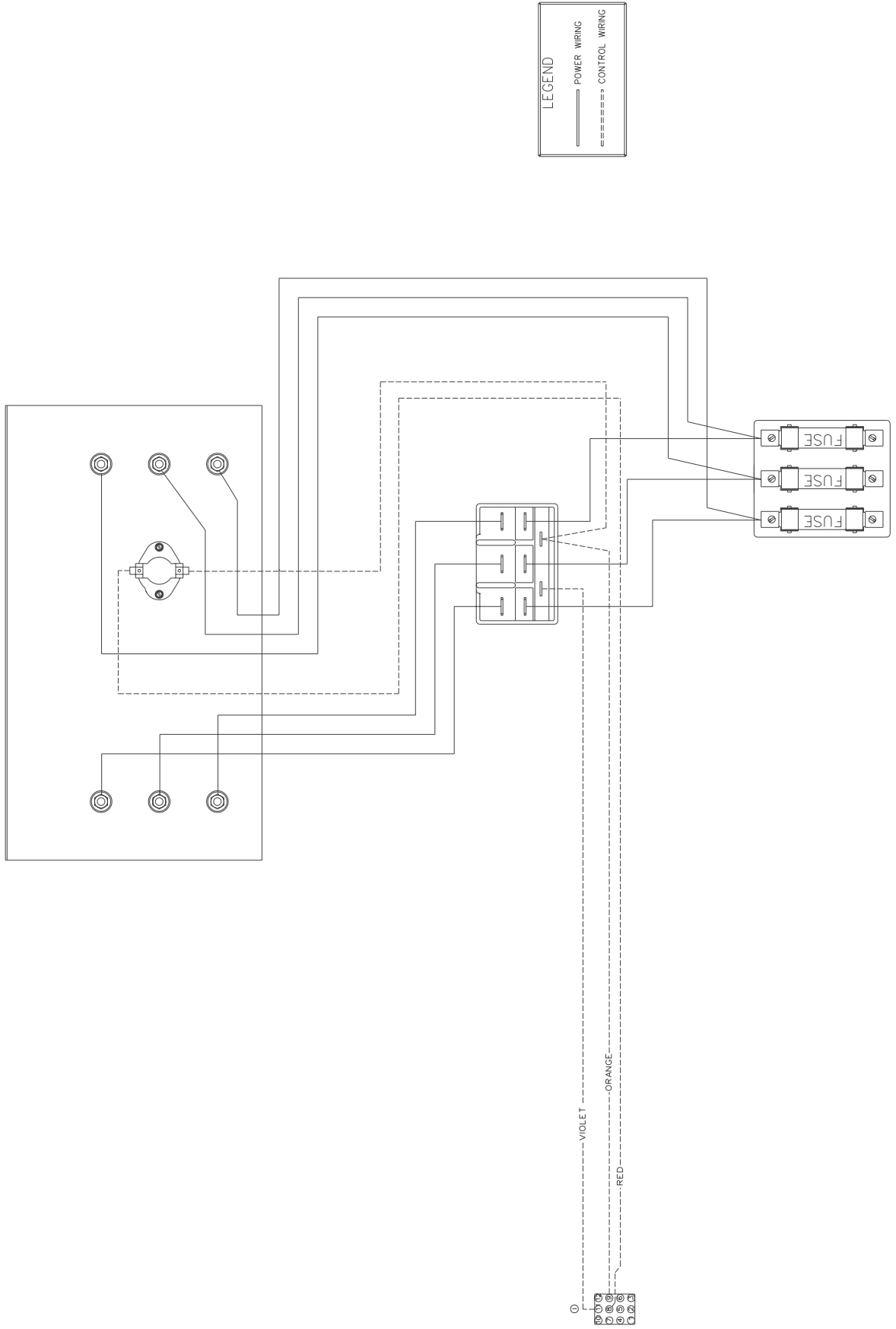
* Temperature Rise Must Not Exceed 60° F (Electric Heat Only) .

AAH SERIES HEATERS PARTS LIST								
No.	Description	Part Number	AAH10FBHA	AAH10FB(L/S)A	AAH15FBHA	AAH15FB(L/S)A	AAH20FBHA	AAH20FB(L/S)A
1	Block, Fuse	1098567	1	1	-	1	-	1
		1098568	-	-	1	-	1	-
2	Relay, Heater	1084529	1	-	1	-	1	-
3	Contact	1098537	-	1	-	1	-	1
4	Switch, Limit	1096985	1	1	1	1	1	1

10, 15, & 20 kw - ААН10ФВНAA, ААН15ФВНAA, ААН20ФВНAA



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- AAH10FBSAA, AAH15FBSAA**



20 kw - AAH20FBSAA

