

ASL3* & ASL5 SERIES ARCHITECTURAL SILL-HEIGHT CONVECTION HEATERS

- "STAIR-STEP" HEATING ELEMENT
- TWO & THREE ELEMENT
- EFFICIENT HEAT DISTRIBUTION

- "SNAP-LOCK" CLOSURE
- BUILT-IN WIREWAY
- RIGHT OR LEFT HAND ENTRY

Selection, beauty, and performance — in a wide range of models, ratings and accessories for use in offices, corridors, lobbies and similar facilities.

Architectural styling incorporates a patented "Stair-Step" heating element arrangement in two- and three-element SHA heaters for more efficient heat distribution. (See line drawing below.)

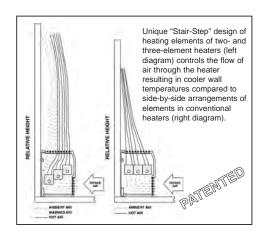
Unique "Snap-Lock" closure design secures the one-piece extruded aluminum top and front grilles to the one-piece back and bottom. This closure method provides a rapid, secure fit all along the length of the unit.

Units can be wall-to-wall or mounted as discrete units in standard lengths of 28 inches to ten feet. Custom length cabinets with single or multiple heat decks are available, as are pedestal mounts.

Standard units are equipped with a built-in wireway (equivalent to 3/4" conduit) with factory-installed wiring which permits multiple heater connections. Units are designed for either right or left hand entry for easy connection of supply wiring from bottom, rear or end, as well as multiple wiring of adjacent heaters from one entry point.

Optional built-in controls include: line-voltage thermostat; two-stage thermostat; disconnect switch; transformer relay; power relay and pneumatic/switch.

* ASL3 Models are approved for Residential use.







CABINET STYLES

Two cabinet styles are available. The ASL3 is $3-5/8" \times 6"$ and is available with one heating element. The ASL5 is $5-3/8" \times 7"$ and is available with one, two, or three-elements. Both sizes are available in two versions: front-in top-out, and bottom-in top-out.



File #E37116

ZBL-BASLO 10-11

ASL3 & ASL5

ASL3 & ASL3							
CATALOG	LENGTH	WATTS	TOTAL		AMPERAGE		
NUMBER	"L"	PER FT.	WATTS	120V	208V	240V	277V
02100	28"	100	200	1.7	1.0	0.8	_
02125	28"	125	250	2.1	1.2	1.0	0.9
02150	28"	150	300	2.5	1.4	1.3	1.1
02188	28"	188	376	3.1	1.8	1.6	1.4
02250	28"	250	500	4.2	2.4	2.1	1.8
03100	3'	100	300	2.5	1.4	1.3	1.1
03125	3'	125	375	3.1	1.8	1.6	1.4
03150	3'	150	450	3.8	2.2	1.9	1.6
03188	3'	188	564	4.7	2.7	2.4	2.0
03250	3'	250	750	6.3	3.6	3.1	2.7
04100	4'	100	400	3.3	1.9	1.7	1.4
04125	4'	125	500	4.2	2.4	2.1	1.8
04150	4'	150	600	5.0	2.9	2.5	2.2
04188	4'	188	752	6.3	3.6	3.1	2.7
04250	4'	250	1000	8.3	4.8	4.2	3.6
05100	5'	100	500	4.2	2.4	2.1	1.8
05125	5'	125	625	5.2	3.0	2.6	2.3
05150	5'	150	750	6.3	3.6	3.1	2.7
05188	5'	188	940	7.8	4.5	3.9	3.4
05250	5'	250	1250	10.4	6.0	5.2	4.5
06100	6'	100	600	5.0	2.9	2.5	2.2
06125	6'	125	750	6.3	3.6	3.1	2.7
06150	6'	150	900	7.5	4.3	3.8	3.2
06188	6'	188	1128	9.4	5.4	4.7	4.1
06250	6'	250	1500	12.5	7.2	6.3	5.4
07100	7'	100	700	l —	3.4	2.9	2.5
07125	7'	125	875	—	4.2	3.6	3.2
07150	7'	150	1050	l —	5.0	4.4	3.8
07188	7'	188	1315	—	6.3	5.5	4.7
07250	7'	250	1750		8.4	7.3	6.3
08100	8'	100	800	-	3.8	3.3	2.9
08125	8'	125	1000	-	4.8	4.2	3.6
08150	8'	150	1200	-	5.8	5.0	4.3
08188	8'	188	1504	-	7.2	6.3	5.4
08250	8'	250	2000		9.6	8.3	7.2
09100	9'	100	900	-	4.3	3.8	3.2
09125	9'	125	1125	-	5.4	4.7	4.1
09150	9'	150	1350	-	6.5	5.6	4.9
09188	9'	188	1690	-	8.1	7.0	6.1
09250	9'	250	2250		10.8	9.4	8.1
10100	10'	100	1000	-	4.8	4.2	3.6
10125	10'	125	1250	-	6.0	5.2	4.5
10150	10'	150	1500	-	7.2	6.3	5.4
10188	10'	188	1880	-	9.0	7.8	6.8
10250	10'	250	2500		12.0	10.4	9.0

NOTES:

- A. This control option is not available on single-phase heaters over 20 amps and three-phase heaters over 20 amps.
- B. This control option is not available on single-phase heaters over 24 amps (22 amps on 277 VAC). In combination with the disconnect switch option use the 2ST thermostat option on heaters over 20 amps.
- C. A second transformer relay can be sequenced off the first transformer relay in the same heater. Up to 30 power relays in different heaters can be controlled by one single-stage pilot duty thermostat.
- Up to 10 power relays in different heaters can be controlled by each stage of a two-stage pilot duty thermostat.
- E. Two relays are required on single-phase heaters over relay rated amps. Two relays are available for two-stage on two or three-element heaters only. Transformer relays are not available on three phase heaters.
- F. Three power relays are available for three-stage on three-element heaters only.
- G. For Three Phase units specify 2 disconnect switches.
- H. Fits ASL5 only. For ASL3, PE will be installed in 4-1/2" section.

ASL5 2 & 3 Element

CATALOG	LENGTH	WATTS	TOTAL		ΔM	PERAGE		
NUMBER	"L"	PER FT.	WATTS	208V/1Ø	208V/3Ø			277V
02375	28"	375	750	3.6		3.1		2.7
02500	28"	500	1000	4.8	_	4.2	l _	3.6
02600	28"	600	1200	5.8	3.3	5.0	2.9	_
02750*	28"	750	1500	7.2	4.2	6.3	3.6	5.4
03375	3'	375	1125	5.4	_	4.7		4.1
03500	3'	500	1500	7.2	_	6.3	l —	5.4
03600	3'	600	1800	8.7	5.0	7.5	4.3	6.5
03750*	3'	750	2250	10.8	6.2	9.4	5.4	8.1
04375	4'	375	1500	7.2	_	6.3		5.4
04500	4'	500	2000	9.6	_	8.3	l —	7.2
04600	4'	600	2400	11.5	6.7	10.0	5.8	8.7
04750*	4'	750	3000	14.4	8.3	12.5	7.2	10.8
05375	5'	375	1875	9.0	_	7.8	_	6.8
05500	5'	500	2500	12.0	_	10.4	l —	9.0
05600	5'	600	3000	14.4	8.3	12.5	7.2	10.8
05750*	5'	750	3750	18.0	10.4	15.6	9.0	13.5
06375	6'	375	2250	10.8	_	9.4	—	8.1
06500	6'	500	3000	14.4	_	12.5	-	10.8
06600	6'	600	3600	17.3	10.0	15.0	8.7	13.0
06750*	6'	750	4500	21.6	12.5	18.8	10.8	16.2
07375	7'	375	2625	12.6	_	10.9	-	9.5
07500	7'	500	3500	16.8		14.6		12.6
07600	7'	600	4200	20.2	14.5	17.5	12.6	15.2
07750*	7'	750	5250	25.2	14.5	21.9	12.6	20.0
08375	8'	375	3000	14.4	_	12.5	-	10.8
08500	8'	500	4000	19.2	40.0	16.7		14.4
08600 08750*	8' 8'	600	4800	23.1	13.3	20.0	11.5	17.3
09375	9'	750 375	6000 3375	28.8 16.2	16.7	25.0 14.1	14.4	21.7 12.2
09375	9'	500	4500	21.6	_	18.8	-	16.2
09600	9'	600	5400 5400	26.0	18.8	22.5	16.2	19.5
09750*	9'	750	6750	32.5	18.8	28.1	16.2	24.4
10375	10'	375	3750	18.0	10.0	15.6	10.2	13.5
10575	10'	500	5000	24.0		20.8	I _	18.1
10600	10'	600	6000	28.8	16.7	25.0	14.4	21.7
10750*	10'	750	7500	36.1	20.8	31.3	18.0	27.1
10730	10	, 50	7 500	55.1	20.0	01.0	1 10.0	-'.'

^{*}Bottom Inlet Only.

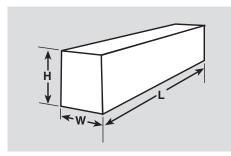
TO DEVELOP A CATALOG NUMBER FOR A HEATER WITH BUILT-IN CONTROLS, ADD THE APPROPRIATE LETTERS AS SUFFIX TO THE BASIC HEATER CATALOG NUMBER.

OPTIONAL BUILT-IN CONTROLS

(FOR MODELS ASL3 AND ASL5 CONVECTORS)

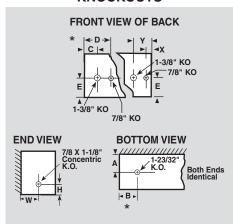
SUFFIX ADDITION TO BASIC CAT. NO.	OPTIONAL BUILT-IN CONTROL	RATINGS
DS	Disconnect Switch	Double-Pole, rated 20 amps @ 120-277 VAC. Single-phase heaters under 20A. (See Notes A & G.)
Т	Single-Pole Thermostat	Rated 24 amps @ 120-240 VAC and 22 amps @ 277 VAC. Pilot duty rating of 125 VA (all voltages). 60-120 degree F temperature range; adjustable through outlet grille — tamper-resistant. Not available on three-phase heaters (See Note B.)
2Т	Two-Pole Thermostat	Rated 24 amps @ 120-240 VAC and 22 amps @ 277 VAC. Pilot duty rating of 125 VA (all voltages). 60-120 degree F temperature range; adjustable through outlet grille — tamper-resistant. Use 2ST on three-phase heaters. (See Note B.)
2ST	Two-Stage Thermostat	Rated 25 amps @ 120-240 VAC and 22 amps @ 277 VAC. Pilot duty rating of 125 VA (all voltages). 60-120 degree F temperature range; adjustable through outlet grille — tamper-resistant. Available on two or three-element heaters only.
PDT	Single-Pole Pilot Duty Thermostat	Same control as T option except wired in the control circuit of one transformer relay or one, two or three power relays. (See Note C.)
2TPD	Two-Stage Pilot Duty Thermostat	Same control as 2ST option except wired in the control circuit of two transformer relays or one, two or three power relays. (See Note D.)
TR	Transformer Relay	Single-pole, low-voltage relay with built-in transformer (24 VAC control), rated 25 amps @ 120-240 VAC and 22 amps @ 277 VAC. (See Note E.)
PR	Power Relay	Single-pole magnetic relay, rated 25 amps @ 120-277 VAC. Specify control voltage and source (internal or external). (See notes E and F.)
PE	Pneumatic / Electric Switch	Pressure set-point @ 10 PSIG adjustable to 30 PSIG. Can be set to "make" or "break" on pressure drop. Rated 25 amps @ 120-277 VAC. (See Note H.)
М	Outlet Mesh	Price per foot

DIMENSIONS



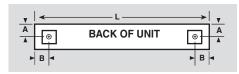
CATALOG NO.	н	w	L			
ASL3 ASL5	6" 7"	3 5/8" 5 3/8"	28" to 15' 28" to 12'			
MINIMUM MOUNTING HEIGHT ABOVE FLOOR						
ASL3 & ASL5 Front Inlet						

KNOCKOUTS



	Α	B*	С	D	Е
ASL3 ASL5	2" 2 25/32"	2 1/4" 2 1/4"	7/8" 7/8"	2 1/4" 2 1/4"	3 3/8" 3 3/8"
		Н	W	Х	Υ
	ASL3 ASL5	1 11/32" 2"	1 7/8" 2 3/8"	1 3/16" 1 3/16"	2 9/16" 2 9/16"

PEDESTAL PLACEMENT



ACCESSORY DIMENSIONS

ACC

CATALOG NO.	L*	н	W	
ASL3-IC**	8 1/2"	6"	3 5/8"	
ASL3-OC**	5"	6"	3 5/8"	
ASL3-1350C**	5"	6"	3 5/8"	
ASL3-135IC**	8 1/2"	6"	3 5/8"	
ASL3-DESBL				
ASL3-DESBR	0.426"	6"	2 5/0"	
ASL3-DESFL	9.136"	ь	3 5/8"	
ASL3-DESFR				
ASL3-ECL				
ASL3-ECR	4/0"	C"	2 5/0"	
ASL3-ECLS	1/8"	6"	3 5/8"	
ASL3-ECRS				
ASL3-SP	0"-1/4"	6"	3 5/8"	
ASL3-FL3	0" - 3"			
ASL3-FL6	3" - 6"			
ASL3-FL9	6" - 9"	6"	3 5/8"	
ASL3-FL12	9" - 12"			
ASL3-FL18	15" - 18"			
ASL5-IC**	10"	7"	5 3/8"	
ASL5-OC**	5"	7"	5 3/8"	
ASL5-1350C**	5"	7"	5 3/8"	
ASL5-135IC**	10"	7"	5 3/8"	
ASL5-DESBL				
ASL5-DESBR	12 1/2"	7"	5 3/8"	
ASL5-DESFL	12 1/2	′	3 3/6	
ASL5-DESFR				
ASL5-ECL				
ASL5-ECR	1/8"	7"	5 3/8"	
ASL5-ECLS	1/0	'	5 3/8"	
ASL5-ECRS				
ASL5-SP	0"-1/4"	7"	5 3/8"	
ASL5-FL3	0" - 3"			
ASL5-FL6	3" - 6"			
ASL5-FL9	6" - 9"	7"	5 3/8"	
ASL5-FL12	9" - 12"			
ASL5-FL18	15" - 18"			
PK3S	0	2 7/8"		
PK3A	l ^v	2 1/0	_	
PK5S	0	4 1/8"		
PK5A	l "	4 1/5	_	

*L dimension is the additional length accessory adds to the total installation length.

CATALOG NO.	Α	В	L		
ASL3	2"	2 1/4"	28" to 10'		
ASL5	2 15/32" 2 1/4"		28" to 10'		
NOTE: On units longer than 10' three pedestals are required					

ACCESSORIES

DESCRIPTION Pneumatic/Electric Switch built into a 4 1/2"

CATALOG NO.

ASL3-PE-F

L	, 1.79	<	1	ASL3-PE-B	wide, 3 5/8" x 6" section.
SPLIC				ASL5-DR-F ASL5-DR-B	Duplex Receptacle built into 4 1/2" wide, 5 3/8" x 7" sections 15 amps @ 125 VAC. (NEMA 5-15 R)
FILLER	٠,		RIGHT END CAP(ECR)	ASL3-BS1-F ASL3-BS2-F ETC.	Front Inlet Blank Sections 3 5/8" x 6", 1', 28", 3', 4', 5', 6', 7', 8', 9' and 10' lengths.
L	W			ASL3-BS1-B ASL3-BS2-B ETC.	Bottom Inlet Blank Sections 3 3/8" x 6", 1', 28", 3', 4', 5', 6', 7', 8', 9' and 10' lengths.
		000	H H	ASL3-ECL ASL3-ECR ASL3-ECRS ASL3-ECRS	Left End Cap. 3 5/8" x 6". Right End Cap. 3 5/8" x 6". Left End Cap with Screws. 3 5/8" x 6". Right End Cap with Screws. 3 5/8" x 6".
OUTS CORI BITO	NER (OC)	INSII (IC) I	DE CORNER FITO	ASL3-SP	3/4" wide strip to cover joint when installing continuous runs.
H		H		ASL3-IC-F ASL3-OC-F ASL3-IC-B ASL3-OC-B	Inside Corner - Front Inlet. 3 5/8" x 6". Outside Corner - Front Inlet. 3 5/8" x 6". Inside Corner - Bottom Inlet. 3 5/8" x 6". Outside Corner - Bottom Inlet. 3 5/8" x 6".
STAND PEDES LEG		ARCH PEDES LEG	ITECTURAL STAL	ASL3-135ICF ASL3-135ICB ASL3-135OCF ASL3-135OCB	135° Inside Corner - Front Inlet. 3 5/8" x 6". 135° Inside Corner - Bottom Inlet. 3 5/8" x 6". 135° Outside Corner - Front Inlet. 3 5/8" x 6". 135° Outside Corner - Bottom Inlet. 3 5/8" x 6".
	W	DIAGONAL END SECTION	ON	ASL3-DESBL ASL3-DESBR ASL3-DESFL ASL3-DESFR	Diagonal End Section, Bottom Inlet Left. Diagonal End Section, Bottom Inlet Right. Diagonal End Section, Front Inlet Left. Diagonal End Section, Front Inlet Right.
	¥			ASL3-FL-3,-6, -9,-12,-18	Filler Sections for ASL3 3", 6", 9", 12" and 18".
				ASL5-BS1-F ASL5-BS2-F ETC.	Front Inlet Blank Sections, 5 3/8" x 7", 1', 28", 3', 4', 5', 6', 7', 8', 9' and 10' lengths.
CESSORI	L*			ASL5-BS1-B ASL5-BS2-B ETC.	Bottom Inlet Blank Sections, 5 3/8" x 7", 1', 28", 3', 4', 5', 6', 7', 8', 9' and 10' lengths.
ALOG NO.	_	Н	W	ASL5-ECL	Left End Cap. 5 3/8" x 7".
-IC** -OC**	8 1/2" 5"	6" 6"	3 5/8" 3 5/8"	ASL5-ECR ASL5-ECLS	Right End cap. 5 3/8" x 7". Left End Cap with Screws. 5 3/8" x 7".
-135OC**	5"	6"	3 5/8"	ASL5-ECRS	Right End Cap with Screws. 5 3/8" x 7".
-135IC**	8 1/2"	6"	3 5/8"	ASL5-SP	3/4" wide strip to cover joint when installing
-DESBL -DESBR					continuous runs.
-DESFL	9.136"	6"	3 5/8"	ASL5-IC-F	Inside Corner - Front Inlet. 5 3/8" x 7".
-DESFR				ASL5-OC-F ASL5-IC-B	Outside Corner - Front Inlet. 5 3/8" x 7". Inside Corner - Bottom Inlet. 5 3/8" x 7".
-ECL				ASL5-OC-B	Outside Corner - Bottom Inlet. 5 3/8" x 7".
-ECR -ECLS	1/8"	6"	3 5/8"	ASL5-135ICF	135° Inside Corner - Front Inlet. 5 3/8" x 7".
-ECRS				ASL5-135ICB ASL5-135OCF	135° Inside Corner - Bottom Inlet. 5 3/8" x 7". 135° Outside Corner - Front Inlet. 5 3/8" x 7".
-SP	0"-1/4"	6"	3 5/8"	ASL-1350CB	135° Outside Corner - Bottom Inlet. 5 3/8" x 7".
-FL3 -FL6	0" - 3" 3" - 6"			ASL5-DESBL	Diagonal End Section, Bottom Inlet Left.
-FL9	3 - 6 6" - 9"	6"	3 5/8"	ASL5-DESBR	Diagonal End Section, Bottom Inlet Right.
-FL12	9" - 12"			ASL5-DESFL ASL5-DESFR	Diagonal End Section, Front Inlet Left. Diagonal End Section, Front Inlet Right.
-FL18	15" - 18"				
-IC**	10"	7"	5 3/8"	ASL5-FL-3,-6, -9,-12,-18	Filler Sections for ASL5 3", 6", 9", 12" and 18".
-OC**	5"	7"	5 3/8"	<u> </u>	l

CONTROL SECTIONS AVAILABLE

- * For standard units only.
- * Dimension from end of unit to KO will vary for custom use.



FILE #E37116

Consult factory for placement.

OTHER SPECIAL FEATURES TRIM ACCESSORIES

Accessories include a complete line of matching blank sections, end caps, filler sections, inside and outside corners, diagonal end sections, and splice plates.



MULTIPLE FINISHES

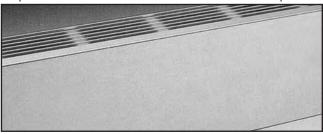
Heating units are available in rich anodized finishes and a spectrum of muted architectural colors in baked enamel finishes which are compatible with all interior decors.

MULTIPLE HEATING CAPACITIES

Units are available in a wide range of heating capacities per foot length: 100 watts (341 BTU per hour) to 750 watts (2560 BTU per hour).

SMOOTH FINISHED BACK

The back of both the ASL3 and ASL5 is void of any fasteners, giving it a clean appearance. Knockouts on the back for access to the junction boxes can be deleted on request to further enhance the appearance. The back will not be painted or anodized to match the front unless requested.



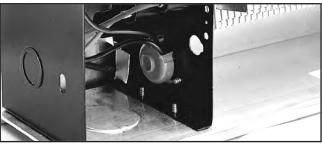
PENCIL-PROOF GRILLES

The discharge air openings in the top grille are punched slots which are pencil-proof for safety. The inlet air grille utilizes these same slots which creates an attractive installation where the inlet grille is visible.



THERMAL CUTOUT

Thermal limit switch with linear type (full length) sensing bulb provides constant protection against overheating from any cause. The switch will automatically reset when normal operating temperatures are restored.



HEATING ELEMENTS The nickel-chromium heating element wire shall be encased in a steel sheath for maximum, trouble-free element life. Aluminum fins shall be pressure bonded to the steel sheath. Elements shall be centered anchored and shall float freely at each end through high-temperature Noryl bushings. The ASL5 shall utilize Berko's "Stair-Step" element arrangement (patent pending).

CONTROL SECTIONS Control sections, finished to match heaters, shall be furnished as an optional accessory for field installation of controls, or shall be used to house factory-installed controls as specified.

OPTION BUILT-IN CONTROLS Thermostats, power relay, low-voltage control relays, and disconnect switches, singly or in combination, may be specified for factory installation in heaters. Thermostats and disconnect switches are accessible through the grille.

PEDESTALS The heater shall be convertible for use as a self-standing unit with pedestal conversion kit. Pedestals shall be painted steel or anodized aluminum. Pedestals can either be mounted on or embedded in the floor surface and wiring or conduit brought through the pedestal during installation.

*Berko reserves the right to change specifications without prior notice.



DIAGONAL END SECTION

Architectural styled section to compliment the ASL3/ASL5 units. Designed to give the unit a finished look when used as a stand alone, or where a wall to wall run is not desired.

Architect's and Engineer's Specifications*

Furnish and install, where indicated on plans, ASL Series convector type heaters, suitable for continuous operation, as manufactured by Berko, A Marley Engineered Products Brand, Bennettsville, SC.

ENCLOSURE Shall be 12-gauge (.080" min.) aluminum extrusion (ASL3) or 10-gauge (0.95" min.) aluminum extrusion (ASL5). The one-piece back and bottom shall join to the one-piece top and front utilizing Berko's Snap-Lock design (patent pending). Both inlet and outlet air grilles shall be punched pencil-proof slots negating the need for mesh under the grille.

SIZE Heaters shall be low profile (3-5/8" x 6" or 5-3/8" x 7") and available in length from 28 inches through 10 feet. Additionally, custom length cabinets (up to 15' for ASL3, 12' for ASL5) with single or multiple heat decks shall be furnished as specified.

HEATING LENGTHS AND VOLTAGES Heater lengths, voltages and wattage capacities shall be as indicated on the plans.

FINISH The top and front shall be finished with a baked enamel paint or anodized.

