

Aquatrol® Indoor/Outdoor Control



- Adjustable settings for boiler maximum temperature, boiler minimum temperature and outdoor low (design) temperature
- Selectable Warm Weather Shut Down (WWSD) at 70F (21C) to prevent summer boiler operation
- Domestic Hot Water (DHW) priority
- Replaceable circulator relay common to other Honeywell replacement controls
- Supply and outdoor sensors included
- Automatic boiler operating differential and system circulator exercising
- Long-life DC relay drive control technology
- Troubleshooting LEDs; push-to-test button; full size screw terminals

Description	Brand	Part Number
120 Volt Outdoor Temperature Compensation Control, includes 2 sensors	Honeywell	AQ475A1004

Automatic Changeover Switch

White
Rodgers



- SPDT control provides automatic change over of thermostat to operate Zone valve on combination hot and chilled water systems
- Epoxy resin seal protects bimetallic disc and snap-action contacts from dust, dirt and corrosion
- Furnished with removable spring clip to attach control to tubing
- SPDT switch connects heating side of thermostat to two-wire zone valve when hot water is circulated through tubing
- SPDT switch connects cooling side of thermostat to two-wire zone valve when chilled water is circulated through tubing
- Curved sensing element provides maximum contact with tubing
- Electrical Connections: 12" red, brown and black leads, 105°C insulated, No. 18 wire
- Red-Black: Open on rise @ 85°F, close @ 70°F
- Red-Brown: Close on rise @ 85°F, open @ 70°F
- Maximum Ambient Temperature: 221°F
- For use with 1/2" tubing (5/8" OD)

Switching Action	Motor Rating		Pilot Duty 120/240/277 VAC	Resistive (non-inductive) 120/240/277 VAC	Brand	Part Number
	Full Load	Locked Rotor				
SPDT	7.5A @ 120Vac 3.75A @ 240Vac	45.0A @ 120Vac 22.5A @ 240Vac	125 VA	15A	White Rodgers	752-1

Direct Mount/Well Immersion Aquastat® Controller



L4006

L6006

- Totally enclosed Micro Switch™ snap-acting switches operate on temperature rise to setpoint
- Visible control point scale and external adjustment screw permit easy setting
- Horizontal or vertical insertion of the sensing element
- Direct or well immersion of the sensing element
- Remote bulb model may be used to sense air temperature in ducts and in outside air sensing applications

Application	Switching Action	Differential	Temperature Ratings (Operating Range)	Spud Size	Includes	Brand	Part Number
High or low limit	SPST, contact break on temperature rise	5F to 30F adj. 3C to 17C fixed	100F to 240F 38C to 116C	3/4" NPT 19mm NPT	1 1/2" (38mm) insulation	Honeywell	L4006A1017
High or low limit	SPST, contact break on temperature rise	2F fixed 1C fixed	40F to 180F 4C to 82C	3/4" NPT 19mm NPT	1 1/2" (38mm) Insulation and heat-conductive compound	Honeywell	L4006A1959
Circulator	SPST, contacts make on temperature rise	5F fixed 3C fixed	100F to 240F 38C to 116C	1/2" 13mm	1 1/2" (38mm) insulation	Honeywell	L4006B1007
Circulator control and high limit or low limit	SPDT	5F to 30F adj. 3C to 17C adj.	100F to 240F 38C to 116C	-	Stop factory-set at 240F (116C); heat-conductive compound	Honeywell	L6006A1145
High Limit	SPST contact break on temperature rise	Manual reset	110F to 290F 43C to 143C	-	2 7/8" (73mm) sensing bulb, stop factory-set at 240F (116C) horizontal or vertical mount	Honeywell	L4006E1042

Honeywell

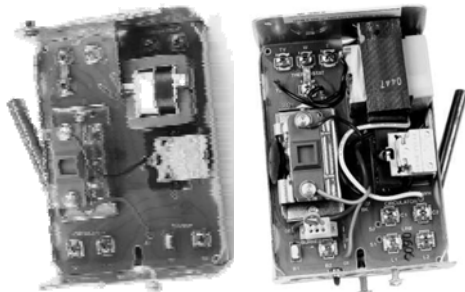
Multiple-Function Aquastat® Controller



- High limit and low limit circulator controller used to regulate boiler water temperature in gas or oil-fired hydronic heating systems
- Immersion type, liquid-filled sensing element actuates two snap switches, one for high limit and one for low limit. One SPST and one SPDT act independently at respective temperature settings
- Separate, easy to read calibrated dial and setpoint adjustments for each switch
- Controller may be mounted in any position and does not require leveling
- Differential adjustment on low limit
- All adjustments accessible inside front cover
- Push terminals for quick connecting
- Single sensing element for easy installation

Differential Temperature		Operating Temperature Range		Insulation Depth	Spud Size	Brand	Part Number
High Limit	Low Limit	High Limit	Low Limit				
-12C Fixed	-12C to -3C Adjustable	54C to 116C	43C to 104C	1 1/2" to 4"	3/4" NPT	Honeywell	L6081A1036

Multiple-Function Aquastat® Controller



L8148A

L8148E

- Immersion-type controller that combines high limit protection with switching relay control of burner and circulator motors
- High limit opens burner circuit only
- Select models include transformer and accessory terminals for adding a remote low limit controller
- Case available for horizontal or vertical mounting
- Combination of two insulation and two insertion well lengths are available
- Requires a 24 VAC thermostat with heat anticipator set at 0.2A
- TRADELINE models include well adapter, heat conductive compound and range stops
- L8148J has terminals for adding zone valve system wiring



L8148J



Horizontal & Vertical mountings



Capillary Length	Differential Temperature	Insulation Depth	Switching Action	Mounting	Brand	Part Number
4 1/2"	-13C / 8F Fixed	1 1/2" to 3" Less Well	SPST: High Limit & Circulator	Horizontal/ Vertical	Honeywell	L8148A1017
4 1/2"	-9C / 15F Fixed	1 1/2" to 3" Less Well	SPST: High Limit & Circulator	Vertical	Honeywell	L8148E1265
4 1/2"	-9C / 15F Fixed	1 1/2" to 3" Less Well	SPST: High Limit & Circulator	Vertical	Honeywell	L8148E1299
4 1/2"	-13C / 8F Fixed	1 1/2" to 3" Less Well	SPST: High Limit & Circulator	Horizontal/ Vertical	Honeywell	L8148J1009

Remote Bulb AquaStat® Controller



- Totally enclosed Micro Switch™ snap-acting switches operate on temperature rise to setpoint
- Visible control point scale and external adjustment screw permit easy setting
- Horizontal or vertical insertion of the sensing element
- Direct or well immersion of the sensing element
- Remote bulb model may be used to sense air temperature in ducts and in outside air sensing applications

Application	Switching Action	Differential	Temperature Ratings (Operating Range)	Electrical Ratings (Full Load)	Includes	Brand	Part Number
High or low limit	SPST, contacts break on temperature rise	5F to 3F adj. 3C to 17C adj.	100F to 240F 38C to 116C	8.0 A @ 120Vac 1.3 A @ 240Vac	5 1/2 ft (1.7m) capillary	Honeywell	L4008A1015
High or low limit	SPST, contacts break on temperature rise	5F to 3F adj. 3C to 17C adj.	130F to 270F 54C to 132C	8.0 A @ 120Vac 1.3 A @ 240Vac	10 ft (3.04m) Capillary; factory-set stop at 200F (93C)	Honeywell	L4008A1130
Circulator	SPST, contacts make on temperature rise	5F to 3F adj. 3C to 17C adj.	100F to 240F 38C to 116C	8.0 A @ 120Vac 1.3 A @ 240Vac	5 1/2 ft (1.7m) capillary	Honeywell	L4008B1013
High limit	SPST, contacts break on temperature rise	Manual reset	130F to 270F 54C to 132C	8.0 A @ 120Vac 5.1 A @ 240Vac	5 1/2 ft.(1.6m) capillary; factory-set stop at 250F (121C)	Honeywell	L4008E1156
Circulator control and low limit	SPDT	3F to 30F adj. 3C to 17C adj.	100F to 240F 38C to 116C	8.0 A @ 120Vac 5.1 A @ 240Vac	5 1/2 ft. (1.6m) capillary	Honeywell	L6008A1192

Remote Ambistat® Controller



- Ambient temperature compensated, high-limit controller for agriculture and industrial applications
- Suitable for line-voltage, low voltage or millivolt (Powerpile) control of bulk milk tanks, beverage dispensing machines, ice cube machines, dishwashers, crop drying, tobacco curing and similar applications
- Enclosed snap-action switches
- Screwdriver adjustment for temperature setting
- Immersion well not included

Notes	Differential Temperature	Maximum Operating Temperature	Setpoint Temperature Range	Output	Bulb Size	Capillary Length	Sensor Element	Includes	Brand	Part Number
Break on Temp. Rise	5F / 2.8C	205F / 96	40F to 180F 4C to 82C	1 SPST	2 7/8" L x 3/8" dia.	5.5ft	Copper	-	Honeywell	T4031C1012
-	2F / 1.1C	205F / 96C	40F to 180F 4C to 82C	1 SPDT	2 7/8" L x 3/8" dia.	5.5ft	Copper Bulb	107324A duct bulb holder	Honeywell	T6031C1009

Honeywell

Aquastats®

Single-Function Aquastat® Controller

Honeywell



- Immersion type controller for regulating and limiting the tank temperature in water heaters
- Regulates temperature and provides energy cutoff (ECO) action on a temperature rise past the set point. Includes a second sensing element that senses average water temperature to minimize stacking.
- Fluid-filled element operates Micro Switch™ SPST snap-acting switch
- ECO switch interrupts the thermocouple circuit or main valve before tank reaches 210F (99C) maximum temperature.
- Includes factory-installed immersion well on controller
- Internal adjustment screw and special switch terminal provides three-wire hookup from Aquastat® controller to gas valve.

Operating Temperature Range	Temperature Ranging (ECO) Energy Cutoff	Capillary Length	Insulation Depth	Brand	Part Number
100F to 180F 38C to 82C	190F	42"	Controller Well: 2 1/4" Remote Well: 1 1/2" or 2 1/2"	Honeywell	L8100B1037

Strap On Aquastat® Controller



- Totally enclosed Micro Switch™ snap-acting switches operate on temperature rise to set point
- Visible control point scale and external adjustment screw permit easy setting
- Horizontal or vertical insertion of the sensing element
- Direct or well immersion of the sensing element
- Remote bulb model may be used to sense air temperature in ducts and in outside air sensing applications

Honeywell

Application	Switching Action	Differential	Temperature Ratings (Operating Range)	Includes	Brand	Part Number
Circulator, high limit and low limit	SPDT	5F to 30F adj. 2.8C to 16.7C adj.	65F to 200F 18C to 93C	Bracket for strap on mounting, stop factory-set at 200F (93C)	Honeywell	L6006C1034

Strap On Hot Water Temperature Control



Johnson Controls



White Rodgers

- Surface type hot water control for direct or reverse action
- May be used as either an open high control or as an open low control
- Terminals are color coded to simplify installation
- May be mounted on either horizontal or vertical rise pipe
- Insulated back portion of case minimizes the effects of ambient temperature

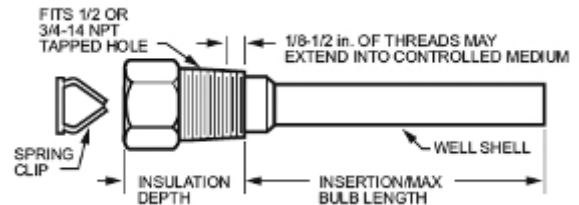
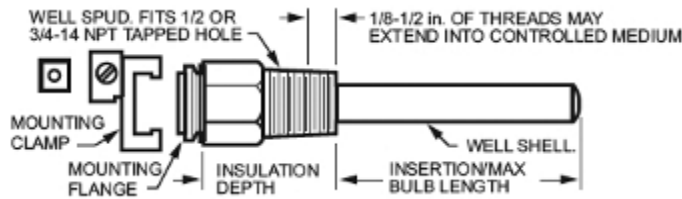
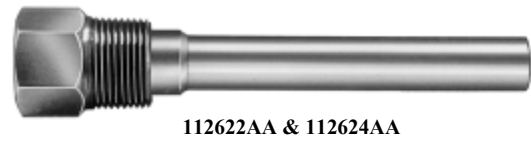
Application	Switching Action	Differential	Temperature Ratings (Operating Range)	Includes	Brand	Part Number
Automatic changeover control for fan coil systems	SPDT	10F fixed 5.6C fixed	100F to 240F 38C to 116C	Clamp-on strap and convertible range adjuster	Johnson	A19DAC-1C
Automatic changeover control for fan coil systems	SPDT	15F fixed 8C fixed	60F to 200F 16C to 93C	Pipe strap and mounting screws	White Rodgers	1127-9

Aquastat® Accessories

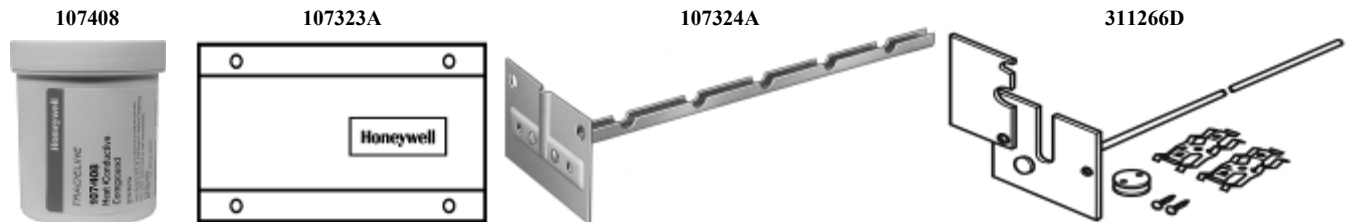
Immersion Wells

- Immersion wells are used with Aquastat® Temperature Controllers to hold the temperature sensing bulb in the controlled medium
- They also allow heat transfer while protecting the sensing bulb from contact with the controlled medium
- Immersion wells permit removal of the sensing bulb for testing or replacement without draining the system

Spud in In. x 14 NPT	Shell ID / Bulb Diameter	Insertion Max Bulb Length	Insulation Depth	Capillary Diameter	Includes	Brand	Part Number
Copper Immersion Wells							
1/2"	3/8"	3"	1 1/2"	-	-	Honeywell	123869A
1/2"	1/2"	4"	1 1/2"	1/8"	112721 spring clip	Honeywell	112622AA
3/4"	3/8"	3"	1 1/2"	5/64"	121371 mounting clamp	Honeywell	121371B
Stainless Steel Immersion Well							
1/2"	1/2"	4 1/4"	1"	1/8"	112721 spring clip	Honeywell	112624AA



Immersion Well Accessories



Description	Brand	Part Number
Heat Conductive Compound: Used to enhance contact and heat transfer in temperature sensor applications. Not for use above 149C (300F). 4oz.	Honeywell	107408
Bulb Shield Assembly for Duct Mount Applications: Shields bulb from weather. Does not include mounting screws and split plug. 6" Long, Holds 3/8" and 1/2" bulbs.	Honeywell	107323A
Bulb Holder for Duct Mount Applications: Supports capillary and bulb in duct. Does not include mounting screws. 8 5/8" Long, 2 3/4" x 1 3/4" plate size.	Honeywell	107324A
Bulb Holder for Duct Mount Applications: Holds 1 or 2 elements in 0°F to 100°F air, grommet holds one 5/64" and one 1/8" diameter capillary, helps reduce airflow through opening in duct. 14" Long, 3 1/4" x 3 1/4" plate size.	Honeywell	311266D

