

TH Series High - Amp Time Delay Relay

Prevents add-on equipment from draining batteries, maximizing operational readiness by eliminating dead batteries, saving total cost of operation.

Ensures equipment that needs power after engine off or at end of shift (video downloads) are satisfied while automatically turning off after a preset time or optionally if battery charge is low.

Protects sensitive on-board electronics via optional under/over voltage shutdown and start event isolation.



Patent: 11,352,998

EXPERTLY ENGINEERED













Ultra-Low Power Draw eliminates vehicle downtime due to dead batteries. Lowest off-state current draw (1.3 mA).



Simple & Robust Installation: Sealed plug with optional long wire leads. Single timer/relay device reduces installation time, overall costs and points of potential failure. Optional output bus bar easily connects RT or CT Fuse Block families.



Meets Stringent OEM Standards for electrical transient self-protection



Adjustable OFF Time Delay: 15 minutes to 16 hours + 5 sec test mode



Diagnostic Feedback via optional external led and on-board LEDs

PREFERRED BY PROFESSIONALS



Bullet-proof Construction: Sealed unit, high temperature materials allow mounting anywhere on vehicle. Integrated thermal overload protection



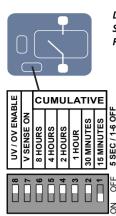
Start Isolation / Kill Switch control input option for service technicians, emergency OFF, or protecting sensitive add-on equipment from engine cranking voltage fluctuation.



Flexible Control Options via Ignition Key, alternator voltage sense, or both.

4 Year Industry Leading Warranty

System Diagram / Dip Switches



DISCONNECT BATTERY FROM POWER DISTRIBUTION SYSTEM BEFORE INSTALLING PRODUCT TO PREVENT RISK OF ELECTRICAL SHOCK AND PRODUCT DAMAGE

1) Use of Ignition Key On signal strongly recommended for all first responder installations to ensure rapid relay ON and maximize vehicle up-time in adverse situations.

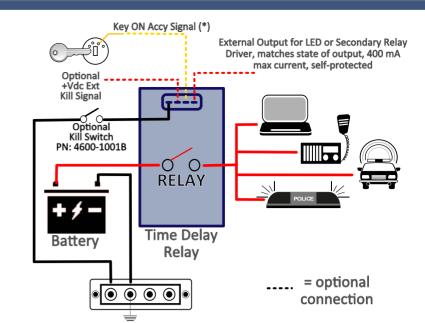
2) Delay between Off Trigger and Relay OFF set with Dip Switches 1-6. Time Delay is cumulative (if DS1 and DS2 are On, Delay = 45 minutes).

3) If DS1 through DS6 = Off, Time Delay = 5 seconds for testing and operational verification

4) Input line voltage sense trigger enabled for ON and OFF Time Delay with Dip Switch 7
5) Under-Voltage and Over-Voltage Protection enabled with Dip Switch 8

Dimensions

MOLEX HOUSING P/N: 75757-0441, MOLEX FEMALE PINS P/N: 33012-2001 STANDARD HARNESS INCLUDES 2 FEET 16 AWG BLACK GROUND WIRE (PIN #1) AND 2 FEET 16 AWG YELLOW IGNITION WIRE (PIN #1) DIP SWITCH COVER SEAL	4X MOUNTING HOLES [.177] Ø4.50 ACCEPTS M4 / #8 MOUNTING SCREWS		
Specifications		7601	7801
Nominal Voltage		12 Vdc	12 Vdc
Input Voltage Range		8-18 Vdc	16-36 Vdc
Continuous Current		160 Amps	
Max 5 Min Current		240 Amps	
Operating Current		340 mA	170 mA
Operating Current, Relays Open		1.3 mA	
Cable Size to Meet Ratings		2 AWG	
Maximum Cable Size		2/0 AWG	
Hardware Material		Stainless Steel	
Terminal Stud Torque		80 in-lbs	
Time Delay Range (Adjustable)		5 sec - 16 hrs	
Close / Open Voltage		13.3 / 12.9	26.6 / 25.8
Low Voltage Protection (15 sec)		11.0 Vdc	22.0 Vdc
Over Voltage Protection (15 sec)		17.0 Vdc	34.0 Vdc



Methods of Operation

Relay closes immediately if:

- 1) Key Ignition Input > 8 Vdc or
- 2) V_sense = On and Input Stud Voltage > 13.3 Vdc

Relay opens after Time Delay setting if:

- 1) Key Ignition Input < 8 Vdc and V_sense = Off or
- 2) Key Ignition Input < 8 Vdc and V_sense = On and Input Stud Voltage < 12.8 Vdc

UV / OV Lock (Under-voltage / Over-voltage Protection):

1) If ON, will turn OFF Relay if Input Stud Voltage < 10.5 Vdc or > 17.0 Vdc for 15 Sec 2) Will turn OFF relay <u>regardless</u> of Key ON Accy Signal

Kill Switch input turns OFF Relay immediately, will override all other relay ON indicators

Part Numbers	Resell Pack	Bulk Pack
12V TDR w/2' Gnd/Start Harness	7601	7601B
24V TDR w/2' Gnd/Start Harness	7801	7801B
12V TDR w/Deutsch Connector	7601-1001	7601-1001B
24V TDR w/Deutsch Connector	7801-1001	7801-1001B

* Contact Egis Mobile Electric for custom product configurations including stud sizes, control harness wires, time delays, voltage settings, dip switch functionality, and control input functionality.

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901444 Rev 2

marine / rv van / 4x4 up-fitting

emergency vehicle work truck