



# KARED

[www.kared.pl](http://www.kared.pl)

SS-07



RZ-1



KSR





# We work with energy

**KARED Sp. z o.o.** is a family business, established in 1988. Since the very beginning, it has been implementing microchip calculation techniques in its products designed to operate in the domains of power generation, transmission and distribution grids and industry in general.

We specialize in control and measurement solutions for automation, diagnostic and testing systems. Our devices meet the requirements of the highest precision and operational reliability, as well as completing work at high speed „in real time“.

The products we offer are targeted at companies that operate in the domains of electric power production, transmission and distribution networks and industry. We invite design offices, and companies that specialise in renovation, redecoration, and maintenance as well as post-assembly tests to work in partnership with us.



# Leading products / services

The power grid synchronizers of the SS-07 type – dedicated in particular for transmission and distribution power systems – are designed to connect „softly“ AC heavy current facilities to operate in parallel, practically without equalizing current surges. As in the SM-type synchronizers dedicated for power-generation industry, measurement accuracy and switching precision are of special importance in network synchronizers SS-07. They implement the principle of structure redundancy, based on modules that are different in terms of hardware and software.

Synchronizers of the SM-06 family are designed to precisely (with the phase error of less than 2 degrees) and automatically connect AC heavy current facilities to operate in parallel.

All type of synchronizers are fitted with a synoptic panel that allows the operator to define setpoints and control the synchronization process. Synchronizers SM-06 are equipped with special software that allows one to carry out tests aimed at determining the appropriate values of the parameters characterizing the dynamics of synchronized power-generating units, as well as the time intervals of switch closure, without any need to use specialized control and measurement instruments.

Digital disturbance recorder RZ1 is a device designed to record variability of the values of voltages and/or currents and binary signals in electric power generation facilities and industrial plants in emergency or fault conditions

The recording and signalling boxes of the KSR type allow any failure signalling and event recording circuitry to be implemented. They can be implemented in distributed or centralized architecture.

Supervisory control and data acquisition (SCADA) systems implement flexible solutions and they can be adapted to particular and oftentimes very unique needs of their end users.

The iKar system is the key element of our offer. It is a master supervision, control and data acquisition system.





# Why KARED?

**Kared** is a company with experience gathered over long years. It delivers system solutions based on proprietary software and hardware. The company is innovative as well as flexible and open to Clients' needs and expectations.

Our technical products and services are characterized by the highest quality level. They implement the best technologies available and guarantee safe operation, reliability and Clients' satisfaction.

## Awards and Distinctions

The Energotest partner in innovations award granted to the Kared company in 2012.

Awards granted to the RZ-1 faults recording unit in the competition for the best product for the power generation sector in 2013.

The Silver Medal at the „Energetab” Bielsko-Biala International Power Industry Fair granted in 2013 for the failures recording unit RZ-1.

The „Energy in good hands” award granted in 2014 by the PSE (Polish Power Supply Grids) for the SS-07 synchronizer.



## Certificates



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