

# MARS Solid State Motor Starting Devices & Solid State Timers

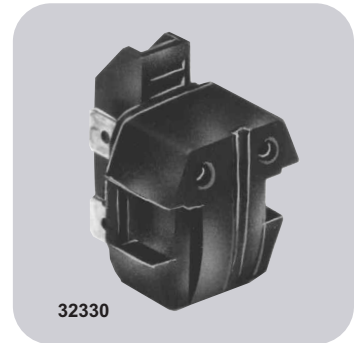
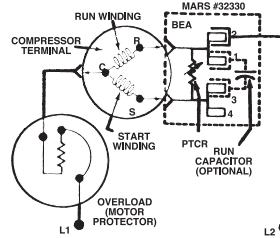
## MARS Solid State Motor Starting Relay for Refrigerators and Freezers

MARS 32330 is a solid state PTC motor starting relay that mounts directly to any 3-pin fuse connector. One model replaces thousands of current relays used on 1/12 HP to 1/3 HP compressors.

### Features:

- Replaces Tecumseh Relays SSR2 and SSR3 for push-on applications.
- Non-positional
- One model for 1/12 HP to 1/3 HP, 120 volt
- UL and CSA listings available

WIRING DIAGRAM FOR USE WITH SPLIT PHASE OR PSC MOTOR



| MARS NO. | HORSEPOWER | VOLTAGE |
|----------|------------|---------|
| 32330    | 1/12 - 1/3 | 120     |

## MARS Solid State Timers Delay On Make

The MARS 32391 is the top-selling timer in the industry. Its reliability has been proven in the field by knowledgeable contractors.

The MARS 32391 will not be fooled by the thermostat anticipator.

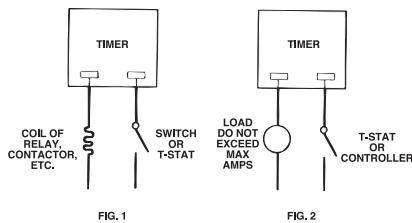
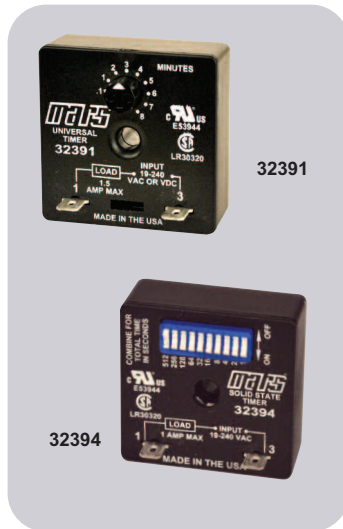
Heavy duty MARS timers are offered for higher current applications.

### Features:

- Easy two-wire installation
- Proven reliability, all solid state
- .25 in. quick connect terminals
- Mounts in any position
- Compact size
- High accuracy
- Totally enclosed and encapsulated for proper heat dissipation

### Specifications:

- .040 amps min. latch current



| MARS NO. | TYPE DELAY | TIME DELAY RANGE  | TYPE OF ADJUSTMENT                             | INPUT VOLTAGE | HZ    | MAX AMPS. | VOLTAGE DROP  | CONN. DIA. |
|----------|------------|-------------------|--|---------------|-------|-----------|---------------|------------|
| 32391    | on make    | 6 sec...8 min.    | dial   | 19...240VAC   | 50/60 | 1         | 2.5 at 1 amp. | 1          |
| 32394    | on make    | 1 sec...1023 sec. | slide switch adjustable in 1 second increments | 19...144VAC   | 50/60 | 1         | 2.5 at 1 amp. | 1          |

### Heavy Duty

|       |         |                |      |         |       |    |              |        |
|-------|---------|----------------|------|---------|-------|----|--------------|--------|
| 32399 | on make | 10...1000 sec. | dial | 230 VAC | 50/60 | 10 | 5 at 10 amp. | 1 or 2 |
|-------|---------|----------------|------|---------|-------|----|--------------|--------|

## MARS Solid State Timers Delay On Break

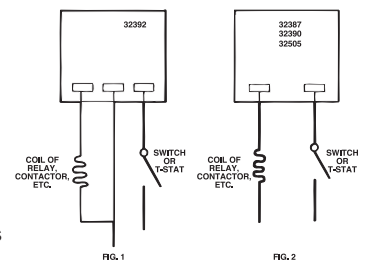
MARS solid state delay on break timers are designed to prevent short cycling of air conditioning, refrigeration and heat pump compressors. Upon application of power the load is energized. When the thermostat opens, or if there is a momentary loss of power, the load is de-energized and the delay period begins. The compressor will not start again during the delay period.

MARS number 32392 is a versatile three wire timer that features adjustable timing and can be used with any voltage from 19 thru 240 VAC, 50 or 60 Hz.

The MARS 32390 and the new 32505 are the most simple and economic ways to stop short cycling on 24 VAC controlled systems. Both devices are fixed 5 minute delay on break timers.

### Features:

- 1 to 3 second random re-start
- Models for two-wire or three-wire connection
- Dial adjustable
- Compact size
- Mounts in any position
- .25 in. quick connect terminals
- Proven reliability
- MARS delay-on-break timers are not load sensitive
- MARS 32505 features two wire leads



### Adjustable

| MARS NO. | TYPE DELAY | TIME DELAY RANGE | TYPE OF ADJUSTMENT | INPUT VOLTAGE | HZ    | MAX AMPS. | VOLTAGE DROP  | CONN. DIA. |
|----------|------------|------------------|--------------------|---------------|-------|-----------|---------------|------------|
| 32392    | on break   | 6 sec...5 min.   | dial               | 19...240VAC   | 50/60 | 1         | 2.5 at 1 amp. | 1          |

### Fixed Delay

|       |          |        |      |           |       |   |               |   |
|-------|----------|--------|------|-----------|-------|---|---------------|---|
| 32390 | on break | 5 min. | none | 24 VAC    | 50/60 | 1 | 2.5 at 1 amp. | 1 |
| 32505 | on break | 5 min. | none | 20-30 VAC | 50/60 | 1 | 3 at 1 amp.   | 1 |