ULC

UNIVERSAL LEVEL CONTROLLER

OVERVIEW

The Universal Level Controller (ULC) offers multistage step control for up to six stages. The ULC operates pumps, electric valves and alarm circuits. Each stage or step can be individually adjusted to open and close at the desired setpoints on either a rising or falling level or pressure. The ULC was designed to replace existing Healy-Ruff Roto-Trol, 940 or RF-2 type controllers.

The ULC is microprocessor based and can be implemented in new installations or be used to retrofit/upgrade existing stations, an analog transducer replaces the original mercury switches. Stages are then configured in the controller using setpoints based on the analog scaling of the transducer.

Two analog inputs are provided to support two separate systems and can operate independently, essentially providing two controllers in one. Any stage or output can be configured to either analog input.

Six discrete inputs are provided to inhibit its respective output. Inhibit delays and auto or manual reset are configurable through the keypad. The ULC has been designed to be flexible for multiple applications.

FEATURES

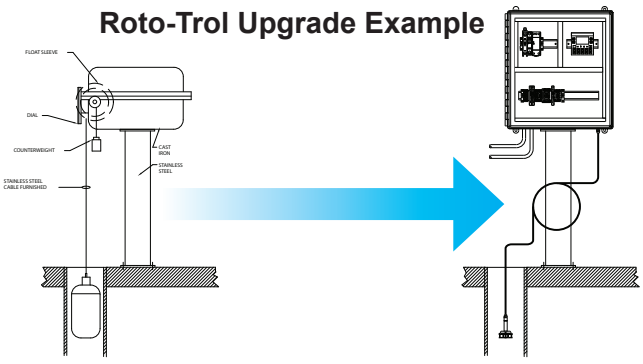
Easy to Install and Use

- Micro-VPAC II
  - Graphic User Interface
  - 6 Digital Inputs (Inhibits)
  - 6 Digital Outputs (Stages)
  - 2 Analog Inputs
- No External Buttons or Switches Required
- All Field Wiring to Terminal Blocks
- Secure Installation
  - NEMA 4X Non-metallic Enclosure
  - Windowed Front with Locking Hasp
- Serialized UL-Label and O&M Manual

Typical Applications

- Sumps
- Reservoirs
- Wet Wells
- Valve Control
- Alarming
- Data Logging

Roto-Trol Upgrade Example



PRIMEX
WATER SYSTEM INTEGRATOR AND CONTROLS PROVIDER
844-4PRIMEX (477-4639)
WWW.PRIMEXCONTROLS.COM

9500285B 02/19
© 2018 SJE, Inc. All Rights Reserved.
PRIMEX is a trademark of SJE, Inc.

ULC

UNIVERSAL LEVEL CONTROLLER

MULTISTAGE STEP CONTROLLER SPECIFICATIONS

GENERAL		
Input:	120VAC @ 10A	
Relative Humidity:	5 to 95% Non-condensing	
Operating Temperature:	0°C to +50°C	
Compliance:	UL 508	
DIGITAL DC INPUTS		
No. of Inputs:	8	
Input Voltage:	24VDC	
Absolute Max. Voltage:	35VDC Max.	
Input Impedance:	10 Kohm	
OFF to ON Response:	1 ms	
ON to OFF Response:	1 ms	
DIGITAL RELAY OUTPUTS		
No. of Outputs:	6	
Commons per Output:	6	
Max. Output Current per Relay:	3A to 250VAC, resistive	
Max. Total Output Current:	5A Continuous	
Max. Output Voltage:	275 VAC, 30VDC	
Max. Switched Power:	1250 VA, 150W	
Contact Isolation to Ground:	1000VAC	
Max. Voltage Drop at Rated Current:	0.5V	
Expected Life:	No Load: 5,000,000	Rated Load: 100,000
Max. Switching Rate:	300 CPM at No Load	20 CPM at Rated Load
Type:	Mechanical Contact	Form A
ANALOG INPUTS		
No. of Inputs:	2	
Input Range:	4-20 mA	
Input Impedance:	100 ohm	
Nominal Resolution:	10 Bits	
% AI Full Scale:	32,000 counts	
Max. Over-Current:	35 mA	
Max. Error at 25°C	1.00%	

PRIMEX
WATER SYSTEM INTEGRATOR AND CONTROLS PROVIDER
844-4PRIMEX (477-4639)
WWW.PRIMEXCONTROLS.COM

9500285B 02/19
© 2018 SJE, Inc. All Rights Reserved.
PRIMEX is a trademark of SJE, Inc.