

The invention relates to a motorized underframe for rail vehicles, which accommodates elements of the drive, the braking equipment and the suspension and comprises at least two wheelsets mounted on a frame. At least one of the wheelsets comprises an axle, a two-stage, axle-mounted drive mechanism and two wheels pressed onto the axle. Said wheels have two brake disks and two bushing units respectively on the disk unit, each being provided with a temperature sensor. In order to connect the reduction gear to an electric drive motor, a tooth gear coupling having curved teeth is provided. The frame is formed by two longitudinal supports that are bent down wards in then" center portion and a cross-member that interconnects the center portions of the longitudinal supports. Fastening elements for the wheelsets are provided on the longitudinal supports and fastening elements for two electric drive motors and for the disk brake equipment for each wheel are provided on the cross-member. The center portion of the cross-member has a throughopening allowing elements of a lemniscate mechanism to be arranged. The underframe further has a yaw damper one end of which is fastened to the frame and the other end of which is connected to a support which is formed independently of the frame and is connected to a body.