# **Timers**



## **GT5Y Series** — **ON Delay Timers**



Key features of the GT5Y series include:

- 4PDT, 3A or DPDT, 5A contacts
- · 4 time ranges
- Repeat error ±0.2% maximum
- · Control settings by hand or screwdriver
- · Power ON and timing out LED indicators
- Uses the same sockets and hold-down clips as IDEC's RY4S and RU series relays



UL, c-uL Listed File No. E55996



			OTEV 2	OTEV 4			
			GT5Y-2 GT5Y-4				
	Rated Operating Voltage		100 to 120V AC (50/60Hz) 200 to 240V AC (50/60Hz) 24V DC 24V AC 12V DC				
	Contact Form		DPDT	4PDT			
	Rated Load	Resistive Load	220V AC, 5A 30V DC, 5A	220V AC, 3A 30V DC, 3A			
		Inductive Load	220V AC, 2A 30V DC, 2.5A	220V AC, 0.8A 30V DC, 1.5A			
	Allowable Contact Power	Resistive Load	1100VA AC 150W DC	660VA AC 90W DC			
		Inductive Load Cos Ø = 0.3 L/r = 7msec	440VA AC 75W DC	176VA AC 45W DC			
	Allowable Voltage		250V AC, 125V DC				
ons	Allowable Current		5A	3A			
cati	Temperature Error		±3% maximum (over –10 to 50°C, reference temperature 20°C)				
Specifications	Setting Error		±10% maximum				
Spe	Reset Time		When turning power off <u>after</u> time up: 0.1 second maximum When turning power off <u>before</u> time up: 1 second maximum				
	Insulation Resistance		100MΩ minimum				
	Dielectric Strength		2,000V AC, 1 minute (except between contacts of the same pole)				
	Vibration Resistance		100N (approximate 10G)				
	Shock Resistance		Operating extremes: 100N (approximate 10G) Damage limits: 500N (approximate 50G)				
	Power Consumption		100V AC type: 1.5VA (at 50Hz) 200V AC type: 1.6VA (at 50Hz) 24V DC type: 0.9W				
	Electrical Life		500,000 operations minimum (220V AC, 5A)	200,000 operations minimum (110V AC, 3A)			
	Mechanical Life		50,000,000 operations minimum	50,000,000 operations minimum			
	Operating Temperature		-10 to +50°C				
	Operating Humidity		45 to 85% RH				

#### **GT5Y Table of Contents**

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- 1. Minimum applicable load: GT5Y-2: 5V DC, 20mA (reference value); GT5Y-4: 5V DC, 10mA (reference value)
- 2. Inductive load:  $\cos \theta = .3$ , L/R = 7 msec.



## Part Numbering List

Mode of Operation	Contact	Output	Rated Voltage	Time Range	Complete Part No.			
			100 to 120V AC	1S/10S/1M/10M	GT5Y-2SN1A100			
				3S/30S/3M/30M	GT5Y-2SN3A100			
				6S/60S/6M/60M	GT5Y-2SN6A100			
			200 to 240V AC	1S/10S/1M/10M	GT5Y-2SN1A200			
				3S/30S/3M/30M	GT5Y-2SN3A200			
				6S/60S/6M/60M	GT5Y-2SN6A200			
		220V AC/ 30V DC, 5A		1S/10S/1M/10M	GT5Y-2SN1D12			
	DPDT		12V DC	3S/30S/3M/30M	GT5Y-2SN3D12			
				6S/60S/6M/60M	GT5Y-2SN6D12			
			24V DC	1S/10S/1M/10M	GT5Y-2SN1D24			
				3S/30S/3M/30M	GT5Y-2SN3D24			
				6S/60S/6M/60M	GT5Y-2SN6D24			
			24V AC	1S/10S/1M/10M	GT5Y-2SN1A24			
				3S/30S/3M/30M	GT5Y-2SN3A24			
ON-Delay				6S/60S/6M/60M	GT5Y-2SN6A24			
OIN-Delay				1S/10S/1M/10M	GT5Y-4SN1A100			
			100 to 120V AC	3S/30S/3M/30M	GT5Y-2SN6A100 GT5Y-2SN1A200 GT5Y-2SN3A200 GT5Y-2SN6A200 GT5Y-2SN1D12 GT5Y-2SN3D12 GT5Y-2SN6D12 GT5Y-2SN1D24 GT5Y-2SN3D24 GT5Y-2SN6D24 GT5Y-2SN1A24 GT5Y-2SN3A24 GT5Y-2SN3A24 GT5Y-2SN3A24 GT5Y-2SN6A24 GT5Y-2SN6A24 GT5Y-4SN1A100 GT5Y-4SN3A100 GT5Y-4SN3A200			
				6S/60S/6M/60M	GT5Y-2SN1D24 GT5Y-2SN3D24 GT5Y-2SN6D24 GT5Y-2SN6D24 GT5Y-2SN1A24 GT5Y-2SN3A24 GT5Y-2SN6A24 GT5Y-4SN1A100 GT5Y-4SN3A100 GT5Y-4SN1A200 GT5Y-4SN3A200 GT5Y-4SN3A200 GT5Y-4SN3A200 GT5Y-4SN3D12			
				1S/10S/1M/10M	GT5Y-2SN6D12 GT5Y-2SN1D24 GT5Y-2SN3D24 GT5Y-2SN3D24 GT5Y-2SN6D24 GT5Y-2SN3A24 GT5Y-2SN6A24 GT5Y-2SN6A24 GT5Y-4SN1A100 GT5Y-4SN3A100 GT5Y-4SN1A200 GT5Y-4SN3A200 GT5Y-4SN3A200 GT5Y-4SN3D20			
			6S/60S/6M/60M (	3S/30S/3M/30M	GT5Y-4SN3A200			
				GT5Y-4SN6A200				
				1S/10S/1M/10M	_			
	4PDT	220V AC/ 30V DC, 3A	12V DC	3S/30S/3M/30M	GT5Y-4SN3D12			
				6S/60S/6M/60M	_			
			24V DC	1S/10S/1M/10M	GT5Y-4SN1D24			
				3S/30S/3M/30M	GT5Y-4SN3D24			
				6S/60S/6M/60M	GT5Y-4SN6D24			
			24V AC	1S/10S/1M/10M	GT5Y-4SN1A24			
				3S/30S/3M/30M	GT5Y-4SN3A24			
				6S/60S/6M/60M	GT5Y-4SN6A24			





1. For sockets and accessories, see page G-69.

#### **Timing Ranges**

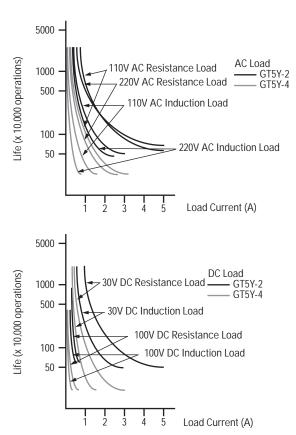
Tilling Kanges						
Code	Scale	Time Range Indication		Time Range		
1S		x 0.1	S	0.1 second to 1 second		
10S	0 to 10	x 1	S	0.2 second to 10 seconds		
1M	0 10 10	x 0.1	М	1.2 seconds to 1 minute		
10M		x 1	М	12 seconds to 10 minutes		
3S	0 to 3	x 1	S	0.1 second to 3 seconds		
30S		x 10	S	0.5 second to 30 seconds		
3M	0 10 3	x 1	М	3 seconds to 3 minutes		
30M		x 10	М	30 seconds to 30 minutes		
6S	0 to 6	x 1	S	0.1 second to 6 seconds		
60S		x 10	S	1 second to 60 seconds		
6M		x 1	М	6 seconds to 6 minutes		
60M		x 10	М	1 minute to 60 minutes		



## Timing Diagram/Schematics/Electrical Life Curves

	GT5Y-2 DPDT	GT5Y-4 4PDT	
Internal Connections (bottom view)	5 8 8 9 12 13 (-) (+) 14 POWER	5 6 7 8 5 6 7 8 7 8 7 8 9 7 7 8 7 7 8 7 7 8 7 7 7 7 7 7 7 7 7 7	
Operation Mode: ON-Delay	Power (Power) 13-14  Delayed Contact (NC) 3-11, 4-12  Contact (NO) 5-9, 6-10, 7-11, 8-12  POWER  Indicator OUT	Operation Set Time  es, see page E-4.	

#### **Electrical Life Curves**





### Accessories

### **DIN Rail Mounting Accessories**

Part Numbers: DIN Rail/Surface Mount Sockets and Hold-Down Springs

DIN	Rail Mount Socket	Applicable Hold-Down Springs		
Style	Appearance	Part No.	Appearance	Part No.
14-Blade Screw Terminal	ALAR	SY4S-05	. <b>8</b> 5. <b>9</b> 55	
14-Blade Screw Terminal (fingersafe)		SY4S-05C		SFA-202
DIN Mounting Rail Length 1000mm	O CONTRACTOR OF THE PROPERTY O	BNDN1000		,

### **Panel Mounting Accessories**

Part Numbers: Panel Mount Socket and Hold-Down Springs

Pa	anel Mount Socket	Applicable Hold-Down Springs		
Style	Appearance	Part No.	Appearance	Part No.
14-Blade Solder Terminal	07080	SY4S-51	THE THE	SFA-302

### **PCB Mounting Accessories**

Part Numbers: PCB Mount Sockets with Applicable Hold-Down Springs

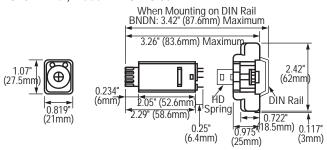
	PCB Mount Socket	Applicable Hold-Down Springs		
Style	Appearance	Part No.	Appearance	Part No.
14 Blade, PCB Terminal		SY4S-61	sold sold	SFA-302
14 Blade, PCB Terminal		SY4S-62		SY4S-02F1

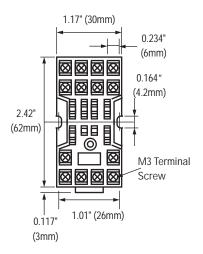
# **Timers**

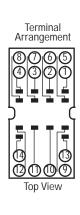


#### **Dimensions**

#### GT5Y Timer, Blade with SY4S-05

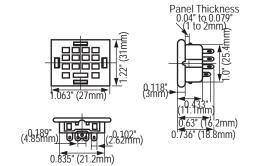






SY4S-51

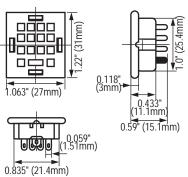






SY4S-61





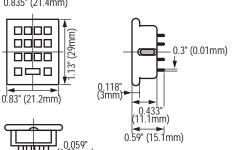




As Viewed from the Bottom

SY4S-62





Terminal Arrangement



As Viewed from the Bottom