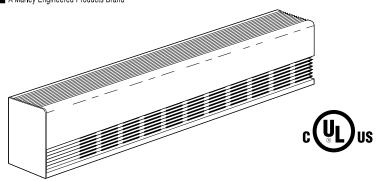
470 Beauty Spot Rd. E Bennettsville, SC 29512

SUBMITTAL SHEET DBA & SHA SERIES

ARCHITECTURAL SILL-HEIGHT CONVECTOR

See Selection Chart for Options



IOD NAME.										
LOCATION:										
ARCHITECT: _										
ENGINEER:										
CONTRACTOR	R:									
SUBMITTED B	Y:	DATE:								
		HEATER								
TAG/ITEM	QTY.	CATALOG NUM	BER	KW	VOLTS	ø	AMPS	LENGTH	NUMBER OF ELEMENTS	BUILT-IN CONTROLS
-,										
		TAG/ITEM	QTY.		CATALOG	NUMI	BER		DESCRIPTION	
ACCESS(
CONTR										
							ļ			
SUBMITTED I	3Y:			DATE		7 [APPROVE	ED BY:		DATE

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS*

Furnish and install, where indicated on plans, SHA/DBA Series convector type heaters, suitable for continuous operation, as manufactured by QMark, A Division of Marley Engineered Products, Bennettsville, SC.

ENCLOSURE: Shall be 12-gauge (.080" min.) aluminum extrusion (DBA) or 10- gauge (0.95" min.) aluminum extrusion (SHA). The one-piece back and bottom shall join to the one-piece top and front utilizing Qmark's Snap-Lock design. 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 %" x 6" or 5 %" x 7") and available in standard lengths from 28 inches through 12 feet. Additionally, custom length cabinets available 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. Finished backs are available upon request.

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 SHA shall utilize QMark's "Stair-Step" element arrangement.

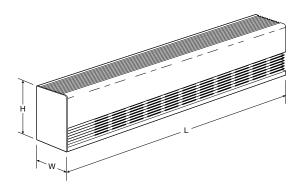
CONTROL SECTIONS: Control sections, finished to match heaters, shall be furnished as an optional accessory for field installation of controls, or shall be used to house factory-installed controls as specified.

OPTION BUILT-IN CONTROLS: Thermostats, power relay, low-voltage control relays, and power on/off switches, singly or in combination, may be specified for factory installation in heaters. Thermostats and power on/off 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.

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

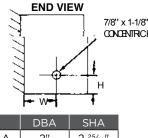
Dimensions and Clearances:



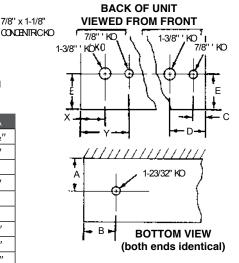
		Dimens	sions
Cat. No.	Н	W	L
DBA	6"	3 %"	28"-12'
SHA	7"	5 %"	28"-12'

Minimum Mounting Heig Above Floor	ght
DBA & SHA Front Inlet	0"
DBA & SHA Bottom Inlet (100W/Ft250W/Ftr.)	1-3/4"
SHA Bottom Inlet (375W/Ft750W/Ft.)	3"

Knockouts:



	DBA	SHA
Α	2"	2 25/32"
В	2 1/4"	2 1/4"
С	7/8"	7/8"
С	2 1/4"	2 1/4"
Е	3 3/8"	³ / ₃₈ "
Н	1 11/32"	2"
W	1 3/16"	2 3/8"
Х	1 3/16"	1 3/16"
Υ	2 %6"	2 %16"



Pedestal Placement:



	Standard	Pedestal P	lacement
Cat. No.	А	В	L
DBA	2"	2 1/4"	28-12"
SHA	2 13/16"	2 1/4"	28-12"

NOTE: On units longer than 12', three pedestals are required. Consult factory for placement.

DBA & SHA (1 Element) Lengths

Length	28"	3′	4′	5′	6′	7'	8′	9′	10′
Shipping Weight	8 lbs	10 lbs	13 lbs	17 lbs	20 lbs	24 lbs	27 lbs	30 lbs	33 lbs

NOTE: Cabinet available up to 12 ft. length. Custom length cabinets are priced with heater and blank to the next larger size. Backs are provided standard with no finish. For finished backs, add 10% to list price. Knockouts on back omitted by request only. All models are NON-STOCK made-to-order. When ordering, specify quantity, catalog number, voltage, wattage, optional controls, and color. Consult sales representative for lead times

Watts per Ft.*

100	125	150
188	250	

Voltages*

120	208	240	277
480	347	600	

SHA (Multiple Elements) Lengths

Length	28"	3'	4′	5′	6′	7'	8′	9′	10′
Shipping Weight	12 lbs	15.5 lbs	20 lbs	25.5 lbs	30 lbs	35 lbs	40 lbs	45 lbs	50 lbs

NOTE: Cabinet available up to 12 ft, length, Custom length cabinets are priced with heater and blank to the next larger size, Backs are provided standard with no finish. For finished backs, add 10% to list price, Knockouts on back omitted by request only. All models are NON-STOCK made-to-order. When ordering, specify quantity, catalog number, voltage, wattage, optional controls, and color. Consult sales representative for lead times.

Watts per Ft. - 2 Elements*

|--|

Voltages - Single Phase*

208 240 277 347 600	208
---------------------	-----

Watts per Ft. — 3 Elements *

600 750

Voltages — Three Phase*

208	240	600
-----	-----	-----

^{*}Specs vary by length. Reference the submittal sheet or additional detail

Optional Built-In Controls:

SUFFIX*	OPTIONAL BUILT-IN CONTROL	RATINGS & DESCRIPTION
Т	Single-Pole Thermostat	Rated 25 amps @ 120-240 VAC and 22 amps @ 277 VAC. Pilot duty rating of 125 VA (all voltages). 60-120°F temperature range; adjustable through outlet grille-tamper-resistant. (See Note B) Not available on three-phase heaters.
2T	Double-Pole Thermostat	Rated 25 amps @ 120-240 VAC and 22 amps @ 277 VAC. Pilot duty rating of 125 VA (all voltages). 60-120°F temperature range; adjustable through outlet grille-tamper-resistant. (See Note B for amperage restrictions.)
DS	Power On/Off Switch	Double-pole, rated 20 amp @ 120-277 VAC. (See Note A) For three-phase heaters and single-phase heaters over 20 amps specify two.
TR	Transformer Relay	Single-pole, low voltage relay with built-in transformer (24 VAC control), rated 22 amps @ 120-240 VAC and 22 amps @ 277 VAC. (See note E) 17 amps @ 347V. Not available on three-phase heaters.
PR	Power Relay	Single-pole thermal time delay relay, rated 25 amps @ 120-600 VAC. (See Notes E & F). Specify control voltage.
2ST	2-Stage Thermostat	Rated 24 amps @ 120-240 VAC and 22 amps @ 277 VAC. Pilot duty rating of 125 VA (all voltages). 60-120°F temperature range, adjustable through outlet grille-tamper-resistant. Available on 2- or 3-element, single-phase heaters only.
PDT	Single-Pole Thermostat	Same as -T except Pilot Duty. (See Note C)
2TPD	Double-Pole Thermostat	Same as -2T except Pilot Duty. (See Note C & D)
М	Outlet Mesh	Price per foot

NO IE: *Addition To Basic Catalog No. (See Note D)

A. For single-phase loads over 20A and all three-phase loads, specify (2) power on/off switches. B. This control option is not available on single-phase heaters over 25 amps (22 amps on 277 VAC). In combination with the power on/off switch option use the 25T 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 (1) single-stage pilot duty thermostat. D. Up to 30 power relays in different heater can be controlled by each stage of a two-stage pilot duty thermostat. E. Two relays are required on single-phase heaters over 20 amps with a power on/off switch, over 25 amps without a power on/off and on all three-phase heaters. Two relays are available for two-stage on two- or three-element heaters only. F. Three power relays are available for three-stage on three-element heaters only.

Control Combinations:

	No Thermostat or Power ON/OFF Switch	Thermostats			Power	Th	Thermostats & Power ON/OFF Switches					
		1-Pole (- <i>T</i>)	2-Pole (-2ST)	2-Stage (<i>-2ST</i>)	Pilot Duty (-PDT)²	2-Stage Pilot Duty (<i>-2SPD</i>)²	ON/OFF (-DS) ⁴	1-Pole	2-Pole	2-Stage	Pilot Duty	2-Stage Pilot Duty
No Power Controls	×	х	×				х	х	×			
Power Relay (-PR)	×	х	x		x		х	х	×		×	
Transformer Relay (-TR)	×	x	×		×		х	х	×		x	
No Power controls	×	x	×	x	×	x	х	x	×	x		
Power Relay (-PR)	×	х	x	x	x	х	х	х	×	х	×	
2 Power Relays (2-PR)	×		x	x	x	х	х		×	х	×	×
3 Power Relays (-3PR)	×		x	x	x	х	х		×	х	×	×
Transformer Relay (-TR)	×	x	х	×	×		х	x	×	х	×	
2 Transformer Relays (-2TR)	×		X3	׳	X3	X3	׳		׳	X3	X3	

NOTE: 1. Normal mounting configuration is a thermostat and Power ON/OFF in left junction box; power relay, transformer relay, and pneumatic/electric switch in right junction box. 2. When used with power relays or transformer relays, pilot duty thermostats will be wired into the coil circuit of the power relay or the 24V side of the transformer relay. The line voltage thermostats will be wired into the power circuit of the heater. 3. When using two transformer relays with any additional controls (built-in thermostat or Power ON/OFF), please consult factory. 4. For three-phase units, specify two Power ON/OFF.

Approvals:			
Approvais.			

Blank Sections & Accessories — DBA Series:

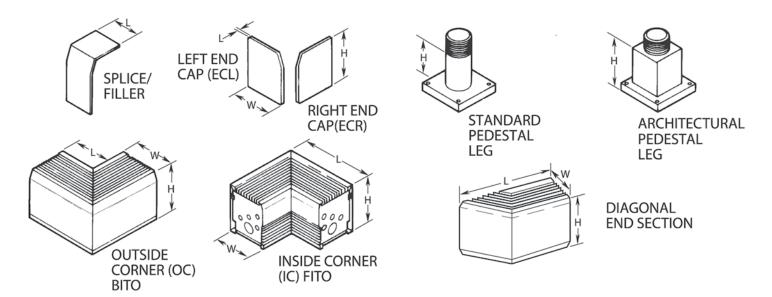
CATALOG NO.	DIMENSIONS (W x H x L)	INLET	SHIP WT.	
DBABS1F	3 5/8" × 6" × 1'	Front	4 lbs	
DBABS1B	3 78 X 6 X I	Bottom	4 IDS	
DBABS2F	3 5/8" x 6" x 28"	Front	7 lbs	
DBABS2B	3 78 X 0 X 20	Bottom	7 105	
DBABS3F	3 %" x 6" x 3'	Front	9 lbs	
DBABS3B	3 78 X 0 X 3	Bottom	9 105	
DBABS4F	3 5%" x 6" x 4'	Front	12 lbs	
DBABS4B	3 78 X 6 X 4	Bottom	12 105	
DBABS5F	3 5%" x 6" x 5'	Front	16 lbs	
DBABS5B	3 78 X 6 X 3	Bottom	16 102	
DBABS6F	3 5%" x 6" x 6'	Front	19 lbs	
DBABS6B	3 78 X 6 X 6	Bottom	19 105	
DBABS7F	3 %" x 6" x 7'	Front	22 lbs	
DBABS7B	3 78 X 0 X 7	Bottom	22 105	
DBABS8F	3 5%" x 6" x 8'	Front	24 lbs	
DBABS8B	3 78 X 6 X 8	Bottom	24 105	
DBABS9F	3 %" x 6" x 9'	Front	27 lbs	
DBABS9B	3 78 X 0" X 9"	Bottom	27 105	
DBABS10F	7.5/11 011 101	Front	70.11	
DBABS10B	3 %" x 6" x 10'	Bottom	30 lbs	

NOTE: Blank section grilles are not punched unless requested.

CATALOG NO.	DESCRIPTION	ADDITIONAL SPACE REQUIRED	SHIP WT.
DBAECLS**	End Cap w/Screws - Left		
DBAECRS**	End Cap w/Screws - Right		
DBAICF**	Inside Corner-Front In	8 ½"	5 lbs
DBAICB**	Inside Corner-Bottom In	8 ½"	5 lbs
DBAOCF**	Outside Corner-Front In	5"	4 lbs
DBAOCB**	Outside Corner-Bottom In	5"	4 lbs
DBA135ICF**	135° Inside Corner-Front In	8 ½"	5 lbs
DBA135ICB**	135° Inside Corner-Bottom In	8 ½"	5 lbs
DBA1350CF**	135° Outside Corner-Front In	5"	4 lbs
DBA135OCB**	135° Outside Corner-Bottom In	5"	4 lbs
DBADESBL**	Dec. End Section-Bottom In, Left		5 lbs
DBADESBR**	Dec. End Section-Bottom In, Right	9 %4"	5 lbs
DBADESFL**	Dec. End Section-Front In, Left	9 764	4 lbs
DBADESFR**	Dec. End Section-Front In, Right		4 lbs
DBASP**	Splice Plate	0-1/4"	1 lbs
DBAFL3**	Filler Section 3 in.	0-3"	1 lbs
DBAFL6**	Filler Section 6 in.	3-6"	1 lbs
DBAFL9**	Filler Section 9 in.	6-9"	1 lbs
DBAFL12**	Filler Section 12 in.	9—12"	1 lbs
DBA-FL18**	Filler Section 18 in.	15—18"	1.5 lbs
DBADRF**	Receptacle Section-Front In	4.1/#	15 11.
DBADRB**	Receptacle Section-Bottom In	4 ½"	1.5 lbs
DBAPEF**	Pneu/Ele Sw-Fnt. In	4.1/#	O Uh e
DBAPEB**	Pneu/Ele Sw-Bot. In	4 ½"	2 lbs
PK3S*	Standard Pedestal 2 % in. (H)	-	2 lbs
PK3A*	Architectural Pedestal 2 1/8 in. (H)	-	2 lbs
SO1A***	Stand-Off Bracket	-	1 lbs

 $^{^{*}}$ One pedestal. Two required on units up to 10 ft., three required on units over 10ft.

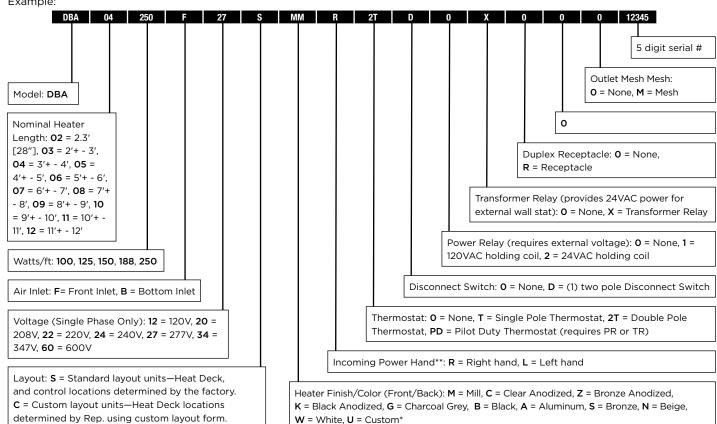
^{***}All Stand-off Brackets come standard as Beige.



^{***} Add suffix -P for painted followed by the color code (i.e. W for White, B for Black, etc.), -C for clear anodized, -B for bronze anodized (excludes PK3S—Black only).

How to Order - DBA

Example:



^{*}Custom finishes require additional approvals prior to acceptance

Control Location must be accounted for. See notes.

^{**}Control Hand / Incoming Power connection is determined by the hand of the DS/ thermostat when facing the heater.

Contact Marley Sales Representative for additional configuration details

Blank Sections & Accessories — SHA Series:

CATALOG NO.	DIMENSIONS (W x H x L)	INLET	SHIP WT.	
SHABS1F	5 ¾" × 7" × 1'	Front	7 lbs	
SHABS1B	1 5 78" X 7" X I	Bottom	/ IDS	
SHABS2F	5 ¾" x 7" x 28"	Front	11 lbs	
SHABS2B	5 %8 X / X 28	Bottom	II IDS	
SHABS3F	5 v" x 7" x 3'	Front	14 lbs	
SHABS3B	3 V X / X 3	Bottom	14 105	
SHABS4F	5 3%" x 7" x 4'	Front	18 lbs	
SHABS4B	1 5 78 X 7 X 4	Bottom	18 105	
SHABS5F	5 ¾" x 7" x 5'	Front	22 lbs	
SHABS5B	1 5 78 X 7 X 5	Bottom	22 105	
SHABS6F	5 ¾" × 7" × 6'	Front	27 lbs	
SHABS6B	1 5 78 X 7 X 6	Bottom	27 105	
SHABS7F	5 ¾" × 7" × 7'	Front	32 lbs	
SHABS7B	1 5 78" X 7" X 7	Bottom	32 105	
SHABS8F	5 ¾" x 7" x 8'	Front	37 lbs	
SHABS8B	1 5 78 X 7 X 8	Bottom	37 105	
SHABS9F	5 ¾" × 7" × 9'	Front	40 lbs	
SHABS9B	1 2 %8 × / × 3	Bottom	40 IDS	
SHABS10F	5.7/1 71 101	Front	44.11	
SHABS10B	5 ¾" x 7" x 10'	Bottom	44 lbs	

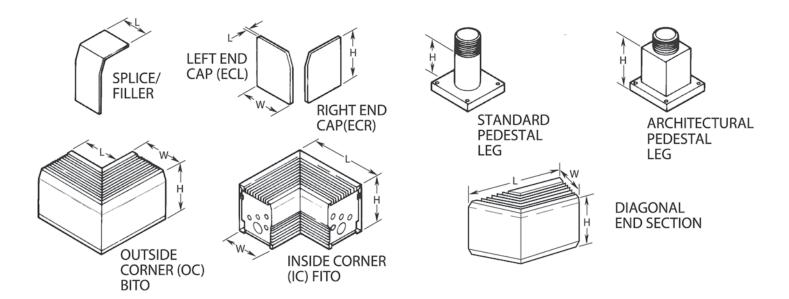
NOTE: Blank section	grilles are not p	unched unle	ess requested.
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CATALOG NO.	DESCRIPTION	ADDITIONAL SPACE REQUIRED	SHIP WT.
SHAECLS**	End Cap w/Screws - Left		
SHAECRS**	End Cap w/Screws - Right		
SHAICF**	Inside Corner-Front In	10"	11 lbs
SHAICB**	Inside Corner-Bottom In	10"	11 lbs
SHAOCF**	Outside Corner-Front In	5"	7 lbs
SHAOCB**	Outside Corner-Bottom In	5"	7 lbs
SHA135ICF**	135° Inside Corner-Front In	10"	11 lbs
SHA135ICB**	135° Inside Corner-Bottom In	10"	11 lbs
SHA135OCF**	135° Outside Corner-Front In	5"	7 lbs
SHA135OCB**	135° Outside Corner-Bottom In	5"	7 lbs
SHADESBL**	Dec. End Section-Bot. In, Left		11 lbs
SHADESBR**	Dec. End Section-Bot. In, Right	12 ½'	11 lbs
SHADESFL**	Dec. End Section-Front In, Left	12 1/2	7 lbs
SHADESFR**	Dec. End Section-Front In, Right		7 lbs
SHASP**	Splice Plate	O-1/4"	1 lbs
SHAFL3**	Filler Section 3 in.	0-3"	1 lbs
SHAFL6**	Filler Section 6 in.	3-6"	1 lbs
SHAFL9**	Filler Section 9 in.	6-9"	2 lbs
SHAFL12**	Filler Section 12 in.	9—12"	3 lbs
SHA-FL18**	Filler Section 18 in.	15—18"	5 lbs
SHADRF**	Receptacle Section-Front In	4.1/11	0.11-
SHADRB**	Receptacle Section-Bottom In	4 1/2"	2 lbs
PK5S*	Standard Pedestal 4 1/8 in. (H)		2 lbs
PK5A*	Architectural Pedestal 4 1/8 in. (H)	- 2 lbs	
SO1A***	Stand-Off Bracket	-	1 lbs

*One pedestal. Two required on units up to 10 ft., three required on units over 10ft.

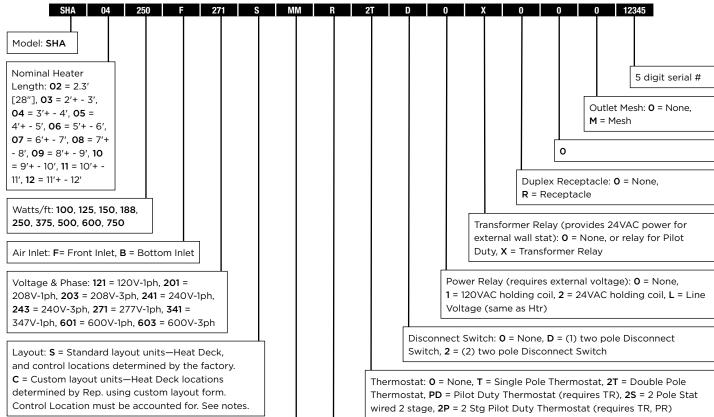
**Add suffix -P for painted, -C for clear anodized, -B for bronze anodized (excludes PK5S - Black only).

***All Stand-off Brackets come standard as Beige.



How to Order - SHA

Example:



Incoming Power Hand**: R = Right hand, L = Left hand

*Custom finishes require additional approvals prior to acceptance

U = Custom*

Heater Finish/Color (Front/Back): M = Mill, C = Clear Anodized,

Z = Bronze Anodized, K = Black Anodized, G = Charcoal Grey, B = Black, A = Aluminum, S = Bronze, N = Beige, W = White,

Contact Marley Sales Representative for additional configuration details

No matter the industry or application, Marley Engineered Products has a robust portfolio of innovative, reliable, high-performance comfort heating and ventilation solutions for all your heating needs.

For more information or assistance on your next project, contact Technical Services at 800-642-4328

Scan the QR code to access additional specs and features



Approvals:			

^{**}Control Hand / Incoming Power connection is determined by the hand of the DS/ thermostat when facing the heater.