# White **▼**Rodgers



24A34-3

### **MODEL 24A34 ELECTRIC HEAT SEQUENCERS**

Direct Replacement for Most Fan/Heat Sequencing Functions. Terminal Markings are Equivalent to Competitive Types

#### **FEATURES**

- Replaces Honeywell, MARS, TOD, GEMLINE, Klixon (Texas Instruments).
- 24V input control.
- · Multi-poise mounting.
- Any contacts (except M1 & M2) can be used as auxiliary contacts.
- Double quick-connect terminals for combination loads.

#### **SPECIFICATIONS**

#### **ELECTRICAL RATINGS - SINGLE LOAD CONTACT RATINGS (ALL MODELS)**

|     | Resistive (No | on-Inductive) | Motor Rating |              |            |
|-----|---------------|---------------|--------------|--------------|------------|
| VAC | Watts         | Amps          | Full Load    | Locked Rotor | Pilot Duty |
| 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     |

|   | Model      |         |          | Timings – ON |       |       |       | Timings – OFF |        |        |       |       |        |
|---|------------|---------|----------|--------------|-------|-------|-------|---------------|--------|--------|-------|-------|--------|
|   | Number     | Timings | Switches | 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 | _      |
|   | 24A34-14①② | 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   | _      | ı     | -     | -      |
| * | 24A34-25   | 1       | 1        | 40-90        | _     | _     | -     | _             | 1-30   | -      | _     | _     | _      |
| * | 24A34-26   | 2       | 2        | 1-20         | 30-90 | 1     | _     | -             | 40-90  | 1-30   | ı     | ı     | -      |
| * | 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  | -      | _     | -     | _      |

# 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:

- 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
- 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  $M_1/M_2$  contacts of the second or third sequencer.

All  $\dot{M}_1/\dot{M}_2$  contacts are wired to the blower motor so that any sequencer that is energized will

## 24A34-15 HEAT PUMP CONTROL

#### **FEATURES**

- · Used in heat pump air handler applications.
- · Provides a delay off to the blower motor in cooling mode.
- · Single pole double throw.

| Model    |         |          | Timings |         |  |
|----------|---------|----------|---------|---------|--|
| Number   | Timings | Switches | ON 1-3  | OFF 1-3 |  |
| 24A34-15 | 1       | 1        | 1-60    | 75-95   |  |

#### **ELECTRICAL RATINGS - NORMALLY OPEN CONTACTS 1-3**

|     | Resistive (No | on-Inductive) | Motor Ratings (Inductive) |              |            |
|-----|---------------|---------------|---------------------------|--------------|------------|
| VAC | Watts         | Amps          | Full Load                 | Locked Rotor | Pilot Duty |
| 120 | 3000          | 25.0          | 14.0A                     | 72.0A        | 125 VA     |
| 240 | 6000          | 25.0          | 7.0A                      | 42.0A        | 125 VA     |

#### **ELECTRICAL RATINGS - NORMALLY CLOSED CONTACTS 1-2**

|     | Resistive (No |      |            |
|-----|---------------|------|------------|
| VAC | Watts         | Amps | Pilot Duty |
| 120 | 1200          | 10.0 | 125 VA     |
| 240 | 1200          | 5.0  | 125 VA     |