

## P-K STORM®

**Competition Comparison Guide** 





# LOW CAPACITY\* COMPETITIVE MATRIX STORM® vs. COMPETITION

	PATTERSO	LOCHNIVAR					
STORM ST1250	STORM ST1500	STORM ST1750	STORM ST2000	CREST FB1251	CREST FB1501	CREST FB1751	CREST FB2001
316L	316L	316L	316L	316L	316L	316L	316L
97%	97%	97%	97%	96%	96%	96%	96%
1,250,000	1,500,000	1,750,000	2,000,000	1,250,000	1,500,000	1,750,000	2,000,000
1,212,500	1,455,000	1,697,500	1,940,000	1,203,000	1,380,000	1,684,000	1,840,000
10:1 MECHANICAL*	10:1 MECHANICAL*	10:1 MECHANICAL*	10:1 MECHANICAL*	20:1	25:1	25:1	25:1
WATERTUBE	WATERTUBE	WATERTUBE	WATERTUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE
NG	NG	NG	NG	NG,LP, DF	NG,LP, DF	NG,LP, DF	NG,LP, DF
41	40	43	41	18	25	25	25
OUTDOOR CAPABLE	OUTDOOR CAPABLE	OUTDOOR CAPABLE	OUTDOOR CAPABLE	INDOOR	INDOOR	INDOOR	INDOOR
208/240 1PH 60HZ	208/240V 1PH 60HZ	208/240V 1PH 60HZ	208/240V 1PH 60HZ	120V 1PH 60HZ	120V 1PH 60HZ	120V 1PH 60HZ	120V 1PH 60HZ
	PATTERSO	ON KELLEY		LOCHNIVAR			
62"	62"	62"	62"	56.5"	67.75"	66.25"	66.5"
34"	34"	34"	34"	30"	30"	30"	30"
59"	59"	59"	59"	78"	78"	78"	78"
2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"	4"	4"	4"
8"	8"	8"	8"	6"	8"	8"	8"
PATTERSON KELLEY				LOCHNIVAR			
1,070	1,150	1,220	1,220	1,648	1,961	2,017	2,087
	\$T1250  316L  97%  1,250,000  1,212,500  10:1 MECHANICAL*  WATERTUBE  NG  41  OUTDOOR CAPABLE  208/240 1PH 60HZ  62"  34"  59"  2 1/2"  8"	STORM ST1250         STORM ST1500           316L         316L           97%         97%           1,250,000         1,500,000           1,212,500         1,455,000           10:1 MECHANICAL*         MATERTUBE           NG         NG           41         40           OUTDOOR CAPABLE         OUTDOOR CAPABLE           208/240 1PH 60HZ         208/240V 1PH 60HZ           62"         62"           34"         34"           59"         59"           21/2"         21/2"           8"         8"           PATTERSO	ST1250         ST1500         ST1750           316L         316L         316L           97%         97%         97%           1,250,000         1,500,000         1,750,000           1,212,500         1,455,000         1,697,500           10:1 MECHANICAL*         MECHANICAL*         WATERTUBE           WATERTUBE         WATERTUBE         WATERTUBE           NG         NG         NG           41         40         43           OUTDOOR CAPABLE         OUTDOOR CAPABLE         OUTDOOR CAPABLE           208/240 1PH 60HZ         208/240V 1PH 60HZ         208/240V 1PH 60HZ           62"         62"         62"           34"         34"         34"           59"         59"         59"           21/2"         21/2"         21/2"           8"         8"         8"	STORM ST1250         STORM ST1500         STORM ST1750         STORM ST2000           316L         316L         316L         316L           97%         97%         97%         97%           1,250,000         1,500,000         1,750,000         2,000,000           1,212,500         1,455,000         1,697,500         1,940,000           10:1 MECHANICAL*         MACHANICAL*         WATERTUBE         WATERTUBE           NG         NG         NG         NG           41         40         43         41           OUTDOOR CAPABLE         CAPABLE         CAPABLE         CAPABLE           208/240 1PH 60HZ         208/240V 1PH 60HZ         208/240V 1PH 60HZ         208/240V 1PH 60HZ           62"         62"         62"         62"           34"         34"         34"         34"           59"         59"         59"         59"           21/2"         21/2"         21/2"         21/2"           8"         8"         8"	STORM ST1250         STORM ST1500         STORM ST1750         STORM ST2000         CREST FB1251           316L         316L         316L         316L         316L         316L           97%         97%         97%         96%         1,250,000         1,250,000         1,250,000         1,250,000         1,250,000         1,250,000         1,203,000 <td< td=""><td>  STORM   STORM   STORM   STORM   STORM   ST1250   ST1500   ST1750   ST2000   FB1251   FB1501    </td><td>  STORM STORM STORM STORM ST1250   STORM ST1250   ST1250</td></td<>	STORM   STORM   STORM   STORM   STORM   ST1250   ST1500   ST1750   ST2000   FB1251   FB1501	STORM STORM STORM STORM ST1250   STORM ST1250   ST1250

### **STORM® INNOVATIONS**



**SMARTER STAINLESS STEEL DESIGN** FOR A LONGER LIFE AND GREATER DURABILITY



#### **LOWER WATER PRESSURE DROPS**

REDUCES COST BY REQUIRING SMALLER
PUMPS AND LESS ELECTRICAL ENERGY



**FRONT DOOR ACCESSIBILITY** REDUCES REPAIR AND MAINTENANCE COSTS



**PERFECT FOR** NEW INSTALLATION AND RETROFIT PROJECTS



**ENERGY EFFICENCY** CAN SIGNIFICANTLY LOWER THE TOTAL COST OF OWNERSHIP OVER THE LIFE OF THE EQUIPTMENT



**INTEGRATES SEAMLESSLY** WITH YOUR EXISTING HYDRONIC SYSTEM

## PATTERSON-KELLEY 7/8

		`	$\underline{\hspace{0.1cm}}$			
AEI	RCO	LA	ARS	CLEAVERBROOKS		
BENCHMARK 1500	BENCHMARK 2000	MAGNATHERM LL1600	MAGNATHERM LL2000	CLEARFIRE CFE1500	CLEARFIRE CFE2000	
439	439	439 & 316	439 & 316	UNS S32101	UNS S32101	
94.6%	94.6%	95%	95%	94%	94%	
1,500,000	2,000,000	1,600,000	2,000,000	1,500,000	2,000,000	
1,425,000	1,900,000	1,520,000	1,895,000	1,320,000	1,880,000	
20:1	20:1	5:1	5:1	5:1	5:1	
FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE	
NG,LP, DF	NG,LP, DF	NG,LP	NG,LP	NG,LP	NG,LP	
25	25	N/A	N/A	24	31	
INDOOR	INDOOR	OUTDOOR CAPABLE	OUTDOOR CAPABLE	INDOOR	INDOOR	
120V 1PH 60HZ	208V 3PH 60HZ	MULTIPLE CONFIGURATIONS	MULTIPLE CONFIGURATIONS	115V 1PH 60HZ	115V 1PH 60HZ	
AEI	RCO	LA/	ARS	CLEAVERBROOKS		
43.6"	43.6"	38"	38"	56"	56"	
28"	28"	29.3"	29.3"	35.8"	35.8"	
78"	78"	79.8"	79.8"	79.9"	79.9"	
4"	4"	3"	3"	4"	4"	
6"	8"	6"	8"	8"	8"	
AERCO		LAA	ARS	CLEAVER	BROOKS	
1,406	1,500	1,390	1,390	1,861	2,041	
1,606	1,700	1,562	1,562	2,746	2,816	





<sup>\*</sup>Mechanical turndown maintains efficiency through the turndown range, unlike excess air that degrades efficiency

### **NURO® TOUCH-SCREEN CONTROL SYSTEM**

The NURO® Touch-Screen Control System with NURO® Connect provides the most intuitive interface in the industry, coming **standard on all STORM® models**. It monitors and modulates the combustion and ignition of the boiler to maintain the desired outlet temperature. The lead/lag setup and boiler start rotation ensures run times are equally distributed across each unit in the system, extending the life of the boilers.

Whether using a desktop or mobile device, NURO® Connect allows for quick, easy modification of system parameters and optimal efficiency.



# HIGH CAPACITY\* COMPETITIVE MATRIX STORM® vs. COMPETITION

BOILER RATINGS	PATTERSON KELLEY			LOCHNIVAR					
	STORM ST2500	STORM ST3000	STORM ST3500	STORM ST4000	CREST FB2501	CREST FB3001	CREST FB3501	CREST FB4001	BENCH- MARK 2500
MATERIAL	316L	316L	316L	316L	316L	316L	316L	316L	439
EFFICIENCY	97%	97%	97%	97%	96%	96%	96%	96%	93.5%
BTU	2,500,000	3,000,000	3,500,000	4,000,000	2,500,000	3,000,000	3,500,000	4,000,000	2,500,000
MAX BTU/HR OUTPUT	2,425,000	2,910,000	3,395,000	3,880,000	2,400,000	2,883,000	3,364,000	3,842,000	2,360,000
TURNDOWN RATIO	10:1 MECHANICAL*	10:1 MECHANICAL*	10:1 MECHANICAL*	10:1 MECHANICAL*	20:1	20:1	20:1	12:1	15:1
STYLE	WATERTUBE	WATERTUBE	WATERTUBE	WATERTUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE
NATURAL GAS, PROPANE OR DUAL FUEL	NG	NG	NG	NG	NG,LP, DF	NG,LP,DF	NG,LP,DF	NG,LP,DF	NG,LP,DF
MIN FLOW RATE (GPM)	62	74	86	99	25	25	45	45	25
INDOOR / OUTDOOR	INDOOR	INDOOR	INDOOR	INDOOR	INDOOR	INDOOR	INDOOR	INDOOR	INDOOR
ELECTRICAL REQUIREMENTS	220V/480V 3PH 60HZ	220V/480V 3PH 60HZ	220V/480V 3PH 60HZ	220/480V 3PH 60HZ	208V 3PH 60HZ	208V 3PH 60HZ	208V 3PH 60HZ	480V 3PH 60HZ	208V 3PH 60HZ
DIMENSIONS		PATTERSO	N KELLEY		LOCHNIVAR				
DEPTH(IN)	68"	68"	90"	90"	56.5"	67.75"	66.25"	66.5"	56"
WIDTH (IN)	44"	44"	44"	44"	30"	30"	30"	30"	28"
HEIGHT (IN)	67"	67"	67"	67"	78"	78"	78"	78"	78"
WATER CONNECTION	4"	4"	4"	4"	3"	4"	4"	4"	4"
VENT / AIR INTAKE	12"	12"	12"	12"	6"	8"	8"	8"	8"
WIDTH		PATTERSON KELLEY			LOCHNIVAR				
DRY (LBS)	2,200	2,200	2,600	2,600	2,577	2,881	3,218	3,805	2,000
OPERATING (LBS)	2,329	2,329	2,772	2,772	3,600	3,900	4,600	5,200	2,200

### **STORM® INNOVATIONS**



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**INTEGRATES SEAMLESSLY** WITH YOUR EXISTING HYDRONIC SYSTEM

AERCO			LAA	\DC	CLEAVERBROOKS			
BENCH- MARK 3000	BENCH- MARK 4000	LL MAGNA THERM 2500	LL MAGNA THERM 3000	LL MAGNA THERM 3500	LL MAGNA THERM 4000	CLEARFIRE CFE2500	CLEARFIRE CFE3000	CLEARFIRE CFE4000
439	439	439 & 316	439 & 316	439 & 316	439 & 316	UNS S32101	UNS S32101	UNS S32101
93.5%	94.1%	95%	95%	95%	95%	95%	95%	95%
3,000,000	4,000,000	2,500,000	3,000,000	3,500,000	4,000,000	2,500,000	3,000,000	4,000,000
2,880,000	3,920,000	2,374,000	2,814,000	3,276,000	3,800,000	2,350,000	2,820,000	3,760,000
15:1	15:1	5:1	5:1	5:1	5:1	10:1	10:1	10:1
FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE	FIRETUBE
NG,LP,DF	NG	NG,LP	NG,LP	NG,LP	NG,LP	NG,LP	NG,LP	NG,LP
25	35	N/A	N/A	N/A	N/A	39	47	63
INDOOR	INDOOR	OUTDOOR CAPABLE	OUTDOOR CAPABLE	OUTDOOR CAPABLE	OUTDOOR CAPABLE	INDOOR	INDOOR	INDOOR
460V 3PH 60HZ	460V 3PH 60HZ	MULTIPLE CONFIGURATIONS	MULTIPLE CONFIGURATIONS	MULTIPLE CONFIGURATIONS	MULTIPLE CONFIGURATIONS	208V 3PH 60HZ	208V 3PH 60HZ	460V 3PH 60HZ
AERCO		LAARS			CLI	EAVERBROC	KS	
56"	63.5"	41.5"	41.5"	52"	52"	56"	56"	68.4"
28"	34"	30.8"	30.8"	34.5"	34.5"	35.7	35.7"	48.4"
78"	78.2"	87"	87"	97"	97"	95.2"	95.2"	91.2"
4"	6"	3"	3"	4"	4"	4"	4"	5"
8"	10"	8"	10"	10"	12"	8"	8"	12"
AERCO		LAARS			CLI	EAVERBROO	KS	
2,170	2,200	1,985	1,985	2,278	2,748	2,541	2,535	3,915
2,300	2,350	2,039	2,039	2,742	2,742	3,470	3,425	5,305

\*Mechanical turndown maintains efficiency through the turndown range, unlike excess air that degrades efficiency

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## **HOW DO WE COMPARE?**

	PATTERSON KELLEY	LOCHNIVAR	AERCO	LAARS	CLEAVER BROOKS
EFFICIENCY UP TO 97%	<b>V</b>	X	X	Χ	X
MINUMUM 10:1 TURNDOWN ON ALL LISTED MODELS	<b>✓</b>	<b>✓</b>	<b>√</b>	X	X
OUTDOOR CAPABILITIES AVAILABLE	<b>/</b>	X	X	<b>V</b>	X
TOUCHSCREEN CONTROL SYSTEM STANDARD ON ALL LISTED MODELS	<b>/</b>	<b>/</b>	X	<b>V</b>	<b>/</b>
EASY REMOVABLE PANELS ON MULTIPLE SIDES FOR QUICK REPAIR ACCESS	<b>✓</b>	<b>✓</b>	<b>✓</b>	X	<b>\</b>

BASED ON MODEL NUMBERS ABOVE ONLY.

## **STORM® CERTIFICATIONS**



ASME Code Section IV

**Applies to Heating Boilers** 



COMPLIANT WITH ALL MAJOR REBATE PROGRAMS





ANSI Z21.13 CSA 4.9



Canada (Gas Appliances) U.S. (Gas Appliance)

\*MODELS ST1250-ST2000. OTHER MODELS PENDING

#### PLEASE REVIEW OUR STORM DOCUMENTS FOR ANSWERS TO SPECIFIC PRODUCT QUESTIONS

ANY ABOVE SPECIFICATIONS MAY CHANGE WITHOUT NOTICE

Patterson-Kelley, a division of SPX Corporation, is the leading provider and producer of commercial hot water heating solutions. With over 135 years of experience and an innovative R&D pipeline, we provide a full line of condensing and non-condensing boilers, semi-instantaneous water heaters, and an array of commercial boiler and water heating products including gas fired, dual fuel and outdoor boilers.

Patterson-Kelley, LLC

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