

Справ. №	Перв. примен.

The diagram illustrates the electrical wiring for a smart heating system. Key components and their connections include:

- Power Supply (XP):** Provides L (Line), N (Neutral), and PE (Protective Earth) lines.
- Fuse (FU):** Protects the main power lines.
- Switch (SA1):** An ON-OFF switch controlling the main power.
- Pump (M):** Drives water circulation, connected via GREEN, RED, and YELLOW lines.
- Solenoid Valve (VS):** Controls water flow, connected to 230VAC and a 500k resistor.
- Pressure Sensor (RP):** Monitors system pressure, connected to a 500k, 0.5W resistor.
- Relay (SA2):** Controls the heating element, connected to 230VAC and a 16A relay.
- Heating Element (EK):** A 1200W element for heating the water.
- Temperature Sensor (T1):** Monitors water temperature, connected to the MCU.
- Microcontroller (MCU):** The central control unit, connected to the pump, solenoid valve, pressure sensor, and temperature sensor.

The diagram also shows the physical layout of the components, including the water tank, the pump, the solenoid valve, and the heating element. The system is designed to be smart, allowing for remote control and monitoring via a mobile app.

Формат