AMETEK ncc
National Controls Corp.

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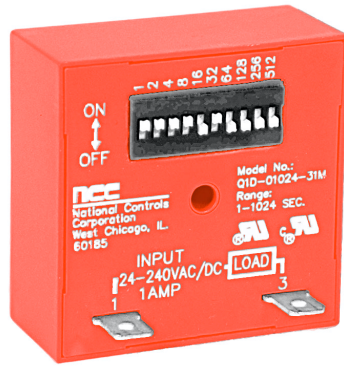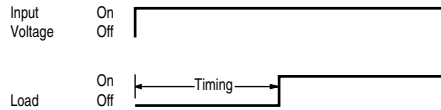**www.nationalcontrols.com**

Features

- ■ ®ℝ℧ ℅ℝ℧ File #E65038
- ■ Time Delay From 1 to 1023 Seconds in 1 second increments
- ■ Universal Input Voltage 24 - 240 VAC/DC
- ■ Solid-State Digital Timing
- ■ 100% Life Tested
- ■ Low Cost
- ■ Compact Size
- ■ Superior Transient Protection
- ■ Flame-Retardant and Solvent-Resistant Polyester Thermoplastic Housing
- ■ Made in U.S.A.

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.885

1.25 MAX

.250 X .032 MALE
SPADE TERMINAL
(2 PL.)

10 POSITION SWITCH
TIME DELAY SELECT

2.00 SQ.

.170 DIA.

ON
OFF

INPUT VOLTAGE

LOAD

7865/7/97

Solid-State Cube Timers

Delay on Make
(Series Load)
Q1D Series

Allows user to accurately set delay times up to 1023 seconds without time consuming trial and error adjustments.

Operating Logic: Upon application of input voltage, the delay starts. At the end of the time delay, the load is energized. Reset is accomplished by removing input voltage. Set the delay time by switching the appropriate combination of time values to the "ON" position.

Note: The load may be located on either side of the line

Logic Function Diagram:

Input Voltage — On / Off
Load — On / Off — Timing

Specifications

Time Delay
Adjustment: 10 Position DIP switch.
Range: 1 to 1023 seconds in one second increments. Zero time setting is undefined.
Repeatability: ± 0.5% (0.25% typ) at constant temperature.
**Accuracy:** ± 10% of set time +0 .25 second.

Input
Operating Voltage: 24 to 240 VAC/DC ±10% (On DC models, unfiltered supply voltage must be full-wave rectified)
Frequency: 50/60 Hz

Output
Type: Solid-state, normally open series load
Rating: 1 amp. steady state maximum
Life: 100,000,000 operations

Protection
Transient Voltage: 30 Joule Metal oxide varistor
Dielectric Breakdown: 3000 VAC, RMS, terminals to mounting
Insulation Resistance: 100 megohms minimum between terminals and case

Mechanical
Termination: .25" x 032" male fast-on terminals
Mounting: Surface mount with one #8 screw

Environmental
Storage Temperature: -40°C to 85°C
Operating Temperature: -40°C to 65°C
Humidity: 95% relative
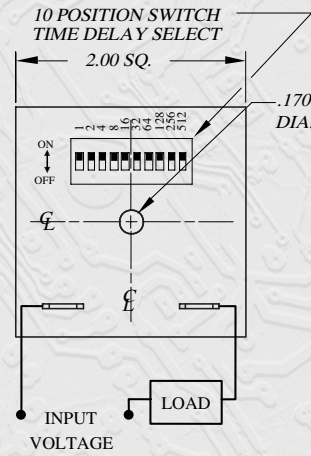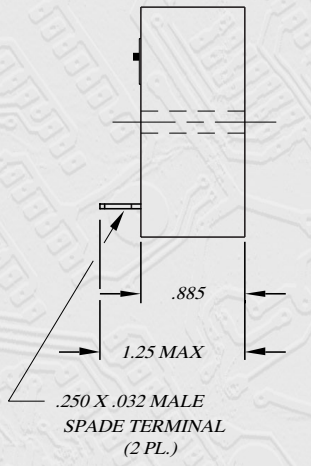
Switch Setting Example:

ON
OFF

Time Selected= 55 sec.

Ordering Information

Time Range	24 to 240 VAC/DC ± 10%
1 - 1023 Seconds	Q1D-01024-31M

Reset: During Timing		125 mS
Reset: After Time Out		10 mS
Min. Load		10 mA or 1 VA whichever is greater
Max. Leakage Current		2 mA
Voltage Drop @ 1A		3.3 V Max.
Power Consumption	During Timing	0.25 VA Max.
	After Time Out	3.3 VA
Peak One Cycle Surge		20 Amp
Protection		30j. MOV