

Installation Instructions

ADR Battery Main Switch for Positive Disconnection TGC/MGDE-I ADR2

Part Numbers: 08075300 and 08075360



Expertise Applied | Answers Delivered

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 12V and 24V. 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.

Installation

Following the below sequence to install the Battery Main Switch:

1. Connect to battery positive the 30-POS BATT stud with the red O-RING and the load wire to 30A-POS IMP stud.
2. Connect command signals and GND lines to the DIN built-in connector according to the scheme.
In ADR application, the ignition key shall not be connected and the corresponding input grounded
3. Fit the device and power cables according to the indicated fixing torque values.

NB: refer to the INSTALLATION SAFETY INSTRUCTIONS included in the pack

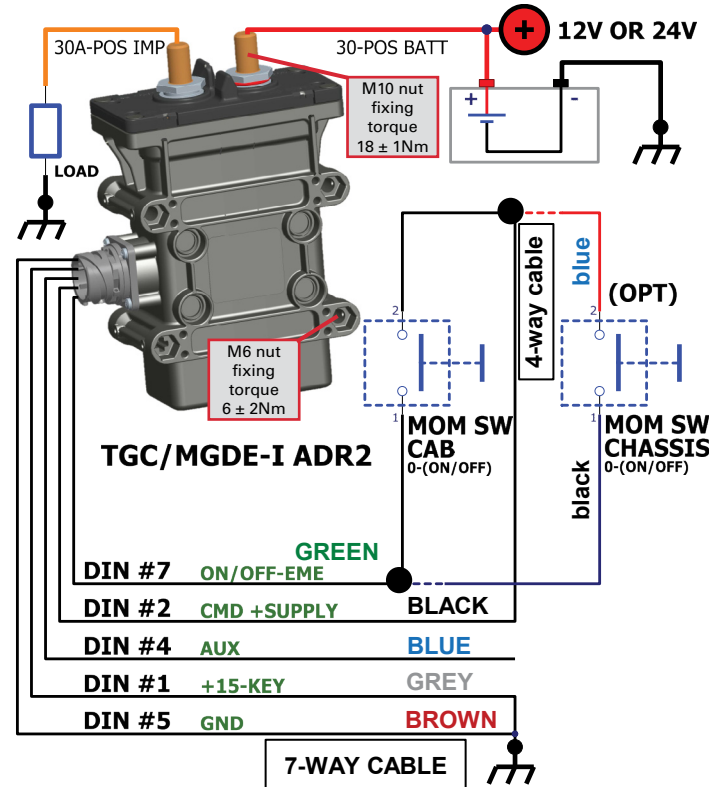
Working:

ACTIVATION (to CLOSE the main contact): when deactivated (main contact open), No supply is given to the internal ECU (AUX line OFF). By acting on MOM SW CAB push button (or on to optional MOM SW CHASSIS), the device is supplied, contact is closed and AUX activated.

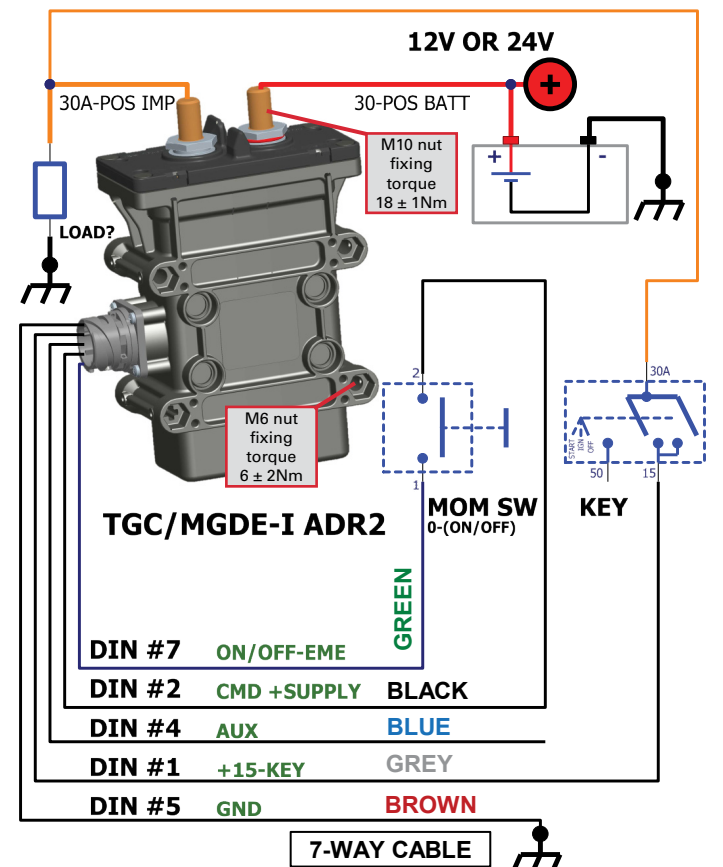
DEACTIVATION (to OPEN the main contact): when active (main contact closed), by acting on MOM SW CAB push button (or on to optional MOM SW CHASSIS push button), the device immediately deactivates AUX line and opens the contact, this implies the ECU total switch off.

DELAYED DEACTIVATION (NON-ADR DIAGRAM ONLY): when active, the +15-KEY input is monitored (if connected). When a key-OFF is detected, a delay starts and results in the AUX line de-activation and main contact opening at time expiration.

ADR Application



Non-ADR Application



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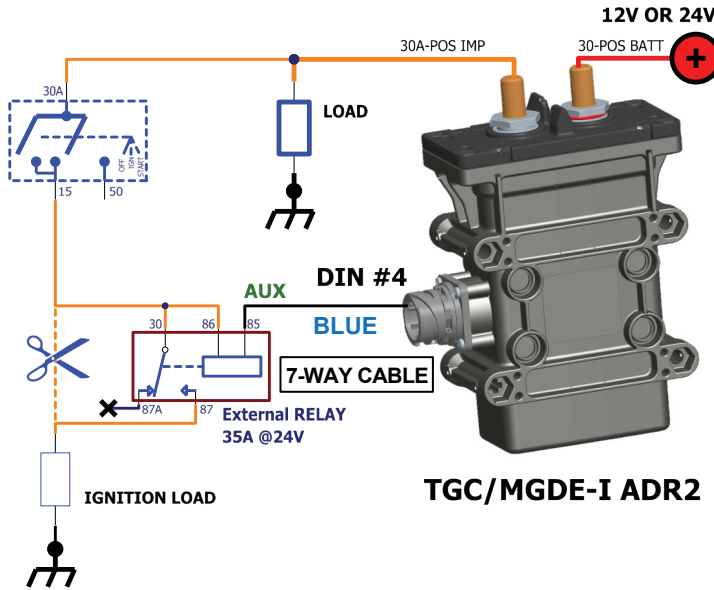
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Emergency Engine Self-Switch off with Aux Line

This wiring must be applied to ensure a correct engine switch off, when there is the need of an emergency BMS deactivation, with the vehicle still running. Bypass the vehicle switch-off line (coming from the ignition switch) with a suitable external relay. The AUX line can be alternatively used to drive a BMS status lamp. See below for the BMS truth table (sequenced), with the AUX line working logic.



Step Number	ON/OFF EME Line	AUX Line (Low Act)	BMS Contact
1	PUSH	OFF=>ON	OFF=>ON
	The AUX line and the BMS stay ON		
2	PUSH	ON=>OFF	ON=>OFF (0,7sec after AUX)
	The AUX line and the BMS stay OFF		

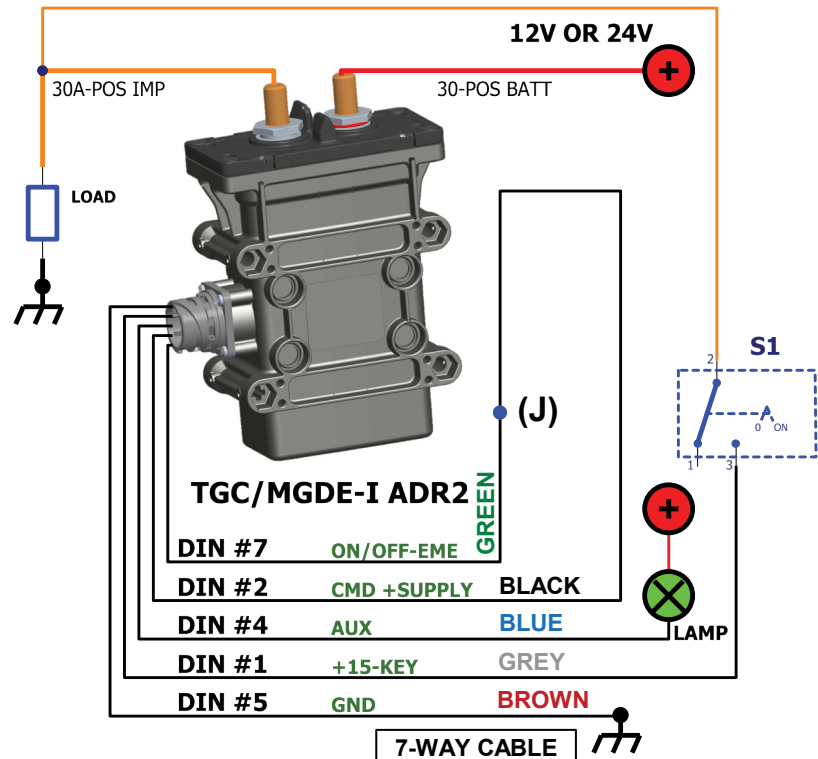
Notices

In case of malfunction of this diagram application, check first for the External RELAY working.

When this diagram is applied in NON-ADR application, with +15-KEY connected to DIN #1, DO NOT install any additional LAMP or LED to the AUX line

Connection Diagram to Change the Time-Delay Value (NON-ADR ONLY)

- Apply this wiring, open the junction (J) and power up. Then just connect the junction itself, by touching DIN#2 (BLACK) and DIN#7 (GREEN) together, to close the contact, then take the power off from 30-POS BATT
- Close the junction (J), activate S1 and power up again ((+) to 30-POS BATT)
- First the LAMP blinks the current time delay blink code (just 1 short pulse if still default set)
- After 10 secs, LAMP activates longer. During this long pulse, apply a fast ON=>OFF=>ON to S1
- Wait for the blink number associated to the desired delay (refer to the Time Setup Blink Codes Table)
- Switch OFF S1, to set the time in non-volatile memory.
- Take the power off and repeat steps (2) and (3) and check that now the new blink number appears
- Apply the NON-ADR installation diagram for normal use, with the key-off delay just setup.



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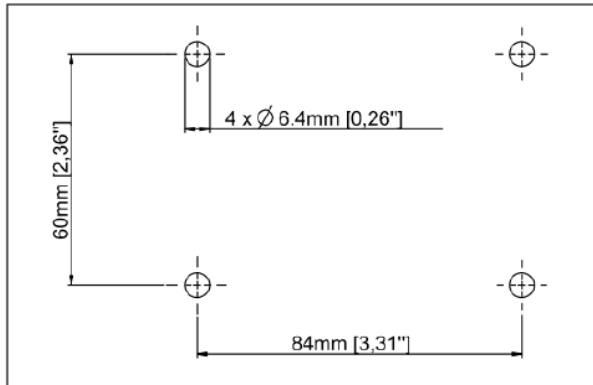
Blink Codes

TIME SETUP BLINK CODES	
BLINK TYPE	DELAY TIME VALUE ACTIVE
1 Blink	6min (DEFAULT)
2 Blink	1sec
3 Blink	35sec
4 Blink	4min
5 Blink	15min
6 Blink	30min
7 Blink	60min

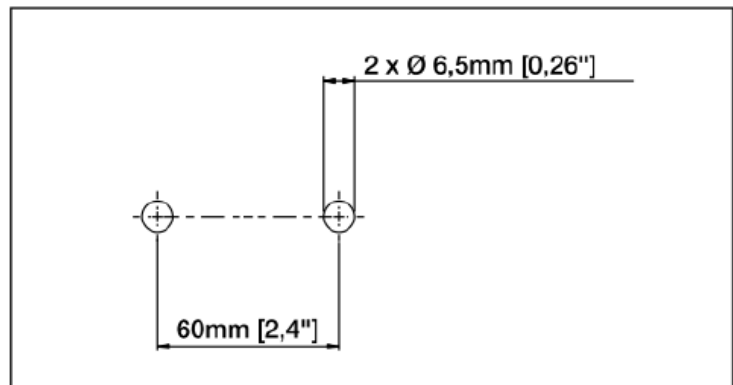
0,8sec blinks spaced out 10sec from each to another

Mounting Templates

Battery Main Switch



External Emergency Switch



WARNING

LITTELFUSE guarantees the product 24 months against fabrication defects, in compliance with applicable laws and terms of liability. All damages caused by improper - handling, installation, use, service or lack of service will void warranty. It is also excluded malfunctions attributable to outside phenomena, LITTELFUSE will take over the possible replacement of the defective product at its discretion. In case of controversies or disputes related to the product and / or interpretation of the warranty conditions the competent FORUM OF VERONA.

LITTELFUSE is not liable for any damage that can, directly or indirectly, affect persons, objects and pets as a consequence of failure to comply with the indications included in this manual.

LITTELFUSE reserves the right to change the features and data described in this manual without forewarning, in order to improve the product. This manual cannot be considered as a contract for third parties.