Vehicle Alcohol Interlocks

ALC-303 · ALC-308 — published specification, ALCOKSON by Springsky Industrial Ltd

Alcohol Interlock ALC-303

The ALC-303 is a vehicle alcohol interlock system that prevents a vehicle from starting if the driver's breath alcohol concentration exceeds the set limit. It uses a premium fuel cell sensor to detect ethanol specifically, not acetone, fuel vapour or mouth alcohol solvents. The system consists of a handheld breath tester unit and a control box that connects to the vehicle's ignition circuit. The handset warms up in about 1 second at 25 ■, up to 180 seconds at -40 ■, and the result is displayed in under 10 seconds. The unit is calibrated every 12 months and operates from -20 ■ to 65 ■. It supports both 9 V and 36 V DC power supplies and communicates with external systems via RS-485 or RS232.

Sensor	Premium Fuel Cell Sensor
Measurement Range	0.000 ~ 0.500 %BAC, 0.00 ~ 5.00 ‰, 0.00 ~ 2.50 mg/L
Accuracy	+/-0.005 %BAC (at 0.050 %BAC, at 25 ■)
Accuracy	+/-0.05 ‰ (at 0.50 ‰, at 25 ■)
Accuracy	+/-0.025 mg/L (at 0.25 mg/L, at 25 ■)
Ready to Test	25 ■: approx. 1 s, -20 ■: approx. 120 s, -40 ■: approx. 180 s
Power Supply	9 V or 36 V DC
Handset Dimensions	59 x 140 x 35 mm
Control Box Dimensions	100 x 75 x 30 mm
Handset Weight	120 g
Control Box Weight	300 g
Calibration Period	Every 12 months
Operating Temperature	-20 ~ 65 ■
Communication	UART between handset and control box, RS-485 and RS232 to external devices

Key points

- Prevents vehicle start if breath alcohol level exceeds the set threshold, enforcing a zero alcohol policy at the engine level
- Premium fuel cell sensor detects ethanol specifically, not acetone, fuel vapour or mouth alcohol solvents
- Calibration every 12 months ensures readings remain traceable and defensible over time
- Operates in extreme temperatures from -20 ■ to 65 ■, suitable for outdoor and remote fleet operations
- Two power supply options (9 V or 36 V DC) allow integration with different vehicle electrical systems
- RS-485 and RS232 communication ports enable data logging and integration with fleet management systems

Alcohol Interlock ALC-308

The ALC-308 is a vehicle alcohol interlock system that prevents a vehicle from starting if the driver's breath alcohol concentration exceeds a set threshold. It uses a premium fuel cell sensor to measure ethanol specifically, ensuring results are not affected by acetone, tobacco smoke, or fuel vapour. The system consists of a handheld unit and a control box mounted in the vehicle. The control box handles the sensor, power management, and communication with external systems. The handset displays results and prompts the driver through the test sequence. Ready time varies with temperature: approximately 1 second at 25°C, 120 seconds at -20°C, and 180 seconds at -40°C. The unit is designed for c

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Accuracy	+/-0.05 ‰ at 0.50 ‰, 25 ■
Accuracy	+/-0.025 mg/L at 0.25 mg/L, 25 ■
Ready to Test	25 ■: approx. 1 s, -20 ■: approx. 120 s, -40 ■: approx. 180 s
Power Supply	9 V or 36 V DC
Operating Temperature	-20 ~ 65 ■
Calibration Period	Every 12 months
Communication	UART between handset and control box
External Communication	RS-485, RS232
Handset Dimensions	59 x 140 x 35 mm
Control Box Dimensions	100 x 75 x 30 mm
Handset Weight	120 g
Control Box Weight	300 g

Key points

- Prevents vehicle start if breath alcohol exceeds the set threshold
- Premium fuel cell sensor ensures accurate ethanol-specific readings
- Ready time of 180 seconds at -40°C allows operation in cold climates
- RS-485 and RS232 communication enables integration with fleet management systems
- Calibration every 12 months maintains traceability and compliance
- Handset and control box design allows for secure installation and remote monitoring

Ordering

Tell us the destination market and the quantity. The alarm point and display units are set before shipment, so units arrive configured for the limit that applies at your site. Minimum order quantity, lead time and calibration route are confirmed in writing when we quote.

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Figures in this sheet are the values published for these models. Where a model has no published specification the datasheet is issued per enquiry. Minimum order quantity, lead time and price are confirmed in writing per order.