

Timing Mode: **DELAY ON MAKE**
 Category: **TIMER WITH RELAY**
 Series: **TGA**

ENGINE START CONTROL



TGA Timers

TGA is a delay timer used in engine starting circuits to bypass ground-connected sensors during cranking and initial run.

The 10 amp internal relay has normally-open and normally-closed contacts, internally connected to the battery connection (b).

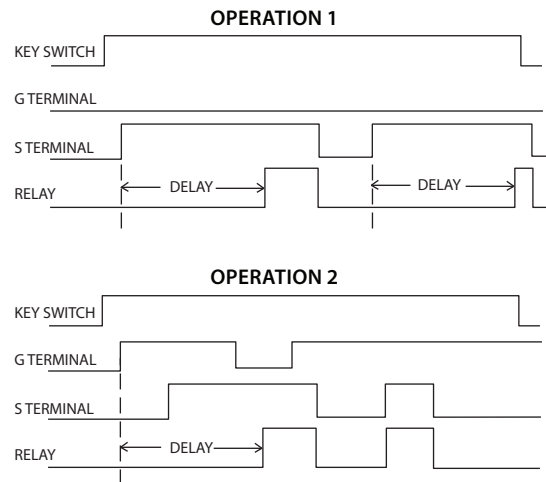
The relay contacts can disconnect the ignition coil, or various types of fuel valves during a sensed fault, or energize a shut-down solenoid if one is used.

A sense terminal (s) is used to connect to ground-connected fault sensors.

Timing Mode

Operation 1: With terminal G open, timing begins when sensor contact is closed. After time out, if sensor stays closed, the relay transfers. Opening sensor contact will reset timer and drop out relay.

Operation 2: With sensor open, timing begins when G terminal goes to ground. If sensor closes during timing, the relay will transfer. If sensor stays open after timing ends, the relay will not transfer until the sensor closes.

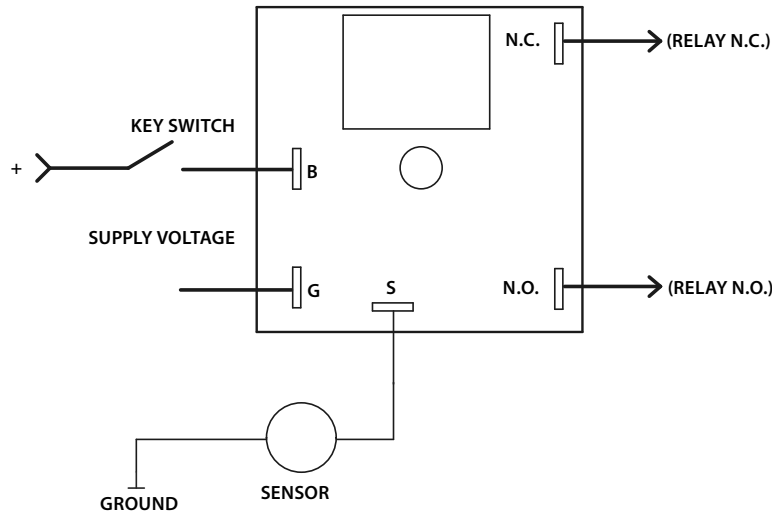


FEATURES

- Automotive-rated 10-amp relay
- 12VDC and 24VDC models available
- 3 standard time periods available 15, 30, 60sec
- Compact 2" square case
- Sturdy alternative to unsealed relay
- Surface mount with single #8 screw
- 1/4" QuickConnect terminals
- Totally encapsulated for protection from harsh environments
- 100% operational testing before shipping

041911

BASIC WIRING AND DIMENSIONS



SPECIFICATIONS

Input Voltage: 12 or 24 VDC

Time Delay: *Timing Mode:* Delay on Make
Type: Digital CMOS
Standard Time Ranges: 15, 30 or 60 seconds
Time Adjustment: Factory-fixed time period

Repeatability: ±0.5%

Setting Accuracy: ±10% of nominal time

Reset/Recycle Time: 25 milliseconds

Initiate Time: 6 milliseconds or less

Relay Output Form: Standard SPDT

Relay Life Expectancy: *Mechanical:* 20 million operations
Electrical: 100,000 operations

Protection: Reverse polarity protection
Transient Protection: 18 joules
Dielectric Strength: 1800V RMS 60Hz internal MOV

Temperature Ranges: *Storage:* -40°C to +85°C
Operating: -25°C to +65°C

Physical Data: *Mounting:* Surface with one #8 screw
Connection & Termination: 0.25" quick connects

OPTIONS SELECTION

Mode of Operation	Series	Input Voltage	Time Range	Time Adjustment Method	Relay Form	
Delay On Make	TGA	4 24VDC 7 12VDC	015S 15 sec 030S 30 sec 060S 60 sec For special times consult factory	C	Factory fixed	1 SPDT 10 Amp Rating

EXAMPLE TGA 4 015S C 1 is a 24VDC TGA series engine start control with a factory fixed time range of 15 seconds and single pole/double throw 10 amp rating.