B-640(7)

INSTRUCTION SHEET

ALL MULTI-TIMERS GT3A -1/ -2/ -3

Confirm that the delivered product is what you have ordered. Read this instruction sheet to make sure of correct operation. Make sure that the instruction sheet is kept by the end user.

●TIME SPECIFICATIONS

Range \ Dial	0-1	0-3	0-6	0-18
1S	0.1sec - 1sec	0.1sec - 3sec	0.1sec - 6sec	0.2sec - 18sec
10S	0.1sec - 10sec	0.3sec - 30sec	0.6sec - 60sec	1.8sec - 180sec
10M	6sec - 10min	18sec - 30min	36sec - 60min	108sec - 180min
10H	6min - 10hours	18min - 30hours	36min - 60hours	108min -180hours

●GENERAL SPECIFICATIONS

Operation System		Solid-state CMOS circuit		
Operation Type		Multi-Mode		
Time Range		0.1sec to 180hours		
Pollution Degree		2 (IE60664-1)		
Over Voltage Category		Ⅱ (IE60664-1)		
Rated Operational Voltage	AF20	100-240V AC (50/60Hz)		
	AD24	24V AC (50/60Hz) / 24V DC		
	D12	12V DC		
Voltage Tolerance	AF20	85-264V AC (50/60Hz)		
	AD24	20.4-26.4V AC (50/60Hz) / 21.6-26.4V DC		
	D12	10.8 to 13.2V DC		
Disengaging Value of Input Voltage		Rated Voltage ×10% minimum		
Range of Ambient Operating Temperature		-10 to +50℃ (without freezing)		
Range of Ambient Storage and Transport Temperature		-30 to +70℃ (without freezing)		
Range of Relative Humidity		35 to 85%RH (without condensation)		
Air Pressure		80kPa to 110kPa (Operating) 70kPa to 110kPa (Transport)		
Reset Time		60msec maximum		
Repeat Error		±0.2%, ±20msec*		
Voltage Error		±0.2%, ±20msec*		
Temperature Error		±1%, ±30msec*		
Setting Error		±10% maximum		
Insulation Resistance		100MΩ minimum (500V DC)		
Dielectric Strength		Between power and output terminals: 2,000V AC, 1min. Between contacts of different poles: 2,000V AC, 1min. Between contacts of the same pole: 750V AC, 1min. (GT3A-1,2), 1,000V AC, 1min. (GT3A-3)		
Vibration Resistance		Operating extremes: 2 hours in each of 3 axes <NO>10 to 55Hz, amplitude 0.75mm (GT3A-1,2) 10 to 55Hz, amplitude 0.41mm (GT3A-3) <NC>10 to 55Hz, amplitude 0.35mm (GT3A-1,2) 10 to 55Hz, amplitude 0.41mm (GT3A-3) Damage limits: 2 hours in each of 3 axes 10 to 55Hz amplitude 0.75mm (GT3A-1,2,3)		
Shock Resistance		Operating extremes: 98m/sec² (Approx. 10G) Damage limits: 490m/sec² (Approx. 50G) 3 times in each of 3 axes		
Degree of Protection		IP40 (enclosure), IP20 (socket) (IEC60529)		
Power Consumption (Approx.)	TYPE	GT3A-1	GT3A-2	GT3A-3
	AF20 100V AC/60Hz	2.9VA	2.5VA	2.2VA
	AF20 200V AC/60Hz	4.7VA	4.3VA	4.0VA
	AD24 (AC/DC)	1.3VA/0.5W	1.6VA/0.8W	1.8VA/0.7W
	D12 (DC)	---	0.9W	0.9W
Mounting Position		Free		
Outline Dimensions		40H×36W×72.2D mm		
Weight (Approx.)		GT3A-1	GT3A-2	GT3A-3
		63g	73g	79g

* For the value of the error against a preset time, whichever the larger applies.

●APPLICABLE STANDARD

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

Electrostatic Discharge	IEC61000-4-2, EN61000-4-2
Radiated Radio-Frequency Electromagnetic Field	IEC61000-4-3, EN61000-4-3
Electrical Fast Transient/Burst	IEC61000-4-4, EN61000-4-4
Surges	IEC61000-4-5, EN61000-4-5
Conducted Radio-Frequency	IEC61000-4-6, EN61000-4-6
Voltage Dips	IEC61000-4-11, EN61000-4-11
Voltage interruptions	IEC61000-4-11, EN61000-4-11
Radiated Emission	CISPR 11, EN55011 (Group 1, Class A)

●OUTPUT SPECIFICATIONS

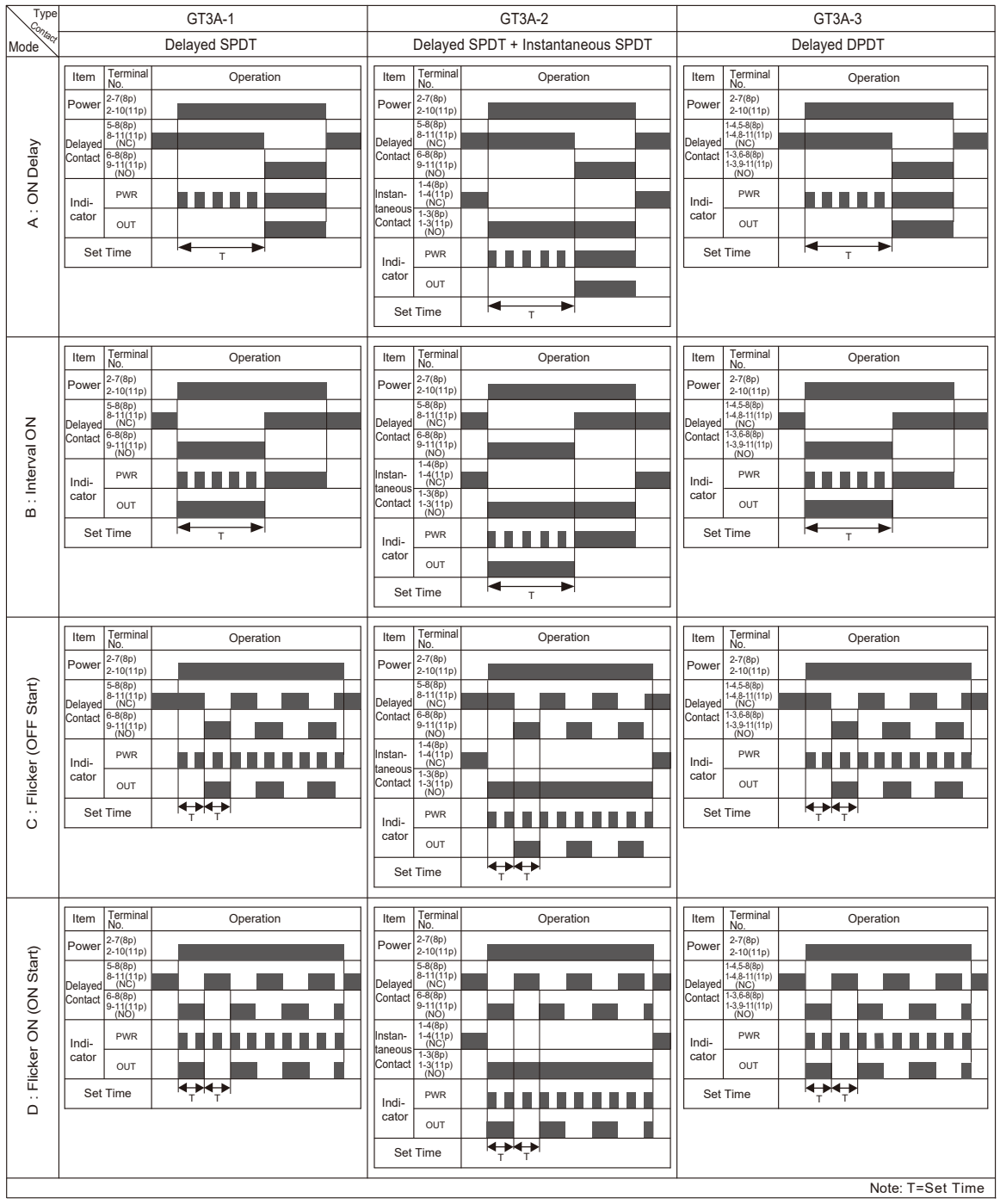
Type		GT3A-1, GT3A-2	GT3A-3
Allowable Contact Power		960VA/120W	1200VA/120W
Allowable Voltage		250V AC/150V DC	
Allowable Current		5A	
Contact Ratings		1/8HP, 240V AC 3A, 240V AC (Resistive) (UL, c-UL Listed)* 5A, 120V AC/30V DC (Resistive) (UL, c-UL Listed)*	1/6HP, 240V AC 5A, 240V AC/24V DC (Resistive)(UL, c-UL Listed)*
Conditional Short Circuit		Fuse 5A, 250V	
Life	Electrical (Resistive)	100,000 op. minimum (Contact rating load)	
	Mechanical	20,000,000 op. minimum	

*UL, c-UL Listed Ratings are only 3A, 240V AC(Resistive), 5A, 120V AC/30V DC (Resistive) for GT3A-1, GT3A-2 and 5A, 240V AC/24V DC (Resistive) for GT3A-3.

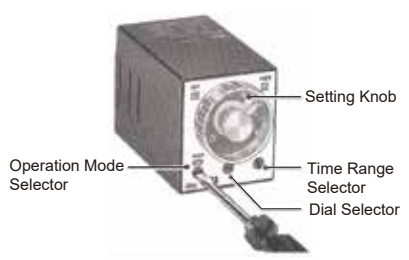
●TYPES

Operation Mode	Rated Voltage Code	Time Range	Output	Contact	Type No. 8-pin Type	Type No. 11-pin Type
A: ON Delay B: Interval ON C: Flicker D: Flicker ON	AF20: 100 to 240V AC(50/60Hz)	0.1sec to 180hours (See TIME SPECIFICATIONS for details.)	3A, 240V AC 5A, 120V AC / 30V DC (Resistive load)	Delayed SPDT	GT3A-1AF20	GT3A-1EAF20
				Delayed SPDT + Instantaneous SPDT	GT3A-2AF20	GT3A-2EAF20
	AF20: 100 to 240V AC(50/60Hz) AD24: 24V AC(50/60Hz) / 24V DC D12:12V DC				GT3A-2AD24	GT3A-2EAD24
					GT3A-2D12	GT3A-2ED12
			5A, 240V AC / 24V DC (Resistive load)	Delayed DPDT	GT3A-3AF20	GT3A-3EAF20
					GT3A-3AD24	GT3A-3EAD24
					GT3A-3D12	GT3A-3ED12

●OPERATION CHARTS

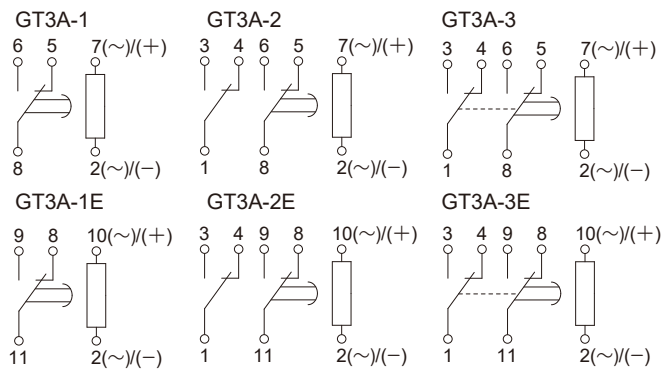


●SWITCH SETTING



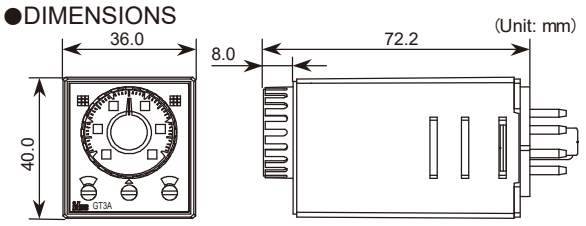
(1) The switches should be securely turned using a flat screwdriver 4mm wide maximum. Note that incomplete setting may cause malfunction. The letter should be centered in the display window. The switches, which do not turn infinitely, should not be turned beyond the limits.
(2) Since changing the setting during timer operation may cause malfunction, power should be turned off before changing the setting.

●INTERNAL CONNECTIONS



●DIMENSIONS

(Unit: mm)



NOTE: GT3A series are UL Listed when used in combination with following IDEC's sockets:
GT3A-1,2,3 : SR2P-06* pin type socket. (*-May be followed by A,B,C or U)
GT3A-1E,2E,3E : SR3P-05* pin type socket. (*-May be followed by A,B,C or U)
The socket to be used with these timers are rated:
-Conductor Temperature Rating 60°Cmin,
-Use No.14AWG to No.18AWG. Copper conductors only,
-Terminal Torque 1.0 to 1.3 N-m

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 sever personal 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.
- Emergency stop and interlocking circuits must be configured outside the Electronic Timer. If such a circuit is configured inside the Electronic Timer, failure of the Electronic timer may cause disorder of control system, or accidents.

⚠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 equipment.
- 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.
- The output may remain in the ON or OFF state due to a malfunction of the output relay.For output signals that may cause serious accidents, install an external circuit to monitor the status.
- Do not disassemble, repair, or modify the Electronic Timer.
- When disposing of the Electronic Timer, do so as an industrial waste.

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