

Controllers from PULSAtrol MCT series continuously protect cooling systems from the harmful effects of scaling, corrosion, and microbiological growth. They are designed using advanced microprocessor technology and the latest in surface mount assembly techniques. The result is amazing versatility in a compact, reasonably priced controller package. The units are simple to program using the clearly labeled keyboard and the bright alphanumeric display. And PULSAtrol's distinctive receptacle cords make easy to connect any electrical device being controlled.

Key Features:

- A high resolution 10 bit A/D converter and adjustable analog sample sensitivity for greater accuracy from all sensor inputs.
- Control TDS, pH or ORP.
- Fully isolated differential inputs for all circuits help prevent the possibility of ground loops.
- Keyboard activated hand/off/auto control of all relay outputs.
- Modular hardware and software for easy access and servicing.
- A prewired NEMA type 4X enclosure for protection from harsh environments.



Series 300

Selections

STANDARD FEATURES		AVAILABLE FOR OPTIONS					
		analog in	digital in	analog out	dry contact	relay out	serial comm
110	Conductivity control with Hi/Lo Alarm Indicator	0	1	1	1	2	0
120	pH Control with Hi/Lo Alarm Indicator	0	1	1	1	2	0
130	ORP Control with Hi/Lo Alarm Indicator and Limit Timer	0	1	1	1	2	0
210	Conductivity control with Hi/Lo Alarm Indicator	1	2	2	1	3	1
220	pH Control with Hi/Lo Alarm Indicator, Limit Timer & Flow Assembly	1	2	2	1	3	1
230	Conductivity and pH Control with Flow Assembly Conductivity - Hi/Lo Alarm Indicator and Selectable Timer pH - Hi/Lo Alarm Indicator and Limit Timer	0	1	2	1	1	1
310	Conductivity control w/ Hi/Lo Alarm Indicator, Alarm Relay & Selectable Timer	3	2	2	1	4	1
320	pH Control with Hi/Lo Alarm, Alarm Relay, Limit Timer & Flow Assembly	3	3	2	1	5	1
330	Conductivity & pH Control with Flow Assembly Conductivity - Hi/Lo Alarm Indicator, Alarm Relay and Selectable Timer pH - Hi/Lo Alarm Indicator, Alarm Relay and Limit Timer	2	2	2	1	3	1

Options*

			SERIES	REQUIRED FOR OPTIONS					
				analog in	digital in	analog out	dry contact	relay out	serial comm
A	Conduit (Required for 220 V)		100/200/300						
B	Mounted flow assembly (not req'd on prefab's)		100/200/300						
B0	No flow assembly		200/300						
B1	High pressure flow assy for cond., 250 psi Max.		100/200/300						
B2	High pressure flow assy for pH, 250 psi Max.		100/200/300						
B3	High pressure flow assy for pH/cond., 250 psi Max.		200/300						
B4	High pressure flow assy for orp, 250 psi Max.		100						
B6	High pressure flow assy for pH/orp, 250 psi Max.		200/300						
B7	High pressure flow assy for pH/orp/cond., 250 psi Max.		200/300						
C	Selectable timer: percent, limit, pulse w/ accumulator		100/200/300		1			1	
D	Alarm output relay (100 Series requires relay out)		100/200						
E	28 day single biocide w/ bleed lockout & pre-bleed		100/200/300					1	
F	28 day dual biocide w/ bleed lockout & pre-bleed		200/300					2	
G	28 day triple biocide w/ bleed lockout & pre-bleed		200/300					3	
H	Make-up water cond. isolated (requires cond. Control)		200/300	1					
I	ORP isolated (requires pH)		200/300	1				1	
K	Alarm dry contact (100 Series requires relay out)		100/200/300				1		
L1	Serial line communication		200/300						1
L2	Serial line communication & modem (120v)		200/300						1
L3	Alarm call out (requires a modem, L2 option)		200/300						
L4	No Serial Line Communication Software		200/300						
M3	One 4-20 mA isolated proportional programmable output		100/200/300			1			
T	pH remote preamplifier w/ power supply (w/ 50 ft. power cord)		100/200/300						
T1	pH remote preamplifier with battery pack		100/200/300						

*For additional information about PULSAtrol Model and available options see Reference Guide No. RGP-001.

PULSAtrol® MCT Controller Series



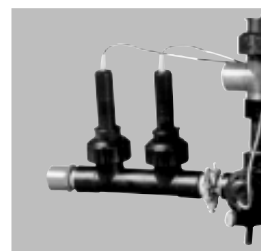
Series 100



Series 200



Series 300

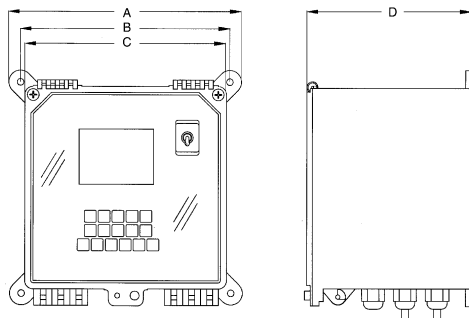


Modular Flow Assembly

PULSAtrol® Specifications

FEATURES/CONTROLLERS	SERIES 100	SERIES 200	SERIES 300
Enclosure	Nema 4X - High Impact Resistant PVC	Nema 4X - High Impact Resistant Polystyrene	Nema 4X - High Impact Resistant Polystyrene
Power Requirements	90 - 250 VAC @ 50/60 Hz, 100 VA	90 - 250 VAC @ 50/60 Hz, 100 VA	90 - 250 VAC @ 50/60 Hz, 100 VA
Control Output	Line Voltage @ 600 VA Per Relay (5 amps @ 120 VAC)	Line Voltage @ 600 VA Per Relay (5 amps @ 120 VAC)	Line Voltage @ 600 VA Per Relay (5 amps @ 120 VAC)
Display	1 X 8 Alpha Numeric, Lighted Display	2 X 16 Alpha Numeric, Back Lit Display	64 X 128 Pixels Dot Matrix, Back Lit Graphics Display
Recessed Front Panel Power Switch	N/A	Standard	Standard
Lockable Viewing Window	N/A	Standard	Standard
Hi/Lo Alarm Indicator	Standard	Standard	Standard
10 Bit A/D resolution	Standard	Standard	Standard
Standard pH Scale	0 - 14 pH	0 - 14 pH	0 - 14 pH
Standard Conductivity Scale	0-500, 0-2,000, 0-5,000, 0-10,000 and 0-20,000 µS/cm	0-500, 0-2,000, 0-5,000, 0-10,000 and 0-20,000 µS/cm	0-500, 0-2,000, 0-5,000, 0-10,000 and 0-20,000 µS/cm
Standard ORP Scale	0-1000 mV	0-1000 mV	0-1000 mV
Front Panel H/O/A Control	Standard	Standard	Standard
Analog Inputs	One	Two	Four
Digital Inputs	Two	Three	Four
Analog Outputs	One	Two	Two
Alarm Dry Contacts	One	One	One
Relay Outputs	Three	Four	Six
Timers	Programmable	Programmable	Programmable
Security Code	N/A	Standard	Standard
Accuracy - At point of measure excluding sensor	+/- 1%	+/- 1%	+/- 1%
Maximum Pressure of Standard Flow Assembly	200 PSI @ 70° F 125 PSI @ 125° F 8.62 Bars @ 52° C	200 PSI @ 70° F 125 PSI @ 125° F 8.62 Bars @ 52° C	200 PSI @ 70° F 125 PSI @ 125° F 8.62 Bars @ 52° C
Sensors:	Consult Factory	Consult Factory	Consult Factory
Differential	Programmable	Programmable	Programmable
Standard Plumbing	Glass Filled Polypropylene (GFPL) Slip or Threaded	Glass Filled Polypropylene (GFPL) Slip or Threaded	Glass Filled Polypropylene (GFPL) Slip or Threaded
Electronic Environment	0 - 125° F -17.8 - 52° C 100% Humidity	0 - 125° F -17.8 - 52° C 100% Humidity	0 - 125° F -17.8 - 52° C 100% Humidity
Controller Weight	6 lbs (2.5 kgs)	8 lbs (3.7 kgs)	8 lbs (3.7 kgs)
Shipping Weight	8 lbs (3.7 kgs)	10 lbs (4.6 kgs)	10 lbs (4.6 kgs)

Dimensions



DIMENSION	SERIES 100	SERIES 200	SERIES 300
A	7.00 in.(sq.) 17.78cm	10.00 in.(sq.) 25.40cm	10.00 in.(sq.) 25.40cm
B	6.00 in.(sq.) 15.24cm	8.99 in.(sq.) 22.83cm	8.99 in.(sq.) 22.00cm
C	5.75 in.(sq.) 14.60cm	8.66 in.(sq.) 22.00cm	8.66 in.(sq.) 22.00cm
D	6.50 in. 16.5cm	7.08 in. 17.98 cm	7.08 in. 17.98cm
Controller Weight	6 lbs. 2.5kgs	8 lbs. 3.7kgs	8 lbs. 3.7kgs
Shipping Weight	8 lbs. 3.7kgs	10 lbs. 4.6kgs	10 lbs. 4.6kgs