



# POLISH TECHNICAL REVIEW







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**SIGMA**

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#### The electronic automatic marine telephone exchange

The electronic automatic marine telephone exchange manufactured by the TELKOM-TELMOR Teleelectronic Works, Gdańsk is equipped with a microprocessor and features many advantages to both subscribers and operators. The exchange has a low sensitivity to conditions prevailing in its environment. Depending on wishes and requirements of users it is also possible to alter rapidly the functions or to include new ones. The new exchanges have passed successfully all tests both on land and at sea. See article on p. 2

#### Polish artificial heart

The artificial heart developed by the Heart Surgery Department of the Silesian Medical Academy, Katowice is used for saving the life of patients whose heart exhibits a permanent haemodynamic insufficiency and for whom there is no suitable heart transplant donor, or whose heart is temporarily insufficient and can resume its normal action after the pumping of blood is taken over by the heart assist devices. The artificial heart system comprises an electropneumatic control unit and appropriate assist ventricles. (Article on p. 12).

#### An integrated-type, computer-aided system for digital electronic equipment

The integrated-type system for electronic system design developed by the Institute of Control Systems, Katowice and called CADISS makes it possible to design the integrated circuits of low, medium- and large-scale integration as well as active and passive discrete components. The second field of application is that of didactics. The use of the CADISS system reduces the costs involved in designing work and helps to considerably raise the designers' skills. For details see p. 16.

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