GT3W Series — Dual Time Range Timers

Key features of the GT3W series include:

- Sequential start, sequential interval, on-delay, recycler, and interval ON timing functions
- 2 time settings in one timer
- 8 selectable operation modes on each model
- Mountable in sockets or flush panel
- Power and output status indicating LEDs
- Time ranges up to 300 hours

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General Specifications

Operation System			Solid state CMOS Circuit
Operation Type			Multi-Mode
Time Range			1: 0.1sec to 6 hours, 3: 0.1sec to 300 hours
Pollution Degree			2 (IE60664-1)
Over Voltage Category			III (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	10.8-13.2V DC
Disengaging Value of Input Voltage			Rated Voltage x10% minimum
Range of Ambient Operating Temperature			-10 to +50°C (without freezing)
Range of Ambient Storage and Transport Temperature			-30 to +75°C (without freezing)
Range of Relative Humidity			35 to 85%RH (without condensation)
Atmospheric Pressure			80kPa to 110kPa (Operating), 70kPa to 110kPa (Transport)
Reset Time			60msec maximum
Repeat Error			±0.2%, ±10msec*
Voltage Error			±0.2%, ±10msec*
Temperature Error			±0.6%, ±10msec*
Setting Error			±10% maximum
Insulation Resistance			100MΩ minimum (500V DC)
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:750V AC, 1 minute
Vibration Resistance			10 to 55Hz amplitude 0.75mm² hours in each of 3 axes
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.)	AF20	100V AC/60Hz	2.3VA
		200V AC/60Hz	4.6VA
	AD24 (AC/DC)		1.8VA/0.9W
Mounting Position			Free
Dimensions			40Hx 36W x 70 mm
Weight (Approx.)			72g

Contact Ratings

Allowable Contact Power		960VA/120W
Allowable Voltage		250V AC/150V DC
Allowable Current		5A
Maximum permissible operating frequency		1800 cycles per hour
Rated Load		1/8HP, 240V AC
		3A, 240V AC (Resistive)
		5A, 120V AC/30V DC (Resistive)
Conditional Short Circuit		Fuse 5A, 250V
Life	Electrical	100,000 op. minimum (Resistive)
	Mechanical	20,000,000 op. minimum

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

Part Number List

Part Numbers

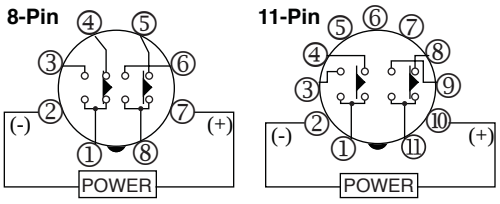
Mode of Operation	Output	Contact	Time Range*	Rated Voltage	Pin Configuration	New Part Numbers
A: Sequential Start B: On-delay with course and fine C: Recycler and instaneous D: Recycler outputs (OFF Start) E: Recycler outputs (ON Start) F: Interval ON G: Interval ON Delay H: Sequential Interval	3A, 240V AC 5A, 120V AC/30V DC (Resistive Load)	Delayed SPDT + Delayed SPDT	1: 0.1sec - 6 hours *(See Time Range Settings for details.)	100 to 240V AC (50/60Hz)	8 pin	GT3W-A11AF20N
					11 pin	GT3W-A11EAF20N
				24V AC/DC	8 pin	GT3W-A11AD24N
					11 pin	GT3W-A11EAD24N
				12V DC	8 pin	GT3W-A11D12N
					11 pin	GT3W-A11ED12N
			3: 0.1sec - 300 hours	100 to 240V AC (50/60Hz)	8 pin	GT3W-A33AF20N
				24V AC/DC		GT3W-A33AD24N

1. For timing diagrams and schematics, see page 836.
2. For socket and accessory part number information, see page 838.
3. 8- and 11-pin models differ only in the number of pins (extra pins are not used).
4. For the timing diagram overview, see page 794.
5. *For details on setting time ranges, see the instructions on page 837.

Time Range Table

Time Range Code: 1			Time Range Code: 3		
Time Range Selector	Scale	Time Range	Time Range Selector	Scale	Time Range
1S	0-1	0.1 sec - 1 sec	1S	0 - 3	0.1 sec - 3 sec
10S		0.3 sec - 10 sec	1M		3 sec - 3 min
10M		15 sec - 10 min	1H		3 min - 3 hours
1S	0 - 6	0.1 sec - 6 sec	1S	0 - 30	0.6 sec - 30 sec
10S		1 sec - 60 sec	1M		36 sec - 30 min
1M		6 sec - 6 min	1H		36min - 30 hours
10M		1 min - 60 min	10H		6 hours - 300 hours
1H		6 min - 6 hours			

Timing Diagrams/Schematics



A: Sequential Start

Item	Terminal No.	Operation	Description
Power	2-7		
Delayed Contact Ry1	1-4 (NC)		ON after T1
	1-3 (NO)		
Delayed Contact Ry2	5-8 (NC)		ON after T1 + T2
	6-8 (NO)		
Indicator	OUT1		
	OUT2		
Set Time		T1 T2	

B: On-delay with course and fine

Item	Terminal No.	Operation	Description
Power	2-7		
Delayed Contact Ry1	1-4 (NC)		ON after T1 + T2
	1-3 (NO)		
Delayed Contact Ry2	5-8 (NC)		ON after T1 + T2
	6-8 (NO)		
Indicator	OUT1		
	OUT2		
Set Time		T1 T2	

C: Recycler and instantaneous

Item	Terminal No.	Operation	Description
Power	2-7		
Delayed Contact Ry1	1-4 (NC)		Instantaneous ON
	1-3 (NO)		
Delayed Contact Ry2	5-8 (NC)		OFF during T1 ON during T2
	6-8 (NO)		
Indicator	OUT1		
	OUT2		
Set Time		T1 T2	

D: Recycler outputs (OFF Start)

Item	Terminal No.	Operation	Description
Power	2-7		
Delayed Contact Ry1	1-4 (NC)		OFF during T1 ON during T2
	1-3 (NO)		
Delayed Contact Ry2	5-8 (NC)		OFF during T1 ON during T2
	6-8 (NO)		
Indicator	OUT1		
	OUT2		
Set Time		T1 T2	

E: Recycler outputs (ON Start)

Item	Terminal No.	Operation	Description
Power	2-7		
Delayed Contact Ry1	1-4 (NC)		ON during T1 OFF during T2
	1-3 (NO)		
Delayed Contact Ry2	5-8 (NC)		ON during T1 OFF during T2
	6-8 (NO)		
Indicator	OUT1		
	OUT2		
Set Time		T1 T2	

F: Interval ON

Item	Terminal No.	Operation	Description
Power	2-7		
Delayed Contact Ry1	1-4 (NC)		ON during T1
	1-3 (NO)		
Delayed Contact Ry2	5-8 (NC)		ON after T1, during T2
	6-8 (NO)		
Indicator	OUT1		
	OUT2		
Set Time		T1 T2	

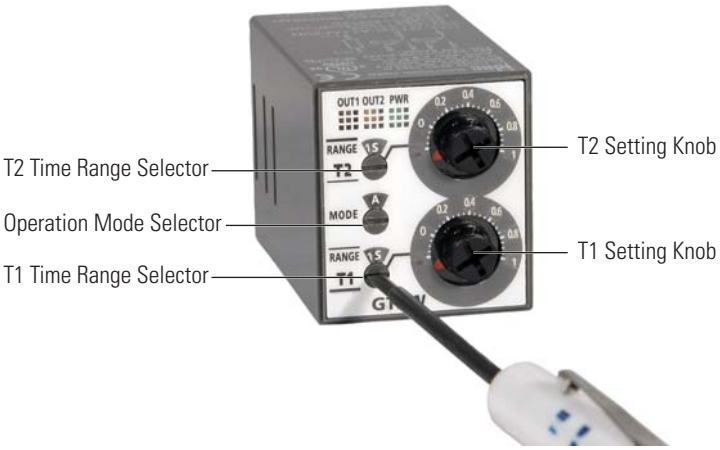
G: Interval ON Delay

Item	Terminal No.	Operation	Description
Power	2-7		
Delayed Contact Ry1	1-4 (NC)		ON during T1
	1-3 (NO)		
Delayed Contact Ry2	5-8 (NC)		ON after T1 + T2
	6-8 (NO)		
Indicator	OUT1		
	OUT2		
Set Time		T1 T2	

H: Sequential Interval

Item	Terminal No.	Operation	Description
Power	2-7		
Delayed Contact Ry1	1-4 (NC)		ON during T1 + T2
	1-3 (NO)		
Delayed Contact Ry2	5-8 (NC)		ON after T1, during T2
	6-8 (NO)		
Indicator	OUT1		
	OUT2		
Set Time		T1 T2	

Instructions: Setting GT3W Timer



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

Safety Precautions

Special expertise is required to use Electronic Timers.

- 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 when using the Electronic Timer in applications where heavy damage or personal injury may occur should the Electronic Timer fail.
- Install the Electronic Timer according to instructions described in this catalog.
- Make sure that the operating conditions are as described in the specifications. If you are uncertain about the specifications, contact IDEC in advance.
- In these directions, 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 malfunction of the control system, or an accident.

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 the specifications. If the Electronic Timer is used in places where it will be subjected to high-temperature, high-humidity, condensation, corrosive gases, excessive vibrations, or excessive shocks, then electrical shocks, fire hazard, or malfunction could 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 industrial waste.