



Universal Temperature Limit, Boiler Reset and Low Water Cut-Off



Universal Temperature Limit and Low Water Cut-Off



Low Water Cut-Offs, Flow Switches and Liquid Level Controls



Low Water Cut-Offs for Steam Boilers



Water Feeders for Steam Boilers

# **PARTS LIST**

EFFECTIVE JULY 1, 2017

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126 BAILEY ROAD, NORTH HAVEN, CONNECTICUT 06473 **www.hydrolevel.com** 



MODEL NUMBER	VOLTAGE	DESCRIPTION	APPLI- CATION*	PART NO.

#### **HYDROSTAT** – TEMPERATURE LIMIT & LOW WATER CUT-OFF

<b>3150</b> For Oil Boilers	120VAC	Cold Start or Tankless Coil Operation.  • Adjustable Low Temp: OFF or 110°F to 200°F.  • Adjustable High Temp: 100°F to 220°F.  • Adjustable Differentials: 10°F to 30°F.  Suitable for mounting on existing immersion well.  NOTE: Hydrolevel Electro-Well" required for low water cut-off operation (see HydroStat Accessories on page 5).	1	48-3150
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#### FUEL SMART HYDROSTAT – TEMPERATURE LIMIT. BOILER RESET & LOW WATER CUT-OFF

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3200- <i>Plus</i>	120VAC	Cold Start or Tankless Coil Operation.		48-3200
For Gas Boilers	(24VAC output)	Adjustable Low Temp: OFF or 110°F to 200°F.     Adjustable High Temp: 100°F to 220°F.     Automatic Differentials.     Adjustable Economy Settings: Off, Low, 1, 2, 3, 4, or 5 Zone, High.		
3250-Plus	120VAC	Outdoor Reset Ready (see Accessories below).		48-3250
For Oil Boilers		Suitable for mounting on existing immersion well.		
		<b>NOTE:</b> Hydrolevel Electro-Well <sup>**</sup> required for low water cut-off operation (see HydroStat Accessories on page 5).	1	
3000	24VAC	Cold Start Operation.		48-3000
For Gas Boilers		Adjustable High Temp:		
		Model 3000: 100°F to 220°F		
		<b>Model 3000-190:</b> 100°F to 190°F		
		Automatic Differentials.  Adjustable Foregons Cattings Off Law 1 0 2 4 or F Zana High		
3000-190 For Gas Boilers	24VAC	Adjustable Economy Settings: Off, Low, 1, 2, 3, 4, or 5 Zone, High. Includes wire harnesses for transformer-type control centers and common integrated ignition controls		48-3001
		Suitable for mounting on existing immersion well.		
		NOTE: Hydrolevel Electro-Well™ required for low water cut-off operation (see HydroStat Accessories on page 5).		





Model 3200-Plus includes 24 volt 30VA transformer for burner circuit and vent damper.

#### **HydroStat Universal Replacement - Cross Reference Table**

Upgrading existing installations with HydroStat or Fuel Smart HydroStat

3200-Plus - Replaces L8124E, L8148E

3150 & 3250-Plus - Replaces L7124A, L7124C, L7148A, L7224A, L7224C, L7224U, L7248A, L7248C, L8124A, L8124C, L8148A, L8148C

**3000 - Replaces L4006A, L4080B** 

#### **SEE HYDROSTAT ACCESSORIES - PAGE 5**

# \*APPLICATION CHART

IMPORTANT: The application information on this schedule provides a general guideline for selecting Hydrolevel controls. We recommend that you refer to your local and state codes prior to purchasing or installing any limit control.

- 1 Residential / Commercial Hot Water Boiler (160PSI)
- 2 Residential / Commercial Steam Boiler (15PSI)
- 3 Commercial / Industrial Hot Water Boiler (250PSI)
- 4 Commercial / Industrial Steam Boiler Primary Control (250PSI)
- 5 Commercial / Industrial Steam Boiler Secondary Control (250PSI)





MODEL NUMBER	VOLTAGE	DESCRIPTION	APPLI- CATION*	PART NO.	

## **LOW WATER CUT-OFFS**

## Automatic Reset with Burner Circuit Test Button — Residential Code Controls Wire Harnesses also sold separately (see page 6).

1100		Compact low water cut-offs for residential boilers. Interrupts power immediately in low water condition. POWER and LOW WATER lights with TEST button. 1100 comes with wiring harness for standard fan center.		45-1100
1100H3	24VAC	1100 without wiring harness		45-1103
1100H5	24VAU	1100 with harness for Weil-McLain Ultra, Lochinvar Knight and Solution	1	45-1105
1100H7		1100 with harness for connecting vent damper plug on Honeywell and UTC boiler control modules (natural draft models only)		45-1107
1150	120VAC	See description for 1100 (above)		45-1150



## **Automatic Reset**

24	24VAC	Interrupts power immediately in low water condition.		45-240
24SV	24VAU	Automatically resets on normal water level. <b>SV</b> models include	4	45-245
170	400)/40	shorter EL1214-SV probe suitable for mounting in standard black tee.	'	45-170
170SV	120VAC			45-175



## **Manual Reset**

700	24VAC	Interrupts power immediately in low water condition. Manual		45-700
700SV	24770	reset required after 30 seconds. Will not trip out on power	3,5	45-701
750	120VAC	failure. <b>SV</b> models include shorter EL1214-SV probe suitable for mounting in standard black tee.		45-750
750SV		Tot mounting in Standard black tee.		45-751



## **Automatic Reset & Test Button/Light**

600	24VAC	Interrupts power immediately in low water condition.		45-600
600SV	24VAU	Automatically resets on normal water level. Test Button	ĺ	45-601
650		tests control operation. <b>SV</b> models include shorter EL1214-SV probe suitable for mounting in standard black tee. <b>P</b> models	1,3	45-650
650SV	120VAC			45-651
650P		thicker jackets.		45-653



#### Manual Reset & Test Button/Light

	<del></del>	Dutton, Light		
1100M		Compact low water cut-off for wall hung and space constrained applications. Interrupts power immediately in low water condition. Manual reset required after 30 seconds. Will not trip out on power failure. Test button tests control operation. Includes standard wire harness.		45-1100M
1100M5 NEW		1100M with harness for Weil-McLain Ultra, Lochinvar Knight and Solution	1	45-1105M
1100M7		1100M with harness for connecting to vent damper plug on Honeywell and UTC boiler control modules (natural draft models only)		45-1107M
500	24VAC	Interrupts power immediately in low water condition. Manual		45-500
500SV	24VA0	reset required after 30 seconds. Will not trip out on power		45-501
550		failure. Test button tests control operation. SV models include	3,5	45-550
550SV	120VAC	shorter EL1214-SV probe suitable for mounting in standard black tee. <b>R</b> models include EL1214-R probe for remote mounting. <b>P</b> models include EL1214-P probe with longer nut	3,3	45-551
550R				45-552
550P		for boilers with thicker jackets.		45-553



# Non-Cycling Steam Primary Low Water Cut-Off – 15 Second Delay

400	24VAC	Interrupts power after 15 second delay in a low water condition.		45-400
400R	24VAU	Automatically resets on return of normal water level.	2	45-402
450	120VAC	<b>R</b> models include EL1214-R probe for remote mounting.	_	45-450
450R	IZUVAU			45-452







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## **LOW WATER CUT-OFFS – continued**

## CycleGard - 15 Second Delay & Intermittent Level Test with Smart Cycle

CG400-1090		Same as 400 S	eries described on page	3 with foam		45-410
CG400P-1090	24VAC		ntermittent Level Test. I			45-413
CG400-2090		EL1214-P prob	e with longer nut for boi		ets.	45-410-2090
CG450-1090		Models	INTERMITTENT LEVEL	. TEST	_	45-460
CG450P-1090		ending in	Frequency of Test	Duration of Test	2	45-463
CG450-1560	120VAC	1090	every 10 minutes	90 seconds		45-460-1560
CG450-2060	.2017.0	1560 2060	every 15 minutes every 20 minutes	60 seconds 60 seconds		45-460-2060
CGT450-2060 for tankless coil		2090	every 20 minutes	90 seconds		45-480-2060

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Note: Additional probe options available on above models. Contact the factory for part numbers and pricing.

## LOW WATER CUT-OFF / FEEDER COMBINATIONS — For attachement to Gauge Glass Tappings

724WF	24VAC	Includes manifold casting, two probes, quick hook-up fittings,	2	45-724
711WF	120VAC	and feed valve assembly.	(35 PSI max)	45-711
724CF	24VAC	As described above – without feed valve assembly.	2	45-720
711CF	120VAC	1	(35 PSI max)	45-710



VXT-24	24VAC	Fully programmable delay before feed and feed settings	2	45-026
VXT-120	120VAC	(1 to 5 gallon). Digital feed counter.		45-122
VXTC	120VAC	Programmable feeder for commercial boilers. Includes water meter with 3/4" fittings, Y-strainer and flow restrictor.	4	45-125
VXTC-WF	120VAC	Commercial Feeder as described above without meter.		45-127



# PUMP CONTROLLER / LOW WATER CUT-OFF COMBINATIONS

250	120VAC	Controls boiler feed pump to maintain boiler water level. Provides low water cut-off protection. Includes manifold	ction. Includes manifold	45-250
250WC	IZUVAG	casting with three model EL1214 probes. <b>WC</b> model includes water column manifold model 1214C-1.	7	45-252



FS200	N/A	Replaces Model 44-100. General purpose liquid flow switch, 160 PSI, fits 1" to 6" pipe. General purpose enclosure.	Multi- purpose	44-200
FS204	N/A	General purpose liquid flow switch, 160 PSI, fits 1" to 6" pipe. NEMA 4 enclosure.	Multi- purpose	44-204



## **WATER METER**

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## HI WATER LIMIT & TANK LEVEL / PUMP CONTROLLERS

270SV	120VAC	High water limit control. Interrupts power to pump/feeder in high water condition. Provides alarm contacts. Includes EL1214-SV probe suitable for mounting in standard black tee.	Multi- purpose	45-270
727	120VAC	Maintains high level. Contacts make to start pump on low level. Includes one EL1214-SV, and one EL1214-RSV probe.	Multi- purpose	45-727
787	120VAC	Maintains low level. Contacts make to start pump on high level. Includes one EL1214-SV, and one EL1214-RSV probe.	Multi- purpose	45-787



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#### **HYDROSTAT ACCESSORIES**

MODEL	PART	
NUMBER	NUMBER	DESCRIPTION

		ELECTRO-WELL <sup>TM</sup> (for use with HydroStats to activate LWCO function)
EW-201	48-201	Standard Electro-Well, 3/4" NPT, standard nut
EW-202	48-202	Extended Electro-Well, 3/4" NPT, long nut for tankless coil boilers
EW-203	48-203	3/4" NPT, short insertion depth, standard nut
EW-204	48-204	3/4" NPT, long nut, short insertion length for off-center immersion well tapping in tankless coil plate
EW-205	48-205	3/4" NPT, extra short insertion length for tight inside casting clearance
EW-206	48-206	3/4" NPT, standard insertion depth, long nut (Buderus)
EW-221	48-221	Standard Electro-Well, 1/2" NPT, standard nut
EW-222	48-222	Extended Electro-Well, 1/2" NPT, long nut for tankless coil boilers
EW-223	48-223	1/2" NPT, short insertion depth, standard nut
EW-224	48-224	1/2" NPT, long nut, short insertion length for off-center immersion well tapping in tankless coil plate
EW-225	48-225	1/2" NPT, extra short insertion length for tight inside casting clearance
48-130-10	48-130-10	Brush for cleaning interior of immersion well





08-100	48-140	Activates Outdoor Reset and Warm Weather Shut-Down on HydroStat models 3200-Plus and 3250-Plus
0S-200 NEW	48-145	Wireless Outdoor Sensor Kit – Activates Outdoor Reset and Warm Weather Shut-Down on HydroStat models 3200-Plus and 3250-Plus



#### REMOTE MOUNTING KITS (for HydroStats)

48-121	48-121	Pipe Mounting Kit with 4' sensor cord.
48-104	48-104	Wall/Jacket Mounting Kit with 20' sensor cord.
48-103	48-103	Wall/Jacket Mounting Kit with 10' sensor cord.
48-102	48-102	Wall/Jacket Mounting Kit with 4' sensor cord.
48-105	48-105	Wall/Jacket Mounting Kit with 3' sensor cord.
48-101	48-101	Wall/Jacket Mounting Kit with 2' sensor cord.



#### **REPLACEMENT SENSORS**

48-3250-60	48-3250-60	12" replacement sensor for HydroStat
48-3250-59	48-3250-59	24" replacement sensor for HydroStat
48-3250-67	48-3250-67	3 ft. replacement sensor for HydroStat
48-3250-58	48-3250-58	4 ft. replacement sensor for Hydrostat
48-3250-57	48-3250-57	5 ft. replacement sensor for HydroStat
48-3250-56	48-3250-56	10 ft. replacement sensor for HydroStat



#### LIMITED MANUFACTURER'S WARRANTY

We warrant products manufactured by Hydrolevel Company to be free from defects in material and workmanship for a period of two years from the date of manufacture or one year from the date of installation, whichever occurs first. In the event of any claim under this warranty or otherwise with respect to our products which is made within such period, we will, at our option, repair or replace such products or refund the purchase price paid to us by you for such products. In no event shall Hydrolevel Company be liable for any other loss or damage, whether direct, incidental or consequential. This warranty is your EXCLUSIVE remedy and shall be IN PLACE OF any other warranty or guarantee, express or implied, including, without limitation, any warranty of MERCHANTABILITY or fitness for a particular purpose. This warranty may not be assigned or transferred and any unauthorized transfer or assignment thereof shall be void and of no force or effect.





# PARTS AND ACCESSORIES Minimum Order \$20.00

MODEL NUMBER	PART NUMBER	DESCRIPTION	
		MANIFOLD FITTINGS	
F0EM-1	45-300	1½" x 1½" x 3/4" C.I. Tee 160 PSI Max.	
F0EM-2	45-304	1" x 1" x 3/4" C.I. Tee 160 PSI Max.	
FOEM-3	45-305	1½" x 1½" x 3/4" C.I. Tee 160 PSI Max.	
1" H.P. Tee	45-322	1" x 1" x 3/4" High Pressure Tee (250 PSI Max.) for use with Model EL1214-SV probe	
1214C-1	45-301	1" x 1" x (3) 3/4" tappings for probe, sightglass & tri-cocks	
1214C-2	45-302	1" x 1" x 3/4" C.I. Tee 250 PSI Max.	
250C	45-303	1" x 1" x (3) 3/4" probe tappings. 250 PSI Max.	
711C	45-309	(2) 3/4" probe tappings C.I. 35 PSI Max.	
711C with fittings	45-310	711C casting as described above w/ quick hook-up fittings for gauge glass attachment.	



#### **PROBES**

EL1150	45-210	3/4" NPT, 115%" inside dimension. For 1150 Series controls.	
EL1214	45-214	3/4" NPT, 2%" inside dimension. Standard ceramic.	
EL1214-SV	45-215	3/4" NPT, 21/16" inside dimension. Short ceramic.	
EL1214-P	45-226	3/4" NPT, 2%" inside dimension. Standard ceramic. Long nut (111/16").	
EL1214-LSV	45-227	3/4" NPT, 21/16" inside dimension. Short ceramic.	
EL1214-R	45-224	EL1214 probe in J-box with metal cover.	
EL1220	45-220	1/2" NPT, 2%" inside dimension. Standard ceramic.	
EL1220-R	45-223	EL1220 probe in J-box with metal cover.	
EL1220-SV	45-221	1/2" NPT, 21/16" inside dimension. Short ceramic.	



COMMERCIAL/INDUSTRIAL CONTROLS
• Control box only • For field replacement • Probes and manifolds not included

711-CO	45-713	Low water cut-off. 120 VAC, 60 Hz. Supply Voltage.
724-C0	45-726	Low water cut-off. 24 VAC, 60 Hz. Supply Voltage.
250-CO	45-260	Low water cut-off. 120 VAC, 60 Hz. Supply Voltage.

## **PARTS**

45-531-54	Standard wire harness for Model 1100 LWCO
45-347	Wire harness for connecting Model 1100 to Burnham PVGA, PVCGA, Series 2, New Yorker CG-D
45-348	Wire harness for connecting Model 1100 to UTC Boiler Control Module
45-349	Wire harness for connecting Model 1100 to Lochinvar Knight and Solution, Weil-McLain Ultra
45-350	Wire harness for connecting Model 1100 to Burnham CHG, SCG, PVG, Crown Bimini
45-353	Wire harness for connecting Models 1100 and 1100M to vent damper plug on boiler control modules
45-337	Plug-in relay, DPDT for 250,967,727,787 controls
45-338	Plug-in relay, 3PDT for 711,724 controls
45-343	24 VAC Feed Valve Assembly
45-344	120 VAC Feed Valve Assembly
45-725	24 VAC Feed Valve Assembly in J-Box (for 724 Series Control)
45-715	120 VAC Feed Valve Assembly in J-Box (for 711 Series Control)
	45-347 45-348 45-349 45-350 45-353 45-337 45-338 45-343 45-344 45-725



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