



## IRZ-700 SOFT STARTER FOR ESP

**Intended use: control, parameters monitoring and protection of motors with power capacity from 14 to 400 kW enabling soft start and stop**



### Ensures:

- four start modes: current increase, current limiting, push mode at high torque, and direct start;
- two stop modes: soft stop and run-down stop (stop without braking);
- manual or automatic control mode;
- continuous monitoring of electric circuit parameters, 3-phase currents and insulation resistance in the "transformer - cable - motor" system;
- evaluation of voltage and current unbalance, power factor, load factor, consumed power, and runtime;
- connecting to surface readout units made by various manufacturers;
- record of monitored parameters and causes of motor shutdowns in real time and saving the logs even in case of power interruptions
- equipment protection in emergencies caused by failures in power system and downhole motor system;
- automatic restart when parameters return to the operating range.

### The drive allows connecting:

- of devices to the 220 V 10 A socket on the drive operator's panel;
- of devices to the 380 V socket of the drive at phase current up to 60 A;
- to well pad telemechanics (normally closed or open contacts);
- to a SCADA-system via RS-232 or RS-485 interfaces, Modbus RTU protocol;
- of a GPRS-modem with option for data output in the Internet.

**Advantages:**

- variety of start and stop modes of the drive;
- small sizes and weight;
- easy operation and maintenance;
- easy connection;
- liquid-crystal display;
- logs download to a USB-drive;
- software updating without motor shutdown;
- compliance with requirements of oil companies and GOST R 51321.1-2007;
- bus-type design of power parts in all drive models;
- option to install a power meter registered in the National Register of Measuring Instruments.

Specification	Value
Supply voltage	190-520 V
Power of the connected motor	14-400 kW
Range of monitoring motor operation current (measured on the transformer primary winding and recalculated into motor actual operating current)	0-2000 A
Range of monitoring insulation resistance of the "transformer-cable-motor" system	0-10000 kOhm
Range of monitoring backspin frequency	1-50 Hz
Error of measuring current, resistance, rotation frequency, and accuracy of time settings	2 %
Error of monitoring insulation resistance	5 %
Operating temperatures	-60...+50 °C
Enclosure	IP43 (or IP54)

Models	Drive rated current	Overall dimensions	Weight
IRZ-721-160	160 A	1755 x 795 x 635 mm	160 kg
IRZ-721-250	250 A		170 kg
IRZ-722-400	400 A		185 kg
IRZ-723-630	630 A		190 kg
IRZ-724-800	800 A		200 kg
IRZ-725-1000	1000 A		240 kg