

Workshop Manual

SE5000-8.1 Smart Tachograph



ATEX Tachograph

Hazardous Goods Vehicles

The ATEX version of the tachograph is approved for use in hazardous goods vehicles. It differs from the standard tachograph as it has explosion protection and is certified in accordance with EU Directive 2014/34/EU.

The printer shall only be used when the area is known to be free of potentially explosive atmospheres. Temperature classification T4 is met by default. Temperature classification T6 is met when the printer has not been used for at least 21 minutes.

Precautions shall be taken to prevent the risk from electrostatic discharge at the enclosure; clean only using a damp cloth.

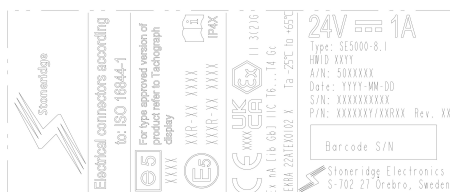
Use in hazardous areas where category 3 equipment is required is only permitted with the printer cover and smart card trays closed.

Note!

The ATEX tachograph explosion protection is only guaranteed when the ignition is off and the battery isolating switch is open.

Visible Differences

The ATEX tachograph will have additional information (ADR classification and DEKRA test certificate number) printed on the label at the top of the tachograph.



Certificate Number: DEKRA 22ATEX0102 X

Ex marking: Ex nA [ib Gb] IIC T6...T4 Gc

Temperature range: Ta = -25°C to +65°C

Um = 32 V for all connected non-intrinsic safe circuits.

Motion sensor interface parameters:

U₀ = 12.2 V

I₀ = 42 mA

P₀ = 0.5 W

C₀ = 0.17 µF

L₀ = 50 µH

The ATEX Tachograph

For the ATEX Tachograph some functions are disabled immediately when the ignition is switched off:

- Card trays cannot be ejected.
- Printouts are not possible.
- Background illumination for buttons and display is switched off.

Note!

The ATEX Tachograph will enter the power saving mode immediately after the ignition is switched off.

To have the ATEX Tachograph fully operational, the ignition key must be in position key-on or ignition on, depending on your vehicle manufacturer.

Fitting an ATEX Tachograph

When fitting a Stoneridge ATEX tachograph the unit must be fitted within the truck cabin, and installed in such a way that:

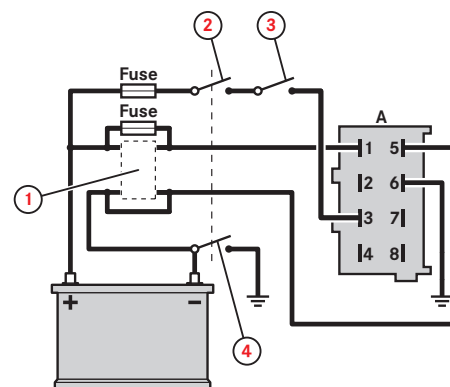
- it is protected against the entry of solid foreign objects or water capable of impairing the safety of the apparatus.
- the area provide at least pollution degree level 2, as defined in IEC 60664-1.
- the risk for mechanical damage is minimized.
- it cannot be subjected to UV light.

The Tachograph enclosure provides IP4X ingress protection. The Tachograph is intended to be installed within the vehicle cabin dashboard in a clean and dry environment.

The motion sensor and its wiring shall be installed such that insulation ensures the connection to chassis is prevented even under fault conditions.

It should also be noted that ADR vehicles might have a safety network integrated into the tachograph wiring system as well as a battery master switch.

If fitted, then the safety network will be connected between the main supply from the battery and the tachograph itself. The battery master switch may be at A only, B only or at both A and B.



1. Safety device (optional)
2. Master switch (A)

3. Ignition switch
4. Master Switch (B)

Technical and Electrical Data Specifications (all rear connectors).

Supply circuit (permanent supply from the vehicle battery), A1 (+) and A5 (-); $U_n=24$ volts.

Ignition system (supply via the battery master switch and the ignition switch from the battery), A2 (illumination), A3 (ignition supply) and A6 (chassis ground); $U_n=24$ volts.

Warning!

Only separate the rear sockets in the absence of an explosive atmosphere.

Motion sensor connections (compliant with intrinsic safety Eex ib IIC protection), B1 (sensor +ve), B2 (sensor -ve), B3 (sensor signal) and B4 (sensor encryption).