

# THE FUTURE OF ALCOHOL TESTING TECHNOLOGY



ALCOHOL COUNTERMEASURE SYSTEMS

life saving innovations

Presented by:

# ALCOHOL COUNTERMEASURE SYSTEMS

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2024.10.03

# About Alcohol Countermeasure Systems



- International group of companies;
- Established in 1970 to create a technical solution to prevent drink driving;
- Leading manufacturer of breath alcohol testing instruments;
- Serving multiple markets: Law Enforcement, Automotive, Industrial, Public and Personal Safety
- Inventor of the ALCOLOCK™ alcohol interlock for road traffic safety;
- Committed to research and development;
- Headquartered in Toronto, Canada
- Quality management systems:
  - ✓ ISO 9001, IATF16949 & ISO 14001;
  - ✓ ISO 17025 & ISO 17034



# Customers



Mercedes-Benz



SCANIA

IVECO



ALSTOM

Distributors:



a.s Fartskriver



ALCOHOL COUNTERMEASURE SYSTEMS

Commercial Interlock:  
**ALCOLOCK™ V3 LE**

# ALCOLOCK™ V3 LE



- Designed for both OEM and aftermarket installation; and commercial fleet safety management programs;
- Meets EN50436;
- Prevents vehicle from starting unless the driver provides a breath sample below the limit;
- Rugged construction and reliable operation;
- Monitor operational vehicles remotely through a secure network application and telematics integration;
- Compliance with:
  - UNECE Regulation 10 (EMC);
  - UNECE Regulation 118 (Flammability);
  - UNECE Regulation 155 (Cybersecurity)

# Applications



- Trucks
- Buses
- Taxies
- Cars
- Tram cars
- Railway
- Construction Equipment
- Mining Equipment



# Application of ALCOLOCK™ V3 LE – Aftermarket



## Installation into Commercial Vehicles

- Active safety to eliminate drink driving;
- The administrators can ensure that the driver is not drink driving in remote locations since alcohol interlocks stop vehicles from starting when the driver has a positive alcohol level over the preset limit;
- The test results are recorded in the handset or ECU and the event log may be uploaded at each service centre.

# Application of ALCOLOCK™ V3 LE – Fleet Solutions



- Fully compatible with telematic systems through CAN Bus and RS 232 data communication protocols;
- With an optional LTE module, event log data may be automatically transmitted from the vehicle in real time;
- With the Wi-Fi option the data may be transmitted from the ECU whenever the vehicle comes in range of the fleet Wi-Fi base station;
- Fleet managers can access the data online via a secure web application AlcoFleet™.

# Telematics Integration Interface

The interface displays a list of exceptions for a Scania G500 vehicle. The top screenshot shows two entries: 'Alcolock blazen OK' (3m 10s, 1 km, 94) and 'Alcolock positief' (3s, 0 km, 2). The bottom screenshot shows a detailed view of the 'Alcolock blazen OK' exceptions, listing multiple instances with timestamps and locations in Belgium.

Exception Type	Duration	Distance	Count
Alcolock blazen OK	3m 10s	1 km	94
Alcolock positief	3s	0 km	2

Exception Type	Timestamp	Location	Duration
Alcolock blazen OK	06/09/23 06:50:06	Vijverstraat 61, 3040 Huldenberg, Belgium	0s
Alcolock positief	06/15/23 00:47:07	N10 241, 2220 Heist-op-den-Berg, Belgium	3s 0 km

Exception Type	Timestamp	Location	Duration
Alcolock blazen OK	06/25/23 23:52:58	Brusselsesteenweg 30, 1980 Zemst, Belgium	2s
Alcolock blazen OK	06/26/23 00:56:17	E314, 3202 Aarschot, Belgium	1s 0 km
Alcolock blazen OK	06/26/23 02:37:58	Huidevetterslaan 7, 3500 Hasselt, Belgium	2s
Alcolock blazen OK	06/26/23 03:14:34	Huidevetterslaan 7, 3500 Hasselt, Belgium	2s
Alcolock blazen OK	06/26/23 04:54:48	Kruisherenlaan 26, 3500 Hasselt, Belgium	3s
Alcolock blazen OK	06/26/23 05:57:07	Bedrijfsstraat 3, 3500 Hasselt, Belgium	3s

# Application of ALCOLOCK™ – OEM

## Automotive OEM



- OEM installation into buses and trucks;
- Installation into lighter vehicles such as taxis;
- Applicable to a range of vehicles in the market.



# Proven Performance of ACS Products

618366\_1C ACS Alcolock V3 50436-1

## Compliance Summary

regarding  
**Electromagnetic Compatibility, Environmental Conditions and Functional Performance Requirements**

# CEcert

**CEcert GmbH, Alter Holzhafen 19a, 23966 Wismar (Germany)**  
**Test Laboratory**  
No.: 618.366.1C

License Holder: **ALCOHOL COUNTERMEASURE SYSTEMS CORP**  
60 International Boulevard  
Toronto, Ontario M9W 6J2 CANADA

Product identification: **Breath alcohol ignition interlock**

Type/Model/Parameters: **ALCOLOCK™ V3 – SERIES LE**

Serial numbers: **Unit A** (Handset: LE000005, Control unit 12 Vdc: CA000004);  
**Unit B** (Handset: LE000003, Control unit 24 Vdc: DA000004);  
**Unit C** (Handset: LE000004, Control unit 12 Vdc: CA000005);  
**Unit D** (Handset: LE000002, Control unit 24 Vdc: DA000006);  
**Unit E** (Handset: LD000030, Control unit 12 Vdc: CA000005);  
**Unit F** (Handset: LD000031, Control unit 24 Vdc: DA000006)

Applied standards: **EN 50436-1:2014; EN 50436-2:2014**  
Breath alcohol ignition interlock devices

Test report(s): **418.366.1A** / Initial laboratory tests: 2019-10-08 – 2020-01-13;  
**418.366.3A** Calibration stability: 2019-10-08 – 2020-10-27  
**418.366.2** EMC tests: 2019-10-08 - 2019-10-18

Test result: **PASS**

This test summary is relevant exclusively to the item(s) submitted for testing. This test summary is intended as cover sheet for the test report referenced. For details, see the test report specified in this summary and the safety instructions specified in the technical documentation to the product.

Approved by  
  
M.Eng. Philipp Meiske

Wismar, Thursday, 19 November 2020

see 'Attachment 1' for more details

ACS alcohol interlock products are certified to CENELEC (EU) EN 50436 standards.

# Quality Certification



**NSF-ISR**

Registered to  
IATF 16949



**NSF-ISR**

Registered to  
ISO 9001



**NSF-ISR**

Registered  
to ISO 14001



**ACCREDITED**

CERT #4169.02  
ISO 17034

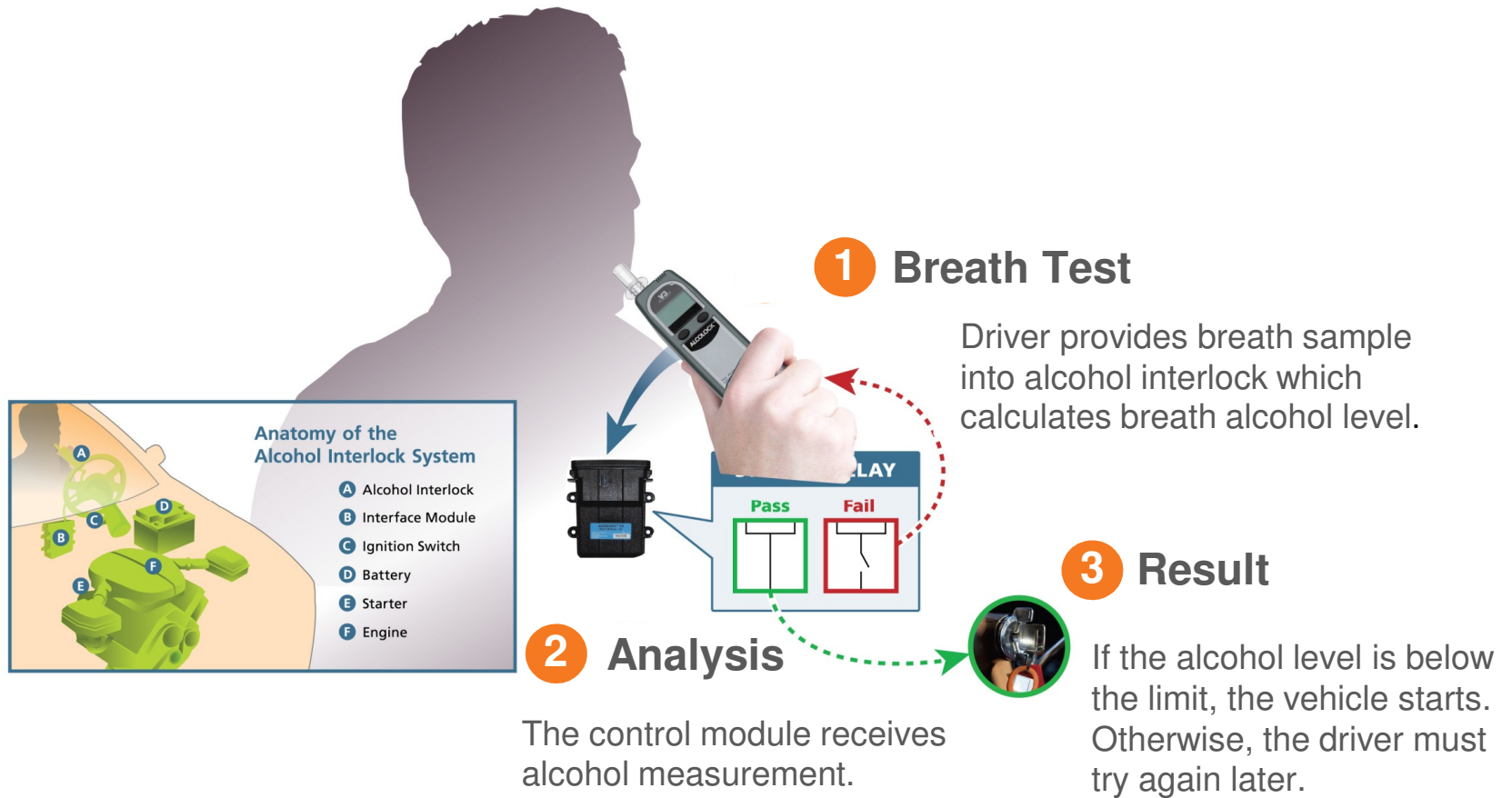


**ACCREDITED**

CERT #4169.01  
ISO/IEC 17025

How does the  
**ALCOLOCK™ V3 LE** work?

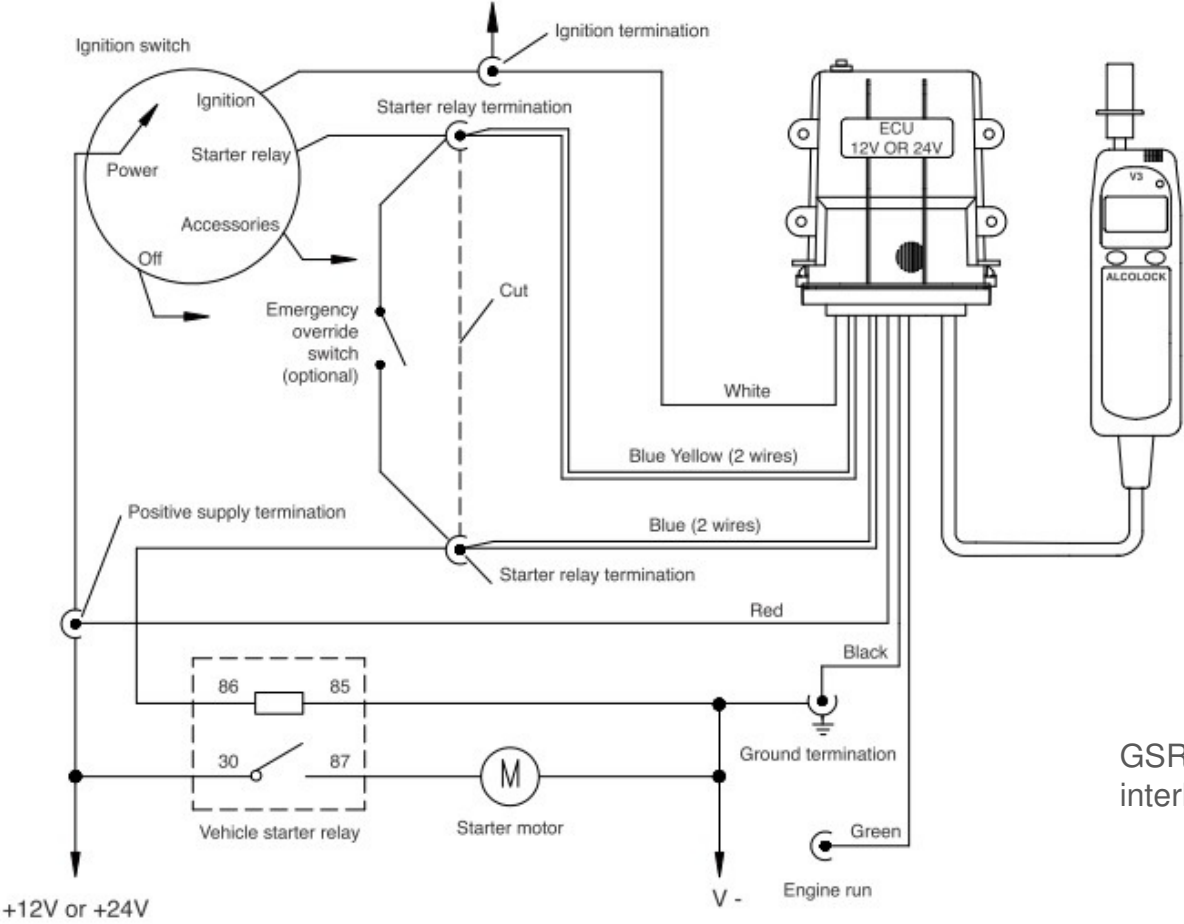
# How do Alcohol Interlocks work?





# Installation of Alcohol Interlocks

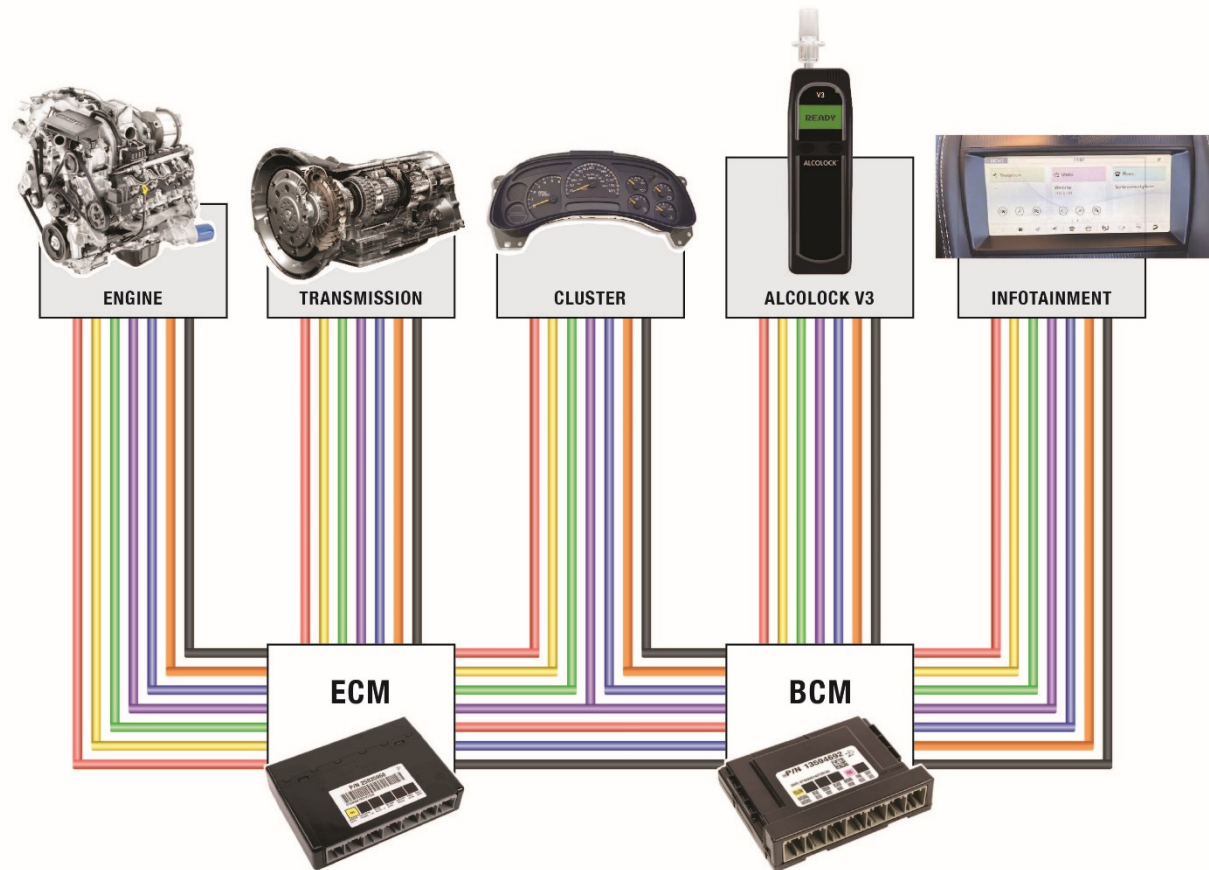
## 1. Classic approach



GSR EU 2019/2144 mandates alcohol interlock installation facilitation

# Installation of Alcohol Interlocks

## 2. New Digital interface



The new digital interface as per EN50436-4 allows quick and safe installation of alcohol interlocks and defines communication protocol over CAN or LIN networks

## Anti-circumvention Technology

- The ALCOLOCK™ V3 LE is equipped with special sensors that prevent non humans, such as machines, from being able to provide a sample and start the vehicle;
- Any attempts to do this or interfere with the wiring will be logged in the data memory of the unit and can be viewed in the **AlcoFleet™** software program;
- Can be integrated with fleet management systems to provide real time alerts of any alcohol violations.

## Benefits of installing an ALCOLOCK™

- Beneficial to your company's corporate image;
- Competitive advantage when soliciting new business – shows your company takes measures to keep your drivers, cargo and passengers safe;
- Only way to verify that your driver has not been drinking before driving;
- Ensures that long distance drivers are following alcohol abstinence policy while driving the company vehicles;
- Eliminates the problem of the random testing for alcohol;
- Administrators do not need to be present to check the drivers for alcohol;
- Potential for insurance premium reductions;
- Less down time and fewer accidents;

# ALCOHOL INTERLOCKS

## in the World

## Commercial Legislation Programs



In many countries, the use of alcohol interlocks has been mandated for certain types of fleet vehicles.

## Commercial Legislation Programs

**Finland:** mandated that all school buses should have alcohol interlocks installed by the end of 2012.

**France:** mandated that all school buses should have alcohol interlocks installed by the end of 2015.

**Sweden:** a government incentive is given for those vehicles with alcohol interlocks.

**Norway:** the Norwegian Road Directorate regulates alcohol interlocks in minibuses and buses from 2019.

**Spain: Spanish Road Safety Law** regulates alcohol interlocks in passenger transportation vehicles and trucks from July 2022.



# SAFETY. IN THE PALM OF YOUR HAND.

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