

CAED

TB.424337.001



Complex of advanced diagnostics of electric rolling stock equipment (CAED)

The solution has been developed on the rolling stock of Russian Railways.

Function

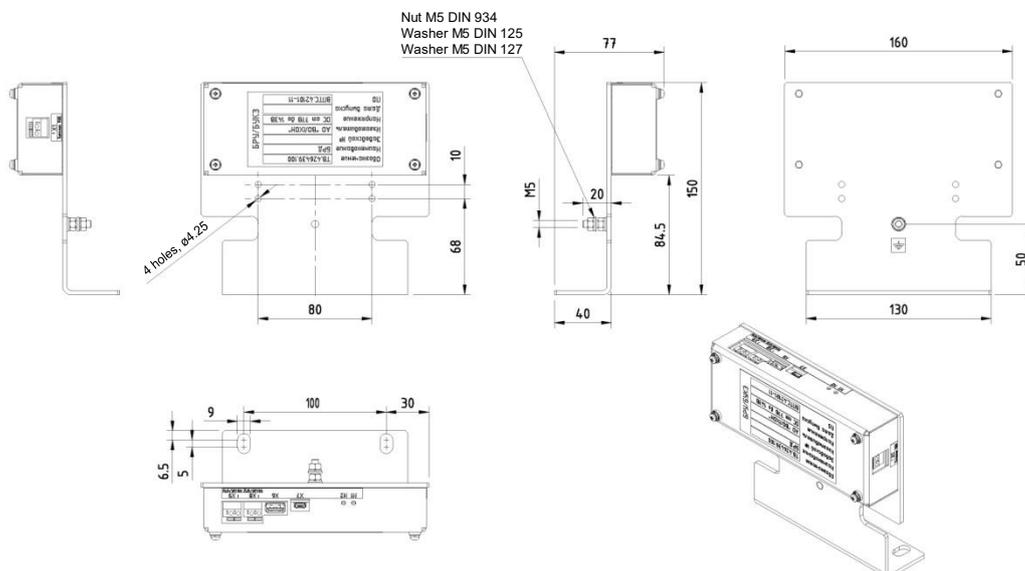
- Monitoring of rolling stock equipment control
- On-line writing the equipment condition data to the non-volatile memory
- Identification of the fault cause emerged
- Displaying the pre-emergency equipment status information on the driver's desk

Data recording unit DRU (БПТС.426439.100)

- It is installed in the car tambour cabinet together with data recording units
- Data registration and storage in non-volatile memory with the possibility of downloading to a laptop or a phone
- Interaction with the train control system
- Data transmission to the driver's desk
- Data reading via Wi-Fi or IoT/GSM



Outline drawing

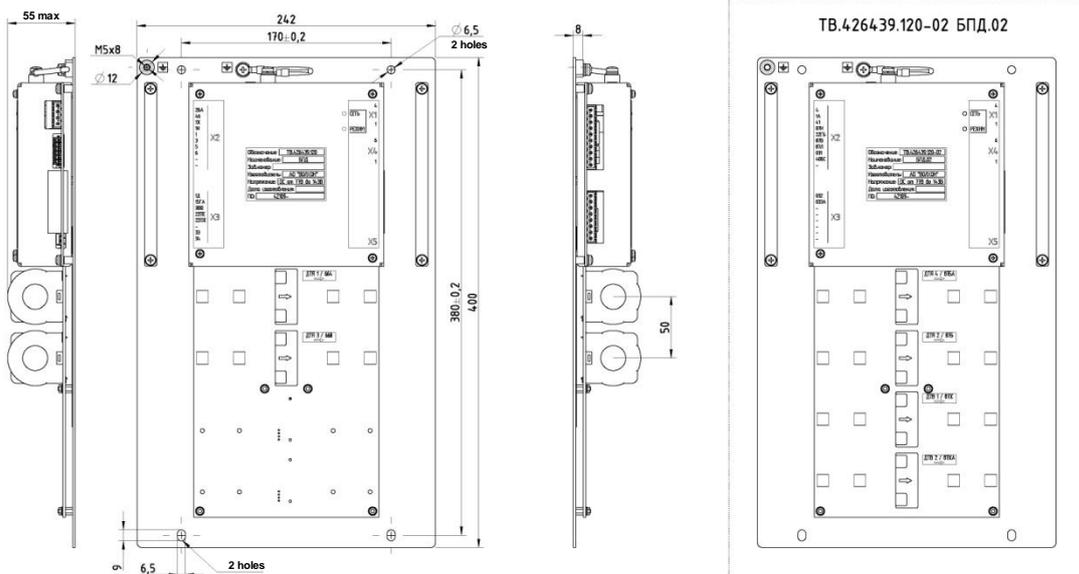


Data transmission unit DTU (ВПТС.426439.120)

- It is installed in the car tambour cabinet
- Data acquisition and transmission to the data registration unit (DRU) from:
 - Electronic equipment (control units, microclimate, etc.)
 - Electromechanical equipment (rheostat controller, brake switch, line contactors, high-speed circuit breaker, etc.)
 - Machine converter
 - Traction motors (currents and voltages)
- Monitoring of the rolling stock control algorithm by registering discrete, analog, digital signals of the onboard control system



Outline drawing



In there is no special devices for monitoring and charging batteries on the rolling stock, CAED can be supplemented with a device for monitoring parameters of batteries "Device УКПБ" (ВПТС.426471.200) installed in the battery box.