



Phoenix Solar Water Heater with Gas-Fired Back-Up Submittal Sheet

JOB NAME:

LOCATION:

ARCH./ENGR.:

WHOLESALE:

MECH. CONTRACTOR:

MODEL NUMBER:

TYPE OF GAS:

BTU/HR INPUT LOW – HIGH FIRE:

NOTES:

High Efficiency Heat Exchanger

- Copper Nickel primary with 800 H and Copper Nickel secondary tube construction
- Gasketless heat exchanger design
- Internal Solar Heat Exchanger provides maximum heat transfer of solar energy

Stainless Steel Tank

- Tank construction of 316 L stainless steel
- High impact plastic jacket eliminates dents
- Auxiliary connection for Air Handler
- High limit water temperature protection
- 1" inlet and outlet domestic connection for 80 and 119 gallon models
- Temperature and pressure valve
- Top and bottom sensor for current temperature measurement inside vessel
- Built-in low water cut-off probe for protection

Combustion System

- Modulating burner with up to 5 to 1 turndown
- 96% thermal efficiency (All Models)
- High-Grade Inconel premix burner
- Spark ignition
- Fires on Natural or LP Gas with included conversion kit
- Dual flame monitoring (Spark and Flame probe)
- Flame stabilization monitoring – Automatic adjustment of firing rate to stabilize flame signal
- Two different outputs to match system design

Additional Features

- Vents in PVC - CPVC - stainless steel – ULC S636 flexible polypropylene vent liner (chimney lining only)
- Built –in condensation system
- Manual reset high limit
- Lead Free Compliant, as required by the Safe Drinking Water Act, Section 1417

Integrated Control System

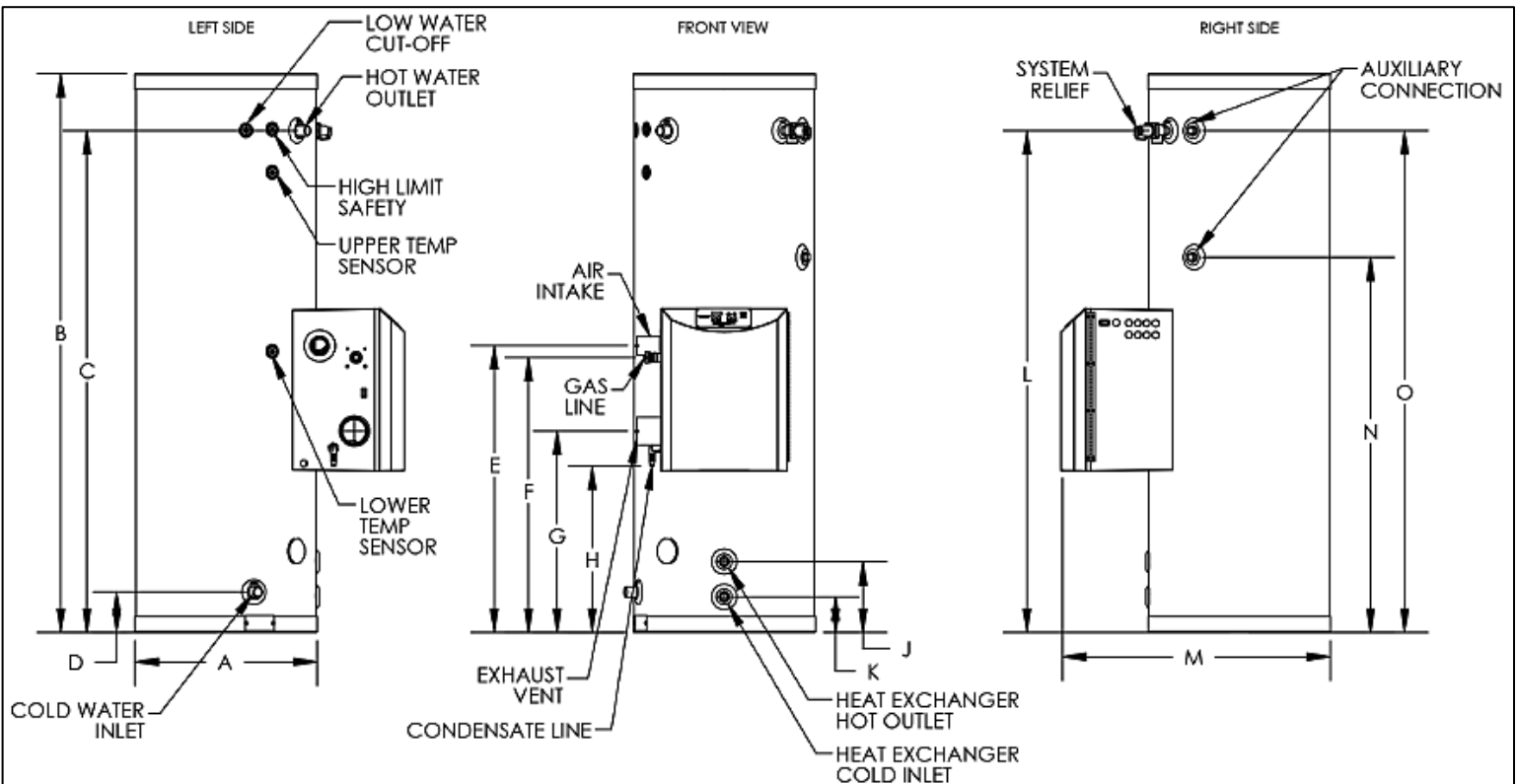
- Digital operating control with LCD display three character for temperature and system monitor - LCD indicators for appliance faults (red light) and operation (green light)
- System parameters password protected
- Outdoor reset
- 120 volt 5 amp electrical connection for condensate pump
- 0-10 volt input for Building Management System
- Dry contact for alarm output
- Outdoor sensor input
- Computer monitor cable allows user to monitor system parameters – fault history – graphical monitor of system operation

Certifications

- ETL Listed
- NSF Listed
- Low NOx emissions – SCAQMD Certified

Optional Equipment

- Outdoor Sensor (Part # 7250P-319)
- 2" PVC Concentric Vent Kit (Part # KGAVT0501CVT)
- 3" PVC Concentric Vent Kit (Part # KGAVT0601CVT)
- 2" Stainless Steel Outside Termination Vent Kit (Part # V500)
- 3" Stainless Steel Outside Termination Vent Kit (Part # V1000)
- 4" Stainless Steel Outside Termination Vent Kit (Part # V3000)
- Condensate Neutralizer (Part # 7450P-212)
- PC Connection Cable w / Software (Part # 7250P-738)



PHOENIX SOLAR WATER HEATER															
MODELS*	GAL.	A	B	C	D	E	F	G	H	J	K	L	M	N	O
PH130-80S	80	23"	72"	65"	5-3/4"	37-1/2"	36"	27"	22-1/2"	9-3/4"	5-1/4"	64-3/4"	34"	48-3/4"	64-3/4"
PH130-119S	119	27"	74"	66"	7-1/4"	38-1/4"	36-3/4"	27-1/4"	23-1/4"	11-1/2"	7"	66-1/4"	38-1/4"	49-1/4"	66-1/4"
PH199-80S	80	23"	72"	65"	5-3/4"	37-1/2"	36"	27"	22-1/2"	9-3/4"	5-1/4"	64-3/4"	34"	48-3/4"	64-3/4"
PH199-119S	119	27"	74"	66"	7-1/4"	38-1/4"	36-3/4"	27-1/4"	23-1/4"	11-1/2"	7"	66-1/4"	38-1/4"	49-1/4"	66-1/4"

PHOENIX SOLAR WATER HEATER										
MODELS	GAL.	BTU'S	AIR INTAKE/ EXHAUST VENT SIZE	WATER INLET/ OUTLET SIZE	HEAT EXCHANGER SIZE	AUXILIARY CONN.	GAS LINE CONN.	SYSTEM RELIEF PIPE SIZE	SHIPPING WEIGHT	
PH130-80S	80	130,000	2"	1" NPT	1"	1" FNPT	3/4"	3/4"	245 LBS.	
PH130-119S	119	130,000	2"	1" NPT	1"	1" FNPT	3/4"	3/4"	415 LBS.	
PH199-80S	80	199,000	3"	1" NPT	1"	1" FNPT	3/4"	3/4"	245LBS	
PH199-119S	119	199,000	3"	1" NPT	1"	1" FNPT	3/4"	3/4"	415 LBS	

* MODEL NUMBER MAY HAVE A SUFFIX DESIGNATION OF "LP" FOR PROPANE GAS
 ALL DIMENSIONS ARE APPROXIMATE

LP-204-L
 01/18/16

PERFORMANCE SPECIFICATIONS FOR PHOENIX MODELS

BTUH	Efficiency	Temperature Rise											
		(°F)	40	50	60	70	80	90	100	110	120	130	140
		(°C)	22	28	33	39	44	50	56	61	67	72	78
100,000	96%	GPH	298	240	202	173	152	136	123	110	101	94	88
		GPM	5	4	3.4	2.9	2.5	2.25	2	1.8	1.7	1.6	1.5
		LPH	1128	908	765	655	575	515	466	416	382	356	333
		LPM	18.8	15.1	12.75	10.9	9.6	8.6	7.8	6.9	6.4	5.9	5.6
130,000	96%	GPH	384	309	260	222	195	175	158	141	130	120	112
		GPM	6.4	5.2	4.3	3.7	3.25	2.9	2.6	2.4	2.2	2	1.9
		LPH	1454	1170	984	840	738	662	598	534	492	454	424
		LPM	24.25	19.5	16.4	14	12.3	11	10	8.9	8.2	7.6	7
160,000	96%	GPH	470	378	317	271	238	213	192	173	159	147	137
		GPM	7.8	6.3	5.3	4.5	4	3.6	3.2	2.9	2.7	2.5	2.3
		LPH	1779	1431	1200	1026	901	806	727	655	602	556	519
		LPM	29.7	23.9	20	17.1	15	13.4	12.1	10.9	10	9.3	8.7
199,000	96%	GPH	582	468	392	335	294	263	237	213	196	181	169
		GPM	9.7	7.8	6.5	5.6	4.9	4.4	4	3.6	3.3	3	2.8
		LPH	2203	1772	1484	1268	1113	996	897	806	742	685	640
		LPM	36.7	29.5	24.7	21.1	18.6	16.6	15	13.4	12.4	11.4	10.7

Recovery on rating plate is based at 94% thermal efficiency at 70° Fahrenheit rise, as required by ANSI