

The diagram illustrates the electrical control system for a water pump, featuring a SIEMENS S7-1200 PLC and various control components.

Top Section (Main Power Supply):

- 24V1** (3) and **0V1** (4) supply the main power.
- The **SIEMENS S7-1200** PLC is connected to the power supply via terminals **L** (17.4), **M** (17.5), and **Q3.0** (17.6).
- The PLC output **Q3.0** is connected to a relay **KW19** (A2/A1) and a timer **KT19** (21/22).
- The relay **KW19** is connected to a motor **LP19** and a lamp **LA19**.

Bottom Section (Control Circuit):

- 24V2** (5) and **0V2** (6) supply the control circuit.
- The control circuit includes a switch **S19** (RECYZ. 0 AUT) and a relay **KW19** (11/14).
- The relay **KW19** is connected to a timer **KT19** (A2/A1) and a relay **KD19** (A2/A1).
- The timer **KT19** is connected to a relay **KD19** (11/14).
- The relay **KD19** is connected to a relay **KA19** (A2/A1) and a relay **KT19** (A2/A1).
- The relay **KA19** is connected to a relay **KT19** (11/14).
- The relay **KT19** is connected to a relay **KA19** (11/14).

RF 2 (Relay Function):

- PRACA** (03.7x.. 01 059 060 061) and **AWARIA** (03.8x.. 01 02 021) are connected to the PLC input **WS1/3/1** (YSTY 40x1).
- START** (03.8x.. 01 02 021) is connected to the PLC input **WS1/3/3** (YSTY 14x1).

SKRZYŃKA PRZYLĄCZENIOWA S-PO2/1 (Connection Box):

- The connection box contains a relay **KTPO22** (A2/T1/T2/E0/A1/E1) and a relay **KT19** (A2/A1).
- The relay **KTPO22** is connected to a relay **KT19** (11/12) and a relay **KA19** (11/14).
- The relay **KT19** is connected to a relay **KA19** (11/14).

Other Components:

- BA15** (01.5x 30) and **WRPO22** (17.5x 30) are connected to the main power supply.
- F3.19** (03.7x 60) and **F3.19** (03.7x 61) are connected to the PLC input **WS1/17/1** (YKSY 5x1).
- PTC** (4) and **CW** (5) are connected to the PLC output **Q3.0**.

WYKONAWCA:				INWESTOR:		
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				OBIEKT OCZYSZCZALNIA ŚCIEKÓW W KRZESZYCACH działka nr 611/2 (obręb 0010 Krzeszyce)		
BRANŻA: ELEKTRYCZNA				TYTUŁ RYSUNKU: Sterowanie pracą pompy PO22		
OPRACOWAŁ:	mgr inż. Wojciech Staszak					NR RYSUNKU: RT/23
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