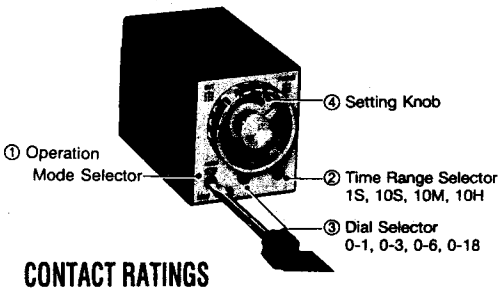
GT3A-4, -5, and -6 ALL MULTI-TIMERS
[Multi-Mode Type with Inputs (11 Pins)]

TYPES

① Operation Mode	Rated Voltage Code	Time Range	Output	Contact	Input	Type No. A Type	Type No. B Type
A: ON Delay B: Flicker C: Signal ON/OFF Delay D: Signal OFF Delay	AF20: 100 to 240V AC (50/60Hz) AD24: 24V AC (50/60Hz)/24V DC	0.1 sec to 180 hours (See the table below for details.)	240V AC, 5A 24V DC, 5A (resistive load)	Delayed DPDT	Start Reset Gate	GT3A-4AF20	GT3A-4EAF20
						GT3A-4AD24	GT3A-4EAD24
A: Interval ON B: One-Shot Flicker C: Signal ON/OFF Delay D: Signal OFF Delay	AF20: 100 to 240V AC (50/60Hz) AD24: 24V AC (50/60Hz)/24V DC					GT3A-5AF20	GT3A-5EAF20
						GT3A-5AD24	GT3A-5EAD24
A: One-Shot B: One-Shot ON Delay C: One-Shot D: Signal ON/OFF Delay						GT3A-6AF20	GT3A-6EAF20
						GT3A-6AD24	GT3A-6EAD24

• Time Range Determined by Time Range Selector and Dial Selector

③ Dial / ② Range	0-1	0-3	0-6	0-18
1S	0.1 sec – 1 sec	0.1 sec – 3 sec	0.1 sec – 6 sec	0.1 sec – 18 sec
10S	0.1 sec – 10 sec	0.3 sec – 30 sec	0.6 sec – 60 sec	1.8 sec – 180 sec
10M	6 sec – 10 min	18 sec – 30 min	36 sec – 60 min	108 sec – 180 min
10H	6 min – 10 hours	18 min – 30 hours	36 min – 60 hours	108 min – 180 hours



•Switch Setting

(1) The switches should be securely turned using a flat screwdriver, 4 mm wide maximum. Note that incomplete setting may cause malfunction. The switches, which do not turn infinitely, should not be turned beyond the limits.

(2) Since changing the setting during timer operation may cause malfunction, power should be turned off before changing the setting.

• Inputs

Note that if you touch the input signal terminal during power voltage application, you may suffer an electric shock.

(1) When connecting the input signal terminals of two or more GT3A timers to the same contact or transistor, the input terminals of the same number should be connected together. (Connect Terminals No. 2 in common.)

(2) In a transistor circuit for controlling input signals, with its primary and secondary power circuits isolated, do not ground the secondary circuit.

(3) Connect the input signal terminals of the GT3A timers to terminal No. 2 only and never apply voltage to other terminals, otherwise the internal circuit may be damaged.

(4) Input signal lines must be made as short as possible and installed away from power cables and power lines. Shielded wires or a separate conduit should be used for input wiring.

CONTACT RATINGS

Contact Ratings		240V AC/5A, 24V DC/5A (resistive load)
Life	Mechanical	5,000,000 operations minimum
	Electrical	100,000 operations minimum (rated load)

GENERAL SPECIFICATIONS

Operation System	Solid-state CMOS circuitry
Operation Type	Multi-Mode with inputs (11 pins)
Time Range	0.1 sec to 180 hours
Rated Voltage Code	100 to 240V AC (50/60Hz) 24V AC (50/60Hz)/24V DC
Operating Temperature	–10 to +50°C
Storage Temperature	–30 to +80°C
Operating Humidity	45 to 85% RH
Repeat Error	±0.2%, ±10 msec
Voltage Error	±0.2%, ±10 msec
Temperature Error	±0.2%, ±10 msec
Setting Error	±10% maximum
Reset Time	60 msec maximum
Insulation Resistance	100MΩ minimum
Dielectric Strength	Between power and output terminals: 2,000V AC, 1 minute Between contacts of different poles: 2,000V AC, 1 minute Between contacts of the same pole: 750V AC, 1 minute
Vibration Resistance	98m/sec² (Approx. 10G)
Shock Resistance	Operating extremes: 98 m/sec² (Approx. 10G) Damage limits: 490 m/sec² (Approx. 50G)
Power Consumption (Approx.)	AF20: 2.5VA (100V AC, 60Hz) 4.6VA (200V AC, 60Hz) AD24: 1.3VA (AC), 0.7W (DC)
Degree of Protection	IP40 (Front Sealing)
Dimensions (㎜)	40H×36W×64.2D

OPERATION CHARTS

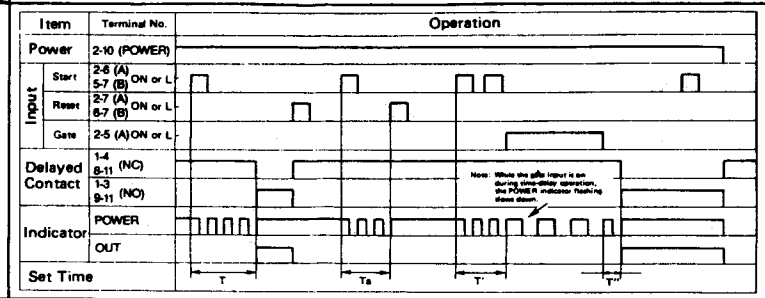
1. GT3A-4 ☐

T = Set time
Ta = Shorter than set time
T = T' + T"

Contact / Mode — Delayed DPDT

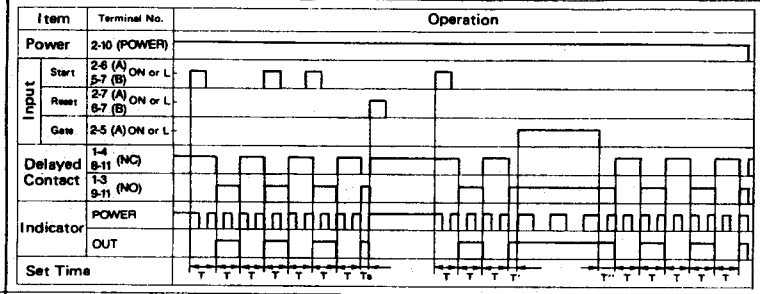
A: ON Delay

- When a preset time has elapsed after the start input turned on while power is on, the NO output contact goes on.
- The output contact is reset by turning power off or by turning the reset input on.
- The time-delay operation is suspended while the gate input is on.



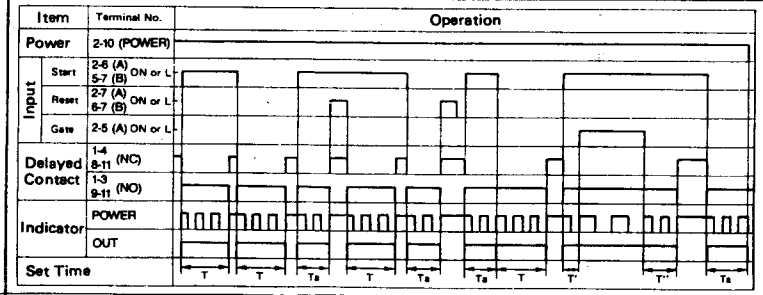
B: Flicker

- When the start input turns on while power is on, the output oscillates at a preset cycle (duty ratio 1:1), starting with the NO contact off.
- The output contact is reset by turning power off or by turning the reset input on.
- The NO output contact remains on while the gate input is on.



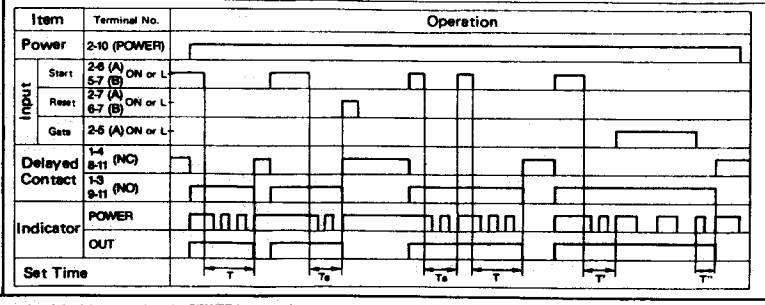
C: Signal ON/OFF Delay

- When the start input turns on while power is on, the NO output contact goes on. When a preset time has elapsed while the start input remains on, the output contact goes off. When the start input turns off, the NO contact goes on again. When a preset time has elapsed after the start input turned off, the NO contact goes off.
- While the reset input is on, the NO output contact is reset to OFF.
- The time-delay operation is suspended while the gate input is on. (NO contact remains on.)



D: Signal OFF Delay

- When power is turned on while the start input is on, the NO output contact goes on. When a preset time has elapsed after the start input turned off, the NO output contact goes off.
- When the reset input is turned on before the preset time has elapsed, the NO output contact goes off.
- The time-delay operation is suspended while the gate input is on. (NO contact remains on.)



Note: While the gate input is on during time-delay operation, the POWER indicator flashing slows down.

2. GT3A-5 ☐

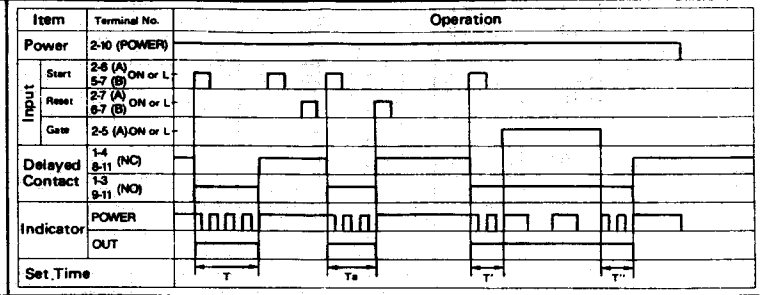
Ta = Shorter than set time
T = T' + T"

Contact / Mode

Delayed DPDT

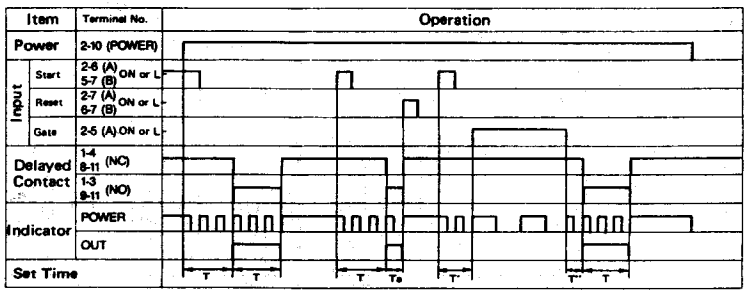
A: Interval ON

- When the start input turns on while power is on, the NO output contact goes on. After a preset time has elapsed, the NO output contact goes off.
- The output contact is reset by turning the reset input on.
- The time-delay operation is suspended while the gate input is on (NO contact remains on).



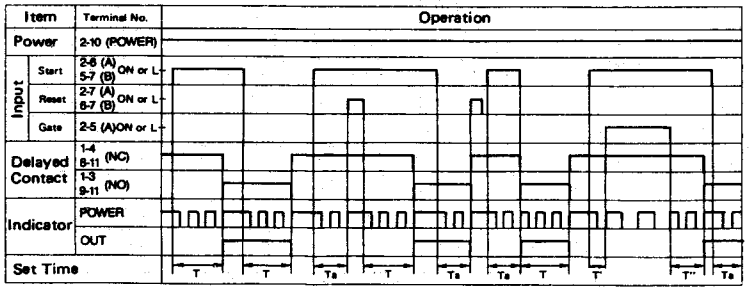
B: One-Shot Flicker

- When a preset time has elapsed after the start input turned on while power is on, the NO output contact goes on. When a preset time has elapsed, the NO output contact goes off.
- The output contact is reset by turning the reset input on.
- The time-delay operation is suspended while the gate input is on.



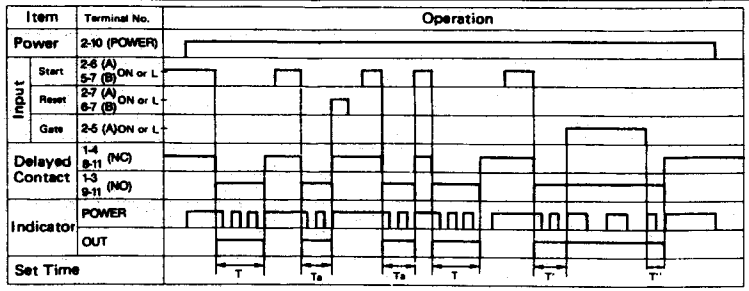
C: Signal ON/OFF Delay

- When a preset time has elapsed after the start input turned on while power is on, the NO output contact goes on. When a preset time has elapsed after the start input turned off, the NO output contact goes off.
- The output contact is reset by turning the reset input on.
- The time-delay operation is suspended while the gate input is on.



D: Signal OFF Delay

- When the start input turns on while power is on, the NO output contact goes on. When a preset time has elapsed, the NO output contact goes off.
- The output contact is reset by turning the reset input on.
- The time-delay operation is suspended while the gate input is on (NO contact remains on).



3. GT3A-6 ☐

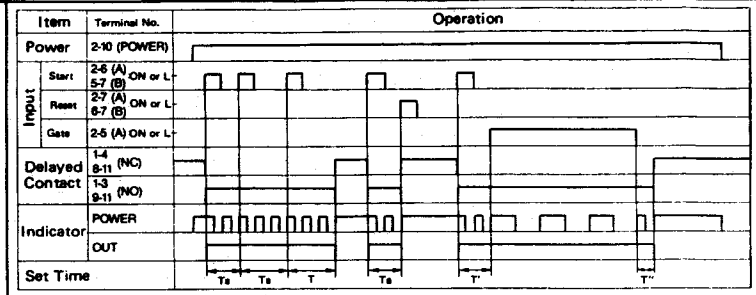
Ta = Shorter than set time
T = T' + T"

Contact / Mode

Delayed DPDT

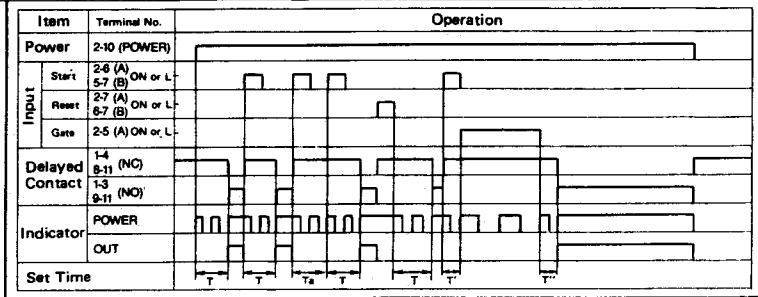
A: One-Shot

- When the start input turns on while power is on, the NO output contact goes on. When a preset time has elapsed, the NO output contact goes off.
- The output contact is reset by turning the reset input on.
- The time-delay operation is suspended while the gate input is on (NO contact remains on).



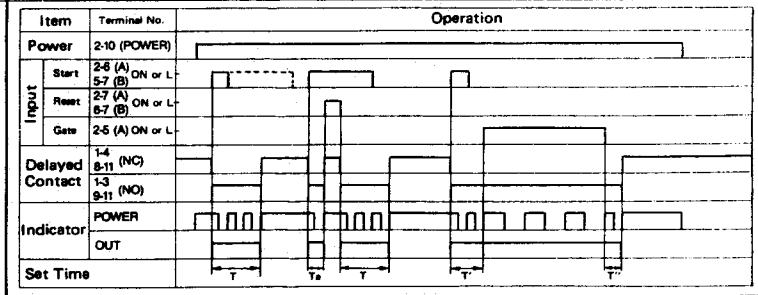
B: One-Shot ON Delay

- When a preset time has elapsed after power turned on, the NO output contact goes on. When the start input turns on, the NO output contact goes off. When a preset time has elapsed, the NO output contact goes on.
- The output contact is reset by turning the reset input on.
- The time-delay operation is suspended while the gate input is on.



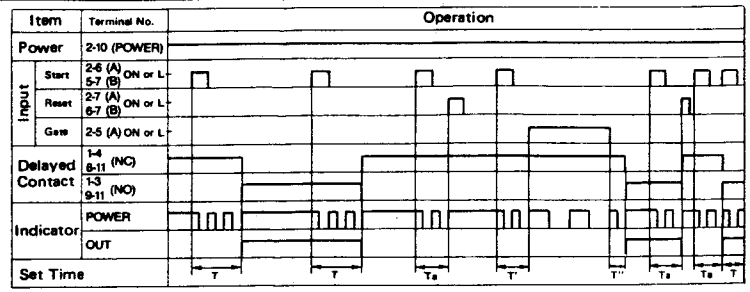
C: One-Shot

- When the start input turns on while power is on, the NO output contact goes on. When a preset time has elapsed, the NO output contact goes off.
- The output contact is reset by turning the reset input on.
- The time-delay operation is suspended while the gate input is on (NO contact remains on).



D: Signal ON/OFF Delay

- When a preset time has elapsed after the start input turned on while power is on, the NO output contact goes on. When a preset time has elapsed after the start input turned on, the NO output contact goes off.
- The output contact is reset by turning the reset input on.
- The time-delay operation is suspended while the gate input is on.



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