

Technical Data Sheet

DW+ Indirect Fired Double-Wall Water Heater

The AERCO DW+ water heater is designed to satisfy potable water heating needs in commercial and institutional environments. The packaged system incorporates real-time, load tracking and responsive controls to maintain accurate hot water temperatures under diversified loads and can be fueled using steam.

Packaged with electronic controls, the heater maintains outstanding temperature control when operated under constant load conditions with variances held to $\pm 4^{\circ}$ F under normal load changes of up to 25% of water heater capacity. An integrated load monitoring system and high turndown control valve deliver accurate temperature control without the need for storage tanks, blending valves or other temperature averaging components. When packaged with the electronic control system, the heater can be remotely monitored and/or fully integrated with BAS software.

The DW+ is constructed of double-wall tubing — two distinct, copper tube walls separate the potable water from the heat transfer medium via a vented air gap. This continuous air path is atmospherically vented through a clearly labeled, visible, leak detection port. Unit construction meets all double-wall heat exchanger requirements as set forth by BOCA (National Plumbing Code), IAPMO (Uniform Plumbing Code) and NAPHCC (National Standard Plumbing Code) the three national associations which reference double-wall requirements All water wetted parts are 304 stainless steel, virgin Teflon, copper or copper alloy – the best materials available for longevity in even the most aggressive potable water supplies.

The unit's semi-instantaneous design (steam in tubes and water in shell) is compatible with low or high steam pressures. And installation is easy because of it small featurint (4 ft²) and decrease size. Tight temperature contri

because of it small footprint (4 ft²) and doorway size. Tight temperature control, low maintenance, longevity and overall reliability make the AERCO DW+ the most logical choice for any commercial or institutional water heating installation.



- Accurate temperature control ±4°F
- Compact foot print <4ft²
- Fully modulating variable primary input
- All stainless, TFE, copper or copper alloy wetted surfaces
- UL-listed as Double-wall Heat Exchanger for potable hot water use
- ASME- B&PV Code Sec. VIII, Div. 1 Stamped
- 20-year warranty on pressure vessel and integral demand anticipator

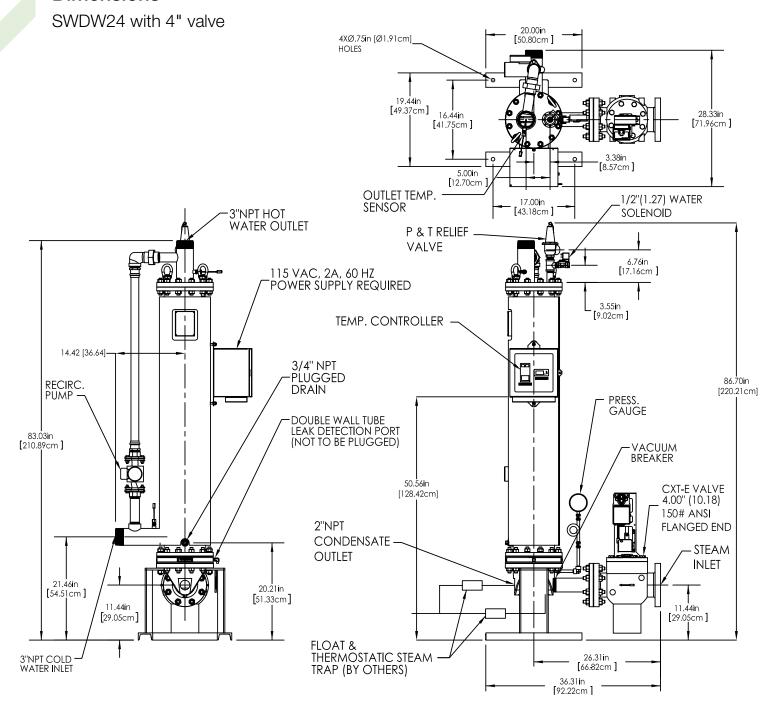
- Supports a variety of applications
 - 5 to 52 PSIG steam supply (subject to valve pressure drop)
 - Set point range 50°F to 205°F
 - Single or multiple installation
 - Ideal for new or retrofit
 - ASME Working Pressure Certified
 - 185 PSIG for DW-24 & DW-68
 - 180 PSIG for DW-45



SWDW24 with 1" thru 3" valves

SVVDVV24 Will 1 thru 3 valves		NG 75: [G1 01 am]	13.00in [33.02cm]	
		4XØ.75in [Ø1.91cm] HOLES	[constant]	1
CONTROL VALVE SIZE IN (CM)	DIM "A" IN./CM	15.44in [39.21cm]		28.33in [71.96cm]
1.00" (2.54) SCREWED END 1.25" (3.18) SCREWED END	25.9 / 65.8 25.6 / 65.0	12.44in [31.59cm]		
1.50" (3.81) SCREWED END	25.7 / 65.3	<u> </u>		3.37in
2.00" (5.08) SCREWED END 2.50" (6.35) 150# ANSI FLANGED END	27.2 / 69.1 31.4 / 79.8	OUTLET TEMP. —/ SENSOR		[8.57cm]
3.00" (7.62) 150# ANSI FLANGED END	32.3 / 82.0	5.00in [12.70cm]-		1 (0)(1 07)) (4 75)
	PT HOT		16.00in [40.64cm]	1/2"(1.27) WATER /SOLENOID
WÄ	TER OUTLET	P & T RELIEF — VALVE		
				6.76in
	115 V/ / POWE	AC, 2A, 60 HZ R SUPPLY REQUIRED		[17.16cm]
		·		3.55in
	TEMP.	CONTROLLER —		
14.42in [36.64cm]	П			
RECIRC.				84.28in [214.06cm]
PUMP —	Ш	+		PRESS.
80.47in				GAUGE
[204.38cm]	3/4" NPT PLUGGED			CXT-E VALVE
	DRAIN	48.00in [121.92cm]		SEE TABLE
3"NPT COLD	DOUBLE WA	ALL TUBE		
WATER INLET		PLUGGED)		VA CHUIM
	_ A	2" NPT		VACUUM BREAKER
		CONDENSATE————————————————————————————————————		
18.90in [48.00cm]	17.65in [44.83cm]			8.87in
8.87in [22.54cm]	1			8.87IN [22.54cm]
6.81in [17.30cm]-	FLOA			2 1/2"NPT
o.o.m. (17.00cm)	IIILK/	MOSTATIC STEAM ——/ (BY OTHERS)	DIM "A" SEE TABLE	STEAM INLET

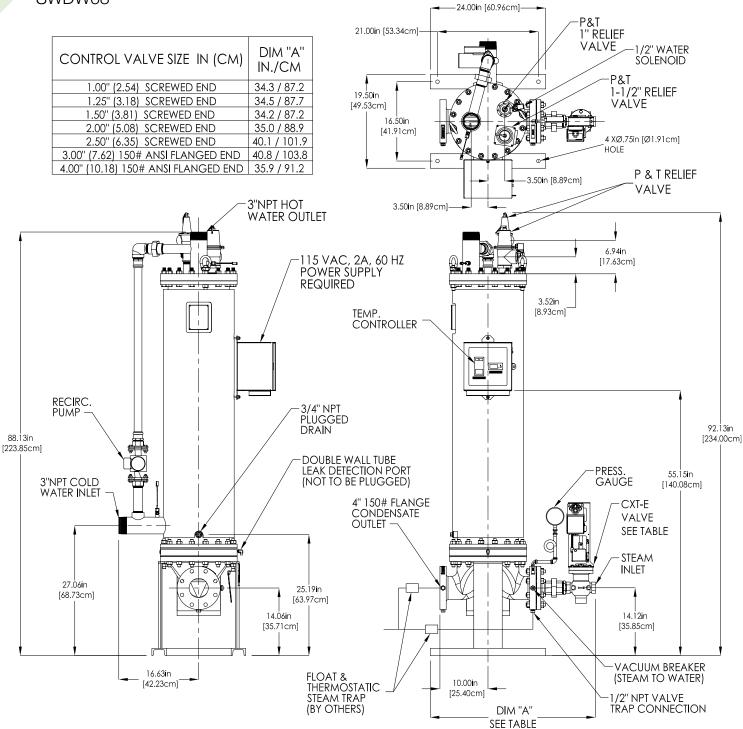
DIM "A" SEE TABLE



SWDW45

SWDW45	- 24 00in [40 04cm] -
	24.00in [60.96cm]
	21.00in [53.34cm]————————————————————————————————————
	3.63in [9.21cm] P8.T I' RELIEF VALVE
CONTROL VALVE SIZE IN (CM) DIM "A" IN./CM	4XØ.75in [Ø1.91cm] HOLES 1/2" WATER SOLENOID
1.00" (2.54) SCREWED END 34.3 / 87.2	P&T
1.25" (3.18) SCREWED END 34.5 / 87.7	P&T 1-1/2" RELIEF VALVE
1.50" (3.81) SCREWED END 34.2 / 87.2	19.50in 16.50in
2.00" (5.08) SCREWED END 35.0 / 88.9	[49.53cm] [41.91cm]
2.50" (6.35) SCREWED END 40.1 / 101.9	1.69in
3.00" (7.62) 150# ANSI FLANGED END 40.8 / 103.8	[4.29cm]
4.00" (10.18) 150# ANSI FLANGED END 35.9 / 91.2	
	OUTLET TEMP. SENSOR P & T RELIEF
3"NPT HOT	2.00in [5.08cm] VALVE
water outlet	
	<u>A</u>
115 V	AC, 2A, 60 HZ
/ POWI	
	-R SUPPLY REQUIRED 4.70in [19.93cm]
	TEMP
	CONTROLLER U SOLENOID
 	
RECIRC.	
TOM PLUGGED	
DRAIN	91.53in
[222.58cm] \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	LE WALL TUBE PRESS. [232.48cm]
LEAK I	DETECTION PORT GAUGE 55.15in
3"NPT COLD (NOT	O BE PLUGGED)
WATER INLET — T I / /	4" 150# FLANGE
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	OUTLET SEE TABLE
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	INLET INLET
27 Odin	
[68.73cm] 25.19in [63.97cr	
14.06in	14.06in
[35.71cm]	[35.71cm]
FLOAT	& VACUUM BREAKER
15.63in THERM	OSTATIC / VACOUM BREAKER
[39.69cm] STEAM (BY OTI	CEETABLE
(B) OII	HERS)
	- IRAP CONNECTION





Specifications

w/ Electronic Controls

Shell Side Pressure Drop: 7 PSIG @ max. rated flow

Ambient Operating Temperature: 0°F to 131°F

Electrical Requirements: 120/1/60 5 Amp / 220/1/50 5 Amp

Standby Amperage Draw: 2.5 Amp

High Limit "Tripped" Amperage Draw: 3.0 Amp

Max. Continuous Water Flow Rate

DW-24: 125 GPM

DW-45 or DW-68: 125 GPM

Max. Intermittent Flow Rate

DW-24: 180 GPM

DW-45 or DW-68: 250 GPM

Available Options

Dry contacts for remote "High Limit Tripped Status" indication. Pressure Relief Valves set up to 180 PSIG for high rise installations

Weight

DW-24: 750 lb (dry); 830 lb (wet) DW-45: 1150 lb (dry); 1270 lb (wet) DW-68: 1350 lb (dry); 1520 lb (wet)

Max. Allowable Working Press. (tube side): 52 PSIG

Max. Shell Side Operating Press.: 180 PSIG* Adjustable Temperature Control: up to 205°F Adjustable High Limit Control: up to 250°F

Water Connection Outlet/Inlet

DW-24: 3"MNPT / 3" MNPT

DW-45 & DW-68: 3"MNPT / 3" MNPT

Shell Volume (gal)

DW-24: 9.6 DW-45: 14.5 DW-68: 20.2

*Standard 150 PSIG, 210°F P&T relief valve supplied; consult AERCO representative for higher settings.

