

# Single-phase alternating current electricity meter Czechowice, FJ type

AUTHOR

TIME AND PLACE OF CREATION

Time:  
1935

Place:  
, Poland



TECHNICAL DATA

Dimensions:  
height: 200 mm, width: 125 mm, depth: 95 mm

OTHER

MIM 1712/IV/85

KEYWORDS

licznik, urządzenia pomiarowe,  
elektrotechnika, energetyka

DESCRIPTION

The induction meter is the oldest (known already at the end of the 19th/beginning of the 20th century) and most widely used device to be used for the purposes of billing of alternating current power consumption. The operating principle of the device is based on the movement of a rotary disc in a magnetic field created by coils through which current flows. The readings can be read out on a drum counter. Nowadays, apart from induction meters, digital (electronic) meters are increasingly used, in which the flow of energy consumed by the customer generates impulses that are counted by the device. The main advantage of such meters is that they allow the remote reading of meters (via radio) without the need for someone to physically inspect the meter. Just like induction meters, electronic meters can be used in single- or three-phase systems. Furthermore, some

electronic meters enable the prepayment of a specified amount of electricity by the customer. This works much like the prepaid offers of mobile phone providers. The meter presented here was made in the factory of Spółka Akcyjna Przemysłu Elektrycznego Czechowice, which has been in existence since 1921. The company produced many types of electrical engineering, installation, and lighting equipment. It is still in operation today, after several ownership transformations. Interesting fact: Fraudsters sometimes attempt to reduce the power meter reading by placing a magnet against the housing. In fact, this can actually increase the reading displayed by the device. References: S. Bolkowski, Teoria obwodów elektrycznych, Warsaw 2010. S. Krakowiak, Podstawy elektrotechniki - zagadnienia wybrane, Warsaw 2006, <http://www.elektrycywiejscy.irsep.org/downloads/podstawy-sklad.pdf> (Accessed: 9.05.2021). O nas, official Kontakt Simon website, <https://www.kontakt-simon.com.pl/pl/Firma/Historia-firmy.html> (Accessed: 9.05.2021).