## ADR SERIES MAGNETIC BATTERY SWITCH



## Description

The ADR (Accord Dangereux Routier) Battery Disconnect Switch is a bistable/magnetic, current isolating switch designed for dangerous goods carriage vehicles. Its ON-OFF position is different than traditional current isolating switches. It uses a minimum current when it is turned on and zero when is off. The "magnetic ON-OFF position" absorbs current only during the commuting phase: when switched from (OFF) to (ON) and vice versa. Generally referred as "bistable with zero consumption", the switch connects/disconnects the electric circuit to/from the battery.
One P/N can be utilized for both 12 V and 24 V . The ADR Battery Disconnect Switch is a positive disconnection switch available either as a base unit or complete kit with ATEX compliant chassis switch, cabin toggle switch, switch protection cover, and harnesses.
The ADR Disconnect Switch can also be used for non-ADR applications that can utilize a programmable disconnect time delay (between 1 sec . and 1 hour). ADR applications are required to break circuit within 10 sec . of activation.

## Features

- ADR (Accord Dangereux Routier) application
- Magnetic Bi-Stable Retention
- 12V-24V
- Switch OFF programmable delay available for Non-ADR applications
- Complete kit comes with Chassis Switch
- Complete kit comes with Cabin Switch with cover
- Integrated 7-way DIN connector
- M10 terminal studs


## Applications

- Heavy Duty Trucks
- Construction
- Agriculture


## Web Resources

Download 2D print, installation guide and technical resources at: littelfuse.com/ADR

## Specifications Overview

Amperage: 250A Continuous Carry
Voltage Rating: $\quad 9 \mathrm{~V}-32 \mathrm{~V} @ 23^{\circ} \mathrm{C}$

Circuitry: SPST
Ingress Protection: IP67/69K (w/DIN Connector plugged in)
Max Cranking Current:
Max Peak Current (S.C.):
Command Supply Output:

Command Input Lines Current:
AUX Line:

Quiescent Current: $1000 \mathrm{~A} \times 30 \mathrm{sec}$
$2000 \mathrm{~A} \times 5 \mathrm{sec}$
1.85 A continuous @ $23^{\circ} \mathrm{C}$ 3.70 A as overload protection @ $23^{\circ} \mathrm{C}$
$1.5 \mathrm{~mA} @ 12 \mathrm{~V}, 3.2 \mathrm{~mA}$ @24V
2 A continuous @ $23^{\circ} \mathrm{C}$ 15 A as overload protection @ $23^{\circ} \mathrm{C}$
OmA (@12V and 24V)
Surface Explosive Gas Atm. Mark: II 2G Ex eb IIC T6 Gb (Tamb $=-40+80^{\circ} \mathrm{C}$ )
Surface Explosive Dust Atm. Mark: || 2D Ex tb IIIC T85 ${ }^{\circ} \mathrm{C}$ IP67 Db
Mine Explosive Atm. Mark: $\quad \mid \mathrm{M} 2 \mathrm{Ex}$ eb $\mathrm{T} 150^{\circ} \mathrm{C} \mathrm{Mb}$ R10 Rev05 Marking: E24 10R 050891
Non-ADR Application Time Delay: Programmable from 1 sec. to 1 hour

## Benefits

- Meets requirements for transportation of hazardous materials. Mining, Gas \& Dust atmosphere application (according EU regulation).
- Magnetic field enables switching between two stable states. State change must be facilitated by a coil pulse. No opening risk at voltage drop.
- One P/N for 12 V and 24 V
- Allows Non-ADR vehicle subsystems to maintain power for a period of time after vehicle turned off
- External switch w/LED and cover, ATEX compliant
- ATEX (ATmospheres EXplosible) marking and ADR requirements compliance
- Control output to 7-way harness with kit
- IP54 ADR terminal protections


## Ordering Information

| PART NUMBER | DESCRIPTION |
| :---: | :---: |
| 08075300 | ADR Battery Disconnect Switch Complete Kit <br> The kit includes all the below part numbers |
| 08075360 | ADR Battery Disconnect Switch |
| 00227073 | Chassis Switch ATEX Compliant w/Cover |
| 00901560 | Cabin Toggle Switch ATEX w/Red Silicon Cover |
| 00900560 | Switch Protection Cover |
| 00712600 | 7-Way DIN Harness |
| 00712500 | 4-Way DIN Harness |

## ADR SERIES MAGNETIC SWITCH

250A•12V-24V DC•IP67/IP69K

## Mounting Diagram

Battery Main Switch


## External Emergency Switch




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250A•12V-24V DC•IP67/IP69K

## Electrical Diagram

## Emergency engine self-switchoff with AUX line



Connection diagram to change the time-delay value (NON-ADR ONLY)


