

Controllers from PULSAtrolE MBC series continuously protect boiler systems from the harmful effects of scaling and corrosion. 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 easy to program using the clearly labeled keyboard and the bright alpha-numeric display.

Key Features:

- A high resolution 10 bit A/D converter and adjustable analog sample sensitivity for greater accuracy from all sensor inputs.
- 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.
- Optional features include a serial line communications and the capability to control.
- Bi-lingual programs.



Series 300

Selections

STANDARD FEATURES		AVAILABLE FOR OPTIONS					
		analog in	digital in	analog out	dry contact	relay out	serial comm
110	Cond. control w/ selectable sample mode, 1 line display (continuous or timed)	0	1	1	1	2	0
210	Cond. control w/ selectable sample mode, 2 line display (continuous or timed)	1	2	2	1	3	1
310	Cond. control w/ selectable sample mode, 8 line display (continuous or timed)	2	2	2	1	3	1

Options*

		SERIES	REQUIRED FOR OPTIONS					
			analog in	digital in	analog out	dry contact	relay out	serial comm
A	Conductivity: In-line type Max. Press. 250 psi, Max. Temp. 400°F, Stainless steel Temp. Comp.	100/200/300						
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	Additional Boiler Controller	100/200/300	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			

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

PULSAtrolE MBC Controller Series



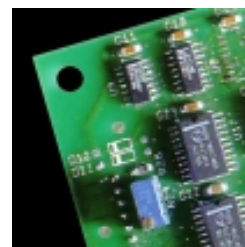
Series 100



Series 200



Series 300



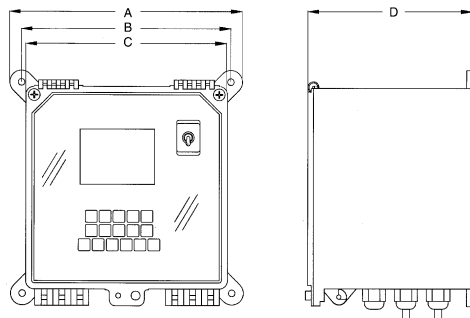
SURFACE MOUNT TECHNOLOGY (SMT)

circuit board design provides higher
quality and dependability

PULSAtrolE 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 μ S/cm	0-500, 0-2,000, 0-5,000, 0-10,000 and 0-20,000 μ S/cm	0-500, 0-2,000, 0-5,000, 0-10,000 and 0-20,000 μ S/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