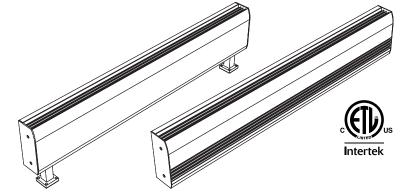


## 470 Beauty Spot Rd. E Bennettsville, SC 29512

## SUBMITTAL SHEET DBSL SERIES SLIMLINE ALUMINUM

CONVECTOR

See Selection Chart for Options



| JOB NAME:     |       |  |
|---------------|-------|--|
|               |       |  |
|               |       |  |
| ARCHITECT:    |       |  |
| ENGINEER:     |       |  |
| CONTRACTOR:   |       |  |
|               |       |  |
| SUBMITTED BY: | DATE: |  |

|          |      |                | HEA | TER   |      |        |                   |
|----------|------|----------------|-----|-------|------|--------|-------------------|
| TAG/ITEM | QTY. | CATALOG NUMBER | ĸw  | VOLTS | AMPS | LENGTH | BUILT-IN CONTROLS |
|          |      |                |     |       |      |        |                   |
|          |      |                |     |       |      |        |                   |
|          |      |                |     |       |      |        |                   |
|          |      |                |     |       |      |        |                   |
|          |      |                |     |       |      |        |                   |
|          |      |                |     |       |      |        |                   |
|          |      |                |     |       |      |        |                   |
|          |      |                |     |       |      |        |                   |
|          |      |                |     |       |      |        |                   |
|          |      |                |     |       |      |        |                   |

|             | TAG/ITEM | QTY. | CATALOG NUMBER | DESCRIPTION |
|-------------|----------|------|----------------|-------------|
| ACCESSORIES |          |      |                |             |
| AND         |          |      |                |             |
| CONTROLS    |          |      |                |             |
|             |          |      |                |             |

| SUBMITTED BY: | DATE | APPROVED BY: | DATE |
|---------------|------|--------------|------|
|               |      |              |      |
|               |      |              |      |
|               |      |              |      |
|               |      |              |      |

# **ARCHITECT'S AND ENGINEER'S SPECIFICATIONS\***

Furnish and install, where indicated on plans, DBSL Series convector type heaters, suitable for continuous operation, as manufactured by QMark<sup>®</sup>, A Marley Engineered Products<sup>®</sup> Brand, Bennettsville, SC.

**ENCLOSURE**: Shall be 12-gauge (.080" min.) aluminum extrusion. 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  $(2 \frac{3}{4}" \times 6")$  and available in length from 24 inches through 10 feet. Additionally, custom length cabinets up to 10 feet with a single heat deck 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 polyester powder paint or anodized. Units are available with an optional finished back.

**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.

**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.

**OPTIONAL 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 selfstanding 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.

### Lengths

| Length          | 2'    | 28″   | 3'     | 4'     | 5′     | 6′     |
|-----------------|-------|-------|--------|--------|--------|--------|
| Shipping Weight | 8 lbs | 8 lbs | 10 lbs | 13 lbs | 17 lbs | 20 lbs |

NOTE: Additional cabinet sizes available up to 10 ft. length. 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, madeto-order. Consult sales representative for more information on specs and lead times.

#### Watts per Ft.\*

| Len                                | ngth | 2'    | 28″                             | 3'     | 4'     |
|------------------------------------|------|-------|---------------------------------|--------|--------|
| Shipping We                        | ight | 8 lbs | 8 lbs                           | 10 lbs | 13 lbs |
|                                    |      |       | provided standard with no finis |        |        |
| to-order. Consult sales representa |      |       | nd lead times.                  |        |        |
|                                    |      |       |                                 |        | 240    |

\*Specs vary by length. Refer to the submittal sheet for full details.

#### Blank Section & Accessories:

| CATALOG NO. | DIMENSIONS (W x H x L)        | INLET  | SHIP WT. |
|-------------|-------------------------------|--------|----------|
| SLCBS1F     | 2 <sup>3</sup> /4" x 6" x 1'  | Front  | 4 lbs    |
| SLCBS1B     | 2 74 X 0 X 1                  | Bottom | 4 105    |
| SLCBS2F     | 2 <sup>3</sup> ⁄4" x 6" x 28" | Front  | 7 lbs    |
| SLCBS2B     | 2 % X 6 X 28                  | Bottom | 7 IDS    |
| SLCBS3F     | 2 ¾" x 6" x 3'                | Front  | 9 lbs    |
| SLCBS3B     | 2 % X 6 X 3                   | Bottom | 9 105    |
| SLCBS4F     | 2 <sup>3</sup> ⁄4" x 6" x 4'  | Front  | 12 lbs   |
| SLCBS4B     | 2 %4 × 6 × 4                  | Bottom |          |
| SLCBS5F     | 2 ¾" x 6" x 5'                | Front  | 16 lbs   |
| SLCBS5B     | 2 %4 X 6 X 5                  | Bottom | 201 01   |
| SLCBS6F     | 2 ¾" x 6" x 6'                | Front  | 19 lbs   |
| SLCBS6B     | 2 %4 X 0 X 0                  | Bottom | 2 al ei  |

NOTE: Blank section grilles are not punched unless requested. Additional sections available for cabinets up to 10 ft. length.

Front inlet unit is

only 2 ¾ in. wide

directly to floor.

by 6 in. tall. Can be

mounted to wall or





Bottom inlet unit is only 2 3/4 in, wide by 6 in, tall. Can be mounted to wall (3 in. above floor) or in front of window mounted on pedestals.

## Dimensions and Clearances:

| Lloight | 6″           | А | 1.27″ | 32mm   |
|---------|--------------|---|-------|--------|
| Height  | 152mm        | В | 2.00″ | 51mm   |
| Width   | 2 3⁄4″       | С | 1.63″ | 41mm   |
|         | 70mm         | D | 1.37″ | 35mm   |
| Length  | 24"-10'      | Е | 2.75″ | 70mm   |
|         | 610mm-3048mm | Н | 2.71″ | 69mm   |
|         |              | W | 1.25″ | 32mm   |
|         |              | X | 1.00″ | 25.4mm |

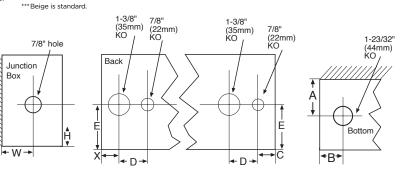
| are 3 in. tall and      |
|-------------------------|
| allow concealed wiring  |
| access when stubbed     |
| through concrete floors |
|                         |

Box

Hollow pedestals

| CATALOG NO. | DESCRIPTION                       | ADDITIONAL<br>SPACE REQUIRED | SHIP WT. |
|-------------|-----------------------------------|------------------------------|----------|
| SLCECL      | End Cap - Left                    | 1⁄8″                         | 1 lbs    |
| SLCECR      | End Cap - Right                   | 1⁄8″                         | 1 lbs    |
| SLCICF      | Inside Corner-Front In            | 8 1⁄2″                       | 5 lbs    |
| SLCICB      | Inside Corner-Bottom In           | 8 1⁄2″                       | 5 lbs    |
| SLCOCF      | Outside Corner-Front In           | 5″                           | 4 lbs    |
| SLCOCB      | Outside Corner-Bottom In          | 5″                           | 4 lbs    |
| SLCDESBL    | Dec. End Section-Bottom In, Left  | 9 %4″                        | 5 lbs    |
| SLCDESBR    | Dec. End Section-Bottom In, Right | 9 %4″                        | 5 lbs    |
| SLCDESFL    | Dec. End Section-Front In, Left   | 9 %4″                        | 4 lbs    |
| SLCDESFR    | Dec. End Section-Front. In, Right | 9 %4″                        | 4 lbs    |
| SLCSP       | Splice Plate                      | O-1⁄4″                       | 1 lbs    |
| SLCFL3      | Filler Section 3 in.              | 0-3"                         | 1 lbs    |
| SLCFL6      | Filler Section 6 in.              | 3-6"                         | 1 lbs    |
| SLCFL9      | Filler Section 9 in.              | 6-9"                         | 1 lbs    |
| SLCFL12     | Filler Section 12 in.             | 9-12"                        | 1 lbs    |
| SLCFL18     | Filler Section 18 in.             | 12-18"                       | 1.5 lbs  |
| SLCFL24     | Filler Section 24 in.             | 18-24″                       | 1.5 lbs  |
| SLCDRF      | Receptacle Section-Front In       | 4 ½"                         | 1.5 lbs  |
| SLCDRB      | Receptacle Section-Bottom In      | 4 ½"                         | 1.5 lbs  |
| SLCPEF      | Pneu/Ele Sw-Front In              | 4 1⁄2″                       | 2 lbs    |
| SLCPEB      | Pneu/Ele Sw-Bot. In               | 4 1⁄2″                       | 2 lbs    |
| SLCPK3A**   | Architectural Pedestal            | -                            | 2 lbs    |
| SO1A***     | Stand-Off Bracket                 | —                            | 1 lbs    |

\*Add suffix -P for painted followed by the appropriate color code (i.e. W for white, B for black, etc.), -C for clear anodized \*\* One pedestal. Two pedestals required on units up to 10 ft. and three required on units over 10 ft.



Pedestal placement and KOs shown are for standard units. Custom enclosures and/or heat decks will have pedestal placement and KOs in various locations. Consult factory.

| Optional | Built-In | Controls:  |
|----------|----------|------------|
| optional | Dancini  | 001101013. |

| Suffix* | OPTIONAL<br>BUILT-IN CONTROLS | USE CASE(S)   | RATINGS & DESCRIPTIONS  |
|---------|-------------------------------|---|---|
| т       | Single-Pole Thermostat        | Ideal for 120v and 277v heaters                                       | 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)                            |
| 2T      | Double-Pole Thermostat        | Ideal for 208v and 240v heaters                                       | 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           | Ideal for servicing   | Double-pole, rated 20 amp @ 120-277 VAC. (See Note A.) For heaters over 20 amps specify two   |
| TR**    | Transformer Relay             | Ideal for remote, low voltage thermostats                             | 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 and F) 17 amps @ 347V. Not available for three-phase heaters              |
| PR      | Power Relay                   | Ideal for multiple heater<br>connections or BMS / EMS<br>connections  | Single-pole magnetic relay, rated 25 amps @ 120-600 VAC. (See Note E). Specify control voltage  |
| PDT     | Single-Pole Thermostat        | For sequencing low<br>voltage connections with<br>a transformer relay | Same as -T except Pilot Duty. (See Note C)  |
| R**     | Receptacle                    | For additional electrical connections.                                | For built-in or as installed in a control section   |

\* Addition To Basic Catalog No.

\*\* Will add 4 in. to length of heater

Notes: (A) For single-phase loads over 20A, 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 2T thermostat option on heaters over 20 amps. (C) Requires PR or TR. (D) Up to 30 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 20 amps with a disconnect switch, over 25 amps without a disconnect switch. (F) For DBSL Series the TR (tranformer relay) R (Duplex Receptacle) will be installed in separate 4 in. long internal control boxes.

#### How to Order Example:

| _xample:   |   |
|--|---|
| DBSL 10 25 F 20 S N  | MM 3 - R T D O X O XXXX   |
| Catalog Prefix:<br>DBSL = Qmark  |   |
| Nominal Total Heater<br>Length: <b>01</b> = 2' (24"),<br><b>02</b> = 2.3' (28"), <b>03</b> =<br>5' (36"), <b>04</b> = 4' (48"),<br><b>05</b> = 5' (60"), <b>06</b> = 6'  | 5 digit serial #<br>Duplex Receptacle:<br>0 = None,<br>R = Receptacle   |
| 72"), 07 = 7' (84"),<br>08 = 8' (96"), 09 = 9'<br>108"), 10 = 10' (120")<br>Watts/ft: 10, 12, 15, 18, 25   | Transformer Relay (provides<br>24VAC power for external<br>wall stat): <b>0</b> = None,<br><b>X</b> = Transformer Relay   |
| /oltage (Single Phase Only): <b>12</b> = 120V,   | Power Relay (requires external voltage)<br><b>0</b> = None, <b>L</b> = Line voltage coil (same as<br>heater voltage), <b>1</b> = 120VAC holding coil<br><b>2</b> = 24VAC holding coil |
| <b>20</b> = 208V, <b>22</b> = 220V, <b>24</b> = 240V, <b>27</b> = 277V,<br><b>34</b> = 347V, <b>60</b> = 600V  | Disconnect Switch: <b>0</b> = None, <b>D</b> = (1) two pole<br>Disconnect Switch  |
| ayout: <b>S</b> = Standard layout units—Heat Deck and<br>control locations determined by the factory, <b>C</b> = Custom<br>ayout units—Heat Deck locations determined by Rep.<br>using custom layout form. Control Locations must be<br>accounted for. See notes | Thermostat: <b>0</b> = None, <b>T</b> = Single Pole Thermostat,<br><b>S</b> = Double Pole Thermostat, <b>P</b> = Pilot Duty Thermostat<br>(requires PR or TR)****                     |
| Heater Finish/Color (Front/Back): M = Mill, C = Clear Anodized,<br>Z = Bronze Anodized, K = Black Anodized, G = Charcoal Grey,<br>B = Black, A = Aluminum, S = Bronze, N = Beige, W = White,<br>U = Custom*  | Incoming Power Hand***: <b>R</b> = Right hand, <b>L</b> = Left hand<br>Options: <b>0</b> = None, <b>1</b> = Pedestals, <b>2</b> = End caps**, <b>3</b> = Both above                   |

\*Custom finishes require additional approvals prior to acceptance. Consult factory.

\*\*End caps (2) will have same finish as Front Cover. Pedestal qty will vary based on length of heater. All options will ship in same carton as the heater ordered with.

\*\*\*Control Hand / Incoming Power connection is determined by the hand of the DS/thermostat when facing the heater. Due to space constraints the DS & Thermostat must always be mounted on the opposite hand of all other controls.

\*\*\*\*P (pilot duty thermostat) now requires a TR (transformer relay) at 24VAC low voltage. 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.

Scan the QR code to access additional specs and features



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