



IRZ-200 SERIES CONTROL STATIONS WITH DIRECT START



IRZ-200 series control station is used for parameters monitoring, control and protection of 3 to 250 kW submersible electric motors.

IRZ-200 functions:

- motor control in manual or automatic mode
- continuous control of 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 of ground monitoring system units 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 restarting 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
- 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 | 3—250 |
| 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” link, kOhm | 0—10000 |
| Control of turbine rotation frequency, 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...+50 |

Versions

| Designation | Rated current of control station, A | Overall dimensions, mm | Weight, kg |
|-------------|-------------------------------------|------------------------|------------|
| IRZ-200-25 | 25 | 1685x765x635 | 180* |
| IRZ-201-250 | 250 | | 130 |
| IRZ-202-400 | 400 | | 140 |
| IRZ-203-630 | 630 | | 150 |

* — with built-in output isolation transformer

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