GT3F-1/GT3F-2 (8-Pin)

Specifically designed for Power OFF Delay. Reset Inputs are available.

GT3F-1 ☐
GT3F-2 ☐

POWER Indicator
Setting Knob
(1) Dial Selector
0-1, 0-3, 0-18, 0-60
(2) Time Range Selector
1s, 10s

(1) Operation Mode	Rated Voltage Code	Time Ranges	Output	Contact	Input	Part No.
Power OFF Delay	100 to 240V AC	0.1 sec to 600 sec	250V AC/24V DC, 5A	Delayed SPDT	Reset	GT3F-1AF20
	24V AC/24V DC					GT3F-1AD24
	100 to 240V AC		250V AC/24V DC, 3A	Delayed DPDT	Without	GT3F-2AF20
	24V AC/24V DC					GT3F-2AD24

Time Ranges

GT3F-1/GT3F-2

(2) Range \ (3) Dial	0 - 1	0 - 3	0 - 18	0 - 60
1S	0.1 sec to 1 sec	0.1 sec to 3 sec	0.2 sec to 18 sec	0.6 sec to 60 sec
10S	0.1 sec to 10 sec	0.3 sec to 30 sec	1.8 sec to 180 sec	6 sec to 600 sec

Timeout Repeat Cycle	3 sec minimum
Reset Input Repeat Cycle	3 sec minimum

Contact Ratings

Model		GT3F-1	GT3F-2
Rated Load		250V AC/24V DC, 5A (resistive load)	250V AC/24V DC, 3A (resistive load)
Minimum Switching Power		AC: 1250VA DC: 150W	AC: 750VA DC: 90W
Minimum Switching Voltage		250V AC/125V DC	
Minimum Switching Current		5A	3A
Maximum Switching Frequency		1800 operations/hour	
Minimum Applicable Load		5V DC, 10 mA	5V DC, 100 mA
External Protection Element		Fuse 250V, 5A	Fuse 250V, 3A
Life	Electrical	100,000 operations minimum (rated load)	
	Mechanical	3,000,000 operations minimum	

Input Specifications

Reset Input	The contact is reset by turning the reset input on (L level). No-voltage contact input and NPN open collector transistor input are applicable. 6V DC, 0.6 mA maximum Input Response Time (AC): ON: 50 ms maximum OFF: 1 sec maximum

General Specifications

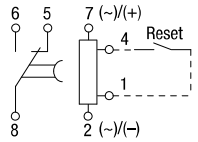
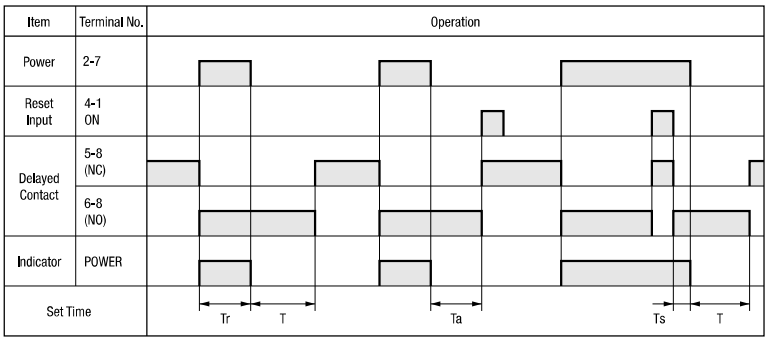
Operation System		Solid-state CMOS circuitry
Operation		Power OFF delay
Time Range		0.1 sec to 600 hours
Pollution Degree		2 (IEC60664-1)
Overvoltage Category		III (IEC60664-1)
Rated Voltage	AF20	100 to 240V AC (50/60Hz)
	AD24	24V AC (50/60Hz)/24V DC
Voltage Range	AF20	85 to 264V AC (50/60Hz)
	AD24	20.4 to 26.4V AC (50/60Hz)/21.6 to 26.4V DC
Time Delay Operation Start Voltage		Rated Voltage × 10% minimum
Minimum Power Application Time (Note 1)		0.4 sec (time range: 180 sec or less) 1 sec (time range: 600 sec)
Operating Temperature		–10 to +50°C (no freezing)
Storage Temperature		–30 to +70°C (no freezing)
Operating Humidity		35 to 85% RH (no condensation)
Storage Humidity		35 to 85% RH (no condensation)
Altitude		0 to 2000m (operation) 0 to 3000m (transportation)
Repeat Error		±0.2%, ±10 ms (Note 2)
Voltage Error		±0.2%, ±10 ms (Note 2)
Temperature Error		±0.2%, ±10 ms (Note 2)
Setting Error		±10%
Insulation Resistance		100 MΩ min. (500V DC megger)
Dielectric Strength		Between power and output terminals: 2000V AC, 1 minute Between contacts of different poles: 2000V AC, 1 minute Between contacts of the same pole: 1000V AC, 1 minute
Vibration Resistance		Damage limits/operating extremes: 10 to 55Hz, amplitude 0.75 mm, 2 hours each in 3 directions
Shock Resistance		Operating extremes: 98 m/s², Damage limits: 490 m/s², 3 shocks each in 6 directions
Degree of Protection		IP40 (timer), IP20 (socket) (IEC60529)
Power Consumption (approx.)	AF20	1.1 VA (100V AC/60Hz), 2.3 VA (200V AC/60Hz)
	AD24	0.7 VA (AC)/0.2W (DC)
Dimensions		40H × 36W × 72.2D mm
Weight (approx.)		GT3F-1: 77g; GT3F-2: 79g

Note 1: An inrush current flows during minimum power application time.
AF20: Approx. 0.4A, AD24: Approx. 1.2A

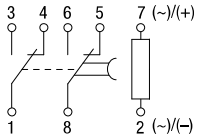
Note 2: The largest value becomes the error against a preset value depending on the time range.

Operation Chart

<table>
<tr><th>Contact</th><th>Internal Connection</th><th>Operation Chart</th></tr>
<tr>
<td>GT3F-1

Delayed SPDT Output
with Reset Input</td>
<td> 
</td>
<td> 

T = Set time
Ta = Shorter than set time
Ts = 1 sec
Tr = Minimum power application time
• 0.4 sec (time range: 180 sec or less)
• 1 sec (time range: 600 sec or less)
• When power turns on, the NO output contact goes on. When a preset time has elapsed after the power has been turned off, the NO output contact goes off.
• The contact is reset by turning the reset input on.</td>
</tr>
<tr>
<td>GT3F-2

Delayed DPDT Output</td>
<td> 
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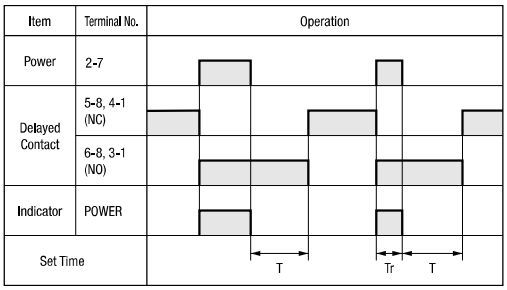
<td> 

T = Set time
Tr = Minimum power application time
• 0.4 sec (time range: 180 sec or less)
• 1 sec (time range: 600 sec or less)
• When power turns on, the NO output contact goes on. When a preset time has elapsed after the power has been turned off, the NO output contact goes off.</td>
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