## Sequencers MARS SERIES 331





## **Electric Heat Sequencers**

The MARS2 heat sequencers are used in a variety of applications, including electric furnaces, baseboard heaters, heat pump blower control and heating element control. The sequencers stage electric heat to prevent circuit overload. These units operate by means of a PTC (positive temperature coefficient). The PTC is self current limiting, ensuring stable switching action over a wide range of voltages.

## **Features:**

- · Solid state dependability
- · Replaces Honeywell, White Rodgers, and Klixon
- · 12.5A to 25A contact ratings
- · Quick connect terminals
- · Various mounting positions
- · Shock & vibration resistant
- Ambient rated from -50°F to 165°F
- · Full-load rated auxiliary contacts

## **Single Load Contact Ratings**

(1	RESISTIVE non-inductive	∍)	MOTOR RATINGS (inductive)					
VAC	WATTS	AMPS	FULL LOAD	LOCKED ROTOR	PILOT DUTY			
120	3000	25	10A	60A	125VA			
240	6000	25	5A	30A	125VA			
480	6000	12.5	3A	18A	480VA			

Combined Load Ratings:

30A @ 240VAC - Total: 23A non-inductive + 7FLA / 42LRA inductive

Life at rated current: 10,000 cycles

MARS2			TIMINGS-ON				TIMINGS-OFF					
NO.	TIMINGS	<b>SWITCHES</b>	M1-M2	M3-M4	M5-M6	M7-M8	M9-M10	M1-M2	M3-M4	M5-M6	M7-M8	M9-M10
33841	1	1	1-20	-	-	-	-	40-110	-	-	-	-
33842	1	1	-	-	30 - 90	-	-		-	1-30	-	-
33844(1)	1	2	1-20	1-20	-	-	-	40-110	40 - 110		-	-
33845	1	2	-	-	30 - 90	30 - 90	-		-	1-30	1-30	-
33832(1)	2	3	1-110	1-110	1-110	-	-	1-110	1-110	1-110	-	-
33833 <sup>(1)</sup>	2	4	1-110	1-110	1-110	1-110	-	1-110	1-110	1-110	1-110	-
33848(1)(2)	4	5	1-160	1-160	1-160	1-110	1-160	1-160	1-160	1-160	1-160	1-160

- (1) M1-M2 and M3-M4 are always first switches to turn ON and to turn OFF. All other switches are random ON and random OFF
- (2) #33848 switch contacts designated F1-F2 instead of M1-M2
- These contacts switch simultaneously
- ON TIME Elapsed time to make contacts after heater is energized (Min. to Max.)

OFF TIME - Elapsed time to make contacts after heater is de-energized (Min. to Max.)

OFF Timings determined after PTC heater has been electrified for a total of 5 minutes.

