Altech Corp.®

Your Source for Automation & Control Components

600XU-A-1-CU
Analog Multifunction Timer
17.5mm DIN Rail

c UL us
E349567

CE

RoHS COMPLIANT

FEATURES

- 13 Timing Modes – broader than most DIN rail timers in this class.
- Universal Voltage (12–240V AC/DC) – simplifies inventory and sourcing.
- Front Dial Interface – no DIP switches or programming needed.
- Compact DIN Rail Mount – 17.5 mm slim profile saves panel space.
- Industrial Certifications – CE and UL listed for trusted reliability.
- 10 timing ranges Seconds/Minutes/Hours for a max up to 30 hours

CAT. NO.

Display	
Display Type	Analog Timer
Digits	N/A
LED Indication	LED 1: Power On, LED 2: Relay On

Supply Specification	
Input Voltage	20-240V AC (50/60Hz) and 12-240V DC

Input Specification	
Reset	Reset time <100m sec

Output Specification	
Main Output	SPDT -1C/O - NO/5A, NC/3A@250V AC

Functional Specification	
Modes	On delay / Interval / Cyclic equal OFF first / Cyclic equal ON first / Pulse output, 500m sec fixed / Delay on break / Delay on make / Delay on break / Interval after break / Single shot / Retriggerable single shot / Latching relay / Delay with totalize / Interval with totalize
Time Ranges	0.1 - 1 sec / 0.3 - 3 sec / 1 - 10 sec / 3 - 30 sec 0.1 - 1 min / 0.3 - 3min / 1 -10min / 3 - 30min 0.1 - 1hr / 0.3 - 3hr
Power Consumption	3.2VA max

Accuracy	
Timer	Setting +/-5% of Full Scale Repeat +/-0.5% or 50m sec.

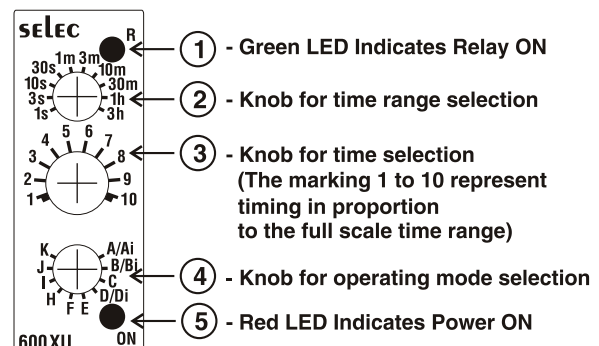| Environmental Specification	
Operating Temperature	0 to 50°C (32 to 122°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)
Humidity (Non-Condensing)	95% Relative Humidity
Weight	64 grams (.141 lbs)
Protection Level	–

COMPLIANCE

Applicable EMI / EMC Standards		
Product Standard		
Category	Reference Standards	Testing Level
Electrostatic Discharge	IEC 61000-4-2	Level-3
Electrical Fast Transient / Brust	IEC 61000-4-4	Level-3
Electromagnetic Field	IEC 61000-4-3	Level-3
Surge	IEC 61000-4-5	Level-3
Conducted RF	IEC 61000-4-6	Level-2
Rated Power Frequency	IEC 61000-4-8	Level-4
Voltage Dip / Short Interruptions	IEC 61000-4-11	Level-3
Conducted Emissions	CISPR-11	Class-B
Rated Emissions	CISPR-22	Class-A
Emission & Immunity	IEC 61326-1	
Safety	IEC 61010-1	
PFMF (Passing criteria)	IEC 61000-4-8	Class A

DIMENSIONS

44mm
45mm
67.5mm
35.3mm
90mm
17.5 mm
60mm

TERMINAL CONNECTIONS

A1 A2

Control Contact Y1

15 25
16 18
NC   NO
COM

Terminal	Description	
A1	L (+)	TIMER SUPPLY
A2	N (-)	TIMER SUPPLY
15	COM	RELAY CONTACT
16	NC	
18	NO	
25	Y CONTACT	

SELEC R

600XU
ON

(1) - Green LED Indicates Relay ON

(2) - Knob for time range selection

(3) - Knob for time selection
(The marking 1 to 10 represent timing in proportion to the full scale time range)

(4) - Knob for operating mode selection

(5) - Red LED Indicates Power ON

A Function: ON Delay
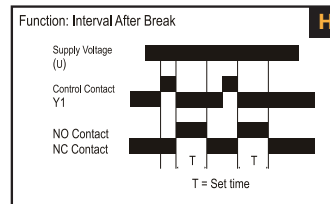
Supply Voltage

NO Contact
NC Contact

T

T = set time

A – On Delay
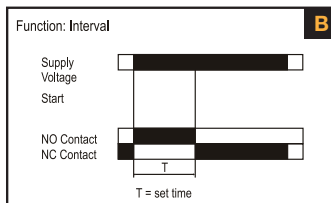Output turns ON after a set time when input is energized.
- Motor Start Delay – Avoids inrush current by sequencing equipment start-up.
- Refrigeration Compressor – Delays restart after power restoration to prevent short cycling.

B Function: Interval

Supply Voltage
Start

NO Contact
NC Contact

T

T = set time

B – Interval
Output activates immediately and stays ON for a set time, regardless of input status.
- Automatic Door Hold-Open – Door opens, remains open for 10 seconds, then closes automatically.
- Timed Lighting in Stairwells – Light stays ON for 2 minutes after switch press.

C Function: Cyclic Equal OFF First

Supply Voltage
Control Contact (Y1)

NO Contact
NC Contact

T T T

T = set time

C – Cyclic Equal OFF First
Alternates OFF-ON-OFF continuously, starting with OFF.
- Warning Siren Pulsing – Alarms flash/beep every 5 seconds for visibility.
- Pulsed Water Sprayer – Irrigation cycles on and off at fixed intervals.

Ci Function: Cyclic Equal ON First

Supply Voltage

NO Contact
NC Contact

T T T

T = set time

Ci – Cyclic Equal ON First
Alternates ON-OFF-ON continuously, starting with ON.
- Warning Beacon – Light starts ON for immediate visibility, then flashes repeatedly.
- Lubrication Pump Cycle – Pump cycles oil feed with consistent intervals.

D Function: Pulse Output

Supply Voltage

NO Contact
NC Contact

T P

T = Set time ; P = 500msec

D – Pulse Output (500 ms fixed)
After delay, a fixed 500 ms output pulse is triggered.
- Triggering Counters – Sends pulse to increment a mechanical or digital counter.
- Label Dispenser Start Pulse – Delivers a timed impulse to a label applicator.

E Function: Delay On Break

Supply Voltage (U)
Control Contact Y1

NO Contact
NC Contact

T T
t1

T = set time; t1 < T

E – Delay on Break (Off Delay)
Output remains ON for a time after the input is turned OFF.
- Fan Overrun in HVAC – Ensures ventilation continues after lights or HVAC turn off.
- Security Gate Hold – Keeps a gate unlocked briefly after access signal ends.

F Function: Delay On Make / Break

Supply Voltage (U)
Control Contact Y1

NO Contact
NC Contact

T T

T = Set time

F – On and Off Delay
Delays both turning ON and OFF after input changes.
- Soft Start/Stop Lighting – Prevents flicker by buffering both transitions.
- Conveyor Gate – Opens with delay and closes slowly to reduce jams.

H Function: Interval After Break

Supply Voltage (U)
Control Contact Y1

NO Contact
NC Contact

T T

T = Set time

H – Interval After Break
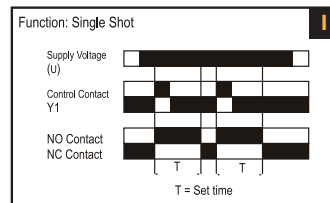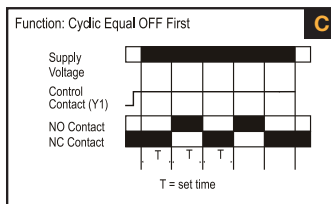Timing starts only after the input signal turns OFF.
- Machine Cool-Down Period – Starts cooling system after machine shuts off.
- Garage Light Timer – Light stays ON for a few minutes after door closes.

I Function: Single Shot

Supply Voltage (U)
Control Contact Y1

NO Contact
NC Contact

T T

T = Set time

I – Single Shot
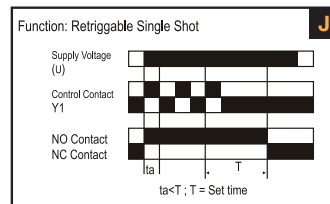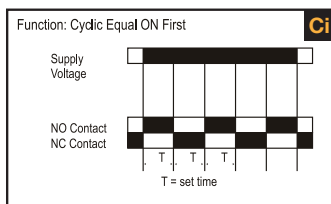One fixed-length pulse per input event (non-retriggerable).
- Bag Sealing Impulse – Heat element receives one consistent pulse per package.
- Solenoid Valve Pulse – Fires once regardless of how long the input is held.

J Function: Retriggable Single Shot

Supply Voltage (U)
Control Contact Y1

NO Contact
NC Contact

ta T

ta<T ; T = Set time

J – Retriggerable Single Shot
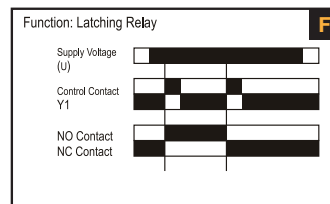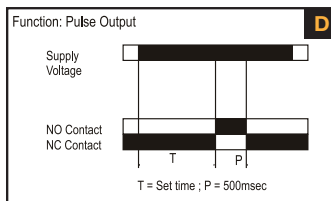Pulse restarts if input is re-triggered during the output cycle.
- Occupancy Sensor Timer – Light stays ON as long as motion is detected.
- Machine Jog Control – Extends jog duration if button is repeatedly pressed.

F Function: Latching Relay

Supply Voltage (U)
Control Contact Y1

NO Contact
NC Contact

K – Latching Relay
One pulse turns output ON; next pulse turns it OFF.
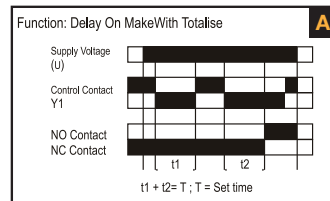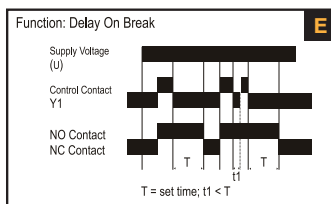- Start/Stop Motor Button – Push once to run; again to stop.
- Mode Toggle Switch – Alternates between modes (e.g., manual/auto).

Ai Function: Delay On Make With Totalise

Supply Voltage (U)
Control Contact Y1

NO Contact
NC Contact

t1 t2

t1 + t2= T ; T = Set time

Ai – Delay on Make with Totalize
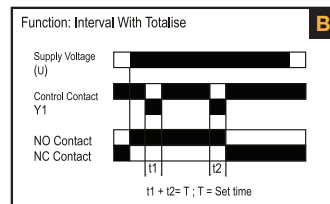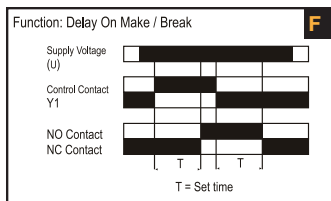Input must be ON for total accumulated time before output activates.
- Usage-Based Trigger – Starts maintenance reminder after 100 hours total run time.
- Data Logger Control – Activates logging only after equipment has been running long enough to justify recording.

Bi Function: Interval With Totalise

Supply Voltage (U)
Control Contact Y1

NO Contact
NC Contact

t1 t2

t1 + t2= T ; T = Set time

Bi – Interval with Totalize
After cumulative input time reaches set point, activates output for one interval.
- Service Reminder System – Triggers a light/alarm after total usage time.
- Delayed Alert for Intermittent Faults – If fault signal accumulates to a threshold, send output signal to operator.

CROSS REFERENCE
Finder - 80.01.0240.0000
Carlo Gavazzi - DMB51CM24, DMB01DM24
Phoenix Contact - ETD-BL-1T-230 (2905813)
Weidmüller - 2697260000
Omron - H3DK-M1 AC/DC24-24
Schneider - 821TD10H-UNI
RS PRO - 102-6125