



This installation manual applies to:

- 209820 501 Electrode Control 115 VAC
- 202820 501 Electrode Control 230 VAC
- 202830 501 Electrode Control 12 VDC

General

The 501 Electrode Control is a simple and price competitive system for level control in conductive liquids. The system includes a transmitter for DIN-rail mounting and various level electrodes.

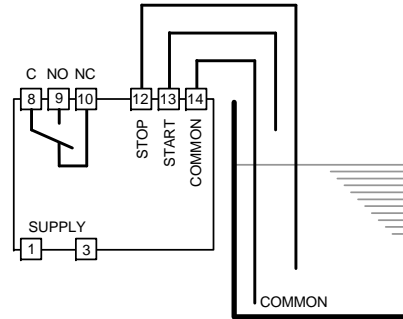
Special Features

- Price competitive and reliable system for level control in conductive liquids
- The amplifier is easily mounted on a DIN-rail
- The electrodes can be suspended by a cable or threaded directly to a Lexan and Noryl plastic electrode base housing with a 1" thread (see diagram at far right)
- The electrode base housing can be mounted on a special acid-proof MJK 316 SS sensor brackets (200219 and 200220) which can be wall mounted, pipe or rail mounted (using Universal Brackets 200205) or mounted on a wall with an extension arm (200210 plus 200215)

Function

The transmitter generates an alternating voltage applied to the electrodes. When the liquid connects the electrodes, the current running between these is amplified and the output relay is activated. Two electrodes can be connected to the unit for the detection of one level, or three electrodes can be connected for the detection of two levels; one for start and one for stop. In cases where the liquid is in a conductive tank, or where for example a metal pipe is in constant contact with the liquid, the tank or piping can be substituted for one of the electrodes by simply attaching a wire to it and the connection housing, usually as a common contact. (see diagram top middle).

Terminal Connections

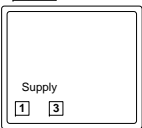
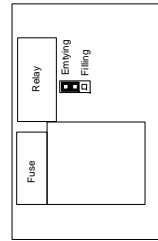


Terminal 13 must always be connected to the high-level electrode. This also applies if you change from pumping out (default) to pumping in. Only here it will function as the STOP electrode.

Settings for pumping out / pumping in

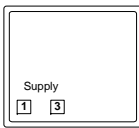
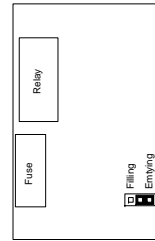
The 501 Electrode Control is set up from the factory to pumping out (emptying). This setting can be changed to pumping in (filling) by moving a jumper inside the cabinet as shown below:

115 VAC / 230 VAC



P 0

12 VDC



+ -

Part numbers

- 209820 501 Electrode Control / 115 VAC
- 202820 501 Electrode Control / 230 VAC
- 202830 501 Electrode Control / 12 VDC
- 202850 Level electrode (19 ft cable; normally not used with electrode base)
- 202860 Electrode base with level electrode (1m rod)
- 202864 Electrode base with 4 level electrodes (1m rods)
- 202865 Level electrode for use with p/n 202860 (1m rod)

Specifications

Part numbers	209820 (202820)	202830	
Dimensions	86 x 52,5 x 58 mm (h x w x d)		
Mounting	On DIN-rail		
Power supply	115 (230) VAC±10%	11-16 VDC	
Consumption (relay off)	-	<1mA	
Consumption (relay on)	Approx. 4VA	40mA	
Temperature range	-4°F to +140°F (-20°C to +60°C)		
Materials	Cover Base	Lexan (grey) Noryl (black)	
CE approvals	EN50081-1, EN50082-1		
Enclosure	IP22		
Relay output	Voltage-free switch (max. 250V, 4A resistive, 1A inductive)		
Electrodes	202850	202860 (64)	202865
Description	Single electrode	Electrode base incl. one (four) electrode rod(s)	Additional rod for p/n 202860
Enclosure	IP68	IP65	IP68
Mounting	Suspended in 19.6 ft cable incl. 5.9" electrode	Mounted with M5 thread	Mounted in base with M5 thread
Length	5.9" / 150mm	39.4" / 1000mm	38.4" / 975mm
Materials	AISI 316	POM / AISI 316	AISI 316

Dimensions

