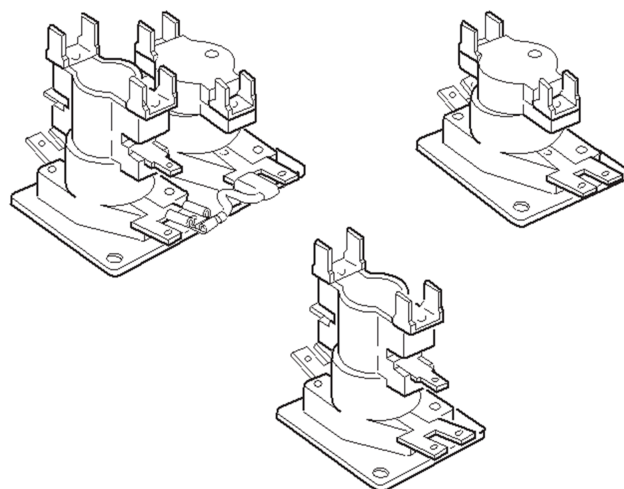


**FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY BEFORE  
INSTALLING OR OPERATING THIS CONTROL COULD CAUSE PERSONAL  
INJURY AND/OR PROPERTY DAMAGE.**

## DESCRIPTION

The 24A34 Series Fan/Heat Sequencer gives the service technician a direct replacement for sequencing both fan and heat. The terminal markings on the 24A34 sequencers are equivalent to most other manufacturers' types.

These sequencers may be wired in series, as shown in wiring diagrams, to allow sequencing of one through seven element furnaces.



### ⚠ CAUTION

To prevent electrical shock and/or equipment damage, disconnect electric power to system, at main fuse or circuit breaker box, until installation is complete.

Do not use on circuits exceeding specified voltage. Higher voltage will damage control and could cause shock or fire hazard.

## SPECIFICATIONS

Electrical Ratings - Single Load Contact Ratings (All Models)

VAC	Resistive (Non-Inductive)		Motor Ratings (Inductive)		Pilot Duty
	Watts	Amps	Full Load	Locked Rotor	
120	3000	25.0	14.0A	72.0A	125 VA
240	6000	25.0	7.0A	42.0A	125 VA
480	6000	12.5	—	—	480 VA

### COMBINED LOAD RATING TABLE (ALL MODELS)

30A @ 240 VAC – TOTAL,  
23A Non-Inductive + 7 FLA/42 LRA Inductive,  
ON Time: Elapsed time to make contacts after  
heater is energized (min. to max.)  
OFF Time: Elapsed time to break contacts after  
heater is de-energized (min. to max.)

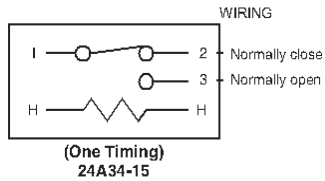
#### TABLE NOTES:

- ① M1-M2 and M3-M4 are always first switches to turn ON and last to turn OFF. All other switches are random ON and random OFF
- ② 24A34-14 Switch contacts designated F<sub>1</sub> - F<sub>2</sub> instead of M<sub>1</sub> - M<sub>2</sub>
- ③ 24A34-28 is 2 pole double throw
- ⬆ These contacts switch simultaneously

**NOTE:** Underwriters Laboratories requires a fan interlock circuit to insure the blower remains operating whenever more than one sequencer is used. The fan interlock should be the M<sub>1</sub>/M<sub>2</sub> contacts of the second or third sequencer. All M<sub>1</sub>/M<sub>2</sub> contacts are wired to the blower motor so that any sequencer that is energized will keep the blower ON.

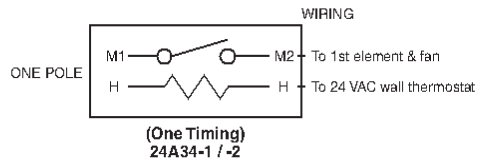
Model Number	Timings	Switches	Timings – ON						Timings – OFF					
			M1-M2	M3-M4	M5-M6	M7-M8	M9-M10		M1-M2	M3-M4	M5-M6	M7-M8	M9-M10	
24A34-1	1	1	1-20	—	—	—	—	—	40-110	—	—	—	—	—
24A34-2	1	1	—	—	30-90	—	—	—	—	—	1-30	—	—	—
24A34-3 ①	1	2	1-20	1-20	—	—	—	—	40-110	40-110	—	—	—	—
24A34-4	1	2	—	—	30-90	30-90	—	—	—	—	1-30	1-30	—	—
24A34-5 ①	2	3	1-110	1-110	1-110	—	—	—	1-110	1-110	1-110	—	—	—
24A34-6 ①	2	4	1-110	1-110	1-110	1-110	—	—	1-110	1-110	1-110	1-110	—	—
24A34-14 ②	4	5	1-160	1-160	1-160	1-160	1-160	—	1-160	1-160	1-160	1-160	1-160	—
24A34-21	1	1	1-20	—	—	—	—	—	1-50	—	—	—	—	—
24A34-22	1	1	15-45	—	—	—	—	—	1-30	—	—	—	—	—
24A34-23	1	1	25-55	—	—	—	—	—	15-45	—	—	—	—	—
24A34-24	1	1	30-75	—	—	—	—	—	1-40	—	—	—	—	—
24A34-25	1	1	40-90	—	—	—	—	—	1-30	—	—	—	—	—
24A34-26	2	2	1-20	30-90	—	—	—	—	40-90	1-30	—	—	—	—
24A34-27	2	2	1-160	1-160	—	—	—	—	1-160	1-160	—	—	—	—
24A34-28 ③	2	2	1-160	1-160	—	—	—	—	1-160	1-160	—	—	—	—
24A34-29	1	1	15-35	—	—	—	—	—	25-55	—	—	—	—	—
24A34-36	2	2	1-20	30-45	—	—	—	—	45-110	1-30	—	—	—	—
24A34-37	1	1	1-110	—	—	—	—	—	1-110	—	—	—	—	—

## FAN DELAY OFF

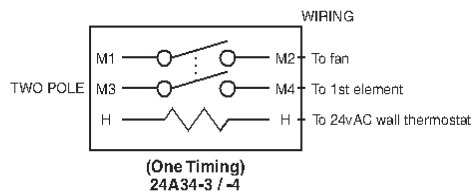


## FOR ONE ELEMENT FURNACES

### COMBINATION Fan and Heater Loads

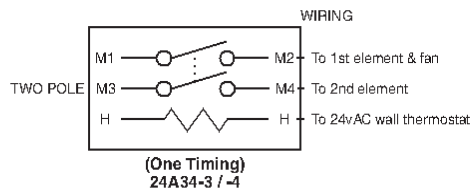


### SEPARATE Fan and Heater Loads

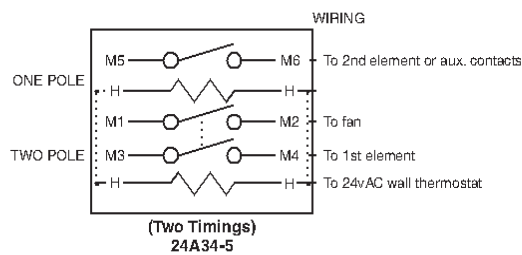


## FOR TWO ELEMENT FURNACES

### COMBINATION Fan and Heater Loads



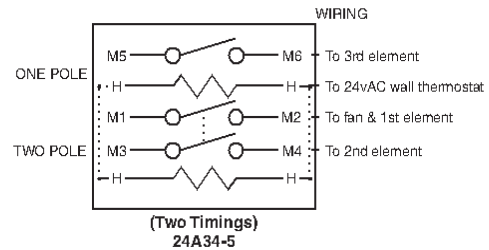
### SEPARATE Fan and Heater Loads



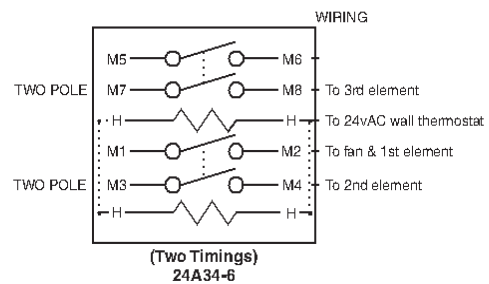
..... DOTTED LINE BETWEEN "H" TERMINAL IS A FACTORY-INSTALLED JUMPER

## FOR THREE ELEMENT FURNACES WITH COMBINATION FAN & HEATER LOADS

### SINGLE-STAGE Room Thermostat

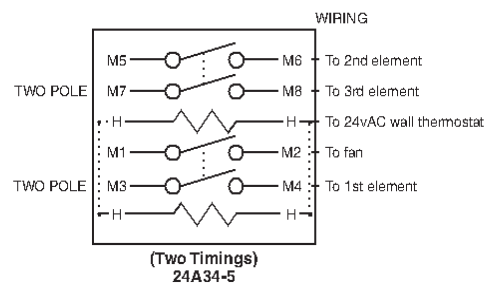


### TWO-STAGE Room Thermostat Option

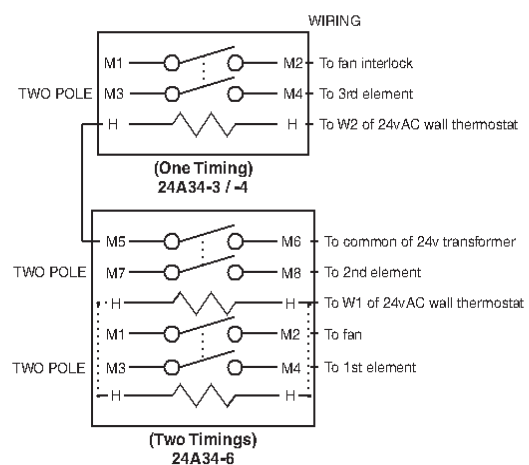


## FOR THREE ELEMENT FURNACES WITH SEPARATE FAN & HEATER LOADS

### SINGLE-STAGE Room Thermostat



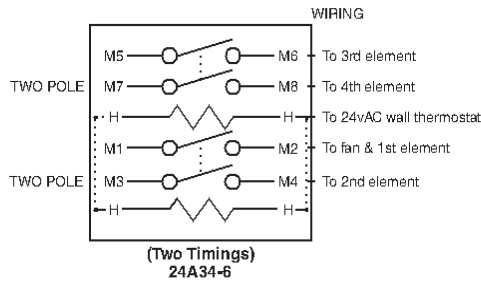
### TWO-STAGE Room Thermostat Option



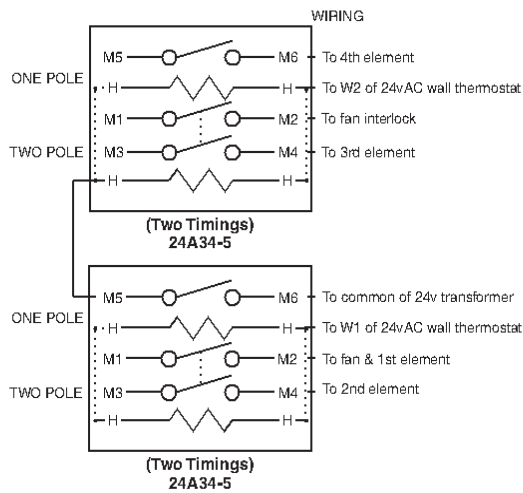
## FOR FOUR ELEMENT FURNACES

### COMBINATION Fan and Heater Loads

#### SINGLE-STAGE Room Thermostat

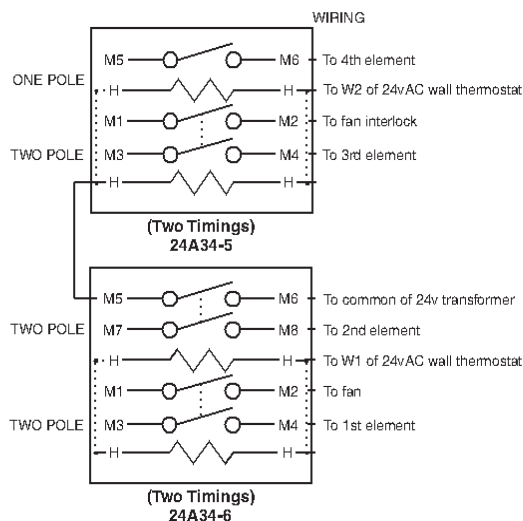


#### TWO-STAGE Room Thermostat Option after 2nd Element



### SEPARATE Fan and Heater Loads

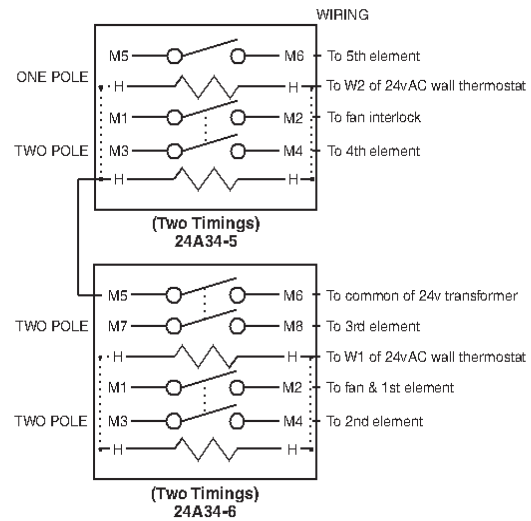
#### TWO-STAGE Room Thermostat Option after 2nd Element



## FOR FIVE ELEMENT FURNACES

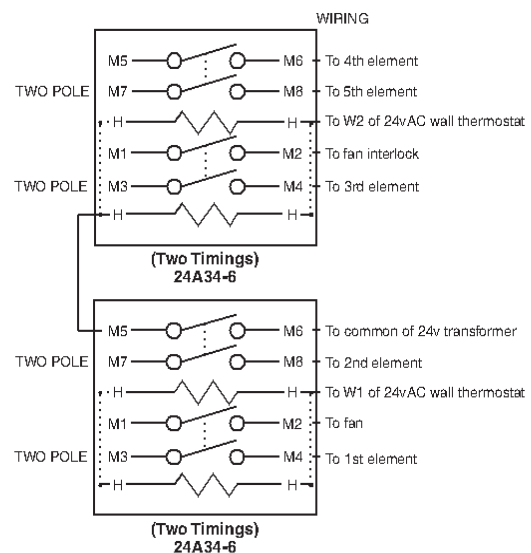
### COMBINATION Fan and Heater Loads

#### TWO-STAGE Room Thermostat Option After 3rd Element



### SEPARATE Fan and Heater Loads

#### TWO-STAGE Room Thermostat Option After 2nd Element

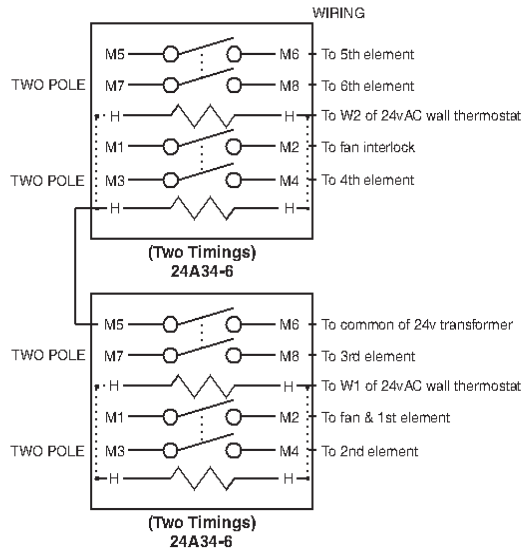


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IS A FACTORY-INSTALLED JUMPER

## FOR SIX ELEMENT FURNACES

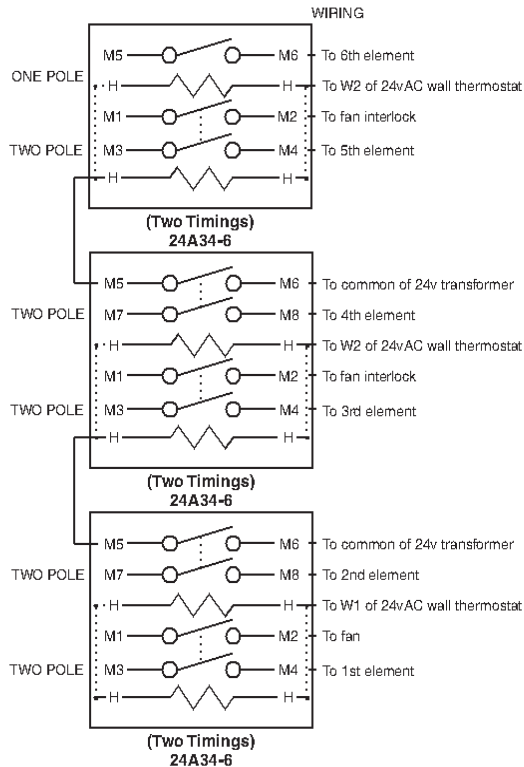
### COMBINATION Fan and Heater Loads

TWO-STAGE Room Thermostat Option After 3rd Element



### SEPARATE Fan and Heater Loads

TWO-STAGE Room Thermostat Option After 2nd or 4th Element

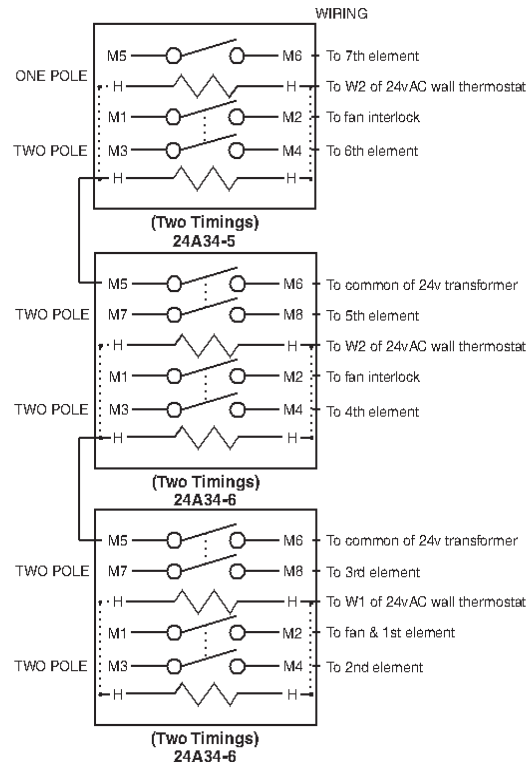


..... DOTTED LINE BETWEEN "H" TERMINAL  
IS A FACTORY-INSTALLED JUMPER

## FOR SEVEN ELEMENT FURNACES

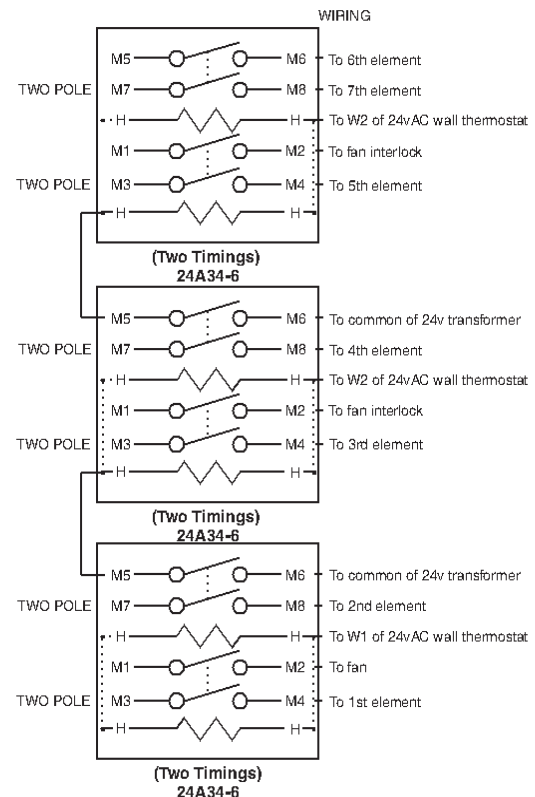
### COMBINATION Fan and Heater Loads

TWO-STAGE Room Thermostat Option After 3rd or 5th Element



### SEPARATE Fan and Heater Loads

TWO-STAGE Room Thermostat Option After 3rd or 5th Element



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