



# IRZ-700 SERIES CONTROL STATIONS WITH SOFT START



Parameters monitoring, control and protection of motors with power ranging from 14 to 250 kW and possibility of soft start and stop.

## Advantages

- different modes of starting and shutdown
- small overall sizes and weight
- easy operation and maintenance
- easy connection
- 4-line display
- history recording to USB Flash
- software updating without motor operation interruption
  - compliance with LUKOIL, ROSNEFT, SURGUTNEFTEGAS, GASPROMNFT, BASHNEFT, TATNEFT
  - bus design of power systems for all control station versions

## Functions

- 4 start modes: start with current increase, start with current limitation, inching start, across-the-line-starting
- 2 stop modes: soft stop, run-down stop
- control in a manual or automatic mode
- continuous control of the supply voltage, order of phase sequence, currents on three phases and isolation resistance of the “pump transformer — power cable — motor” link
- calculation of voltages and currents unbalance, power factor, load factor, consumed power, operation time
- connection to ground acquisition units of sensor system produced by IRZ TEK and other manufacturers
- recording controlled parameters and causes of submersible electric motor switching off in real time saving records during power supply interruptions
- protection of equipment from emergency modes caused by failures in electric mains and submersible equipment
- With the protection system actuated, an automatic restart is provided when parameters are within the working range.

## The control station provides

- appliances connection to a female connector on the operator’s panel with 220 V rated voltage and up to 10 A consumption current
- with 380 V rated voltage and up to 60 A phase current
- connection to oilfield telemechanics (normally closed and normally open contacts)
- connection to SCADA-system via RS232 or RS485 interfaces using Modbus-RTU communications protocol
- GPRS-modem connection with the option to transmit data via Internet

**There is an option to install energy resources metering and recording system registered in the State Register for Measuring Equipment and Tools into the control station.**



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## Specifications

Parameter	Value
Supply voltage, V	190—520
Power of connected motor, kW	14—320
Control of motor operating current, A (performed on the primary winding of the pump transformer with the transformation into the actual motor operating current)	0—2000
Insulation resistance control of the “transformer — power cable — motor”, kOhm	0—10000
Turbine rotation frequency control, Hz	1—50
Error of current, voltage, rotation frequency and time setting control, %	2
Error of insulation resistance control, %	5
Cabinet protection class	IP43
Operating temperature, °C	minus 60...+60

## Versions

Designation	Rated current of control station, A	Overall dimensions, mm	Weight, kg
IRZ-721-250	250	1685x765x635	160
IRZ-722-400	400		180
IRZ-723-630	630		200
IRZ-724-800	800		220
IRZ-725-1000	1000		240

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