



TrainSWing KBS-06

Driver's vigilance system

- Failsafe system meeting SIL4 requirements according to CENELEC
- Microprocessor based solution
- Easy operation
- High reliability, availability and stability
- Easy installation
- Minimum maintenance



GENERAL DESCRIPTION

The driver's vigilance system TrainSWing KBS-06 (further KBS-06) is based on the concept of automatic train protection system TrainSWing LS-07.

KBS-06 provides four basic functionalities:

- check of driver's vigilance
- check of train movement authority
- check of maximum speed at shunting
- intervention to the braking system in case of negative outcome of checking function

KBS-06 can be switched to the Operation, Shunting or Non-leading engine modes.

- „Operation“ mode provides check of driver's vigilance and check of train movement authority. Driver's vigilance is checked by periodical confirmation of vigilance pushbutton by train driver upon

optical and acoustic warning. Check of driver's vigilance is automatically deactivated for braked or stationary vehicles. Train movement authority is checked by evaluating the relevant vehicle speedometer signal.

- „Shunting“ mode provides check of maximum speed at shunting and train movement authority.
- „Non-leading engine“ mode does not provide any check.

In case of negative result of driver's vigilance check, train movement authority check or check of maximum speed at shunting, KBS-06 generates the command to braking system of tractive vehicle.

BASIC TECHNICAL DESCRIPTION

KBS-06 consists of panel and control unit.

- Panel KBS-06 is designed as a set of plug-in units installed in 19" subrack of 3U height
- Control unit KBSE is independent component for switching over the individual modes and consists of control pushbuttons for setting brightness of optical and volume of acoustic warning

KBS-06 has its own internal diagnostics. Diagnostic data and operational records are stored in an internal memory for prospective download to external USB drive or computer.





BASIC TECHNICAL PARAMETERS

Complies with standard	EN 50 155
Mean time between failures (MTBF)	45 000 hours
Humidity	15 % to 95 %
Altitude	up to 1400 m
Supply voltage	24, 48, 72, 96, 110 V
Supply voltage tolerance	- 30 %, + 25 %
Input	max. 30 W
Cover rating	IP 30
Temperature range	-25 °C to +70 °C

