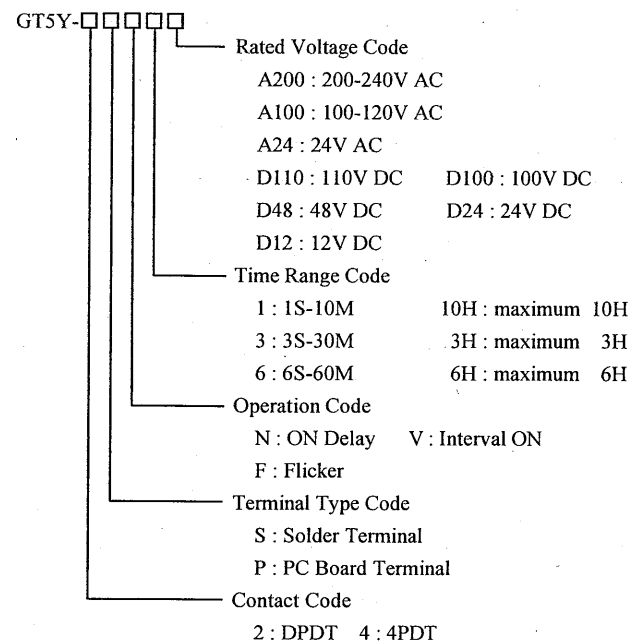
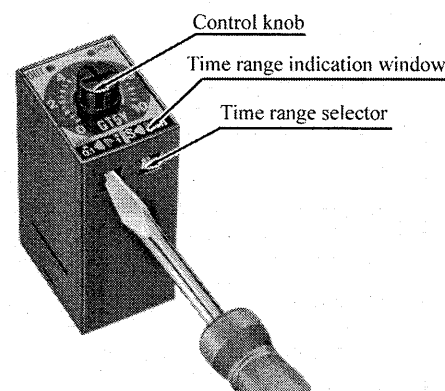


Read this instruction sheet to make sure of correct operation before starting installation, operation, maintenance, and inspection of the GT5Y series timers. The end user should keep this instruction sheet for future reference.

TYPE NO. DEVELOPMENT

TIME RANGES

Code	Scale	Time Range Indication	Time Range
1S	0 to 10	× 0.1 S	0.1 sec to 1 sec
10S		× 1 S	0.2 sec to 10 sec
1M		× 0.1 M	1.2 sec to 1 min
10M	0 to 3	× 1 M	12 sec to 10 min
3S		× 1 S	0.1 sec to 3 sec
30S		× 10 S	0.5 sec to 30 sec
3M	0 to 6	× 1 M	3 sec to 3 min
30M		× 10 M	30 sec to 30 min
6S		× 1 S	0.1 sec to 6 sec
60S	0 to 10	× 10 S	1 sec to 60 sec
6M		× 1 M	6 sec to 6 min
60M		× 10 M	1 sec to 60 min
10H	0 to 10	-	10 min to 10 hours
3H	0 to 3	-	3 min to 10 hours
6H	0 to 6	-	6 min to 10 hours

The time range is calibrated at its maximum time scale, therefore it is desirable to use the timer at a setting as close to its maximum time scale as possible for accurate time delay. For a more accurate time delay, adjust the control knob by measuring the operating time with an instrument before application. On the GT5Y timers, a desired time range can be selected using the time range selector on the side surface. Turn the multiplier and time unit selectors using a flat screwdriver until they click.


SPECIFICATIONS

Pollution Degree	2 (IEC60664-1)
Over voltage Category	III (IEC60664-1)
Rated Operational Voltage	200-240V AC (50Hz/60Hz) 100-120V AC (50Hz/60Hz) 24V AC (50Hz/60Hz) 110V DC, 100V DC, 48V DC, 24V DC, 12V DC
Voltage Tolerance	AC : Rated voltage × 85-110% DC : Rated voltage × 90-110%
Disengaging value of Input Voltage	Rated voltage × 20% minimum
Range of ambient Operating Temperature	-10 to + 50°C (without freezing)
Range of ambient Storage and Transport Temperature	-30 to + 80°C (without freezing)
Range of Relative Humidity	35 to 85 % RH (without condensation)
Air Pressure	80 kPa to 110 kPa (operating) 70 kPa to 110 kPa (transport)
Recovery Time	100ms maximum
Repeatability	±0.2%, ±20 ms
Voltage Influence	±0.5%, ±20 ms
Temperature Influence	±3%
Setting Accuracy	±10%
Insulation Resistance	100 MΩ minimum (500VDC)
Dielectric Strength	Between power and output terminals 2000V AC 1 minute Between contact circuits (opposite pole) 2000V AC 1 minute Between contact circuits 1000V AC 1 minute
Vibration Resistance	10 to 55 Hz amplitude 0.75 mm 2 hours in each of 3 axes
Shock Resistance	Operating extremes 98 m/s ² (approx. 10G) Damage limits 490 m/s ² (approx. 50G) 3 times in each of 3 axes
Degree of Protection (IEC60529)	IP40 (enclosure), IP20 (socket)
Power Consumption (Approx.)	A200 1.6 VA/1.5 VA : 200V AC 60Hz/50Hz A100 1.4 VA/1.4 VA : 100V AC 60Hz/50Hz A24 1.3 VA/1.3 VA : 24V AC 60Hz/50Hz D110 1.5 W : 110V DC D100 1.4 W : 100V DC D48 1.1 W : 48V DC D24 1.0 W : 24V DC D12 0.9 W : 12V DC
Mounting Position	Free
Outline Dimension (mm)	27.5H × 21.0W × 58.6D
Weight (Approx.)	50 g

APPLICABLE STANDARD CONDITIONS

Safety standard : UL508, CSA C22.2 No.14, IEC61812-1, EN61812-1
EMC : IEC61812-1, EN61812-1

Electrostatic Discharge	level 3 Contact ±6kV / Air ±8kV	IEC61000-4-2 EN61000-4-2
Electromagnetic Field	level 3 10V/m AM 80% 80M-1000MHz	IEC61000-4-3 EN61000-4-3
Fast Transient/Burst	level 3 Power supply : ±2kV	IEC61000-4-4 EN61000-4-4
Surge	Type : A200/A100/D110/D100 level 3 Power supply : Line to Line ±1.0kV Line to Ground ±2.0kV Type : D48/A24/D24/D12 level 2 Power supply : Line to Line ±0.5kV Line to Ground ±1.0kV	IEC61000-4-5 EN61000-4-5
Radiated Emission	Group 1 Class A The GT5Y Electronic Timers are Class A devices. This means that they can not be used in residential areas.	CISPR 11 EN55011

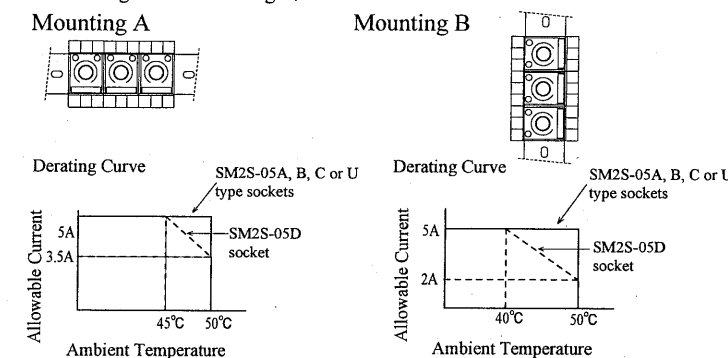
Note: The GT5Y series are UL listed when used in combination with IDEC's SY4S-05* or SM2S-05* type sockets.
(*-May suffix A, B, C, D or U)
Specifications of socket to be used are as follows:
-Conductor Temperature Rating 60°C min.,
-Use 14AWG max. (2mm² max.) Copper Conductors Only,
-Terminal Torque 0.6 to 1.0 N·m.

CONTACT RATINGS

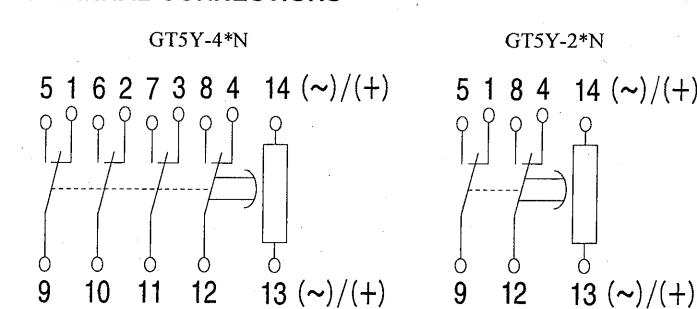
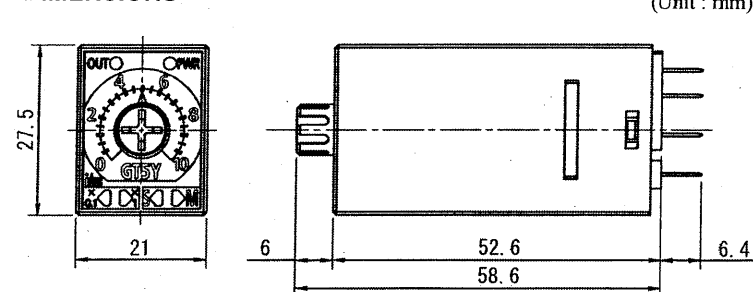
Type No.	GT5Y-4	GT5Y-2
Contact Configuration	4PDT	DPDT
Contact Material	Silver (Gold plated)	Silver
Minimum Applicable Load (reference value)	5V DC, 10 mA	5V DC, 20 mA
Contact Resistance (Initial value)	50 mΩ minimum	30 mΩ minimum
Allowable Voltage	250V AC, 125V DC	
Allowable Current	3A	5A
Maximum Permissible Operating Frequency	1800 cycles per hour	
Allowable Contact Power	Resistive Load	660VA AC 90W DC
	Inductive Load cos φ = 0.3 L/R = 7 ms	1100VA AC 150W DC
Rated Load	Resistive Load	220V AC, 3A 30V DC, 3A
	Inductive Load cos φ = 0.3 L/R = 7 ms	220V AC, 5A 30V DC, 5A
Conditional Short Circuit	9A	15A
Protect Device	Fuse 250V, 3A	Fuse 250V, 5A
Life	Electrical	200,000 op. minimum (220V AC, 3A)
	Mechanical	50,000,000 op. minimum

ALLOWABLE CURRENT VS TEMPERATURE DERATING CURVES

When using the GT5Y-2 timer with the SM2S-05* socket, observe the following allowable current vs temperature derating curves regarding the Mounting A and Mounting B.


OPERATION CHART

Operation : ON Delay (GT5Y-*N)		
Item	Terminal No.	Operation
Power	13-14	Set Time
Output	1-9, 3-11, 2-10, 4-12 (NC) 5-9, 7-11, 6-10, 8-12 (NO)	
Indicator	PWR OUT	
Operation : Interval ON (GT5Y-*V)		
Item	Terminal No.	Operation
Power	13-14	Set Time
Output	1-9, 3-11, 2-10, 4-12 (NC) 5-9, 7-11, 6-10, 8-12 (NO)	
Indicator	PWR OUT	
Operation : Flicker (GT5Y-*F)		
Item	Terminal No.	Operation
Power	13-14	Set Time
Output	1-9, 3-11, 2-10, 4-12 (NC) 5-9, 7-11, 6-10, 8-12 (NO)	
Indicator	PWR OUT	

INTERNAL CONNECTIONS

DIMENSIONS

Safety Precautions

Special expertise is required to use the Electronic Timer.

- All Electronic Timer modules are manufactured under IDEC's rigorous quality control system, but users must add a backup or fail safe provision to the control system using the Electronic Timer in applications where heavy damage or personal injury may be caused in case the Electronic Timer should fail.
- Install the Electronic Timer according to instructions described in this instruction sheet and the catalog.
- Make sure that the operating conditions are as described in the catalog. If you are uncertain about the specifications, contact IDEC in advance.
- In this instruction sheet, safety precautions are categorized in order of importance to Warning and Caution.

Warning

Warning notices are used to emphasize that improper operation may cause severe personnel injury or death.

- Turn power off to the Electronic timer before starting installation, removal, wiring, maintenance, and inspection on the Electronic Timer. Failure to turn power off may cause electrical shocks or fire hazard.

Caution

Caution notices are used where inattention might cause personal injury or damage to equipment.

- The Electronic Timer is designed for installation in equipment. Do not install the Electronic Timer outside a cabinet.
- Install the Electronic Timer in environments described in this instruction sheet and the catalog. If the Electronic Timer is used in places where the Electronic Timer is subjected to high-temperature, high-humidity, condensation, corrosive gases, excessive vibrations, and excessive shocks, then electrical shocks, fire hazard, or malfunction will result.
- Use an IEC60127-approved fuse and circuit breaker on the power and output line outside the Electronic Timer.
- Do not disassemble, repair, or modify the Electronic Timer.
- When disposing of the Electronic Timer, do so as an industrial waste.