

E7898

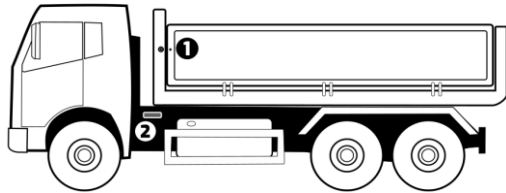
Wireless open side panel detection system

Marking: «DPO 1-3 P MAG version 4.x »

Purpose

1-3 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 receiver box matched to the installed sensors.



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

The outputs of the Atlas Connect box (2) can be used to power cabin mounted warning lights and buzzer or directly connected to the vehicle body interface to activate dashboard information and the 15km/h speed limit.

An upgrade to the CAN-compatible version (Part No. E9340) is also available on request.

Distance limit

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.



Consider installing the receiver outside the cabin.

Learning detection

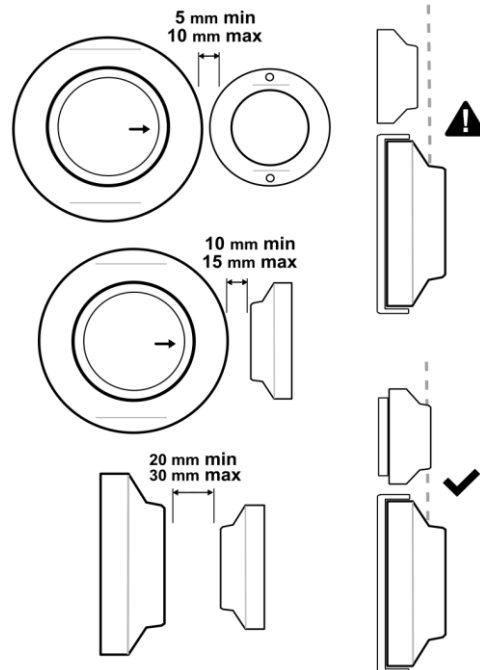
As the measurement conditions of the sensors are not the same in the workshop and on the road, the system automatically adjusts its parameters during the first 30 hours of operation and each time the sensors are replaced (a feature known as "dynamic Tnpc").

Kit contents

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

Layout of the 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 consists of 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 1 output NO
V1	R1 NF	Relay output 1 NC
V2	R2 IN	Relay input 2
V12	R2 NO	Relay output 2 NO
V3	R2 NF	Relay output 2 NC
V8	R3 IN	Relay input 3
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	Transferred ground

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

Relay 1 (R1 NO) raises an open sideboard warning conditional on the hydraulics being switched off. This relay is fitted with a 2-second anti-bounce to filter out any vibration of the side panel on the road.

A buzzer or the activation of the message "side panel open" as well as the speed limit on the vehicle body interface should be wired to relay 1.

Depending on the polarity requirement of the output, The input of **relay 1 (R1 IN)** can be wired to a power supply if a buzzer is used, or to a ground if it is connected to the vehicle body interface.

Relay 2 (R2 NO) and **relay 3 (R3 NO)** indicate the status of sensor 1 and sensor 2 respectively, making it possible to wire an indicator light to display the status of two panels separately. To do this, the input of these two relays (R2 IN and R3 IN) must be powered.

The **E1 input** defines the status of the hydraulic activation, limiting the alerts when the vehicle is working at low speed. This input can only be controlled by a ground.

The **E2 input** defines the operating mode of the card. A bridge must be made between E2 and GND Out to ensure the correct 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 for a warning buzzer and a warning light in the cabin:

V6	+VCC	+24V
V5	GND	GND
V11	R1 IN	+24V
V10	R1 NO	+ Buzzer
V2	R2 IN	+24V
V12	R2 NO	+ Indicator light
M10	E1	Status of the vehicle hydraulics
M11	E2	(Ground = hydraulics on)
	- buzzer	GND
	- indicator light	GND




We recommend the addition of 1A fuses on all powered inputs (+VCC, R1IN and R2IN) to secure the assembly.

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.

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

6m pre-wired harness for buzzer and cabin light	E1261
Magnetic sensor	E6818
Wired inductive 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

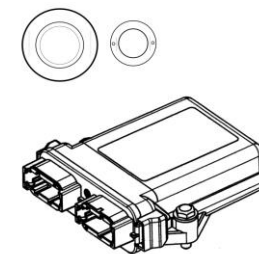
Frequency.....2.4 Ghz - Bluetooth Low Energy 4.0/4.2
 Battery life.....Up to 5 years
 Transmission time.....2 seconds
 Water resistance.....IP67

Dimensions

P MAG / P IDØ 57mm / Height 18mm
 Magnet.....Ø 40mm - Height: 15mm

Homologations

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



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notice v6