# E9339

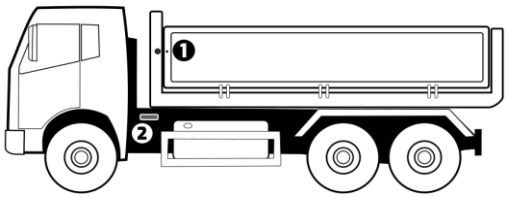
## CAN-compatible wireless side panel detection controller

Marking: « DPO 1-3 P MAG version 5.x »

### Purpose

From 1 to 3 sides are fitted with a wireless MAG (1) magnetic sensor.

The vehicle is fitted with an Atlas Connect (2) DPO - Entry Protection Device 1-3 P MAG version 5 or higher receiver box paired with the installed sensors.




The status of the magnetic sensor(s) (1) is then reported back to the instrument panel. The presence and battery level of the sensor(s) are also checked by the system.

The various alerts and the speed limit of the vehicle are implemented by CAN communication with the vehicle.

The whole system can be configured using the Mobile application (DPO Config) according to the programming made by the dealer on the bodywork interface.

### Distance limitation

Given the variety of vehicle configurations that can limit the signal between the sensors and the box (insulating walls, crane, nature of the material being transported, etc.), we recommend that the Atlas Connect box be mounted outside the cabin to ensure that the system functions properly. For this purpose, use, for example, the 6-metre harness reference E1261.

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|---|---|
| ⚠ | Please consider installing the receiver outside the cabin. |

### Learning detection

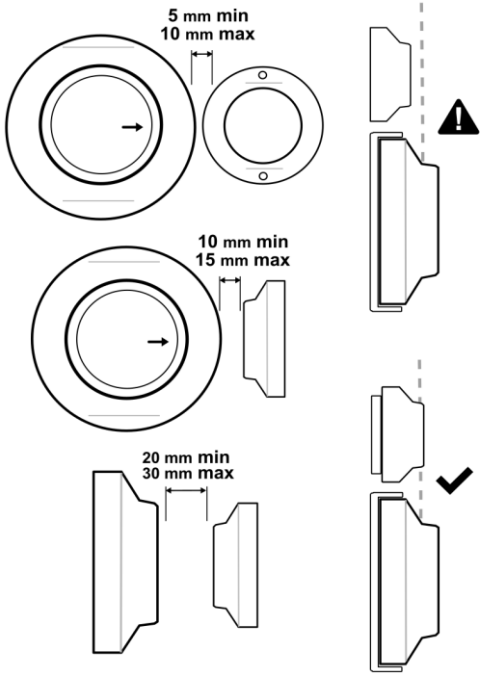
As the measurement conditions of the sensors are not the same in the workshop and on the road, the system automatically adjusts its parameters during the first 30 hours of operation and each time the sensors are replaced (a feature known as "dynamic Tnpc").

### Kit Contents

- One Atlas Connect DPO 1-3 P MAG
- P MAG magnetic sensor paired
- One magnet
- 1 sensor holder
- 2 x 12-pin connectors (brown/green) + 20 pins
- Mounting instructions

### Layout of elements

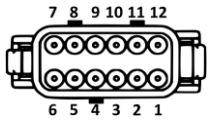
The **MAG magnetic sensors** and their magnetised counterpart should be mounted on the side panel, preferably with the magnet on the moving part, in one of the following 3 configurations:




### Connecting the electronic board

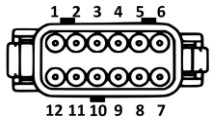
The Atlas Connect DPO has two 12-pin connectors with the following inputs/outputs:

**GREEN Connector**




| Pin | Atlas DPO 1-3 P MAG | |
|---|---|---|
| V6 | +VCC | Power supply +12V/24V |
| V5 | GND | Ground |
| V11 | R1 IN | Relay 1 input * |
| V10 | R1 NO | Relay output 1 NO * |
| V1 | R1 NF | Relay 1 output NC * |
| V2 | R2 IN | Relay 2 input * |
| V12 | R2 NO | Relay output 2 NO * |
| V3 | R2 NF | Relay output 2 NC * |
| V8 | R3 IN | Relay 3 input * |
| V7 | R3 NO | Relay output 3 NO * |
| V9 | R3 NF | Relay output 3 NC * |

**BROWN Connector**




| Pin | Atlas DPO 1-3 P MAG | |
|---|---|---|
| M10 | E1 | Input 1 (dry contact) * |
| M11 | E2 | Input 2 (dry contact) |
| M12 | E3 | Input 3 (dry contact) |
| M9 | GND Out | Carried over ground |
| M3 | CAN H | CAN H |
| M4 | CAN L | CAN L |

* Functions made optional by the use of the CAN link.

The power supply of the **+VDC / GND** card must be connected to a + after contact.

The relay outputs (buzzer and lights) and the E1 input (hydraulic status) can be replaced by a direct connection to the bodybuilding channel.
To do this, simply connect **CAN H and CAN L** to the corresponding pins of the bodybuilder interface.

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| ⚠ | Never connect to a bodywork CAN that is already connected to another device (crane, cooling unit, etc.) |

The **E2 input** defines the operating mode of the card. A bridge must be made between **E2 and GNDout** to ensure proper operation of the system (see " Setting mode ").

The **E3 input** is the optional connection to a 3rd wired sensor that can be activated by the "parameter mode".

**Example** of minimum wiring when using the bodywork CAN:

| | | |
|---|---|---|
| V6 | +VCC | +24V |
| V5 | GND | GND |
| M11 | E2 | Bridged on GND Out |
| M3 | CAN H | CAN H bodybuilder ** |
| M4 | CAN L | CAN L bodybuilder ** |

| | |
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| ⚠ | We recommend the addition of 1A fuses on the power supply (+VCC) of the box. |

** Activation of the Bodybuilder's CAN on the vehicle may require the intervention of a dealer of the brand.

## Setting mode

The **E2 input** determines the operating mode of the Atlas Connect unit at the time of power up.

**If E2 is not connected**: The parameterisation mode is active. Sensor analysis is disabled. The Atlas Connect becomes visible to the mobile setup application.

**If a ground is present on E2**: Setup mode is disabled. Sensor analysis is effective.

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| ⚠ | To ensure proper operation of the system, it is imperative to bridge E2 to GND Out on the brown connector. |

On this version, the parameters available in the mobile application are as follows:

- **Sensor 1 to 3**
Identification of the sensors paired to the system (1 sensor paired by default).
- **Tnpc**
Distance tolerance between the receiver and the opening sensor. (5 by default for a dynamic Tnpc on ON, 60 for a dynamic Tnpc on OFF).
- **Test mode (on/off)**
Activation of relay 1 at each frame received from sensor 1 (default OFF).
- **Dynamic Tnpc (on/off)**
Activation of the learner mode (ON by default).
- **Input 3 (on/off)**
Activates the taking into account of input 3 (E3) instead of sensor 3 (OFF by default).

## Statistics

Atlas Connect keeps track of the number of times each sideboard is opened for maintenance purposes. This information can be accessed directly in the settings application.

## Settings application

The dedicated setting software DPO CONFIG is available for Android at the following address

https://www.electromaintenance.fr/dpoconfig

1. Switching to " Setting " mode
Disconnect the brown connector before powering the unit,
2. In DPO Config, connect to the desired Atlas unit.
The security PIN code is 123456,
3. Apply the new settings before disconnecting,
4. Reconnect the brown connector.

We advise you to contact our technical support for more information on the available settings.

## Accessories

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|---|---|
| 4M harness for Atlas Connect CAN (with integrated plug) | E8141 |
| Magnetic Sensor | E6818 |
| Inductive wired sensor | E7939 |

## Technical features

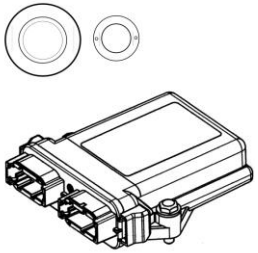
**Atlas Connect**
Supply voltage ..... from 9V to 30VDC
Operating temperatures.....-40°C to +85°C
Sealing.....IP69K
Dimensions.....119x133x35mm
holes for mounting Ø 7mm between 101mm centres

**Sensors**
Frequency.....2.4 Ghz - Bluetooth Low Energy 4.0/4.2
Battery life.....Up to 5 years
Transmission time.....2 seconds
Water resistance.....IP67

**Dimensions**
P MAG / P ID .....Ø 57mm / Height 18mm
Magnet.....Ø 40mm - Height: 15mm

**Homologations**
CE (Europe) : EN ECE R10/ EN 60947-5-2
RoHS





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notice v3