

**CALIFORNIA  
ECONOMIZER**  
The Zoning Systems Company

**Zoning**

For more information call:  
**800-228-2966**  
**714-898-9963**

or visit our website at:  
**WWW.  
hvacomfort.com**

## California Economizer System 2000

Lennox List Pricing - 2/1/00

	LIST PRICE	LENNOX CAT. NO.	SHIP WT. LBS.*	PART NO.
<b>1. CONTROLLERS (Supports up to 20 zones)</b>				
A. System 2000 Gas/Electric Controller	575.00	98N48	4	101ASSB
B. Heat Pump with Electric Heat and L.A.S.	625.00	30N51	4	101ACBHP
<b>2. CAPACITY CONTROL</b>				
A. Hi-Lo LAT Capacity Control	124.00	87N87	2	TRLAT
B. Digital Capacity Control (G/E only)	277.00	46N54	2	101CAPGE
C. 2 Stage Modulating G/E Control	330.00	87N88	2	CAPL-2
D. 3 or 4 Stage Modulating G/E Control	650.00	87N89	3	CAPL-4
<b>3. THERMOSTATS</b>				
A. Digital	120.00	45N83	1	101DIGI
B. Digital with Remote Sensor	196.00	34N66	1	101DIGIRS
C. Mechanical	76.00	30N72	1	101ACT
D. Programmable	147.00	30N74	1	101PROG
E. Digital Two Stage	135.00	46N10	1	101DIGITS
<b>4. BYPASS DAMPERS</b>				
A. BAROMETRIC BYPASS (for small systems 5 tons and under)				
Round Barometric Bypass 9", 10", 12"	154.00	30N54, 55, 56	6	101ABBDsize
14"	186.00	34N65	8	101ABBD14
Rectangular Barometric Bypass 12x8, 12x10, 12x12	162.00	70N15, 66N06, 70N16	8	RBBWxH
20x8, 20x10, 20x12	162.00	70N17, 70N18, 70N19	8	RBBWxH
B. ROUND ELECTRONIC BYPASS (for systems over 5 tons)				
6" Diameter	337.00	28N01	4	STMPD 06
8" Diameter	359.00	28N02	5	STMPD 08
10" Diameter	375.00	28N03	7	STMPD 10
12" Diameter	375.00	28N04	9	STMPD 12
14" Diameter	393.00	28N05	11	STMPD 14
16" Diameter	408.00	28N06	17	STMPD 16
C. RECTANGULAR ELECTRONIC BYPASS (See Rectangular Bypass Damper price list STCD)				
D. BYPASS CONTROLLER (for use with the Electronic Bypass)				
Static Pressure Sensor required to operate Electronic Bypass	130.00	30N63	3	101ASPC
<b>5. LOW PRESSURE ROUND ZONE DAMPERS (Recommended on equipment 5 tons and under)</b>				
6" Diameter	198.00	31N13	4	101ARZD 06
7" Diameter	198.00	31N14	4	101ARZD 07
8" Diameter	205.00	31N15	4	101ARZD 08
9" Diameter	218.00	31N16	6	101ARZD 09
10" Diameter	218.00	31N17	7	101ARZD 10
12" Diameter	247.00	31N18	9	101ARZD 12
14" Diameter	250.00	31N19	11	101ARZD 14
16" Diameter	298.00	31N20	17	101ARZD 16
<b>6. MEDIUM PRESSURE ROUND ZONE DAMPERS (Recommended on equipment over 5 tons)</b>				
6" Diameter	337.00	30N64	7	101AMPD 06
8" Diameter	359.00	30N65	7	101AMPD 08
10" Diameter	375.00	30N66	9	101AMPD 10
12" Diameter	375.00	30N67	11	101AMPD 12
14" Diameter	393.00	30N68	14	101AMPD 14
16" Diameter	408.00	30N69	18	101AMPD 16
18" Diameter	473.00	30N70	24	101AMPD 18
<b>7. LOW, MEDIUM &amp; HEAVY DUTY RECTANGULAR ZONE DAMPERS</b>				
See Rectangular Damper price list 101ARTD, 101MRTD or 101CD				
<b>8. TRANSFORMERS</b>				
A. 150 VA foot mounted transformer	189.00	30N75	6	101ARTN-150
B. 250 VA foot mounted transformer	286.00	30N76	9	101ARTN-250

\*Actual weight. Dimensional weights may vary.

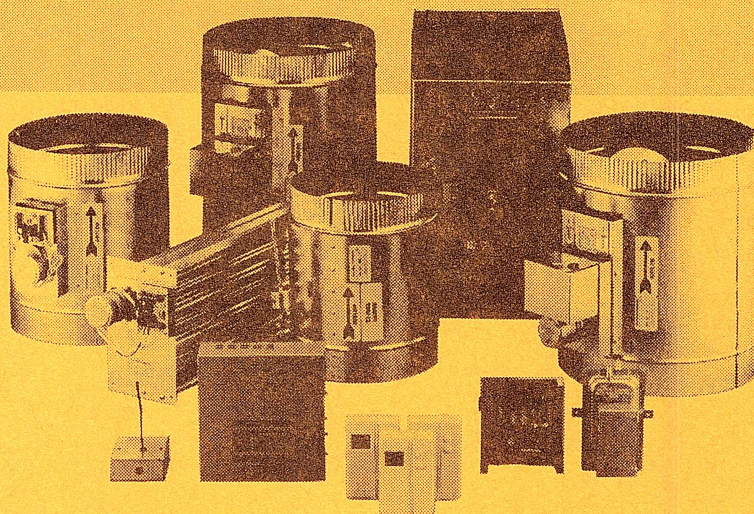
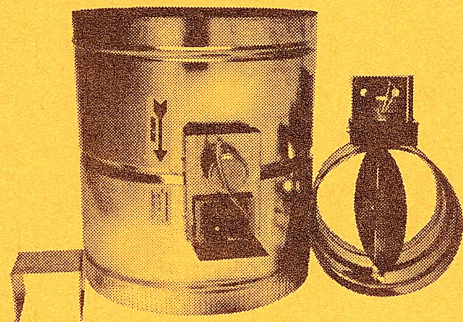
For shipments requiring immediate processing or priority shipping add 10% to quoted prices. All prices are in U.S. Dollars.

TERMS: Net 30 days from day of invoice. FREIGHT POLICY: Paid by buyer F.O.B. Huntington Beach, CA.





**California Economizer**  
The Zoning Systems Company



### Low Pressure Rectangular Supply Dampers – 101ARTD Lennox List Pricing – 2/1/00

Two-wire 24Volt AC Power Close / Spring Open - For use with System 1000 or System 2000. Use on Systems 5 tons and under with applications up to .5" of static pressure at the damper.

**To order Low Pressure use:**

Lennox Cat. # plus W x H  
W x H E. G. for 10 x 8 =  
Order 30N80 10 x 8.

\* Stock damper orders of 15 or fewer pieces will ship within 48 hours following order processing. Larger rectangular orders, non-stock items, or odd size dampers available with three-week lead time.

**To order Medium Pressure use:**

Lennox Cat. # plus W x H  
W x H E. G. for 10 x 8 =  
Order 31N36 10 x 8.

All motors are normally mounted on the "H" height side of the damper. To bottom mount or locate the motor on the "W" width side, place your order as shown above - Cat. No. W x H, and indicate **bottom mount** on your order. To bottom mount motor, add 10% to quoted prices.

← WIDTH IN INCHES →

HEIGHT IN INCHES		8	10	12	14	16	18	20	22	24
	6		30N77 244.00	30N79 250.00	30N82 259.00					
8		30N78 250.00*	30N80 259.00*	30N83 278.00*	30N86 285.00*	30N90 293.00*	30N94 300.00*	30N97 288.00*		31N05 303.00*
10			30N81 269.00*	30N84 290.00*	30N87 296.00*	30N91 296.00*	30N95 300.00*	30N98 307.00*	31N02 322.00	31N06 322.00*
12				30N85 296.00*	30N88 307.00	30N92 307.00*	30N96 318.00*	30N99 318.00*		31N07 400.00*
14					30N89 318.00	30N93 322.00			31N03 351.00	
16								31N00 351.00	31N04 370.00	

### Medium Pressure Rectangular Dampers – 101MRTD Lennox List Pricing – 2/1/00

3-Wire 24Volt AC Run Open / Run Closed - For use with System 1000 or System 2000  
Use on Systems 7.5 tons and under with up to 1" of static pressure at the damper.

← WIDTH IN INCHES →

HEIGHT IN INCHES		8	10	12	14	16	18	20	22	24
	6		31N26 372.00	31N27 372.00	31N28 372.00	31N29 378.00	31N30 384.00	31N31 391.00	31N32 397.00	31N33 427.00
8		31N35 372.00	31N36 372.00	31N37 372.00	31N38 378.00	31N39 384.00	31N40 391.00	31N41 397.00	31N42 427.00	31N43 435.00
10			31N44 384.00	31N45 384.00	31N46 391.00	31N47 394.00	31N48 403.00	31N49 421.00	31N50 441.00	31N51 449.00
12				31N52 391.00	31N53 400.00	31N54 403.00	31N55 416.00	31N56 446.00	31N57 457.00	31N58 465.00
14					31N59 410.00	31N60 413.00	31N61 425.00	31N62 460.00	31N63 468.00	31N64 479.00
16						31N65 425.00	31N66 437.00	31N67 471.00	31N68 482.00	31N69 494.00
18							31N70 449.00	31N71 484.00	31N72 498.00	31N73 512.00
20										31N74 528.00

**TERMS:**

Net 30 days from date of invoice.

**FREIGHT POLICY:**

Paid by buyer,  
F.O.B. Huntington Beach, CA.



# Heavy Duty Rectangular Supply Dampers – 101CD

Lennox List Pricing – 2/1/00

← WIDTH IN INCHES →

	8	10	12	14	16	18	20	22	24	28	32	36	40	44	48	
HEIGHT IN INCHES ↑	8	31N75 519.00	31N76 519.00	31N77 519.00	31N78 524.00	31N79 530.00	31N80 536.00	31N81 541.00	31N82 571.00	31N83 578.00	31N84 595.00	31N85 611.00	31N86 625.00	31N87 642.00	31N88 658.00	31N89 675.00
	10	530.00	31N90 530.00	31N91 530.00	31N92 536.00	31N93 539.00	31N94 548.00	31N95 581.00	31N96 583.00	31N97 592.00	31N98 608.00	31N99 625.00	32N00 641.00	32N01 657.00	32N02 674.00	32N03 690.00
	12	536.00	536.00	536.00	32N04 545.00	32N05 548.00	32N06 560.00	32N07 590.00	32N08 599.00	32N09 608.00	32N10 622.00	32N11 637.00	32N12 655.00	32N13 671.00	32N14 688.00	32N15 705.00
	14	551.00	551.00	545.00	32N17 553.00	32N18 557.00	32N19 569.00	32N20 601.00	32N21 611.00	32N22 620.00	32N23 637.00	32N24 649.00	32N25 670.00	32N26 687.00	32N27 704.00	32N28 720.00
	16	607.00	607.00	609.00	610.00	32N29 612.00	32N30 612.00	32N31 613.00	32N32 622.00	32N33 634.00	32N34 652.00	32N35 664.00	32N36 685.00	32N37 701.00	32N38 718.00	32N39 734.00
	18	645.00	651.00	656.00	662.00	662.00	32N40 673.00	32N41 704.00	32N42 713.00	32N43 717.00	32N44 722.00	32N45 722.00	32N46 726.00	32N47 739.00	32N48 744.00	32N49 750.00
	20	657.00	663.00	672.00	675.00	678.00	683.00	32N50 719.00	32N51 728.00	32N52 734.00	32N53 736.00	32N54 740.00	32N55 739.00	32N56 750.00	32N57 753.00	32N58 760.00
	24	671.00	677.00	686.00	688.00	717.00	739.00	764.00	772.00	32N67 792.00	32N68 807.00	32N69 821.00	32N70 838.00	32N71 845.00	32N72 874.00	32N73 874.00
	28	807.00	810.00	813.00	819.00	824.00	833.00	839.00	858.00	879.00	882.00	32N74 902.00	32N75 916.00	32N76 948.00	32N77 952.00	32N78 960.00
	32	825.00	828.00	834.00	838.00	845.00	853.00	863.00	876.00	902.00	914.00	32N81 926.00	32N82 932.00	32N83 983.00	32N84 987.00	32N85 992.00
	36	860.00	860.00	868.00	868.00	876.00	880.00	884.00	902.00	916.00	926.00	960.00	32N86 965.00	32N87 1014.00	32N88 1026.00	32N89 1048.00
	40	912.00	921.00	927.00	930.00	931.00	933.00	938.00	970.00	982.00	992.00	1014.00	1026.00	32N90 1048.00	32N91 1157.00	32N92 1213.00
	44	959.00	965.00	970.00	977.00	986.00	992.00	1009.00	1026.00	1034.00	1043.00	1053.00	1066.00	1103.00	32N93 1268.00	32N94 1279.00
	48	1026.00	1032.00	1045.00	1052.00	1071.00	1103.00	1130.00	1157.00	1180.00	1185.00	1191.00	1213.00	1235.00	1279.00	32N95 1323.00

# Heavy Duty Rectangular Bypass Dampers – STCD

Lennox List Pricing – 2/1/00

← WIDTH IN INCHES →

	8	10	12	14	16	18	20	22	24	28	32	36	40	44	48	
HEIGHT IN INCHES ↑	8	28N46 519.00	28N47 519.00	28N48 519.00	28N49 524.00	28N50 530.00	28N51 536.00	28N52 541.00	28N53 571.00	28N54 578.00	28N55 595.00	28N56 611.00	28N57 625.00	28N58 642.00	28N59 658.00	28N60 675.00
	10	530.00	28N61 530.00	28N62 530.00	28N63 536.00	28N64 539.00	28N65 548.00	28N66 581.00	28N67 583.00	28N68 592.00	28N69 608.00	28N70 625.00	28N71 641.00	28N72 657.00	28N73 674.00	28N74 690.00
	12	536.00	536.00	536.00	28N75 545.00	28N76 548.00	28N77 560.00	28N78 590.00	28N79 599.00	28N80 608.00	28N81 622.00	28N82 637.00	28N83 655.00	28N84 671.00	28N85 688.00	28N86 705.00
	14	551.00	551.00	545.00	28N88 553.00	28N89 557.00	28N90 569.00	28N91 601.00	28N92 611.00	28N93 620.00	28N94 637.00	28N95 649.00	29N22 670.00	29N23 687.00	29N24 704.00	29N25 720.00
	16	607.00	607.00	609.00	610.00	29N26 612.00	29N27 612.00	29N28 613.00	29N29 622.00	29N30 634.00	29N31 652.00	29N32 664.00	29N33 685.00	29N34 701.00	29N35 718.00	29N36 734.00
	18	645.00	651.00	656.00	662.00	662.00	29N37 673.00	29N38 704.00	29N39 713.00	29N40 717.00	29N41 722.00	29N42 722.00	29N43 726.00	29N44 739.00	29N45 744.00	29N46 750.00
	20	657.00	663.00	672.00	675.00	678.00	683.00	29N47 719.00	29N48 728.00	29N49 734.00	29N50 736.00	29N51 740.00	29N52 739.00	29N53 750.00	29N54 753.00	29N55 760.00
	24	671.00	677.00	686.00	688.00	717.00	739.00	764.00	772.00	29N56 792.00	29N57 807.00	29N58 821.00	29N59 838.00	29N60 845.00	29N61 874.00	29N62 889.00
	28	807.00	810.00	813.00	819.00	824.00	833.00	839.00	858.00	879.00	882.00	29N63 902.00	29N64 916.00	29N65 948.00	29N66 952.00	29N67 960.00
	32	824.00	828.00	834.00	838.00	845.00	853.00	863.00	876.00	902.00	914.00	29N69 926.00	29N70 932.00	29N71 983.00	29N72 987.00	29N73 992.00
	36	860.00	860.00	868.00	868.00	876.00	880.00	884.00	902.00	916.00	926.00	960.00	965.00	29N74 1014.00	29N75 1026.00	29N76 1048.00
	40	912.00	921.00	927.00	930.00	931.00	933.00	938.00	970.00	982.00	992.00	1057.00	1026.00	29N78 1048.00	29N79 1157.00	29N80 1213.00
	44	959.00	965.00	970.00	977.00	986.00	992.00	1009.00	1026.00	1034.00	1043.00	1053.00	1066.00	1103.00	29N81 1268.00	29N82 1279.00
	48	1026.00	1032.00	1045.00	1052.00	1071.00	1103.00	1130.00	1157.00	1180.00	1185.00	1191.00	1213.00	1235.00	1279.00	29N83 1323.00

To order 101CD: use rectangular part #  
Cat. # W x H E.G. for 10 x 8 = Order 31N90 10 x 8

To order STCD Bypass: use rectangular part #  
Cat. # W x H E.G. for 10 x 8 = Order 28N47 10 x 8  
Static pressure control (101ASPC) required to operate.

3-wire 24 VAC power open / power close damper. For applications up to 1.75" of static at the damper.  
All motors are normally mounted on the "H" height side of the damper. To bottom mount or locate the motor on the "W" width side, place your order as shown above – Part No. W x H, and indicate **bottom mount** on your order.  
All heavy duty dampers are built to order. No returns or exchanges on these items.  
Please allow for a 3-week lead time on all dampers.



**START**

**CONTROLLERS**

**GAS ELECTRIC**  
Controller  
98N48 (101ASSB)

**Capacity Control**  
Single Stage 87N87 (TRLAT) or 46N54 (101CAPGE)  
2-Stage - 87N88 (CAPL-2)  
3- or 4-Stage - 87N89 (CAPL-4)

**HEAT PUMP ①**  
2 Stage Heat/Cool  
with Electric Heat  
30N51 (101AACBHP)

**Capacity Control**  
LAS (Included with Controller)

Optional  
Outdoor -T-Stat  
(field supplied)

**ZONE THERMOSTATS**

**Digital**  
45N83  
(101DIGI)

**Mechanical**  
30N72  
(101ACT)

**Programmable**  
30N74  
(101PROG)

**Auxiliary Heat**  
for reheat/baseboard  
46N10  
(101DIGITS)

**ZONE DAMPERS**

**5 TONS AND UNDER**

**Low Pressure Dampers**  
Round 31N13-31N20 (101ARZD size) up to .5" SP  
Rectangular 30N77-31N07 (101ARTD W x H) up to .5" SP

12 X (Number of Dampers) = VA for the  
24V System Transformer (Field Supplied)

**OVER 5 TONS**

**Medium Pressure Dampers**  
Round 30N64-30N70 (101AMPD size) up to 1.75" SP  
Rectangular 31N26-31N74  
(101MRTD W x H) up to 1" SP ②  
Heavy Duty Rectangular 31N75-32N95 (101CD W x H)  
to 1.75" SP

6 X (Number of Dampers) =VA for the  
24V System Transformer (Field Supplied)

**BYPASS DAMPERS**

**5 TONS AND UNDER**

**Barometric Bypass Damper**  
Round 30N54, 55, 56, 34N65  
(101ABBD size)  
Rectangular RBB W x H  
70N15, 16, 17, 18, 19, 66N06

**OVER 5 TONS**

**Electronic Bypass Damper**  
Round 28N01-28N06  
(STMPD size)  
Rectangular 28N46-29N83 (STCD W x H)

**Static Pressure Control**  
30N63 (101ASPC)

24V, 40VA Independent Transformer  
for bypass (Field Supplied)

**COMPLETE SYSTEM**

① Some Heat Pumps utilize Gas/Electric thermostats. For this type of Heat Pump, use the Gas/Electric parts selection and field modify the capacity control heat cutoff setpoint to 118° F.

② Use heavy duty rectangular dampers on systems of 7.5 tons or larger



For more information call:  
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or visit our website at:  
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*California Economizer System 2000*  
*Lennox Bid Sheet - 2/1/00*

PART	PART NO.	LENNOX CAT. NO.	QUANTITY	PRICE	EXTENSION
<b>CONTROLLER -GAS/ELECTRIC (ONE PER UNIT)</b>					
System 2000 Controller	101ASSB	98N48	_____	575.00	_____

<b>CONTROLLER-HEAT PUMP</b>					
2 Stage Heat/Cool w/Electric Heat IAS included	101AACBHP	30N51	_____	625.00	_____

<b>CAPACITY CONTROL - CAP Control For Gas/Electric Units</b>					
Hi-Lo LAT	TRLAT	87N87	_____	124.00	_____
Digital Capacity Control	101CAPGE	46N54	_____	277.00	_____
2 Stage Modulating G/E Control	CAPL-2	87N88	_____	330.00	_____
3 or 4 Stage Modulating G/E Control	CAPL-4	87N89	_____	650.00	_____

<b>THERMOSTAT (ONE PER ZONE)</b>					
Digital	101DIGI	45N83	_____	120.00	_____
Digital with remote sensor	101DIGIRS	34N66	_____	196.00	_____
Mechanical	101ACT	30N72	_____	76.00	_____
Programmable	101PROG	30N74	_____	147.00	_____
Digital Two Stage	101DIGITS	46N10	_____	135.00	_____

**TRANSFORMERS**

For Dampers and Controller: Use a 24V transformer and figure the VA by using the formulas below.

Low pressure dampers: 12VA X NUMBER OF DAMPERS      12 X \_\_\_\_\_ = \_\_\_\_\_ VA  
 Medium or Heavy Duty dampers: 6VA X NUMBER OF DAMPERS      6 X \_\_\_\_\_ = \_\_\_\_\_ VA

150 VA 24 volt	101ARTN-150	30N75	_____	189.00	_____
250 VA 24 volt	101ARTN-250	30N76	_____	286.00	_____

For Bypass Electronic Damper 24 Volt, 40VA	(Field Supplied)		_____		_____
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*Continue on to page 2, Zone Dampers, Bypass Dampers, and enter the totals below.*

SUB TOTAL FOR THIS PAGE: \_\_\_\_\_

SUB TOTAL FROM PAGE 2: \_\_\_\_\_

TOTAL: \_\_\_\_\_





**The Zoning Systems Company**

# California Economizer System 2000

Lennox Bid Sheet - 2/1/00

### ZONE DAMPERS

PART NO.	LENNOX CAT. NO.	QUANTITY	PRICE	EXTENSION
<b>ZONE DAMPERS (LOW PRESSURE ROUND)</b>				
6" 101ARZD06	31N13	_____	198.00	_____
7" 101ARZD07	31N14	_____	198.00	_____
8" 101ARZD08	31N15	_____	205.00	_____
9" 101ARZD09	31N16	_____	218.00	_____
10" 101ARZD10	31N17	_____	218.00	_____
12" 101ARZD12	31N18	_____	247.00	_____
14" 101ARZD14	31N19	_____	250.00	_____
16" 101ARZD16	31N20	_____	298.00	_____

### ZONE DAMPERS (MEDIUM PRESSURE ROUND)

6" 101AMPD06	30N64	_____	337.00	_____
8" 101AMPD08	30N65	_____	359.00	_____
10" 101AMPD10	30N66	_____	375.00	_____
12" 101AMPD12	30N67	_____	375.00	_____
14" 101AMPD14	30N68	_____	393.00	_____
16" 101AMPD16	30N69	_____	408.00	_____
18" 101AMPD18	30N70	_____	473.00	_____

### ZONE DAMPERS (LOW PRESSURE RECTANGULAR)

Sizes 8 x 6 thru 24 x 12

x	101ARTD	x	_____	_____	_____
x	101ARTD	x	_____	_____	_____
x	101ARTD	x	_____	_____	_____
x	101ARTD	x	_____	_____	_____

### ZONE DAMPERS (MEDIUM PRESSURE RECTANGULAR)

Sizes 8 x 6 thru 24 x 20

x	101MRTD	x	_____	_____	_____
x	101MRTD	x	_____	_____	_____
x	101MRTD	x	_____	_____	_____
x	101MRTD	x	_____	_____	_____

### ZONE DAMPERS (HEAVY DUTY RECTANGULAR)

Sizes 8 x 8 thru 48 x 48

x	101CD	x	_____	_____	_____
x	101CD	x	_____	_____	_____
x	101CD	x	_____	_____	_____
x	101CD	x	_____	_____	_____

### BYPASS DAMPERS

PART NO.	LENNOX CAT. NO.	QUANTITY	PRICE	EXTENSION
<b>BAROMETRIC BYPASS DAMPERS (ROUND)</b>				
9" 101ABBD09	30N54	_____	154.00	_____
10" 101ABBD10	30N55	_____	154.00	_____
12" 101ABBD12	30N56	_____	154.00	_____
14" 101ABBD14	34N65	_____	186.00	_____

### BAROMETRIC BYPASS DAMPERS (RECTANGULAR)

12 x 8	RBB12x08	70N15	_____	162.00	_____
12 x 10	RBB12x10	66N06	_____	162.00	_____
12 x 12	RBB12x12	70N16	_____	162.00	_____
20 x 8	RBB20x08	70N17	_____	162.00	_____
20 x 10	RBB20x10	70N18	_____	162.00	_____
20 x 12	RBB20x12	70N19	_____	162.00	_____

### ELECTRONIC BYPASS DAMPERS (ROUND)

6" STMPD06	28N01	_____	337.00	_____
8" STMPD08	28N02	_____	359.00	_____
10" STMPD10	28N03	_____	375.00	_____
12" STMPD12	28N04	_____	375.00	_____
14" STMPD14	28N05	_____	393.00	_____
16" STMPD16	28N06	_____	408.00	_____

### ELECTRONIC BYPASS DAMPERS (RECTANGULAR)

Sizes 8 x 8 thru 48 x 48

x	STCD	x	_____	_____	_____
x	STCD	x	_____	_____	_____
x	STCD	x	_____	_____	_____
x	STCD	x	_____	_____	_____
x	STCD	x	_____	_____	_____
x	STCD	x	_____	_____	_____

### ELECTRONIC BYPASS CONTROLLERS

STATIC PRESSURE CONTROL

101ASPC	30N63	_____	130.00	_____
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### SUB TOTAL FOR PAGE #2

(Enter here and on the bottom of page 1): \_\_\_\_\_