### E-Lock control unit

#### Component interface

##### Output signals

The E-Lock control unit generates the following output signals for status indication:

|  |  |  |  |
| --- | --- | --- | --- |
|  | | Logical values | |
| Signal | Message | Description | Raw value [dec] |
| eCS\_SBS\_LastState\_Row2\_BF | eCS\_01 | * Init * Occupied * Unoccupied * Error | * 0 * 1 * 2 * 3 |
| eCS\_SBS\_LastState\_Row2\_FA | eCS\_01 |

Information : [10944369](http://avw-prod1.wob.vw.vwg:4430/im/viewitem?selection=10944369)

#### Requirements for the component function

The E-Lock control unit monitors the status of the seat belt buckle and the SBR sensor. The seat belt buckle and SBR sensor are connected in series. When the seatbelt buckle is locked, the information from the SBR sensor is no longer available to the E-Lock control unit.

Information : [10944450](http://avw-prod1.wob.vw.vwg:4430/im/viewitem?selection=10944450)

When Kl15 = "on", the E-Lock SG must provide the states of the driver and passenger side SBR sensors in the 2nd row of seats via the signal defined above.

Functional requirement : [10945684](http://avw-prod1.wob.vw.vwg:4430/im/viewitem?selection=10945684)

If the state of the SBR sensors is not available due to the locking of the respective belt buckle, the E-Lock SG must provide the last valid state of the SBR sensors before locking of the belt buckle via the signal defined above.

Functional requirement : XXX

If the occupancy status of the SBR sensors does not change via a Kl15 change, the last valid status of the SBR sensors must be made available.

Functional requirement : XXX

The above requirement means that the E-Lock SG must store the last valid state of the SBR sensor (occupied and unoccupied) beyond Kl15 change.

Information : XXX

It must be ensured that a change in resistance of the series connection of belt buckle and SBR sensor (SBR sensor = occupied, SBR sensor = unoccupied, belt buckle locked) can be detected in any operating state of the vehicle

Functional requirement : [10946062](http://avw-prod1.wob.vw.vwg:4430/im/viewitem?selection=10946062)

In the case of resistance values of the series connection that cannot be assigned to the states "SBR sensor = occupied", "SBR sensor = unoccupied" or "Belt lock locked", the signal value "Error" must be sent. The assignment of the resistance values of the series connection to the occupancy values of the SBR sensors is to be carried out analogously to the requirements for the signal assignment "eCS\_SBS\_occupancy\_row2\_FA" and "eCS\_SBS\_occupancy\_row2\_BF".

Functional requirement : XXX

#### Requirements for component diagnostics

There are no requirements for diagnostic functions.